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Analysis of the Optimal Choice of Pension System in Palestine

Ayman Aldoqi

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Analysis of the Optimal Choice of Pension System in Palestine

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Spécialité **Sciences économiques**

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Université Paris-Dauphine

**Analysis of the optimal choice of retirement
system in Palestine**

THÈSE

Pour le Doctorat en Sciences Economiques
Présentée et soutenue publiquement le 11 octobre 2017

par:

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“There is hope in dreams, imagination, and in the courage of those who wish to make those dreams a reality” *Jonas Salk*

“It’s no use going back to yesterday because I was a different person then.” *Lewis Carroll*

“If I have seen further it is by standing on the shoulders of Giants.”
Isaac Newton

For my parents
For my wife and sons
For my supervisor
For my colleagues, in particular, Faycal, Yeganeh, and Mohammad
For all persons that had contributed to this work, in particular Montserrat, Gustavo, and
my colleagues from PPA.

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Acronyms

BCR	Wealth and Benefits/ Cost Ratios
BOD	Board of Directors
CIA	Central Intelligence Agency
CPI	Consumer Price Index
ESCWA	Economic and Social Commission for Western Asia
DB	Defined Benefits
DC	Defined Contributions
FAO	Food & Agriculture Organization
GAP	General Average Premium
GDP	Gross Domestic Production
GNI	Gross National Income
ILO	International Labor Organization
IMF	International Monetary Fund
ISSA	International Social Security Association
LFS	Labor Force Survey
MAS	Palestine Economic Policy Research Institute (MAS)
MDG	Millennium Development Goals
MENA	Middle East and North Africa
MoF	Ministry of Finance
MoH	Ministry of Health
MoSA	Ministry of Social Affairs
NDC	Notional Defined Contributions
NGOs	Non-Governmental Organizations
NIS	New Israeli Shekel
NPS	New Pension Scheme of India
ODA	Official Development Assistance
OECD	The Organization for Economic Co-operation and Development
PA	Palestinian Authority
PAYG	Pay-As-You-Go
PCBS	Palestinian Central Bureau of Statistics
PECDAR	Palestinian Economic Council for Development & Reconstruction
PMA	Palestinian Monetary Authority
PLC	Palestinian Legislative Council
PLO	Palestine Liberation Organization
PPA	Palestinian Pension Agency
PPL	Public Pension Law
PROST	Pension Reform Options Simulation Toolkit
SPF	Social Protection Floor

SSL	Social Security Law
TFR	Total Fertility Rate
UN	United Nations
UNRWA	United National Relief and Works Agency
WB	The World Bank
WB&G	West Bank and Gaza Strip
WFP	World Food Program

Long résumé de la these

Selon les estimations de l'Association internationale de la sécurité sociale (AISS), 50% de la population mondiale est partiellement couverte par une forme de protection sociale, et 20% bénéficie d'une protection sociale adéquate. Ce faible taux de couverture montre la difficulté à réduire la pauvreté et à améliorer le niveau de vie d'une large partie de la population mondiale. La question majeure liée à la gestion de système de retraite est celle de la mise en place de d'un système efficace face aux changements politiques, économiques et démographiques. Des réformes ont été mises en place de manières différentes dans de nombreuses pays en fonction notamment des ressources disponibles, avec diverses expériences réussies dans de nombreux pays. Toutefois, de nombreux pays n'ont pas su développer un système qui garantisse des prestations minimales de protection sociale reconnues comme droits humains fondamentaux selon les normes internationales et les conventions de l'Organisation Internationale du Travail (OIT) et de l'Organisation Nations Unies (ONU).

L'OIT souligne le fait que les systèmes de protection sociale dans de nombreux pays sont confrontés à des problèmes de couverture, de financement et/ou d'adéquation. Ces défis sont généralement complexes et dynamiques, en raison de leur interdépendance et de leur influence par le développement de la société. En effet, chaque pays est particulier quant à son rythme de développement et son expérience, ce qui est susceptible de générer de nouveaux défis pour son système de protection sociale. Ainsi, pour faire face aux défis de la mise en œuvre du système de protection sociale, un processus de réforme du système de retraite est indispensable.

Depuis l'instauration de l'Autorité Palestinienne (AP) en 1994, le niveau de pauvreté élevé de la population vivant en Cisjordanie et dans la bande de Gaza a été l'une des principales préoccupations des décideurs politiques et de la communauté internationale, en raison de son importance pour tout programme de développement et de stabilité dans la région. Pourtant, cette réalité du niveau élevé de pauvreté nécessite une action urgente de la part des décideurs pour protéger les populations vulnérables à court et à long terme. Le taux de pauvreté moyen en Palestine, basé sur la consommation réelle, s'élevait en 2011 à 25,8%,

tandis qu'il a été de 22,2% chez les personnes âgées. Les données montrent que le taux de pauvreté le plus élevé a été chez les enfants atteignant 27,2% ; les familles prises en charge par des femmes sont plus pauvres que celles prises en charge par des hommes. La population âgée vivant seule représentait en moyenne 9% de la population totale âgée; 14,2% pour les femmes contre seulement 2,3% pour les hommes, ce qui indique qu'un pourcentage important de la population âgée vit seule et que les femmes sont plus exposées à ce type risque.

Afin de parvenir à un développement durable, la protection des groupes vulnérables contre les risques potentiels, en particulier la pauvreté, fait partie des éléments de paix qui maintiennent la sécurité et la stabilité dans une société. Il se trouve que l'AP a hérité d'une multitude de régimes de retraite dispersés, ayant une couverture limitée qui ne concerne que les agents du secteur public. Par conséquent, ces régimes manquent d'efficacité et de durabilité. En outre, la réforme de 2005, fruit de nombreux efforts, menée en coopération avec certaines grandes institutions internationales, a été confrontée à de nombreux obstacles concernant l'extension de la couverture du régime au secteur privé. De son côté, le gouvernement s'est efforcé d'établir un système de protection sociale cohérent en créant le Comité national de sécurité sociale en février 2012. Ce comité comprenait des représentants du gouvernement, des employeurs du secteur privé, des syndicats des travailleurs et d'autres organisations professionnelles, ainsi que des universitaires, de juristes, des experts en droits de l'homme et des économistes. En outre, le comité a bénéficié du soutien technique de l'OIT et de certains experts internationaux du domaine.

Se basant sur les travaux de ce comité, le gouvernement a adopté la loi sur la sécurité sociale (SSL) de 2016, qui a fait l'objet de fortes contestations et de nombreux débats pour subir certaines modifications avant l'adoption de sa version finale. En effet, après l'échec de la réforme du système de retraite public en 2005, qui visait à étendre la couverture au secteur privé et aux autres organisations non gouvernementales, la publication de la SSL de 2016 a été un nouveau tournant dans l'histoire du système de protection sociale palestinien. Elle est de nature à protéger la majorité de la main-d'œuvre, en particulier celle

travaillant dans le secteur privé. Toutefois, la mise en place du système de protection sociale proposé pour le secteur privé risque d'être entravée par de sérieux obstacles.

La hausse du niveau de pauvreté chez les Palestiniens, en Cisjordanie et dans la Bande de Gaza (comme chez ceux vivant dans les camps de réfugiés dans certains pays arabes) soulève des questions concernant son origine et la manière d'y remédier. Ces questions rejoignent les préoccupations de certains des projets les plus globaux. Le premier de ces projets est celui de l'éradication de la pauvreté dans le monde, menée par certaines institutions internationales telles que l'ONU, l'OIT, l'OCDE et la Banque mondiale. Le second, est le projet visant à mettre en place des institutions nationales palestiniennes, dans l'optique d'aboutir à l'instauration d'un État palestinien indépendant, dans le cadre du projet de libération prévu par l'accord de paix d'Oslo et d'autres efforts visant à aboutir à un accord de paix définitif dans la région.

Depuis la création de l'Autorité palestinienne en vertu de l'accord de paix d'Oslo de 1993, des efforts ont été déployés pour réduire le niveau de pauvreté et construire des institutions nationales palestiniennes. Cette démarche a été étroitement liée au processus de négociation de paix. Cependant, le processus de paix a été gelé après la deuxième Intifada de 2001, ce qui s'est reflété dans la situation sécuritaire ainsi que dans la détérioration de la situation politique et économique.

Le côté israélien a de plus en plus durci ses restrictions concernant l'octroi des autorisations de voyage, de commerce et de passage par Israël. Sachant que la main-d'œuvre palestinienne travaillant en Israël était estimée à environ 130 000 employés, représentant environ 20% de la main-d'œuvre totale de la Cisjordanie et de la Bande de Gaza, ces mesures ont provoqué une forte baisse des autorisations accordées à environ la moitié de ces travailleurs, en particulier ceux provenant de la bande de Gaza. En outre, l'industrie palestinienne s'est effondrée, faisant que nombreux autres travailleurs locaux perdent leurs emplois, étant donné que de nombreuses usines et entreprises ont été détruites. Depuis l'Intifada, les usines palestiniennes ont été ciblées par l'armée israélienne lors des affrontements militaires ou simplement fermées en raison du manque de matières premières nécessaires à la fabrication, ou du manque des pièces de remplacement des

machines, ainsi que des difficultés de commercialisation des produits à l'étranger et parfois même dans les villes palestiniennes. Ces difficultés de commercialisation sont dues aux restrictions israéliennes sur la circulation des personnes et des biens ou aux coûts plus élevés par rapport aux produits importés et aux produits israéliens existant sur le marché palestinien. Le résultat direct de cela a été que la bande de Gaza ait enregistré le taux de chômage le plus élevé au monde, estimé à 39%. De manière plus indirecte, cette situation a créé un fossé entre la bande de Gaza et la Cisjordanie en ce qui concerne la qualité de vie et le niveau de pauvreté. En effet, il est nécessaire de passer par Israël pour se rendre de la bande de Gaza à la Cisjordanie et vice versa, et Israël contrôle toutes les frontières de la Cisjordanie et de la bande de Gaza avec la Jordanie et l'Égypte, respectivement.

La situation financière palestinienne s'est détériorée depuis la deuxième Intifada de 2001, au moment où le budget de l'AP dépendait fortement de l'aide étrangère pour faire face au déficit public. Celui-ci ne dépassait pas 1,5% du PIB en 1997, a été équilibré en 1999, pour atteindre un pic à 24,5% du PIB en 2007, puis diminuer progressivement et se stabiliser autour de 12,1% en 2014. D'autre part, le soutien étranger a constitué environ 28,06% du budget de l'AP qui a atteint environ 4,431 milliards de dollars américains en 2014. Les États donateurs visent à soutenir le processus de paix dans la région mais leurs contributions ne sont pas assez ciblées pour atteindre des objectifs de développement de long terme. Elles fluctuent fortement en fonction de l'évolution du processus de paix et de la situation économique de chaque État donateur et de ses relations avec l'Autorité palestinienne ou avec les associations caritatives.

Même si les données montrent que l'aide étrangère par habitant a presque doublé entre 2004 et 2008, passant de 323 USD à 685,5 USD, le taux de pauvreté est passé durant la même période de 25,4% à 26,1%, ce qui montre l'absence d'impact de cette aide sur la réduction de la pauvreté. L'Autorité palestinienne n'est pas en mesure de gérer efficacement les fonds reçus de l'étranger pour deux raisons principales. La première est la fluctuation du montant de ces programmes d'assistance qui les rendent peu fiables. La seconde est que cette aide n'était pas intégrée au budget de l'AP. Il existe, en effet,

beaucoup de canaux de transmission de programmes d'assistance : les ONG, les associations... ce qui les rend désordonnés et sans objectif de développement précis.

Dans le meilleur des cas, l'aide est orientée vers les besoins d'urgence et les programmes de formation. Par conséquent, l'aide étrangère et le budget de l'AP ont été de plus en plus orientés vers des programmes d'urgence, en plus de la hausse de la demande pour les services d'éducation et de soins due au taux de fécondité élevé et au niveau élevé de dépendance des jeunes de 0-14 ans se situant à 72,78%. Il y a eu des mises en garde concernant l'insuffisance des recettes publiques pour couvrir ces besoins élémentaires, ce qui se traduit par une baisse des allocations pour les dépenses de développement. À cet égard, nous remarquons que les dépenses publiques de 2015 ont été allouées principalement aux dépenses sociales et sécuritaire à raison de 43,9% et 30,7%, respectivement, par rapport aux dépenses d'infrastructure et économiques, respectivement de 8,5% et 7,1%. Cette priorité d'allocation reflète à la fois la politique du gouvernement et l'impact de l'aide étrangère. Celle-ci cible le secteur social avec l'allocation la plus élevée, à savoir 40,8% du total des programmes d'aide, suivi par les programmes de renforcement des capacités des institutions publiques à 21%. En revanche, les secteurs productifs n'ont pas reçu plus de 6% du total des programmes d'aide.

Cette situation d'augmentation des dépenses du budget de l'AP pour le secteur social et la forte dépendance à l'égard de l'aide étrangère conduisent à une utilisation inefficace des ressources disponibles et à l'absence d'un programme de développement durable, ce qui expose la majorité de la population à un niveau élevé de pauvreté en cas de baisse de l'aide étrangère ou d'une augmentation brutale et non-anticipée des dépenses publiques. Un budget équilibré doit être prévu pour le secteur social afin de venir en aide aux personnes pauvres via un système de protection sociale efficace, tout en contribuant à un programme de développement durable de l'économie nationale, en tenant compte de la rareté des ressources et de la variabilité de l'aide étrangère.

De plus, l'évolution de la structure familiale vers une structure plus nucléaire expose la population âgée à plus de risques et la laisse sans prise en charge appropriée, s'ajoute à cela une plus grande participation des femmes au monde du travail. À cet égard, nous avons

constaté que la population âgée a moins de capacité à gérer ses besoins financiers que la population active, en plus du fait que la population âgée a des besoins spécifiques notamment en matière de santé.

Les systèmes actuels de retraite publics se limitent aux prestations de vieillesse et d'invalidité totale pour les fonctionnaires, en plus d'une très faible part d'ONG qui ont été autorisées à rejoindre le système récemment. Aussi, le droit du travail peut garantir une prime de fin de service pour les employés du secteur privé formel, payée par l'employeur. À cet égard, certaines grandes entreprises peuvent créer et gérer des fonds de prévoyance ou des comptes d'épargne pour être en mesure de payer lesdites primes et peuvent offrir d'autres avantages comme les prêts. Cependant, la majorité des employés ne bénéficient pas de ce type d'avantages sur le marché du travail palestinien.

En effet, d'autres prestations, telles que la prise en charge de la maternité, des accidents de travail, de l'invalidité, du chômage et de la santé, sont selon les normes internationales nécessaires pour les employés. Légalement, les lois existantes concernant le marché du travail et la protection sociale introduisent certaines prestations pour certains groupes travaillant dans les secteurs formels. Cependant, leur respect est faible en raison du taux élevé du secteur informel. De plus, les employeurs ne peuvent parfois pas supporter les coûts supplémentaires liés à ces prestations en raison de l'instabilité politique et économique ; d'autres fois, ils refusent simplement de payer les contributions sociales en l'absence de mesures contraignantes.

En outre, les employés palestiniens sont soumis à des réglementations différentes en fonction de la situation d'emploi, du lieu de travail ou de la taille de l'employeur, ce qui se traduit par une inégalité des chances et une injustice entre les différentes catégories. De plus, il existe une réelle préoccupation concernant la qualité des services fournis, en particulier dans les domaines de la santé et de l'assistance sociale. Même si le taux de couverture de l'assurance maladie est relativement élevé, la qualité des services reste médiocre. Une partie des cas critiques sont transférés à l'étranger pour leur prise en charge avec une couverture complète. Le reste des cas sont mal pris en charge, ils vivent sur

l'espoir de bénéficier d'un transfert à l'étranger ou accepte le risque de se contenter du traitement médical disponible localement. Par conséquent, le système d'assurance-santé souffre d'un déséquilibre financier énorme à cause des dépenses élevées liées aux prises en charge à l'étranger. Par ailleurs, les employés du secteur informel comme les populations les plus démunies ne sont pas assurés et ne bénéficient d'aucune prestation de santé.

D'un autre côté, les programmes d'assistance sociale sont régis par plusieurs institutions qui n'ont pas mis en place des systèmes d'échange de données efficaces, certaines d'entre elles ne s'occupent que de certaines populations locales. Cette situation entraîne une distribution inefficace et injuste des ressources, en plus de l'accroissement des dépenses administratives. Dans le même temps, les programmes de protection sociale restent presque insoutenables, certains d'entre eux bénéficient de financement peu durables. Il est donc nécessaire de mettre en place un système de protection sociale durable et intégral capable de protéger la population palestinienne de la pauvreté et d'améliorer son niveau de vie, conformément aux normes internationales de protection sociale.

Étant donné que la majorité de la population palestinienne actuelle est jeune et étant donné qu'environ la moitié de cette population a moins de 20 ans, une forte augmentation de la population active est attendue dans un proche avenir. Toutefois, cet avantage ne durerait pas longtemps car le taux de fécondité a diminué. Par conséquent, il devrait y avoir un plan stratégique pour assurer du travail à ces générations et réformer le système de protection sociale, afin de l'équilibrer financièrement avant de perdre cet avantage démographique, si cette occasion n'est pas saisie, la réforme des retraites serait plus difficile et plus coûteuse. Cependant, il existe deux principaux défis:

Le premier défi consiste à créer des emplois pour les jeunes générations en attirant des investissements étrangers et en encourageant l'épargne et les investissements locaux, sachant que la stabilité politique est importante pour atteindre ces objectifs. Dans le même temps, à court terme, il est nécessaire d'aider la main-d'œuvre à trouver des emplois à l'étranger, tout en réglementant cela pour lui garantir une pension à l'âge de la retraite. Autrement, certains programmes gouvernementaux d'assistance et de protection des chômeurs seraient indispensables pour éviter la catastrophe.

Le deuxième défi consiste à réformer le système actuel de protection sociale pour garantir sa viabilité et son adéquation aux revenus sur le long terme. Dans le cas palestinien, le taux de chômage élevé et le fait que la majorité de la population active bénéficie d'un faible revenu est de nature à donner lieu à l'émergence de générations de vieilles personnes ayant des revenus insuffisants, car leurs carrières seraient incomplètes et leurs capacités d'épargne très faibles. Ainsi, la majorité de la population active n'aurait pas de revenu suffisant à l'âge de la retraite. Ces gens ne pourraient assurer les besoins des personnes à leur charge concernant l'éducation et la santé. Par conséquent, le cycle de pauvreté serait la caractéristique dominante de la majorité de la société pendant une période plus longue et toute réforme de la protection sociale serait beaucoup plus coûteuse. Néanmoins, la création d'emplois pour la main-d'œuvre actuelle et l'encouragement de l'épargne réduiraient le niveau de pauvreté à court et à long terme. La situation démographique actuelle peut être considérée comme un avantage qui devrait être utilisé pour le développement de l'investissement, la création d'emplois et la hausse de la production et des revenus réels. Ceci renforcerait le système de protection sociale, en créant les conditions nécessaires pour dégager des surplus de fonds pour la protection sociale.

En effet, la mise en place d'un système intégral de protection sociale assurerait les prestations précédemment mentionnées avec des taux cotisations raisonnables et réduirait dans le même temps la charge qui pèse sur les employeurs et les employés concernant les coûts additionnels de la prise en charge médicale, tout en garantissant une pension adéquate en cas de perte d'emploi due au handicap ou en cas de décès. En outre, il protégerait les groupes vulnérables de la population contre la pauvreté et les programmes d'assistance instables qui dépendent fortement de l'aide étrangère aux finances publiques et à certaines ONG.

En d'autres termes, sans la mise en place d'un système de protection sociale durable et efficace, il y aurait une hausse continue des coûts des programmes d'assistance avec la hausse de la population pauvre, alors que les finances publiques ne seraient pas en mesure de supporter ces coûts et l'aide étrangère ne durerait pas éternellement et s'arrêtera un jour

ou sera réduite pour une raison ou une autre. Dans les sociétés modernes, le développement devrait concerner tous les domaines, y compris l'éducation, la santé, le logement et l'infrastructure, les domaines productifs de l'agriculture et de l'industrie, ainsi que les programmes de protection sociale. Dans ces sociétés, l'État devrait avoir un rôle essentiel pour assurer les moyens de réalisation de ces objectifs.

Soutenir les programmes de santé, d'éducation et d'assistance est essentiel pour toute société. Cependant, le soutien seul ne suffit pas. Mettre en place un programme de protection sociale fiable, efficace et durable est aussi important qu'un plan de développement durable pour tous les secteurs et les standards d'égalité et de bonne qualité de vie. Le développement est un processus global auquel toutes les sociétés devraient adhérer. Autrement, la pauvreté augmenterait et il faudrait plus de dépenses pour les programmes d'assistance. Les carences en matière de développement et de production créent dans la société un manque de revenu et un déficit des finances publiques qui empêchent la satisfaction des besoins de certains secteurs, comme cela est le cas actuellement en Palestine. À l'inverse, l'accélération du développement augmente les capacités de production de l'économie et réduit la pauvreté.

Suite à l'analyse que nous faisons des données de l'enquête sur la pauvreté de 2003, nous constatons que l'absence d'un système de protection sociale moderne et dynamique en Palestine a obligé les familles palestiniennes à chercher des solutions alternatives pour leur logement, leurs besoins d'éducation, leurs soins et leurs besoins de retraite. Nous avons également constaté que les Palestiniens dépendent principalement de l'épargne personnelle et des ressources familiales pour maintenir leur stabilité financière et répondre à leurs besoins. Cependant, ces types de mécanismes contribuent peu à l'accumulation de capital pour l'investissement et la croissance économique.

Une réforme du système de protection sociale est un élément indispensable pour tout système de retraite afin d'étendre la couverture et inclure les plus larges parties possibles de la société. En outre, pour tout système de retraite à concevoir, le respect des normes internationales augmente ses chances de réussite. Cependant, la particularité de la situation

palestinienne peut mener à l'ajout ou à la suspension de certaines prestations pour correspondre au choix le plus optimal d'un système de retraite applicable.

Cette thèse vise, dans un premier temps, à analyser les systèmes de retraite existants: leur développement, leurs tendances et leurs défis, en mettant l'accent sur l'exploration du système de retraite le plus approprié à la situation palestinienne. Dans un second temps, nous discutons les options de réforme du système de retraite permettant de protéger les personnes de la pauvreté et d'améliorer la croissance économique, en tenant compte de la spécificité du cas palestinien en termes de facteurs politiques, économiques, démographiques et sociaux.

Notre recherche est organisée en cinq chapitres interdépendants qui concentrent la discussion sur divers sujets. Le premier chapitre explique les objectifs et la méthodologie de recherche, puis discute les facteurs démographiques, économiques et politiques de la société palestinienne par rapport aux données relatives à d'autres régions.

Le chapitre deux présente une revue de la littérature des systèmes de protection sociale et de retraite, y compris un examen des concepts, des définitions, des principes, des objectifs et de la typologie. En outre, il aborde les principaux défis communs aux niveaux international et régional des systèmes de retraite et les facteurs qui déterminent les options des réformes. Il aboutit à un examen analytique comparatif des systèmes de protection sociale de trois pays de la région qui ont des caractéristiques, des conditions ou des relations communes avec la Palestine. Les cas choisis sont ceux de la Jordanie, de l'Irak et d'Israël. Notre analyse comparative inclut la structure et le mécanisme de financement, l'adéquation des pensions et des politiques de redistribution des revenus, le soutien familial et les problèmes des femmes ainsi que l'assurance chômage.

Le chapitre trois présente les avantages du système de protection sociale palestinien et plus particulièrement du système de retraite. Ainsi, on commence par un examen du cadre juridique de la protection sociale en Palestine, dans lequel nous montrons que la protection sociale est un droit conformément à la loi fondamentale palestinienne et qu'elle respecte le

droit international à cet égard. En outre, la Palestine a signé un certain nombre d'accords internationaux de l'ONU et de l'OIT qui définissent et garantissent les droits du travail conformément aux normes internationales.

Ce chapitre montre également la complexité de la structure juridique palestinienne, car il existe de nombreuses lois héritées des différentes autorités, développées parallèlement au développement historique et politique récent de la Palestine. Ensuite, ce chapitre examine les détails des régimes de retraite public et privé qui expliquent et comparent les systèmes de retraite mis en œuvre en Palestine et met en évidence les défis auxquels ils font face. Nous examinons également les programmes d'aide sociale et le système de santé ainsi que le taux de couverture de chaque système en fonction des caractéristiques socio-économiques des ménages. Dans chaque section de la protection sociale, les données examinées couvrent les types, les ressources financières, la couverture et les défis. Le chapitre se termine par une analyse du comportement des ménages pour gérer le déficit de ressources financières. L'analyse de ce chapitre dépend principalement des données de deux enquêtes, « L'enquête sur la pauvreté de 2003 » et « L'enquête palestinienne sur les dépenses et la consommation pour 2011 ».

Nos résultats confirment l'importance des programmes d'assistance sociale pour l'amélioration du niveau de vie des populations très pauvres tout en montrant qu'ils restent insuffisants, limités et non-durables. Ces problèmes dépendent du degré de stabilité, du transfert de données et du niveau de coopération entre les différentes institutions de ce domaine, des sources de financement qui proviennent presque exclusivement de l'étranger et du type d'assistance. En ce qui concerne les services de santé, l'examen montre qu'il y a une forte charge subie par ce secteur en raison de l'instabilité. Cela dépend fortement de l'aide étrangère pour couvrir les dépenses et les coûts des médicaments. Le développement de ce secteur nécessite davantage de ressources vu que ses dépenses augmentent fortement avec la croissance de la population. Même si la couverture santé est très élevée au sein de la population palestinienne, pour tous les niveaux de revenu, la qualité des soins est médiocre, étant donné qu'il existe une pénurie de médicaments, d'outils et d'expertise, en plus de la surcharge du système de santé à cause de l'occupation. Ainsi, une réforme du

système de santé est à l'ordre du jour du gouvernement, mais nous sommes d'accord avec les recommandations du comité national de le maintenir séparé des autres systèmes de protection sociale. Enfin, notre analyse montre la variabilité du comportement des travailleurs à l'égard de leur stabilité financière qui est souvent fonction du niveau de revenu et de sa stabilité, en plus de certaines caractéristiques personnelles et sociales.

Le quatrième chapitre vise à analyser le faible taux de couverture des régimes de retraite en Palestine et à examiner les obstacles internes et externes à l'extension de la couverture du système public de retraite au secteur privé afin de les prendre en compte dans toute réforme. Ce chapitre commence par un examen des systèmes actuels de retraite publics, en déterminant le taux d'accès de la population et la viabilité financière, puis un examen de la réforme des retraites de 2005 et de ses objectifs non réalisés. Ceci est de nature à expliquer le faible taux d'accès au système de retraite et de déterminer les objectifs toujours pas réalisés. Nous abordons également dans ce chapitre les obstacles internes et externes ayant empêché l'application de la réforme des retraites de 2005 au secteur privé. Nous avons constaté que le déficit budgétaire public est l'un des obstacles externes les plus importants, étant donné que le ministère des finances, qui est le principal employeur, ne versait qu'une partie des contributions, même si les contributions non-versées sont enregistrées comme des arriérés sans promesse claire de les payer. Par ailleurs, le poids important du secteur informel est l'un des défis les plus importants de l'extension de la couverture, l'instabilité économique et la faiblesse du secteur financier et des assurances comptent également parmi les principaux obstacles externes à l'application de la réforme des retraites de 2005. En outre, la nécessité de renforcer les capacités des institutions de retraite en matière de gestion des nouveaux régimes à piliers multiples a également été un obstacle important, étant donné qu'il est indispensable de se doter davantage de systèmes informatiques de programmation et de reporting pour améliorer la qualité des données et accroître la capacité de stockage et de rappel des données détaillées. D'un autre côté, l'un des principaux obstacles internes à la réforme des retraites est l'insoutenabilité du système. Il y avait des mises en garde quant à la durabilité du système qui pourrait être compromise par les facteurs suivants : la transition trop lente vers les nouvelles règles, la politique de retraite anticipée en faveur des fonctionnaires et l'incapacité du gouvernement à verser ses

cotisations. De plus, parmi les barrières internes les plus importantes discutées, dans ce chapitre, figurent : le taux de cotisation élevé et la part des cotisations non-versées, en plus de l'incompatibilité du système de retraite actuel avec le secteur privé et certaines normes internationales.

Par ailleurs, l'occupation dure depuis plus de 60 ans, avec de très fortes restrictions impactant la vie quotidienne de la majorité des Palestiniens et un contrôle israélien de plus de 65% des terres palestiniennes (celles se situant à l'intérieur des frontières de 1967, supposés constituer les frontières de l'Etat Palestinien selon les résolutions des Nations Unies). En toute vraisemblance, elle représente la raison principale de la détérioration de la situation économique et de l'absence d'une stratégie de développement durable. Ceci est mis en avant dans les rapports des institutions internationales comme les Nations Unies, la Banque mondiale et l'OIT. Par conséquent, la capacité des employeurs à verser davantage de cotisations au système de protection sociale est très faible ; la capacité d'épargne des employés est, pour sa part, limitée à une petite partie de la population. En outre, le déficit des finances publiques et sa forte dépendance à l'égard de l'aide étrangère font que l'allocation publique est destinée principalement aux programmes d'assistance et de besoins élémentaires, négligeant les secteurs productifs qui sont indispensables pour la croissance de la production et du revenu.

Ensuite, nous avons passé en revue les principaux systèmes de retraite des trois dernières décennies, depuis l'instauration de l'Autorité palestinienne en 1994 et jusqu'à 2015. Nous avons conclu que la réforme des retraites a été une priorité nationale. Cependant, tous les systèmes proposés dépendaient de l'amélioration de la situation politique et économique et visaient à instaurer un système à contributions entièrement financées dans des systèmes à piliers multiples.

Les systèmes proposés étaient irréalistes ou trop optimistes dans un environnement caractérisé par : une évolution rapide, une situation économique faible et très instable, une conjoncture politique compliquée qui se traduit par des politiques publiques centrées sur les programmes d'assistance plutôt que sur des programmes de développement. Par conséquent, tous les systèmes de retraite proposés ont échoué à en introduire un qui puisse être accepté par les décideurs publics, étant donné qu'ils ne tenaient pas compte des

problèmes les plus importants : le niveau élevé de pauvreté, l'importance du secteur informel, le taux de chômage élevé et le faible niveau de participation des femmes au marché du travail.

À ce jour, les lois les plus acceptées ont été : la loi sur les pensions publiques de 2005, élaborée en coopération avec la Banque mondiale et, plus tard, la loi sur la protection sociale de 2016, élaborée en coopération avec l'OIT notamment. La première a introduit un système à piliers multiples qui garantit une pension de base universelle au premier niveau pour toutes les personnes âgées pauvres. Toutefois, il ne s'appliquait qu'aux retraités de la fonction publique éligibles à une pension, et excluait les autres catégories de personnes âgées. En outre, il y a eu de nombreux obstacles à l'application des deux autres piliers du système, car ils sont inadaptés au secteur privé et manquent de nombreux avantages comme l'assurance chômage.

La deuxième loi a introduit un système de protection sociale intégral et obligatoire incluant de nombreux avantages, applicable à plus de catégories et plus approprié au fonctionnement du secteur privé. Toutefois, cette loi ne prévoit pas de pension de base universelle pour les personnes âgées démunies et reporte la mise en place de plusieurs dispositifs comme l'assurance chômage dont l'application est soumise à conditions. Cette loi a subi plusieurs critiques concernant les taux de cotisations et certaines conditions de prestation, elle souffre également d'obstacles administratifs, vu qu'elle nécessite l'établissement d'une nouvelle structure administrative pour la mettre en œuvre. En outre, il existe des inquiétudes quant à la capacité d'appliquer cette loi dans la bande de Gaza, au vu de la division politique qui a conduit à son contrôle par le Hamas.

Par ailleurs, nous avons examiné les mesures prises pour la protection de la population âgée contre la pauvreté. Nous avons également mené une étude économétrique basée sur les données de l'enquête sur la population active "Labour Force Survey" (LFS) de 2014, afin de déterminer les caractéristiques personnelles des ménages par rapport à leur probabilité de participer à un système de retraite, chose déterminante pour établir une stratégie d'extension de la couverture.

Pour cela nous avons utilisé un modèle binaire. Nous avons utilisé la base de données des résultats annuels de LFS 2014, élaborée par le Bureau central palestinien des statistiques (PCBS). L'analyse vise à déterminer les variables indépendantes en tant qu'éléments explicatifs du statut de participation à un système de retraite. Ces variables indépendantes comprennent les caractéristiques : démographiques, socio-économiques et régionales des membres des ménages.

Le modèle établi peut prédire la probabilité de chaque groupe de participer à un système de retraite en fonction des caractéristiques individuelles. Nous avons examiné les données et préparé les variables discrètes nécessaires dans un format binaire. Avant d'effectuer une régression probit sur STATA, nous avons éliminé les observations concernant les employés du secteur public, car leur couverture de retraite est obligatoire. Dans cette analyse, le modèle est estimé pour le maximum de vraisemblance sous forme d'une série de modèles probit, afin d'analyser les variables de réponse binomiales. L'explication des résultats dépend des coefficients des variables exprimant la variation de la probabilité de participation à un système de retraite.

Afin d'identifier l'importance de chaque variable pour la décision de participation à un système de retraite, les variables explicatives ont été regroupées en trois catégories : variables sociales et personnelles, variables du marché du travail et variables régionales. Nous avons intégré les groupes au modèle de manière cumulative, pour aboutir au modèle complet de toutes les variables concernées et statistiquement significatives.

Nos résultats indiquent que la majorité des travailleurs Palestiniens du secteur privé ne bénéficient d'aucune couverture de retraite, seuls 47,95% d'entre eux bénéficient de certains types de prestations. Bien que la plupart des caractéristiques socio-économiques semblent avoir une certaine relation avec la couverture retraite, seules certaines d'entre elles ont une forte relation. Les caractéristiques ayant le plus de chance d'influencer (positivement) la participation au système de retraite sont les suivantes : avoir un retraité dans le même ménage, être au-dessus du seuil de pauvreté, le niveau de revenu, le nombre de jours de travail, travailler dans une entreprise enregistrée auprès de l'administration fiscale, travailler dans une entreprise de plus de 20 salariés, le nombre d'employés salariés

de l'entreprise soit supérieur à six, l'affiliation à un syndicat, avoir un contrat, le nombre de mois travaillés dans le même emploi, travailler dans les secteurs commerce-hôtels-services, travailler pour l'UNRWA ou une organisation à but non lucratif, travailler en Israël, et vivre en Cisjordanie. A l'opposé, les caractéristiques ayant le moins de probabilité d'influencer la participation à un système de retraite sont : vivre dans les zones rurales, être un fils ou une fille dans le ménage, travailler en tant qu'employé qualifié, être employé non-permanent du secteur privé.

Ainsi, les résultats de notre analyse permettent de formuler des recommandations susceptibles de contribuer à étendre la couverture du système de retraite. Il faudrait mettre en place un dispositif stratégique concernant le ciblage des nouveaux groupes à intégrer au système de retraite en tenant compte des caractéristiques individuelles. Comme la proportion du secteur informel est élevée dans l'économie palestinienne, il est recommandé d'inciter à une adhésion volontaire des groupes vulnérables du secteur informel et des autres catégories d'employés, y compris ceux travaillant en Israël et à l'étranger ainsi que les autoentrepreneurs. En outre, il devrait exister un régime de protection sociale prévoyant un revenu de base pour les personnes âgées. Sur la base des données analysées et des discussions élaborées dans les quatre premiers chapitres, d'autres recommandations ont été formulées pour la mise en place d'un système de retraite approprié au fonctionnement du secteur privé palestinien.

Enfin, le chapitre cinq vise à tester un système de retraite alternatif. Nous analysons l'impact des différentes politiques de taux de cotisation sur les différents scénarios de chômage. Ce chapitre commence par une discussion des lignes directrices d'un système de retraite optimal alternatif en Palestine, sur la base des études précédentes, de la revue de la littérature, des risques constatés et de la viabilité du système de retraite public actuel. D'après la revue de littérature, un système intégral de protection sociale devrait couvrir les risques à l'origine de la pauvreté, définis en fonction des avantages de la protection sociale par rapport aux normes internationales et aux conditions de vie. Le modèle utilisé pour effectuer une analyse de la viabilité du système de retraite est le PROST développé et utilisé par la Banque mondiale. La principale source de données utilisées a été l'Enquête sur la Population Active (Labor Force Survey, LFS) de 2015, effectuée par le Bureau Central

Palestinien des Statistiques (PCBS). Cette enquête représente la population totale et intègre de nombreux détails sur la main-d'œuvre et sur les caractéristiques socio-économiques des ménages, ce qui aide à produire des résultats plus précis. En outre, nous nous sommes appuyés sur d'autres données démographiques et macroéconomiques des Nations Unies et du PCBS. L'ensemble des données a été classé et analysé selon le sexe, l'âge, le secteur d'emploi et d'autres caractéristiques socioéconomiques.

Le système de retraite proposé devrait offrir un filet de sécurité flexible aux groupes les plus vulnérables, en particulier : les femmes, les personnes âgées, les travailleurs informels et les chômeurs. En Palestine, la flexibilité du système de retraite est essentielle pour faire face à la diversité des objectifs, la vulnérabilité des conditions et l'hétérogénéité des individus. Le système de retraite alternatif proposé est obligatoire et à piliers multiples, pouvant résoudre plusieurs problèmes et offrir une certaine flexibilité. En outre, il est censé donner la possibilité de participation volontaire aux employés informels et aux autres catégories non couvertes. Chaque pilier a été discuté séparément pour déterminer les besoins du système et clarifier les défis et les problèmes. Les déterminants paramétriques proposés concernant les cotisations et les avantages tiennent compte des systèmes de retraite actuels, en particulier ceux de la SSL de 2016, qui sont le résultat de longues négociations avec les parties concernées. En même temps, différents taux de cotisation ont été testés dans plusieurs scénarios de chômage pour déterminer l'impact de chacun d'eux, ce qui aiderait à faire un choix optimal quant à la viabilité financière du système et à l'adéquation des revenus dans chacun des scénarios. D'autres déterminants paramétriques ont été définis en fonction des projections démographiques et économiques.

Notre recherche montre l'urgence de certaines mesures à mettre en œuvre pour les retraites, en accordant la priorité à la protection des personnes âgées et vulnérables, et en tenant compte des facteurs démographiques, économiques et politiques. Les projections démographiques révèlent qu'il existe une tendance à la baisse du taux de fécondité associée à une hausse de l'espérance de vie, ce qui est de nature à modifier la structure démographique. Ainsi, l'avantage actuel de la structure démographique diminue avec le temps. L'évaluation préalable de cet avantage est importante pour accumuler des réserves

de fonds de pension permettant de faire face à la hausse future anticipée des dépenses de protection sociale. Dans le cas contraire, les dépenses de protection sociale augmenteraient fortement pour les seuls programmes d'assistance destinés aux personnes âgées et aux jeunes, ce qui exposerait la majorité de la population à la pauvreté. D'autres changements démographiques anticipés sont liés à la structure familiale, ce qui exposerait les personnes âgées à la pauvreté, vu que la majorité d'entre elles peut perdre l'assistance familiale.

D'un autre côté, il existe d'autres problèmes au sein de la société qui rendent vulnérables certains groupes de la population comme : le secteur informel élevé, le faible taux de participation des femmes au marché du travail, l'écart important de revenu entre certains groupes de la population selon la région et le secteur d'emploi, le taux de chômage élevé à long terme de la main-d'œuvre et le manque de prestations de protection sociale pour la majorité de la population active. Tous ces problèmes sont de nature à exposer la majorité de la population à la pauvreté.

Nous concluons cette thèse par des recommandations. Certaines mesures doivent être prises en urgence pour la réforme du système de retraites, en accordant la priorité à la protection des personnes âgées et des personnes vulnérables. De plus, pour étendre la couverture, il est fortement recommandé aux décideurs politiques de baser le choix stratégique de l'adhésion au système de retraite sur les caractéristiques individuelles. Notre analyse fournit les lignes directrices d'un système de retraite optimal pour la Palestine. Par ailleurs, l'amélioration de la qualité des données et leur prise en compte constituent un enjeu clé pour développer et améliorer la protection sociale. Il est également recommandé de tenir compte davantage, dans l'élaborations des politiques, des recherches menées sur les autres paramètres et secteurs de la protection sociale et du marché du travail. Nous recommandons également d'approfondir la recherche concernant l'utilisation des caractéristiques personnelles socio-économiques de la main-d'œuvre pour étendre la couverture du système de retraite, de renforcer le respect du paiement des cotisations et de déterminer les choix d'investissement dans le schéma DC. En outre, il est nécessaire d'étudier l'immigration pour prévoir l'impact du retour attendu des réfugiés et de la main d'œuvre palestinienne qui se trouve à l'étranger sur les systèmes de retraite et sur l'économie dans son ensemble.

General Introduction

According to the International Social Security Association (ISSA) estimations, only about 50 percent of the world population are partially covered by some form of social security and only about 20 percent enjoy adequate social security benefits. This low coverage rate of social security indicates to the international difficulty to cope with poverty alleviation and to improve the living standards for large ratio of the global population.

The most important issue related to pension system administration has been continuous pension reforms and how to apply an efficient pension system structure in order to cope with the environment changes such as political, economic and demographic factors.

However, these reforms have been developed differently in many societies depending on the environmental factors and the available resources, resulting in various experiences and success stories in many countries. While, many others still unable to develop their systems to guarantee the minimum social security benefits that were recognized as basic human rights upon the international standards and the related conventions of International Labor Organization (ILO) and the United Nations (UN). In this context, ILO discussion report concluded that all social security systems in all countries face some kinds of challenges related to coverage, finance, and/ or adequacy.

Since the establishment of Palestinian Authority (PA) in 1994, the high poverty rate among Palestinians living in West Bank and Gaza Strip (WB&G) has been one of the highest concerns on the agenda of the policy makers and the international community due to its significance to any development plan and stability in the region. Nevertheless, the reality of high poverty rate in Palestine needs an urgent action from the policy makers to protect the vulnerable groups on both short and long terms. In this regard, the average poverty rate in Palestine according to the real consumption reached about 25.8%, while the poverty rate among old-aged was 22.2% as in 2011. The data show that the highest poverty rate was among children at 27.2%, and female headed families are poorer compared to those headed by males. Given that the old-age population living alone were 9% of the total old-age population in average; 14.2% for females compared to only 2.3% for males, which indicates that a large ratio of the old-age population lives alone and females are more exposed to risks.

In order to achieve a sustainable development, protection of the vulnerable groups from the potential risks, particularly the poverty, is part of the peace elements that keep security and stability in the society. However, PA inherited scattered public pension systems with limited pension coverage to the employees of public sector only. As a result, these pension systems lack the efficiency and sustainability. Furthermore, the 2005 pension reform that was a result of many efforts and attempts to reform the pension system in cooperation with some important international institutions, faced many challenges and barriers to extend coverage over the private sector.

Therefore, the government worked to establish a comprehensive social security system by forming the National Social Security Committee in February 2012. The committee included representatives of the government, employers from the private sector, employees represented by labor and some other professional unions, and some experts with academic, legal, human rights, and economic backgrounds. Further, the committee got technical support from ILO and international experts in this field.

As a result of the works of the committee, the government approved the social security law (SSL) of 2016, which faced strong protests and debates before adding some modifications to the final version. After the failure of the 2005 reform of the public pension system to extend the coverage to include the private sector and other non-governmental organizations, publishing SSL of 2016 is considered as a new turning-point in the history of the Palestinian social security system to protect the majority of the Palestinian labor force, particularly those working in private sector. However, there are many serious challenges and obstacles face the implementation of the proposed social security system to the private sector in Palestine.

Increasing poverty rate among Palestinians in WB&G and those living in Palestinian camps of refugees in some Arab countries have raised the questions about the reasons behind this trend and how to eliminate the poverty in Palestine. These questions meet with wider and more comprehensive projects, the first is the international efforts to end poverty around the world through some international institutions as the UN, ILO, OECD, and the World Bank. The second project is the national project to establish the Palestinian national institutions

that enhances declaring the independent Palestinian State, as part of the liberation project under Oslo peace agreement and other efforts to reach a final peace agreement in the region.

Since the establishment of the Palestinian Authority under Oslo peace agreement in 1993, there have been efforts to reduce the poverty rate and build the Palestinian national institutions; however, the development was highly related to the peace negotiations process. After the second Intifada in 2001, there was a stagnancy in the peace process, which was reflected in the security measures and deterioration in political and economic situation. There were more restriction measures from the Israeli side on the permissions to cross Israel¹ or traveling abroad and trading. Given that the Palestinian labor force working in Israel was estimated at about 130,000 employees which formed about 20% of the total labor force in WB&G, there was a high drop in the issued permissions at about the half, particularly from Gaza Strip. Further, the Palestinian industry has collapsed leaving many other employees to lose their jobs in the local market because many factories and enterprises were destroyed. Since the Intifada, the Palestinian factories has been targeted by Israeli army through military confronts or simply closed due to the lack of raw or needed materials for manufacturing and maintenance, or difficulty of marketing the products abroad and sometimes even in Palestinian cities. These marketing difficulties refer to the Israeli restrictions on movement of persons and goods or to higher costs compared to imported and Israeli products in the Palestinian market. Off course, the direct result was one of the highest records of unemployment rate in the world was recorded in Gaza Strip that was estimated at about 39%. Thus, this indirectly created a gap between Gaza Strip and West Bank regarding life quality, living standards, and poverty rates.

The Palestinian financial situation has been weak since the second Intifada in 2001, in which the public budget has been highly depending on the foreign aids to meet the deficit of public budget, provided that the budget deficit was only 1.5% of GDP in 1997 and was balanced in 1999. Then, it recorded a peak at 24.5% of GDP in 2007 and decreased gradually to 12.1% in 2014. On the other hand, the external foreign support formed about

¹ Given that there is need to cross Israel to travel from Gaza Strip to West Bank or vice versa, and Israel control all borders of West Bank and Gaza Strip with both Jordan and Egypt, respectively.

28.06% of the public budget that reached about 4,431 thousand US dollar in 2014. The donor states aimed to support the peace process in the region; however, these efforts were not well-organized to target long-term development objectives, rather it was highly fluctuating with the development of the peace process and the economic situation of each donor state and its relation to the Palestinian Authority or other charity association.

Historical data from 2004 to 2008 shows that although the per-capita foreign aids almost doubled from \$323 USD to \$685.5 USD, the poverty rate was increased from 25.4% to 26.1%, which means it had low or no impact on reducing poverty.

The Palestinian Authority could not organize these assistance transfers well because of two main reasons. The first is the fluctuation of the amount of these assistance programs made them unreliable. The second is that this assistance was not integrated to the public budget, instead there were many channels to transfer these assistance programs through NGOs and associations, which made these assistance programs unorganized, abused, or with no clear target towards development. Instead, in the best cases they almost were directed to urgent relief and some training programs.

As a result, the foreign assistance and public budget were directed more and more to urgent relief programs, besides the highly increasing education and health-care demands due to high fertility rate, given that there is high young dependency ratio at 72.78% for those aged 0-14 years old. There have been caveats regarding the public expenses and inadequacy of public revenues to cover these basic needs, which mean less allocation for development expenses and less development opportunity.

In this regard, we notice that the public budget allocation of 2015 was more directed to social sector and security expenses at 43.9% and 30.7%, respectively, compared to infrastructure and economic expenses at 8.5% and 7.1%, respectively. Off course, this priority of allocation reflects the policy of the government and the impact of foreign aids as well. Given that the foreign aids target the social sector with the highest allocation at 40.8% of the total assistance programs, followed by capacity building programs for public institutions at 21%. On the other hand, the productive sectors did not receive more than 6% of the total assistance programs.

This situation of increasing expenses of the public budget for social sector and high dependency on foreign assistance leads to lack efficient usage of the available resources

and a sustainable development program, which exposes the majority of the population to deep poverty in any case of shortage in foreign assistance to the public budget or having unexpected sharp increase in the public expenses. There should be a balanced budget for social sector to relief poor people with an efficient social security system; at the same time, contribute to a sustainable development program for the national economy, taking into consideration the scarcity of resources and the variability of foreign aids.

Furthermore, the changing family structure to more nuclear one exposes the old age population to more risks and leaves them without a proper care, which means there would be new caveats for old age population with these demographic changes and more female participation to labor force.

The current public pension systems are limited to benefits of old-age, total disability, and survivors for public servants only in addition to very small rate of NGOs that were allowed to join the system recently. While, the labor law may guarantee compensation at the end of service for employees in the formal private sector paid by the employers. In this regard, some large enterprises may create and administer provident funds or saving accounts to be able to pay these compensations and may offer other benefits as lending; however, the majority of employees lack these benefits in the Palestinian labor market.

Indeed, other benefits as maternity, work injuries, disability, unemployment, and health-care are needed for the employees in Palestine according to the international standards. Legally, the existing labor and social security laws introduce some of them for certain groups that are working in formal sector. However, the compliance is low because of the high informal sector rate; besides, the employers cannot pay the extra costs due to political and economic instability, or they simply refuse to pay for social security expenses as there is no measures to enforce them. Further, the Palestinian employees have different regulations depending on the employment status, work place or size, which means unequal opportunities and injustice among different categories. In addition, there is a real challenge in the quality of the provided services, particularly in the health-care and social assistance programs. Although coverage rate of the existing health-care insurance is comparatively high, but the quality of services is not accepted. Thus, part of critical cases are transferred abroad for medical treatment with full coverage of expenses and the rest face the sickness with a hope to have the opportunity of transfer or take a risk of the available medical

treatment. Therefore, the health-care insurance system suffers from a financial imbalance due to high expenses on medical treatment abroad as patients do not trust the local health-care services or simply the service is not available. Moreover, other employees from informal labor or poor people are not insured and remain without health-care services. On the other hand, the social assistance programs are administered by several institutions, which lack of efficient exchange of data and some of them are limited to certain local population. This situation results in inefficient and unfair distribution of the resources and more expenses on administrative issues. Meanwhile, the social security programs are almost unsustainable and some of them have unreliable financing resources. Thus, there is a need for a sustainable and comprehensive social security system that can provide protection for the Palestinian residents from poverty and enhance living standards according to the international standards of social security.

Given that the current majority of demographic structure is a young population as about half of the Palestinian population are under the age of 20 years old, a sharp increase in labor force is expected in the near future. This advantage of young population would not last long as the fertility rate has been decreasing. Therefore, there should be a strategic plan to employ these generations and reform the social security system to be financially balanced before losing this advantage of high demographic dividend, after which the pension reform would be harder and more costly.

However, there are two main challenges:

The first challenge is to create job opportunities for these young generations through attracting foreign investments and encourage local savings and investments, whereas the political stability is important to realize these targets. At the same time, on the short-term there is a need to help labor force finding job opportunities abroad, which is preferred to be regulated to guarantee a pension at old age. Otherwise, some kinds of unemployment or relief programs are the inevitable choice for the government to prevent a disaster.

The second challenge is to reform the current social security system to guarantee the sustainability of the system and adequacy of income on the long-term. In the Palestinian case, high unemployment rate with low-income majority of labor force would create old-

age generations with inadequate income as the career period would be shorter and the saving opportunity would be lower. Thus, the majority of labor force would not have adequate income at their old age and their dependents would not be able to meet their basic expenses on education and health-care. As a result, the poverty cycle would be the dominant feature on the majority of the society for longer time and any social security reform would be much more costly. Nonetheless, creating job opportunities for the current labor force, and encouraging savings would reduce the poverty rate in the short and long terms. The current high demographic dividends in Palestine is considered as advantage that should be employed for a development opportunity through more investments to create job opportunities and increase the real production and income, which would better support any proposed comprehensive social security system as it would definitely produce a good opportunity to create surplus in the funds of social security.

In fact, introducing a comprehensive social security system would provide various insurance for the above mentioned benefits for affordable contributions, and it would also reduce the burden on the employers and the employees from extra costs of treatment and guarantee an adequate income in case of ending service because of disability or death. Further, it would protect vulnerable groups of the population from poverty and unreliable relief programs that highly depend on the foreign assistance to the public budget and some NGOs. In other words, without sustainable and efficient social security system, the relief programs would need a continuously increasing costs a long side the increase in poor population, while the public budget would not be able to cover these costs and the foreign assistance would not last forever and one day it would stop or be reduced to the minimum for any reason. Then, the vulnerable groups would be in deep poverty and hard to avoid catastrophic disaster. Therefore, the development of modern societies should go side by side in all fields, including education, health-care, housing and infrastructure, productive fields of agriculture and manufacturing, and social security programs. In modern societies, the state should have an essential role in organizing and finding the means to realize these issues.

Supporting health-care, education, and urgent relief programs are important as they are essential for any society; however, supporting them alone is not enough. Having reliable, efficient and sustainable social security program with a sustainable development plan have

the same priority and importance for the development of all sectors and equity and equality of life standards. The development is a comprehensive process that any society should integrate in and at all stages of development. Otherwise, the poverty would increase and more expenses on relief programs would be needed. The lack of development and production would create a gap in income in the society and shortage in the public budget that would leave some sectors of the public budget without enough resources to cover the expenses as the current case of Palestine. The other way around, more development would increase the opportunity of production that would support other sectors in the economy and reduce poverty in the future.

This research aims firstly to analyze the current pension systems including; development, trends and challenges with focus on exploring the most proper applicable pension system for Palestinians. Secondly, to discuss pension reform options in order to protect people from poverty and enhance the economic growth, taking into consideration the Palestinian privacy in terms of political, economic, demographic and social factors.

Our research is organized in five interrelated chapters that focuses the discussion on various topics, in order to answer the research questions and achieve the objectives. Chapter one explains the objectives and methodology of the research, introduces and reviews the demographic, economic, and political factors in the Palestinian society compared to other figures of selected countries from the region and the world.

Chapter two reviews the literature of the social security and pension systems including a review to the concepts and definitions, main principles, objectives, development, and the typology. Moreover, it discusses the main common challenges on the international and regional levels of the pension systems and the latest trends that determine the options of the pension reform as a response to the needs for that reform. It ends up with an analytical comparative review for the social security systems of three regional countries that believed to have common features, conditions, or interrelation with the Palestinian case. The chosen cases are Jordan, Iraq, and Israel, in which the comparative analysis included the structure

and financing mechanism, adequacy of pensions and income redistribution policies, family support and females concerns, and unemployment insurance.

Chapter three spots the light on the Palestinian social security benefits and coverage with focus on pension system. Thus, it starts with a review of the legal framework of social security in Palestine, in which we prove that a social security is a right according to the Palestinian basic law and its compliance to the international law in this regard. Further, Palestine has signed a number of international agreements of UN and ILO that define and guarantee the rights of labor in accordance with the international standards. It shows also the complexity of the legal structure in Palestine as there are many applied inherited laws from different governing entities that have been developed alongside the recent historical and political development of Palestine. Then, it reviews the details of the public compared to private pension schemes that explain and compare the applied pension systems in Palestine and highlight the particular challenges. That is followed by review of both social assistance programs and health-care system. Then, an analysis was performed on the coverage rate of each system according to socio-economic characteristics of households. The chapter tried to cover the social security systems in Palestine in details to be as reference for this period regarding pension systems, social assistance programs, as well as the health-care system. In each section of social security, the reviewed data covered their types, financial resources, coverage, and challenges. The chapter ends up with an analysis of the households' behavior to manage the shortage in financial resources. The analysis in this chapter depended mainly on the data of two surveys, the "The Poverty Survey of 2003" and "The Palestinian Expenditure and Consumption Survey for 2011".

While, chapter four aims to highlight the problem of low coverage of pension systems in Palestine and to review the internal and external barriers from extending coverage of the public pension system over the private sector in order to take them in consideration in any pension system reform. Thus, the chapter started with a review to the current public pension systems determining the access rate of the population and the financial sustainability, followed by a review to the 2005 pension reform and its unrealized objectives.

Further, it reviews the taken measures to protect old age population from poverty. Then, it reviews the development of the Palestinian pension system over the period from 1994 to

2015. This review includes the structure of the proposed systems in the period and analyzes the main studies on pension systems in Palestine and the recent actuarial studies on the Palestinian public pension, which would determine the reasons of failing to have a proper pension system along this period and whether there are common recommendations in the proposed system. In the chapter, we also conducted an empirical study that performs an econometric analysis to the data of “Labor Force Survey” (LFS) of 2014 to find the personal characteristics of the households in relation to their probability to participate to a pension system in Palestine, which is important to provide a strategy of choice to extend coverage. The used model is a binary model in order to explain the determinants of participation to a pension system in Palestine. We used the database of the annual results of (LFS) of 2014 that was developed by Palestinian Central Bureau of Statistics (PCBS) to collect specified data of the individuals from a representative sample of the population in WB&G. The analysis aims to determine the independent variables as explanatory ones to the status of participating to a pension system or not as a dependent variable. The independent variables include demographic, socio-economic, and regional characteristics of the members of the households of the population. The reached model that best describes this relationship, can predict the probability of the behavior to participate to a pension system of each cohort according to the individual characteristics. The data were reviewed and prepared needed discrete variables to a binary format. Before performing probit regression on STATA, I dropped the observations of public sector employees as their pension coverage has been mandatory. In this study, the model is estimated for maximum likelihood as a series of probit models for individuals to analyze the binominal response variables. Explaining the results depends on the coefficients of the variables that represent the change in the probability of participation to a pension system.

In order to identify the significance of each variable to understand the decision of participation to a pension system, the explanatory variables were grouped in three categories; social and personals, labor market, and regional variables, where each group was added to the model in cumulative manner, ending up with the complete model of all related and statistically significant variables.

Finally, chapter five aims is to test an alternative proposed pension system. We analyze in this chapter the impact of different policies of contribution rate cases in different unemployment scenarios.

It starts with discussing the guidelines for an optimal alternative proposed pension system in Palestine in the light of the previous studies, literature review, available risks, and the sustainability of the current public pension system. According to the literature review, a comprehensive social security system should cover the risks that lead to poverty, which were determined upon the availability of benefits of social security compared to the international standards and living conditions.

The model used to perform an analysis for the sustainability of a pension system is the PROST model that is developed and used by the World Bank². The main source of the used data for the model was the raw data of Labor Force Survey (LFS) of 2015 that was acquired from the Palestinian Central Bureau of Statistics (PCBS) as it represents the total population with many details of labor force and household socio-economic characteristics that would help in determining more accurate results. Further, other Demographic and macro-economic data were acquired from United Nations data and PCBS as well. The data was classified and analyzed by gender, age, sector of employment and other labor and socio-economic characteristics. Finally, we conclude by some policy recommendations.

² The used PROST model is version 15 that is the recent available version at the time of the research, which is used as part of cooperation between World Bank and other countries to assist them to test their system.

Chapter One

“Analysis of the Economic, Demographic and Political Environments in Palestine and the Region”

1.1- Introduction

The social security systems became an essential tool to keep harmony in the societies by setting fair redistribution policies among generations and enhancing the economic growth. These systems are important to protect the individuals from potential risks in their life of being poor at old age, disability, or unemployment cases. Moreover, they enable the society to overcome the future crises of economic fluctuations and enhance social and economic development.

In this regard, Garcia and Gruat (2003) stated that *“Social protection is thus integral to the dynamic development of modern, open economies and societies; and it brings cumulative benefits through time”* (Garcia and Gruat, 2003, P. 19). Further, Mitchell (1998) argued that one of the most important goals of modern societies is to have a sustainable, efficient and equitable social security system with high coverage over the population (Mitchell, 1998). Likewise, the International Social Security Association (ISSA) has introduced how the social security systems can be an essential tool to achieve development and has cut short the European experience in the following message directed to the developing countries: *“Effective and efficient social security systems are key to long-term social and economic development”* (International Social Security Association (ISSA)), reminding that the social security system was introduced to Europe before being rich and approved that it can grow hand-in-hand with development. Moreover, Banerji (2013) goes farther by focusing on the significance of social security to poverty alleviation by stating that *“Establishing robust, equitable, and effective social protection is essential to reducing poverty and boosting prosperity at all levels of development”* (Banerji, 2013, P. xi). Thus, the ILO recent consensus states that *“Of highest priority are policies and initiatives, which can bring social security to those who are not covered by any existing system”* (ILO, 2001, P. 2).

Although the social security was recognized as a basic human right by 1948 Universal Declaration of Human Rights, and in spite of all the efforts of the international organizations and institutions cooperating with governments around the world to have the social security as a universal right, the coverage of social security is still very limited to some groups of the societies. The (ISSA) estimated that about 50 percent of the global populations are partially covered by some form of social security, while only about 20

percent enjoy adequate social security coverage (International Social Security Association (ISSA)). While, Holzmann reported that only 15% or less of the world population have access to a formal system of retirement income support as in 1999 (Holzmann, 2001). This means that there is inequality among the people, and this variety exists within the population in the country level. In order to protect the poor and deprived people, more efforts and cooperation are still needed from all parties.

Introducing a pension reform would have both direct and indirect impacts on the stability and development of any society, since the behavior of the individual employees as well as the employers will change according to the reform actions seeking to achieve their own utility. However, the design and implementation process of social security systems is so complex, since they have many short- and long-term implications. At the same time, they are very sensitive to environmental changes of the society structure.

This sensitivity nature of the social security systems makes them vary in their structures, services provided and the degree of coverage according to the society. Each society has developed its system to reflect its environmental circumstances. Thus, we find the social security systems are very sensitive mainly to the demographic, political, economic and social factors. As a result, the social security systems would be a subject to continuous changes as long as these factors are not stable. Unfortunately, the mentioned factors are not the only determinants of the social security systems, there are some other important issues that should be taken into consideration in the process of designing or reforming a social security system. In order to be able to manage these contradictory factors and issues that have a continuous changing character, a continuous reform process is important.

Mitchell argues that any successful pension system should provide more affordable, efficient and equitable old-age benefits (Mitchell, 1998). On the other hand, some specialized international organizations in social security have set their standards, and it is believed that the future pension system should take into consideration the international standards on social security like ILO standards and World Bank standards, which determine the main guidelines to design any pension system. These outlines are applicable for both developed and developing countries as well, and they share the fact of continuous change; however, they differ in the degrees and the kinds of change. The fact is that the developing countries witness dramatic demographic, social and economic changes, while

the developed countries seem to be more stable. On the other hand, as Mitchell argues in her discussion paper that some further institutional and regulatory changes in the environmental factors should be applied to support the pension reform (Mitchell, 1998).

In our paper we will discuss the Palestinian pension system case as one of the developing countries with some privacy, due to the fact that it is being under occupation, which created one of the strangest demographic structures in the world and long-term instability. The Palestinian people were subject to large and long-lasting immigration that lasted for more than 65 years, whereas more than 50% of population were displaced from their homes and lost their properties since 1948. This has its effects on the other life aspects of the Palestinians and some other countries in the region.

Most of the immigrants could survive only with the international relief programs, which have become as part of the economic structure of the Palestinian society. However, most of social assistance and relief programs are provided as relief programs against crises brought forth by the Israeli occupation by short resources.

Palestine is still short of an effective and reliable social security system, while the poverty and unemployment are increasing. Thus, the Palestinian government gave a priority to this issue and launched a reform plan since 1998, in cooperation with mainly the World Bank and International Labor Organization (ILO), to introduce an optimal insurance and pension system. They introduced the Public Pension Law No. 7 for the year 2005 mainly to unify the existing pension schemes in Palestine³, reduce the costs and to extend coverage for all new categories including the private sector with certain regulations. The reform introduces also the unification of the administration and new structural reform.

However, this reform has been criticized by the World Bank itself as unsustainable and suffering from gaps and mistakes in regulations. Moreover, there was no coverage to the private sector until the year 2012, where limited number of universities and municipalities started to be covered. The final attempts to develop the social security system in Palestine was in 2012 by establishing the National Social Security Committee, which introduced the Social Security Law of 2016 for private sector. It is still early to start applying the system

³ There are four active public pension schemes in Palestine, three of them are phasing out schemes until 2021, and purely for public sector, while the last one is universal started form 2007, to be applied for existing public sector employees (Civil and Military), who were less than 45 years old at the time of implementation, in addition to all non-governmental social groups that apply to join the system.

as it needs more preparation steps. There were many obstacles that limited the attempts of having a universal social security system and even to extend coverage of Pension System to include the private sector, end the informal labor, and protect the people against poverty. The main point that should be taken into consideration in any pension reform is that social security and welfare requires first a joined up and integrated vision and tools for development.

This study aims to spot the light on the main challenges and problems in the current social security system in Palestine, identify and analyze the challenges of the pension system reform and, focus on exploring the most proper model compared to the social security reforms in other systems, in order to protect people against poverty and enhance the economic growth.

Our discussion in this chapter begins with an analytical overview of the main demographic, economic, social, and political figures and its developments in Palestine compared to some regional selected countries, which would enable us determine the problems and understand the current structure of the pension system.

1.2- Demographic Figures and development of the Palestinian population

Demographics are very important for any national policy, since it interprets the economic and social phenomena and reflects the reality and needs of people. In the Palestinian case, Lubbad argues that demographics have special importance as it is very strongly related to the political instability in the Middle East and Northern Africa (MENA) region (Lubbad, 2007). While, Courbage goes more further, by claiming that any study for the Palestinian demography cannot ignore comparing it with the Israeli population, due to the outstanding conflict and strongly interrelated dependency (Courbage, 2012).

In the recent decades, the demographic structure has changed rapidly due to internal and external migrations that created new social and economic realities with new needs. The United Nations Relief and Work Agency (UNRWA) played an important role to maintain the survival of the Palestinian migrants through providing some health-care and primary education services, in addition to relief programs for poor refugees, but these programs failed to introduce a long-term growth policy with clear vision that enables the people to depend on themselves, rather there were predominant instability and ambiguous future. With the increasing poverty rates across all the population, other assistance programs were organized through the Ministry of Social Affairs and some other NGO institutions and associations. These programs were mostly funded by donor states, charity associations, and money of Al-Zakat from local and international Muslims.

1.2.1- The Palestinian population

The total Palestinian population around the world is estimated at 12,365,761 at the end of 2015; whereas, only 4,749,486 live in Palestine⁴ representing about 38.4% of the total population (PCBS, 2016).

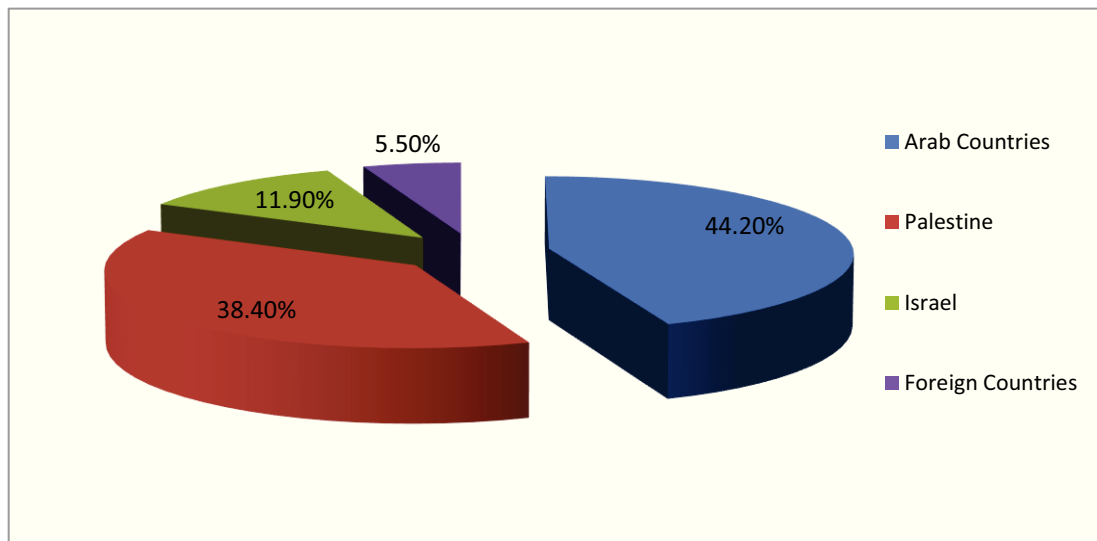
The rest are settled around the world, mainly in neighbor Arab countries, and most of them live in refugee camps with services provided by United Nations Relief and Work Agency (UNRWA) in cooperation with hosting countries, beside some responsibility of the Palestine Liberation Organization (PLO). There is no precise statistics on the number of

⁴ Palestine as defined by the UN Security Council resolution No. 242, constitutes of West Bank, Gaza Strip and Eastern Jerusalem (WB&G) upon the 1967 borders.

the Palestinians in Arab countries or in the world due to registration reasons; while, some Palestinians were granted the citizenship of resided countries. However, their number is estimated to be about 5,459,678 constituting about 44.2% of the total population at the end of 2015 (PCBS, 2016).

The following figure shows the main distribution of the Palestinians by country of residence:

Figure 1: The Estimated Distribution of the Total Palestinian Population by Region of Residence at the End of 2015



Source: The author by PCBS data, 2016

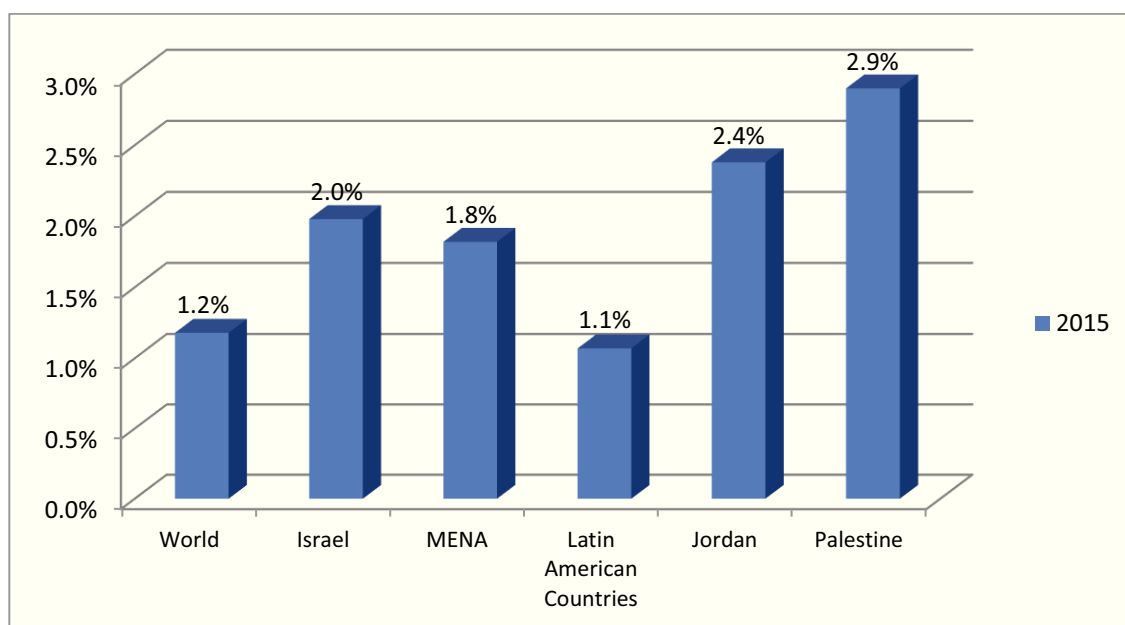
In figure (1), we notice that the Palestinians in Palestine constitute only 38.4% of the total population, which will be considered as the population of research. However, the population outside Palestinian territories are also important to review, since they are part of the total Palestinian population, whereas many of them still suffer from poverty and are waiting a permanent fair solution to end their migrant case according to the UN resolution No. (242 for 1967). Their return to home could be considered in any probable peace conciliation in MENA region. In addition to the increasing needs for assistance in some refugee camps in Lebanon and Syria where, they lack the opportunity to work or to have social benefits and political instability, while the UNRWA role has been falling back due to the financial crises and shortage of donors. For these reasons, I believe it is worth to mention briefly about them and recommend to be considered in one of the scenarios of extending coverage of the pension system over the Palestinians currently living outside Palestine.

The following analysis and figures specify the Palestinian population living in Palestine only as they are the available population in the formal statistics at the time of the research. The other part of the population, who is living abroad, is explained briefly in other section.

1.2.2- Population Growth rate

In 2015, the population growth rate in Palestine is 2.9% compared to 1.18% for the average world and about 1.82% for MENA developing countries. While, it is 1.98% for Israel and 2.38% for Jordan compared to only 1.07% for the Latin American countries (World Bank Data and PCBS).

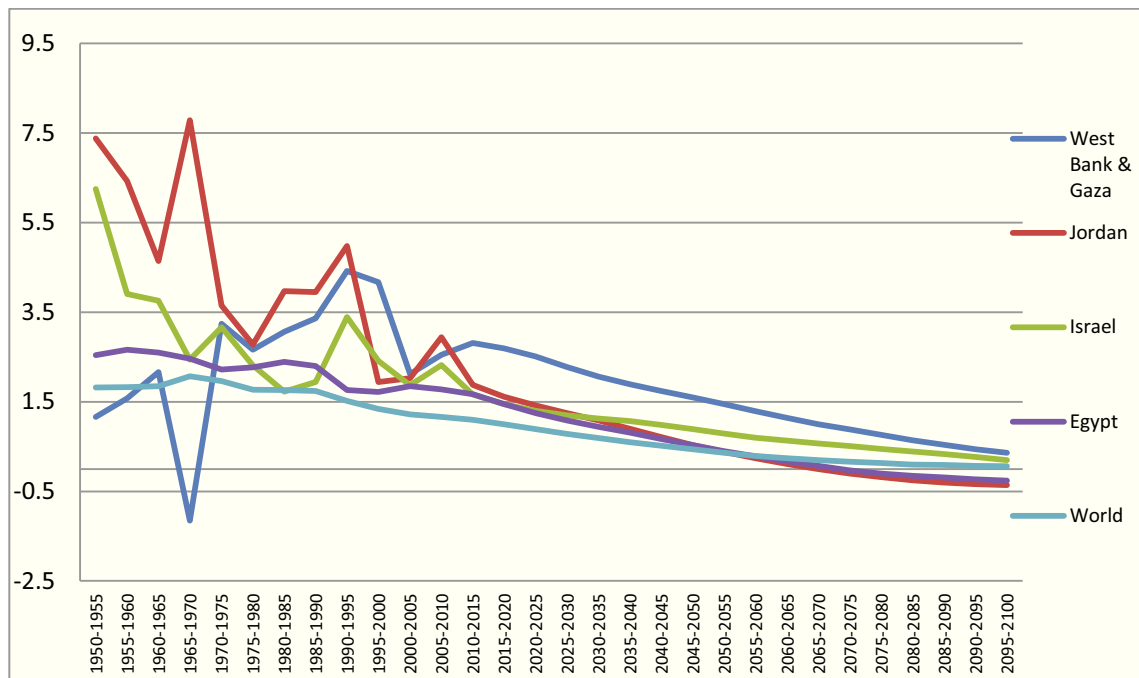
Figure 2: Population Growth Rate in Palestine Compared to Regional Selected Countries as in 2015



Source: The author by the World Bank data base

Over the last five decades, the Palestinian population in WB&G has been doubled about 4 times, to increase from 1,045,000 in 1970 to be 4,749,486 persons at the end of 2015. On the other hand, although the annual population growth rate has decreased significantly through the mentioned period, it is still the highest compared to the rates of the average world and MENA region with a tendency to be closer to them according to UN demographic projections (UN Data).

Figure 3: The Population Growth Rate by Country and Years (1950 - 2100)



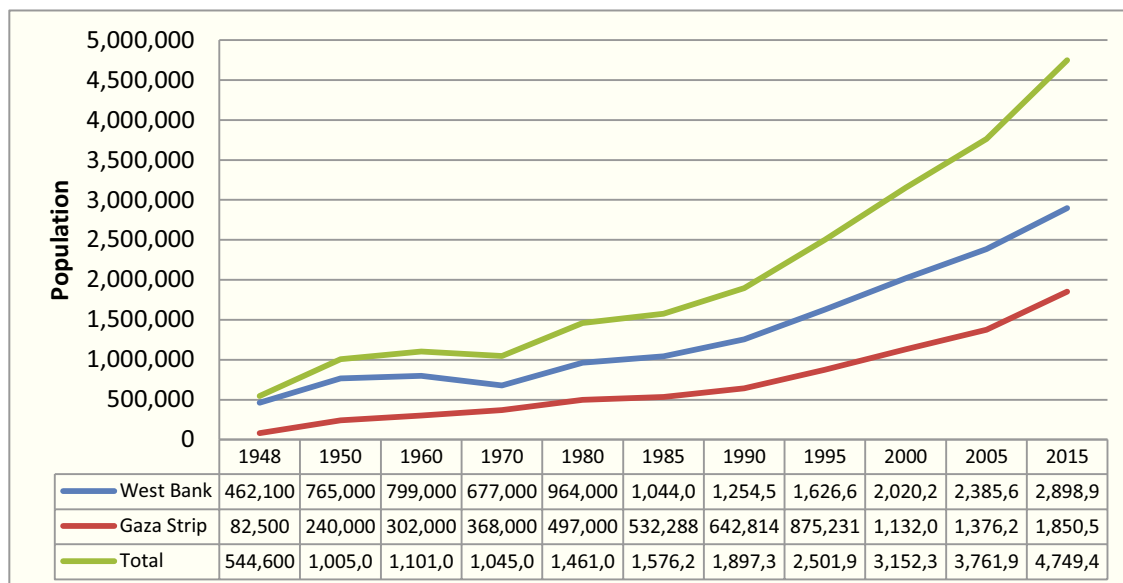
Source: The author by UN data

Through the last half century, the population growth of Palestine has changed dramatically because of the political reasons in Palestine and the region. Jordan has very similar fluctuations in the same period, but sometimes with opposite direction of Palestinian population growth rate where, most of migrants moved to Jordan. Israel has more stable indication but it is still fluctuated depending on the migration waves of Jews from other countries of the world, whereas, Egyptian population growth was the most stable in the region. This figure interprets the main three waves of migration happened to Palestinians in 1948, 1967 and 1990.

According PCBS estimations, the population growth in Palestine is estimated to continue with a rate less than 3% annual growth through the next decade, with a tendency to decrease gradually. Similarly, the United Nations projections estimate a gradual decrease in the growth rate of all countries of the region; however, it is estimated that the population growth in Palestine will remain the highest growth rate in the region until 2100.

On the other hand, the population growth of Gaza Strip is higher than West Bank, where it is at 3.4% in Gaza compared to 2.6% in West Bank as in 2015 (PCBS, 2016).

Figure 4: Palestinian Population in Palestine over the Period (1948 – 2015) by Region



Source: The author by Procon.org, Wael Ennab, and PCBS data, 2015.

In the diagram above, there was a sharp increase in the population, which refers to the immigration of Palestinians from towns and villages in the occupied Palestine in 1948, and the creation of Israeli State instead of them. In 1967, there was a decline in the population as a result of Israeli occupation to West Bank, Gaza Strip, and Eastern Jerusalem, where Israel practiced forced exile and prevented the Palestinians, who were outside Palestine to return back through that time (Human Rights Watch, 2012).

We can see the decline in population in 1967 is more obvious in West Bank than in Gaza, and that returns to the fact that the Palestinians in West Bank had the Jordanian citizenship before 1967. As we mentioned before, about 350,000 immigrated from WB&G in 1967, where 95% of them moved from West Bank to live in Jordan.

After 1993, there was another migration affected the population in WB&G, where the Palestinian National Authority was established under the Oslo peace agreement, which allowed many Palestinians to return home as security forces, politicians and civil servants with their families (BADIL, 2012).

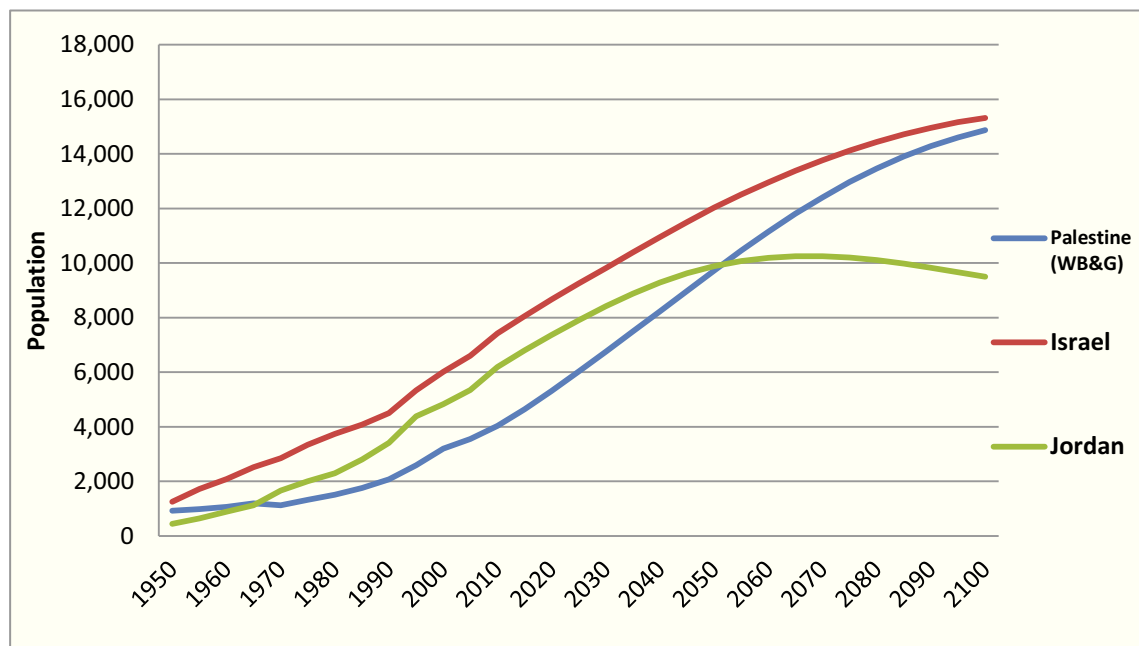
These developments created a new situation in Palestine, which has been considered as one of the highest population densities in the world, particularly in Gaza Strip, where it is 5,070

persons /Km². While, West Bank has a lower population density at 513 persons/Km² at the end of 2015 (PCBS, 2016).

At the same time, it is important to mention that the movement from Gaza Strip to West Bank has been strictly prevented by Israel, since 2000. Further, they still control the issues of civil affairs and registrations of population in WB&G, including changing the residency between West Bank, Gaza Strip, and Jerusalem. Israel has imposed different labor and commerce policies on Gaza and West Bank, which increased the difference in population structure and other life aspects (Human Rights Watch, 2012).

On the other hand, according to the UN simulations of population in Palestine, with a medium population growth assumption and referring to data from 1950, it is estimated to exceed the 6 million in 2025, and to be over 9.7 and 14.8 million by 2050 and 2100, respectively.

Figure 5: Estimation of the Palestinian Population in Palestine compared to Israeli and Jordanian Population (1950-2100) (In Thousands):



Source: The author by UN Data.

By reviewing the data above, we notice how the Palestinian population growth has been very close to the Israeli and Jordanian, and it is estimated that gradually it would be equal to the Israeli population, but the Jordanian population is estimated to have very low growth rate by 2040 and a decreasing population by 2070.

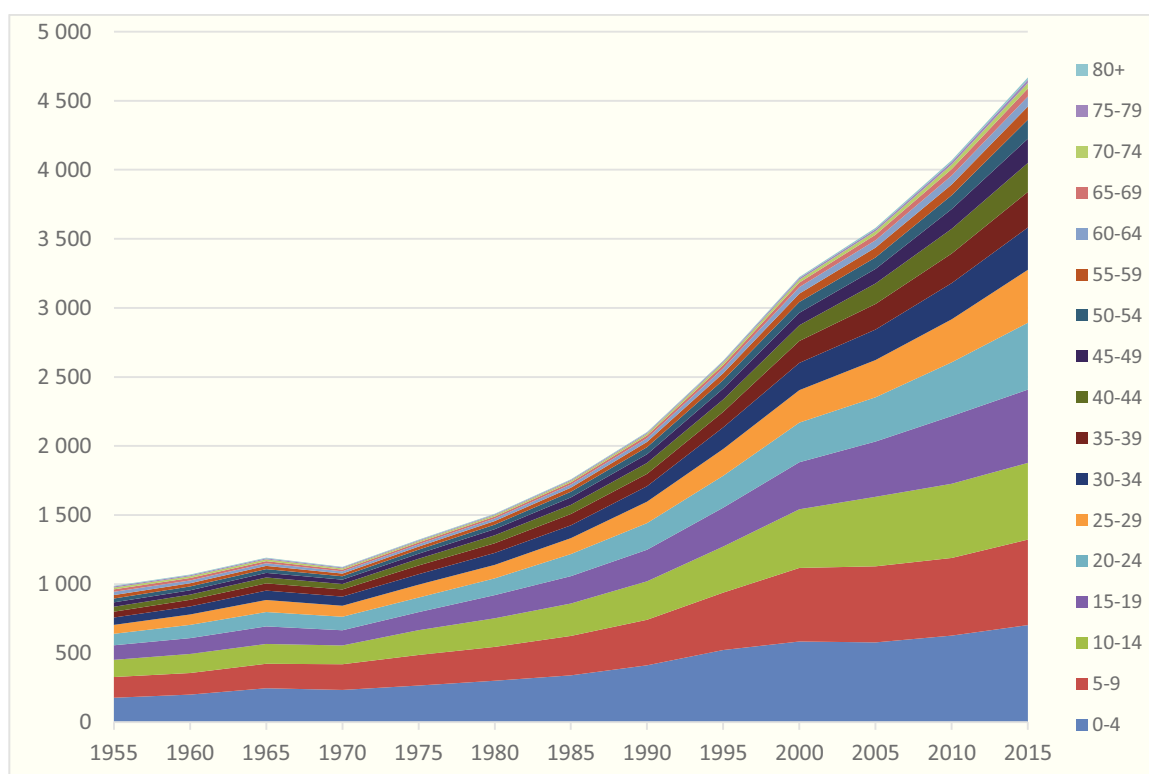
1.2.3- Age Structure

The population in Palestine is considered a young population in majority, where in 2015 the young population, who aged 15 years old and less, constitutes 39.4% of the total population, where it is 37.0% in West Bank compared to 42.8% in Gaza Strip.

On the other hand, the percentage of population aged 65 years old and over in Palestine is only 2.96%, where, it is 3.2% in West Bank compared to 2.4% in Gaza Strip at the end of 2015 (PCBS, 2015). These figures indicate how much the population is young with clear difference between Gaza Strip and West Bank population age structure.

By reviewing the figure down, we notice that the population of young-age categories is more compared to older age categories. The most increase of young population ratio started from 1970 and lasted until 2000. Thus, the labor force population is expected to be at the highest rate in the near future before it declines compared to the old age, which will start to increase gradually.

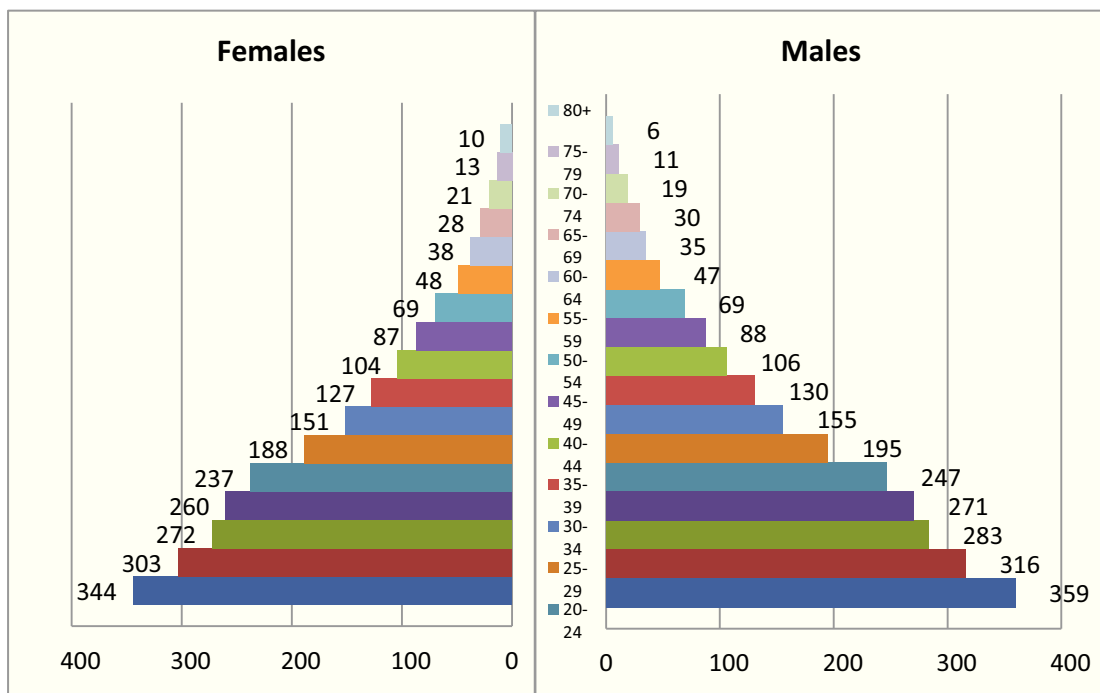
Figure 6: Population Age Structure of the Palestinian Population in Palestine by Years (1955 - 2015) (In Thousands)



Source: The author by UN Data

The population structure in Palestine is a pyramid shape with very flat base of young generations, and this is considered advantageous to have an economic growth because the majority is expected to be composed of productive ages.

Figure 7: Population Pyramid of Palestine by Gender in 2015 (In Thousands)

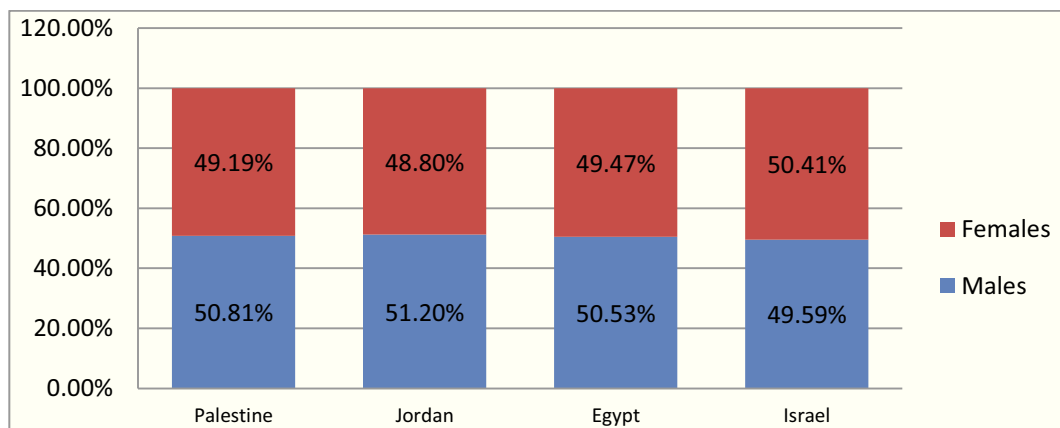


Source: The author by UN Data

The figure of population pyramid of Gaza Strip has a flatter base compared to that of the West Bank. The population pyramid in Palestine is remarked with flatter base of young generations compared to the other countries in the region and most of the world, since it is one of the youngest societies in the world with high fertility rate and comparatively lower life expectancy.

The population structure of Palestine in all age groups is semi-equally distributed between males and females, with a higher rates for males, where, the rate of gender has been 104.1 males per 100 females as in 2015 (PCBS, 2015).

Figure 8: The Females Ratio to Males in Palestine Compared to Selected Regional Countries as in 2015



Source: The author by UN Data

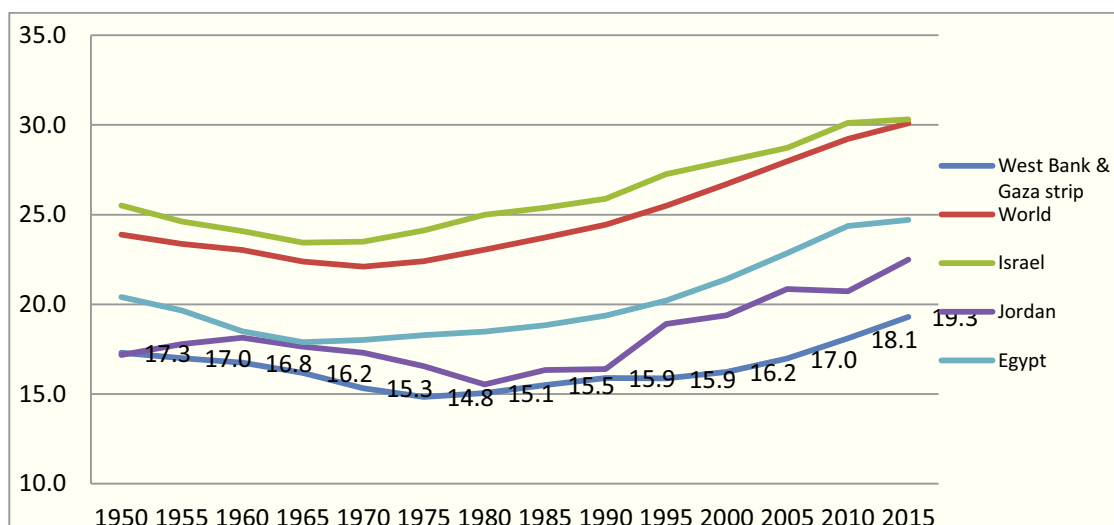
1.2.4- Median Age

The median age in Palestine has increased gradually in the last decade, to be 19.3 years in 2015; where, it was 16 years in 1997. This is related to a decrease in fertility rates and an increase in life expectancy, especially in West Bank. The data of PCBS, CIA Data, and the World Fact Book indicates that the median age in 2015 is 16.9 in Gaza strip, while, it is 20.8 in West Bank.

By comparing data of median age in Palestine with other countries in the region and the average world median age, we find that Palestine has the least median age along the period from 1950 to 2015.

Jordan is considered the closest society to the Palestinian since there are strong relations and ties between families; however, it seems to gradually have higher median age than the Palestinian median age, because of the differences in living standards and conditions. While, Israel has kept a higher median age all the time because of its low fertility rate and part of its population growth depends on migration of Jews from other countries, mainly from Europe and Russia that have high median age.

Figure 9: Median Age in Palestine Compared by Other Regional Countries (1950 - 2015)

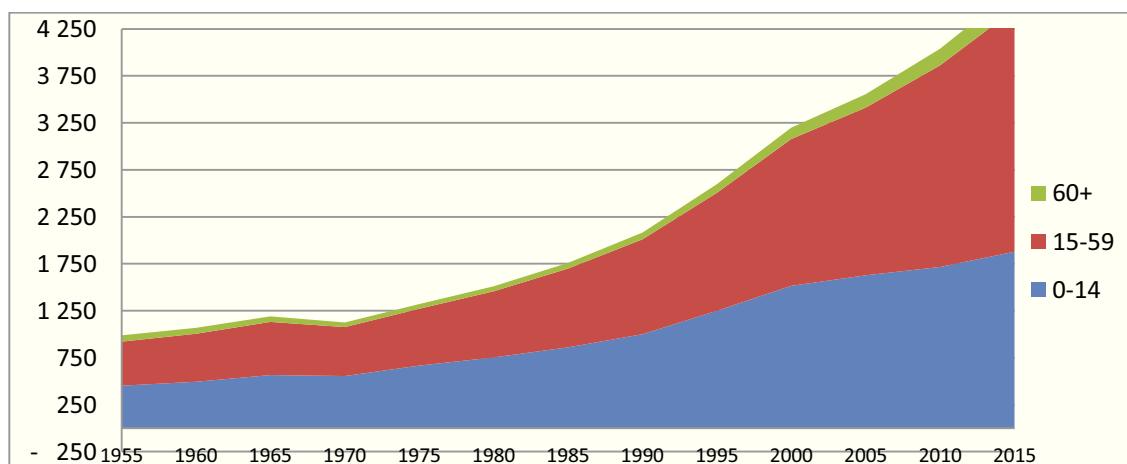


Source: The author by UN Data

1.2.5- Dependency Ratio

As we mentioned above, the population in Palestine is young one and the figure down shows the development of the age groups of population structure, which are used to calculate the dependency ratio. It is clear that by 1970s the ratio of young-age population started to increase compared to older groups due to high fertility and less mortality at young ages. While, the old-age population has remained at the lowest ratio of the total population, even there is an increasing tendency to increase. Moreover, we notice that the young population started to increase at slower rate by 2000.

Figure 10: Population Structure by Age in Palestine (1955 - 2015) (In Thousands)



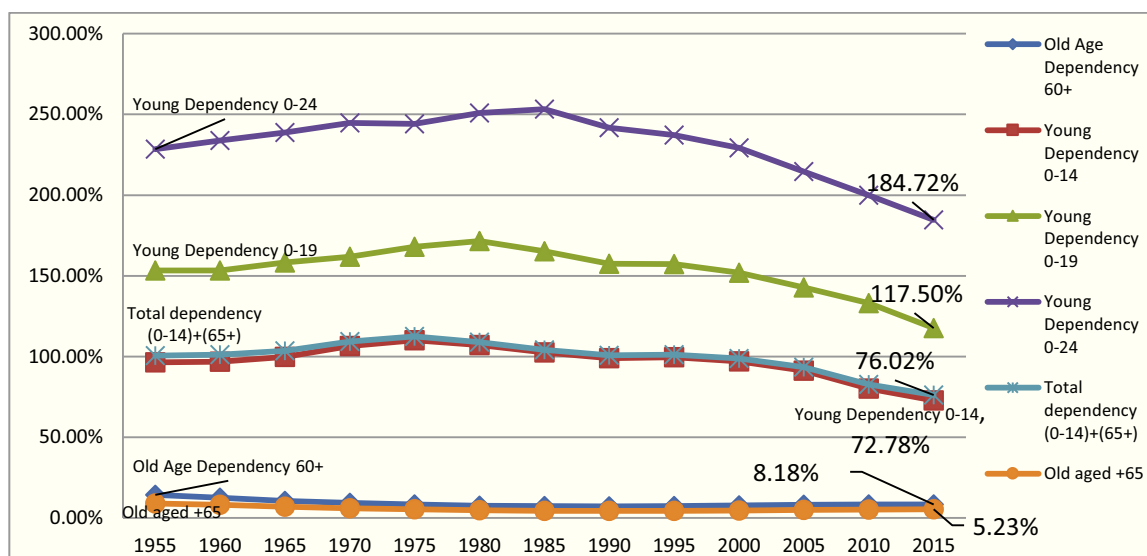
Source: The author by UN Data

This change in fertility and mortality rates that shaped the current population structure and will have its future effect, refers mainly to the living conditions and income besides some related programs that target controlling family size and health-care of the family. In the period from 1970 to 1990, there was stability regarding political conflict and income, where many Palestinian employees worked in Israel with high income. Besides, the needs of families were simple and the land was almost agriculture, exporting the internal products to Israel and some Arab countries was facilitated from the Israeli side, and many factories worked in Palestine for other Israeli partners, especially in textile. However, after the uprising “Intifada” of 1987, the conditions changed completely, where less opportunities were available to work in Israel, exportation not possible anymore, less agricultural land, and family needs are more sophisticated as it is more nuclear and modernized. Besides, some programs were run by UNRWA and Ministry of Health that aims to organize and decrease family size by offering contraceptive pills for free.

Moreover, the following figure shows the different measures of the dependency ratios of Palestine in the period from 1955 to 2015 depending on the UN database. It was calculated in different ways regarding different categories of age of young dependency. Since the Palestinian population is a young population, the young dependency ratio is much higher than the old-age dependency ratio, and the younger the age of old-age dependency is calculated the much greater the ratio of old-age dependency would be increased. That highlights the importance of the government policy to determine the working and retirement ages, and the cost of investing in education and health on the economy.

Here are some figures of the projected dependency ratio by using different scenarios of calculating the dependency ratio. At the same time, we used also the international age limits standards for the purposes of comparison with other international figures.

Figure 11: Dependency Ratio in Palestine by Different Age Measures (1955 - 2015)



Source: The author by UN Data

According to the UN data in 2015, the total dependency ratio is 76.02; whereas, it is 72.78 for young dependency ratio and 5.23 for old-age dependency ratio for those over 65 years old⁵.

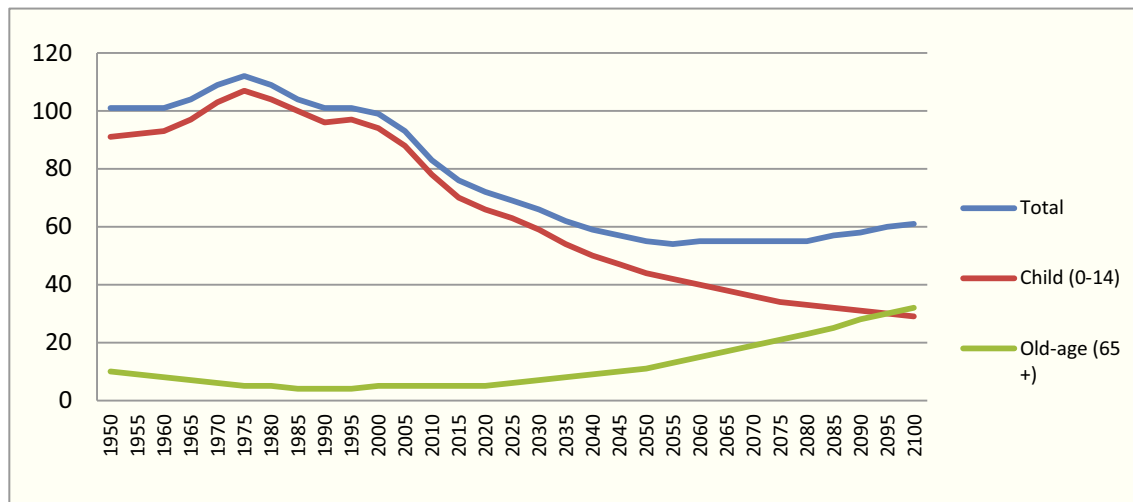
While according to PCBS data, the total dependency ratio in Palestine has decreased from 101.3 in 1997 to 73 in 2015 and it is expected to continue decreasing to about 66 in 2020. However, there was a distinct difference between West Bank and Gaza Strip dependency ratios, it is 67.4 in West Bank compared to 82.7 in Gaza Strip as in 2015, which is still considered a high ratio compared to the world, where it was 53.9, 64.1 and 64.8, in the World, Israel and Jordan, respectively (The World Bank data, 2015).

However, the old-age dependency ratio in Palestine is one of the lowest at only 2.96 for those over 65 years old according to the World Bank data or 5.23 according to UN data. While, it is 8.18 for those over 60 years old according to UN data. It is important to highlight these advantageous figures of Palestine, which is contrary to the case of Israel and Europe, where the old-age dependency is an essential part of the total dependency ratio or even higher than young dependency ratio (UN data, 2015).

⁵ The age of young dependency ratio is calculated from 0-14 years, and the age of old-age dependency ratio is from 65 years and over according to the international standards to be comparable with other countries.

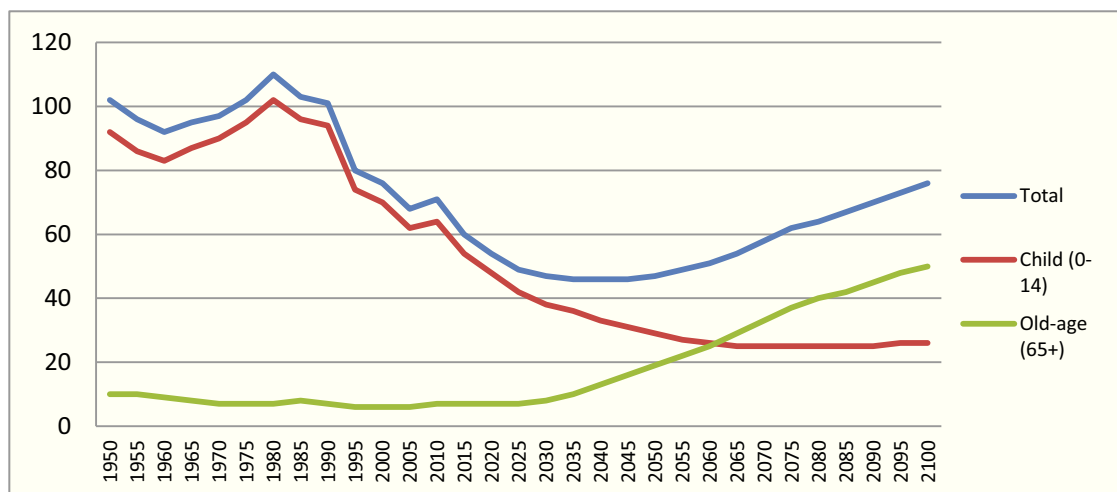
According to the UN estimations, the old-age dependency ratio is projected to continue increasing in most countries to exceed the child dependency ratio, which is considered as a dangerous indicator on the economic growth as well as population structure. Fortunately, the UN Data estimations projected that the old-age dependency ratio in Palestine will be equal to the young dependency ratio at the year 2095 at the point of 60, whereas, in other countries they would be equal at earlier years; in Jordan and Israel at around 1961, and in the World at around 1965, at the point of 60.

Figure 12: Projected Dependency Ratio in Palestine (1950-2100)



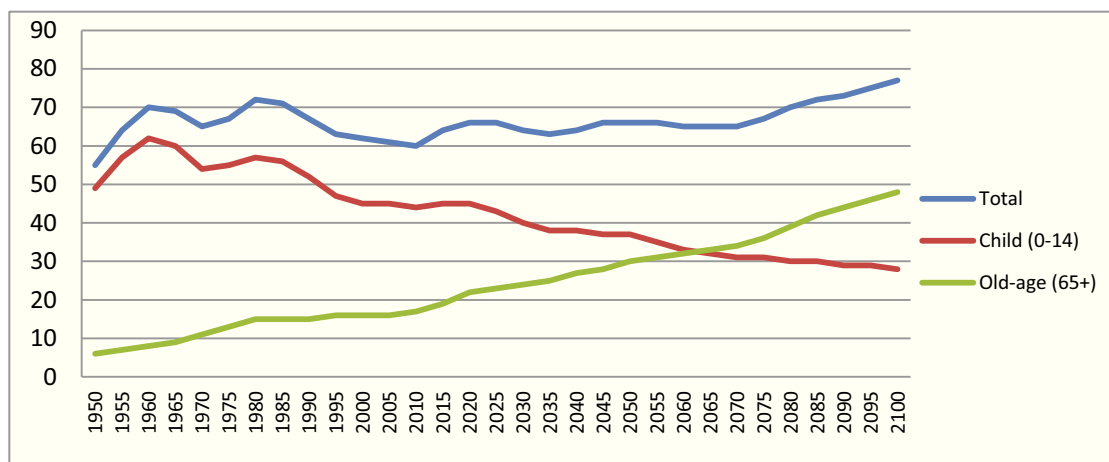
Source: The author by UN Data

Figure 13: Projected Dependency Ratio in Jordan (1950-2100)



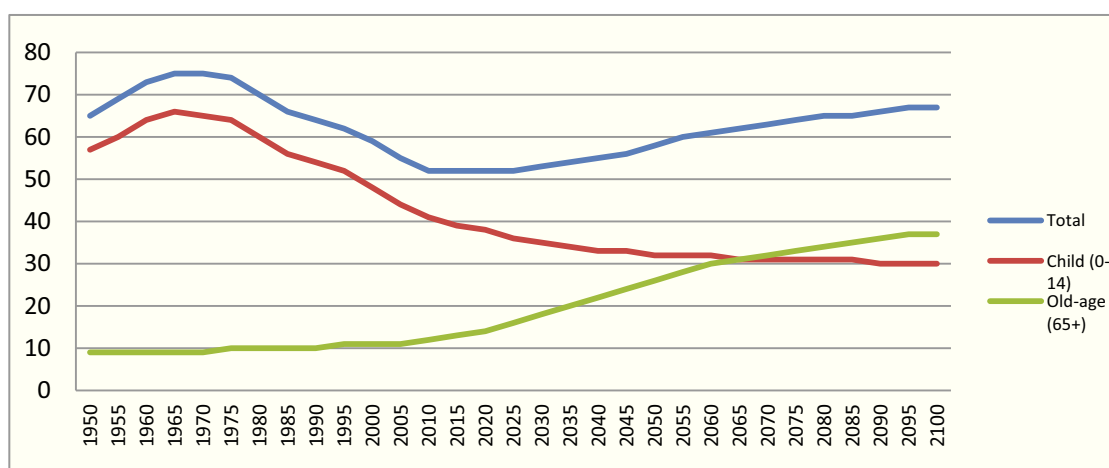
Source: The author by UN Data

Figure 14: Projected Dependency Ratio in Israel (1950-2100)



Source: The author by UN Data

Figure 15: Projected Dependency Ratio in the World (1950-2100)



Source: The author by UN Data

According to the projection of populations above, the Palestinian case has been experiencing a sharp decrease in young dependency ratio to pull the total dependency ratio from its peak of 112 at 1975 to be less than 60 at 2040s. The critical point is that the total dependency ratio in Palestine would be less than the average world, which will overcome 60 at 2050s. Jordan has been experiencing sharper decrease, while Israel keeps steady dependency ratio. However, in all cases the old-age dependency ratio is increasing, while the young dependency ratio is decreasing, which form a threat on the future balance of productivity ages.

At the beginning, where the young dependency ratio is the majority of the population structure, the future is optimistic to have demographic dividends period. While, the opposite case seems to have pessimistic character as the old-age population need more expenses with no future productivity, coincided with less productive age to support them. This case is critical when we have the cross point of the lines of young and old-age dependency ratios, after which the old-age population becomes more than the young population, which means that the population is experiencing a shrinkage instead of growth. According to the projection data, the Palestinian case will have latest cross point compared to the above compared cases; however, this does not mean the threat is a way, particularly the Palestinian economy is volatile with no natural resources and it needs good planning and policy to use this opportunity of high demographic dividends and create a sustainable growth.

Therefore, although the total dependency ratio in Palestine is still high, the concerns are different from those of other countries, because of the fact that it is caused mainly by the young population, who would be productive in the future as they would be considered demographic dividends. However, they still need investment in education, cultural programs and health-care.

Bloom, Canning and Sevilla (2003) highlighted the importance of the age structural changes of the population rather than the population growth alone to have better understanding to the link between the demographic change and economic growth. Their conclusion ended the debate between the economists and demographic thinkers regarding the impact of demographic changes on economic growth, whether it restricts, promotes, or is independent of the economic growth. Pool (2007) called the period preceding the young majority population as “dividend period”, in which high public expenditures had been directed to young generations, who have been productive at the work-age. This period diminishes with aging population, as the population growth decreases and less youth generations start to replace the older ones. Thus, Carvalho and Wong (1998) considered the “dividend period” as “Window of opportunity” for developing countries. Further, Mason and Lee (2006) debated that the dividend period parameters are measured according to the economic literature by a “support ratio”, which is determined by the ratio of producers to consumers. This kind of measure would determine the population structure in

regard of productive ages. They focused on populations at their first or mid- point phase in their demographic change to dividend period, where some developing Eastern Asian countries as the case of Taiwan, which could successfully manage this period and still have the opportunity to have the second dividend.

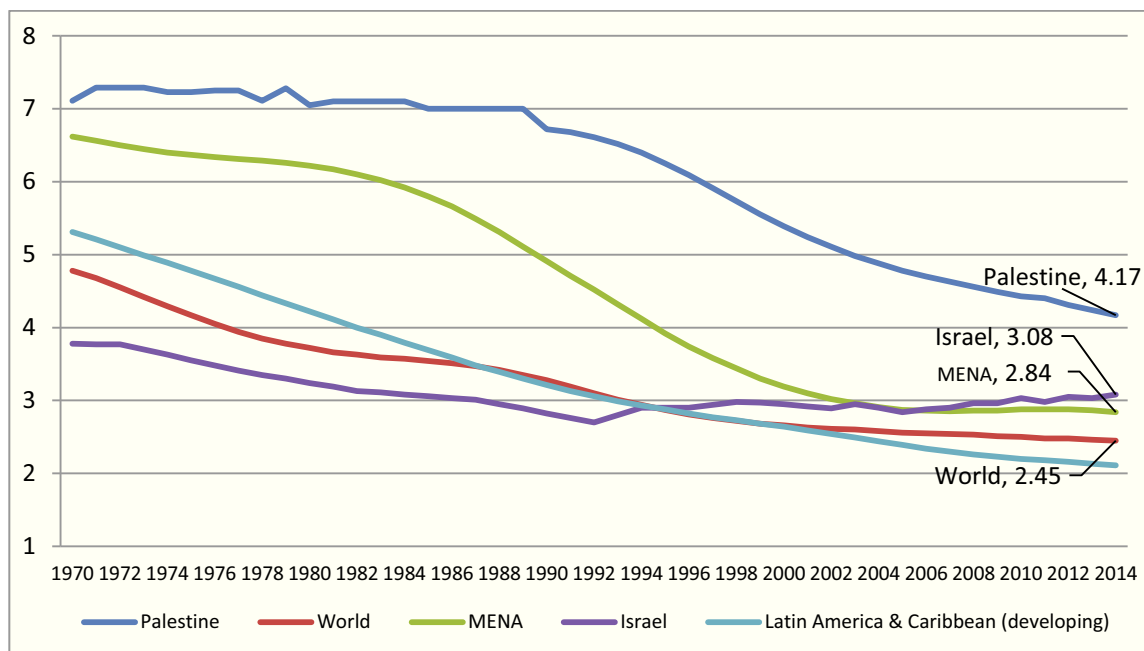
So, it is important for Palestine to have a strategic planning to deal with the problem of poverty, achieve an economic growth, and avoid future problems. The available demographic dividends in Palestine can be a window of opportunity to be productive to enhance both economic growth and pension systems, if the right policies were chosen. Otherwise, this golden opportunity will be lost to the Palestinian population, which would create a case of instability as their needs and consumption would increase without production. After the mid-point of dividend period, where the peak of productive age would have been reached, the aging population would be in place and creative solutions would be lost for the future of ambiguity and instability.

1.2.6- Total Fertility Rate (TFR)

According to results of Family Health survey in 2010 held by PCBS, the total fertility rate in Palestine was at 4.5 and 4.4 births per woman in 2008 and 2009, respectively. Further, the World Bank data records it as 4.17 births in 2014. While, it is noticed that the fertility rate is much higher in Gaza Strip at 4.3 births compared to West Bank, where it is 3.3 births as in 2014 (CIA, the World Fact Book).

The fertility rate has been decreased significantly since 1990, from about 7 births in 1990 to be at 4.17 at 2014. It is still classified and considered as a high rate compared to the world fertility rates, which averaged at about 2.45 births and to the rate in regional developing countries and Israel, which are at 2.84 and 3.08 births, respectively. However, according to PCBS, the population projections estimated to have less total fertility rates in the future.

Figure 16: Fertility Rates in Palestine Compared to the World, Regional, and Developing Countries 1970 - 2014



Source: The author by the World Bank Data

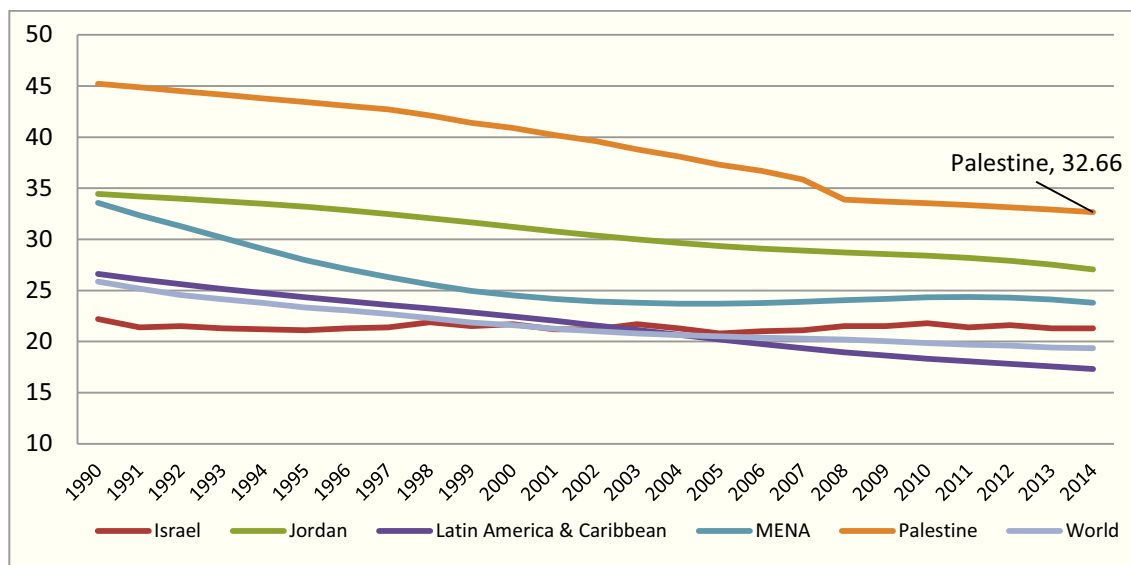
1.2.7- Crude Birth Rate

The Crude Birth Rate in Palestine is 32.7 in 2014, whereas it has declined from 45 in 1990. However, according to PCBS data for 2015, the birth rates in Gaza Strip is 36.3 and in West Bank is 29.0, creating a distinct gap between them (PCBS, 2015).

On the other hand, even the birth rates in Palestine has declined largely in the last decade, it is still considered the highest rate compared with average world rate and other countries in the region. By 2014, the average birth rate of the world is 19.3, Jordan is 27.1, Israel is 21, the MENA region is 23.8, and lastly the Latin American countries is 17.3.

The next figure shows that there has been a continuous decline in the birth rates in all mentioned countries and regions since 1990, and it is projected by the United Nations to have less rates in the future.

Figure 17: Crude Birth Rates of Palestine Compared to the World, Regional, and Developing Countries (1990 - 2014)

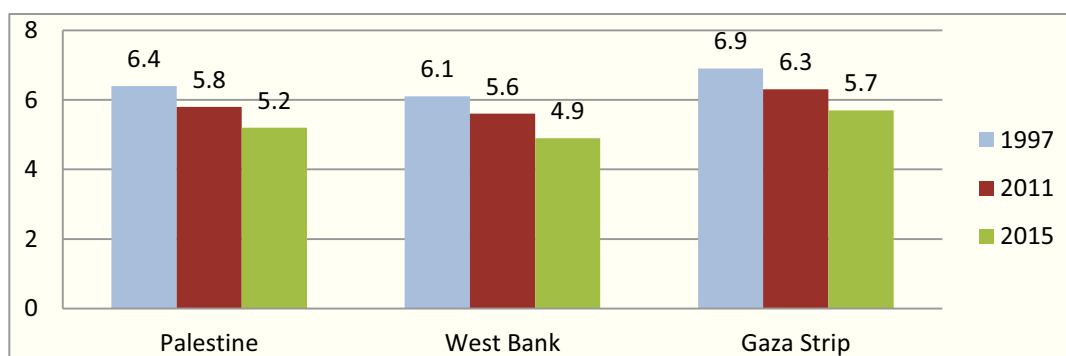


Source: The author by World Bank Data

1.2.8- Household Size

The family type depends mainly on the level of development of the society, education and economic activities. The transformation of production from agricultural to services and industry, beside the increasing dependency on machines, helped to decline the number of household and the transformation of family type from traditional to nuclear one.

Figure 18: Average Household Size in Palestine by Region and Selected Years



Source: (PCBS, 2011) and (PCBS, 2016)

According to the PCBS data of Palestine, it is found that the household size in Palestine has declined from 6.4 in 1997 to 5.2 in 2015, and it is estimated to continue declining, driven by the decline in birth rates and fertility.

There is also a trend to increasing rate of the nuclear family type rather than traditional families, where it became 87.2% in 2014 compared to 80.7% in 2007 and 73.3% in 1997 (PCBS, 2015). The population surveys indicate different figures of the family types; the following tables classify the rates of family types:

Table 1: Distribution Ratio of Families by Type and Region in Selected Years 1997, 2007, and 2014

Family Type	1997	2007	2014
Family of one person	3.3	3.3	3.4
Nuclear Family	73.3	80.7	87.2
Traditional Extended Family	23.0	16.8	9.3
Traditional Compound Family	0.04	0.2	0.1
Total	100%	100%	100%

Source: (PCBS, 2009 & 2015)

These changes have implications on the dependency and living conditions of old people. In traditional family type societies, the senior citizens have more chance to have care and social relations with the other family members, in addition to the financial support (PCBS, 2009). The following table highlights the change in the distribution of old people by family type in Palestine in ten years.

Table 2: Distribution Ratio of Old People (+ 60 Years) by Family Types in West Bank in Selected Years 1997 and 2007

Family Type	1997			2007		
	Male	Females	Total	Males	Females	Total
Family of one person	1.9	10.5	6.6	2.3	14.2	9.0
Nuclear Family	54.0	28.6	40.0	52.9	70.2	39.5
Extended Family	43.6	60.2	52.8	37.5	27.1	45.6
Compound Family	0.5	0.7	0.6	0.6	0.4	0.9
Total	100%	100%	100%	100%	100%	100%

Source: (PCBS, 2009)

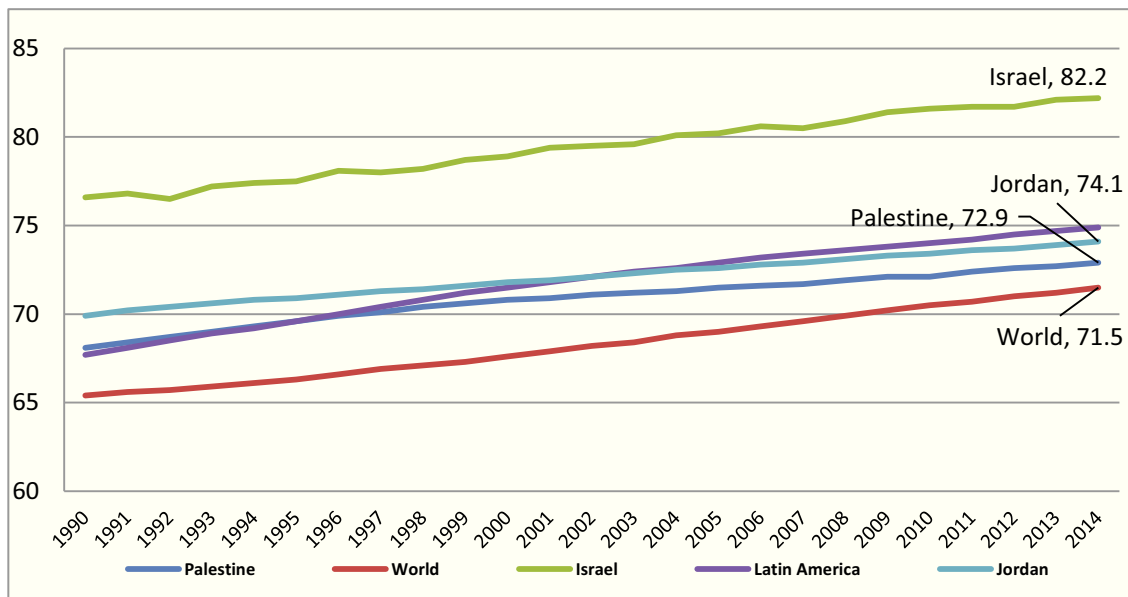
Given that females living alone formed 14.2% of the old-age population compared to only 2.3 among males, which may indicate that they are the most vulnerable and need some kind of support. Moreover, the old-age persons living alone had been increased from 1997 to 2007 for both genders, which indicates to the change in family structure to more nuclear type that leaves the old-age population without care and exposed to poverty.

1.2.9- Life Expectancy

The data of the World Bank shows an increasing tendency in life expectancy in most countries of the world. The life expectancy in Palestine has been higher than the average

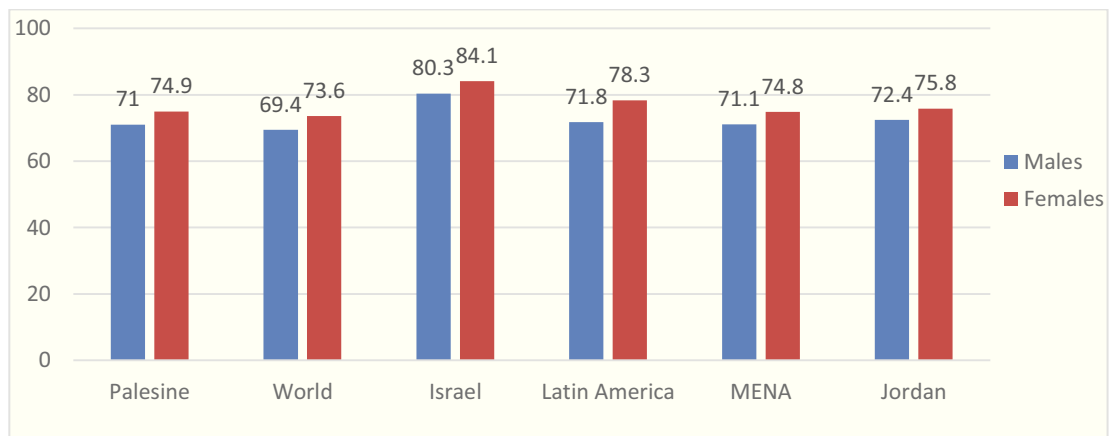
World life expectancy and similar to the developing countries in the MENA region whereas, it is less than Israel and developed countries. In 2014, it was 72.9 for Palestine, and 71.5, 72.9, 74.1 and 82.2 for the average world, MENA region countries, Jordan and Israel, respectively.

Figure 19: Total Life Expectancy of Palestine Compared to Other Countries (1990 - 2014)



Source: The author by World Bank Data

Figure 20: Comparative Total Life Expectancy Rates by Gender and Region as in 2014

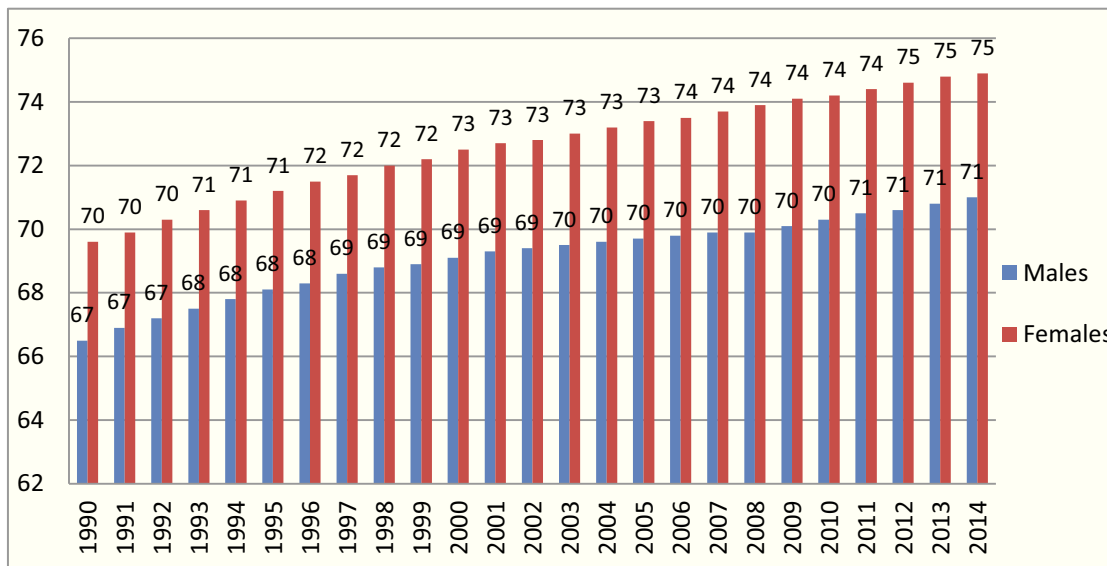


Source: The author by World Bank Data

In general, the females have higher life expectancy in all countries through the last decades. In Palestine, it recorded 74.9 years for females and 71 for males as in 2014. There was a clear difference between Gaza Strip and West Bank with a higher average age in West

Bank. The life expectancy was 73.9 in West Bank, 75.3 for females and 72.4 for males; while, it was 72.9 in Gaza Strip, 74.4 for females and 71.5 for males (PCBS, 2015).

Figure 21: Total Life Expectancy in Palestine by Gender (1990 - 2014)



Source: The author by World Bank Data

This increase in life expectancy is almost related to the improvement level in health-care services and awareness, the decrease in Mortality rate in infants and adults as well, and the better living standards conditions and more stability with less wars in the last decades.

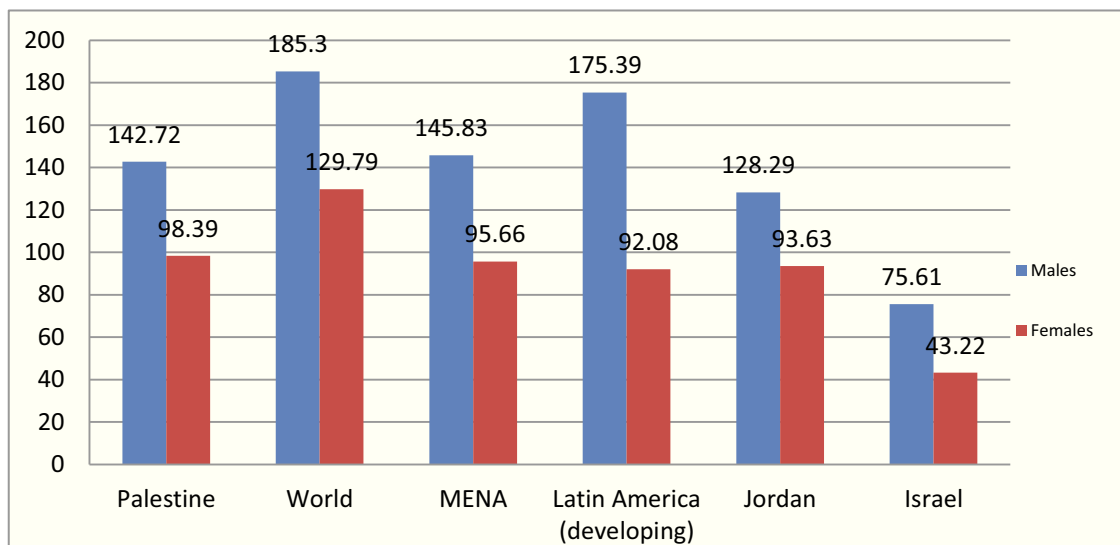
Adult Mortality Rate (per thousand persons):

The available data about Adult Mortality Rate⁶ since 1990 shows that there has been a steady decrease for both genders in Palestine as well as in Latin American countries and Israel, but in MENA region countries and the World average it has witnessed slower decrease since 2007 for both males and females.

The mortality rate of adults could be caused by many reasons, but mostly it refers to living standards conditions and health reasons.

⁶ Adult Mortality Rate refers to the probability that those who have reached age 15 will die before reaching age 60 (shown per 1,000 persons).

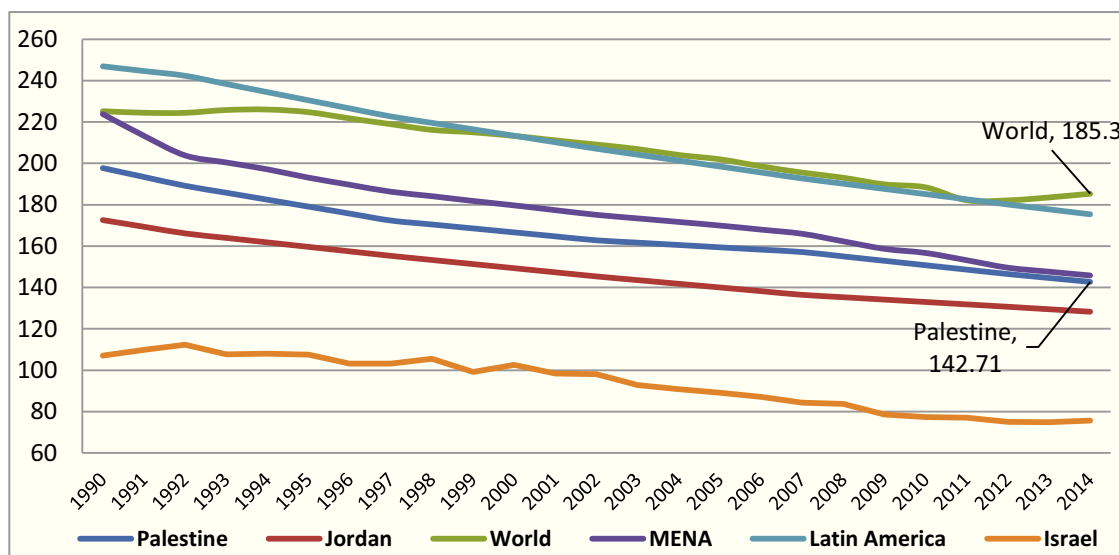
Figure 22: Adult Mortality Rates per Thousand by Gender and Countries in 2014



Source: The Author by the World Bank Data

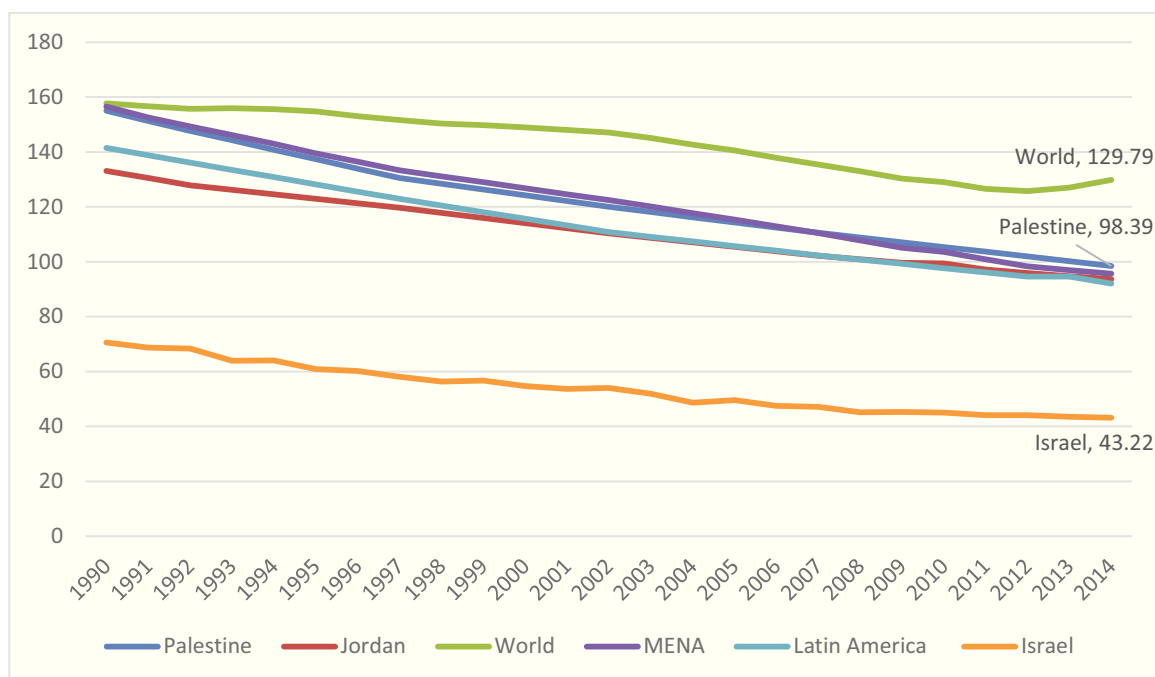
The mortality rates in Palestine are 142.72 and 98.39 for males and females, respectively as in 2014, which is less than the average world rate, where it is 185.30 for males and 129.79 for females, but it is still close to the MENA region, and higher than Israel.

Figure 23: Male Adults Mortality Rate per Thousand by Country in (1990 - 2014)



Source: The author by the World Bank Data

Figure 24: Female Adults Mortality Rate per Thousand Births by Country in (1990 - 2014)



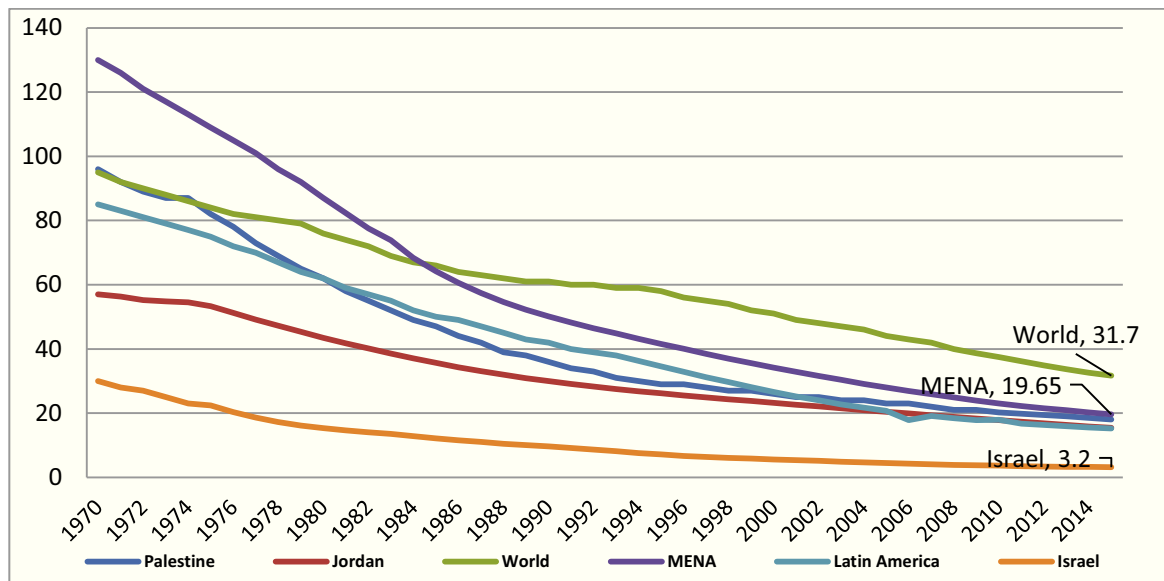
Source: The author by the World Bank Data

Child Mortality

Child mortality is considered as one of the most important figures of demographic indicators, since the people suffered at earlier times from high death rates of infants and children less than 5 years old. However, the development of health-care of mothers before birth and of infants later, in addition to cleaner resources of food and water, and availability of cleaner environment, all could decrease the number of deaths of infants and children. The level of poorness and education are also related to the mortality indirectly.

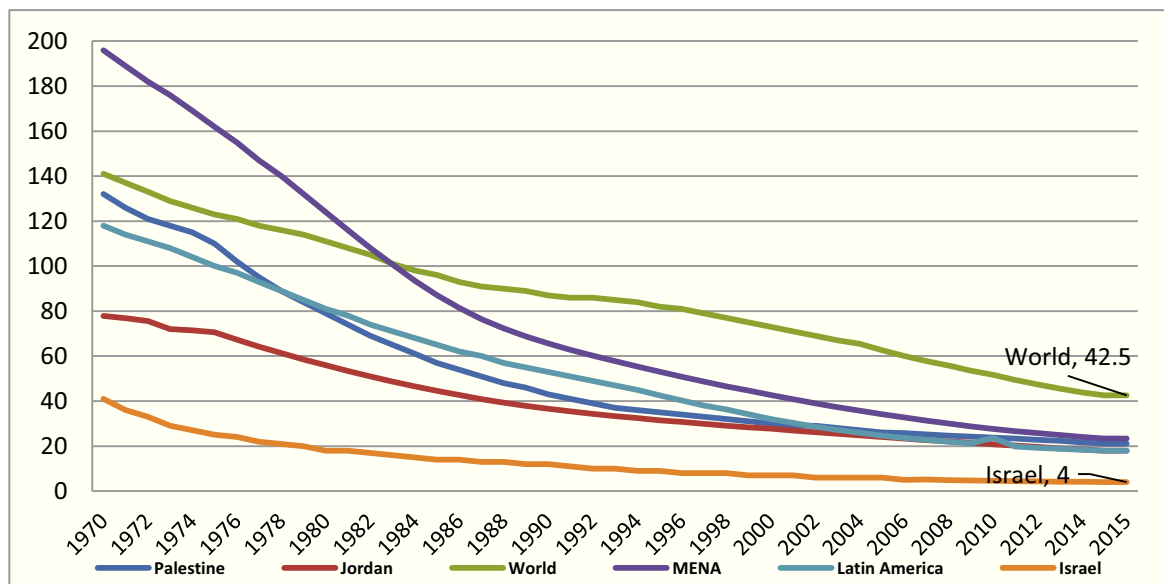
According to UN data, the infant mortality rate in Palestine has declined very significantly in the last four decades, where it has declined from 214 in 1950 to be only 18 in 2015. It is still better than the average MENA region countries, and the average world rate, where they have infant mortality rates at 19.6 and 31.7, respectively. While, it is much higher than Israel, where it is only 3.2.

Figure 25: Infants Mortality Rate per Thousand Births by Country (1970 - 2015)



Source: The author by the World Bank Data

Figure 26: Children Under 5 Years Mortality Rate per Thousand Births by Country (1970 - 2015)



Source: The author by World Bank Data

The mortality rate of children under five years old has also a significant decline in Palestine, where it was 132 in 1970 and became 21.1 by 2015. This refers again to the improvement in health-care and living standards; however, it could be better if there is stability and no shortage in some medicines and specialized doctors.

1.2.10- The Palestinian Refugees

The migration is normal evidence in all around the world and along the history; however, the migration in Palestine was remarked with other reasons. It was as a result of political project that caused the replacement of the majority of the Palestinians from the historical Palestine with Jews from around the world in new created state "Israel". This replacement created the Palestinian refugees to be one of the largest displaced populations in the world today (BADIL Resource Center for Palestinian Residency & Refugee Rights (BADIL), 2012).

Disregarding the political debate on this issue, the demographic changes in Palestine started to take place from the time of British Mandate (1917 - 1948) over Palestine by encouraging the Jewish migration to Palestine. By the establishment of "State of Israel" in 1948, more than 50% of the total Palestinian population migrated from their towns and villages, which are located inside the borders of new created State of Israel in 1948, to the towns in West Bank, Gaza Strip, and in neighbor Arab State countries; besides some minorities around the world.

Another demographic determinant of the Palestinian population was in the year 1967, when Israel occupied West Bank, Eastern Jerusalem, and Gaza Strip. Israel banned the Palestinians outside these territories to get back to their homes. According to UNRWA estimates, about 390,000 Palestinians out of about 1,250,000, were misplaced from WB&G in 1967, where 95% of them were misplaced to Jordan (Lubbad, 2007).

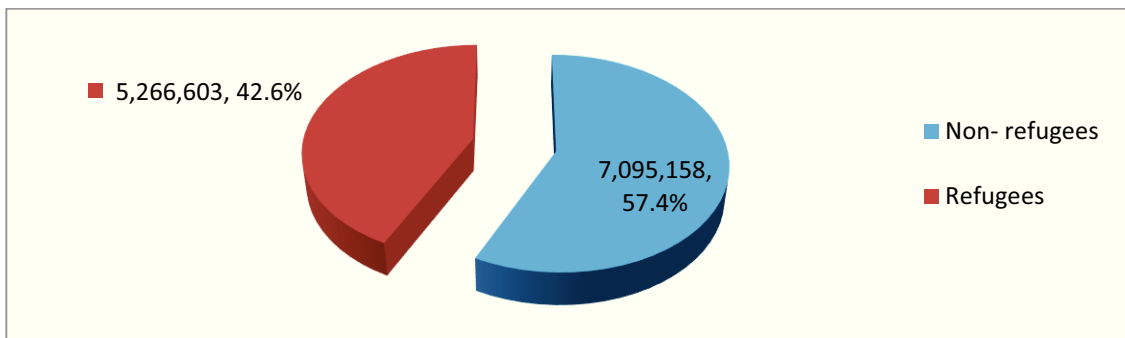
In addition, since 1967 the Israeli occupation has controlled the civil registration and permissions of residency to the Palestinians in WB&G. In the period from 1967 to 1993, Israel canceled the residency of about 140,000 Palestinians, who left WB&G in that period seeking work or education abroad or escaped from 1967 war. Later, it agreed on the re-registration of only about 10,000 (Human Rights Watch, 2012).

There was all the time some migration movement of Palestinian refugees from and to WB&G in that period. While, many of the refugees in Arab countries were forced to re-migrate to other countries. The most known dates are; the internal conflict in Jordan in 1970, civil war in Lebanon in 1980, and the Gulf war in 1991, in which the number of Palestinians in Kuwait alone decreased from 250,000 to 40,000, where most of them moved to Jordan, and some numbers moved to Scandinavian and Latin American countries

(Lubbad, 2007). The main difference between 1948 and 1967 wars on the population of WB&G is that in 1948, the population in WB&G was increased, while in 1967, the population was decreased as Israel had control over them.

It seems that this re-migration would not stop as long there are refugees waiting a solution in the non-ended conflict case. The main reasons of considering the Palestinian refugees out of Palestine in this study, even briefly, are that one of the scenarios of the solutions is to return all or part of them to Palestine and the fact that UNRWA, PLO and PA still responsible for and care about these registered refugees living abroad, particularly in refugee camps in Arab countries.

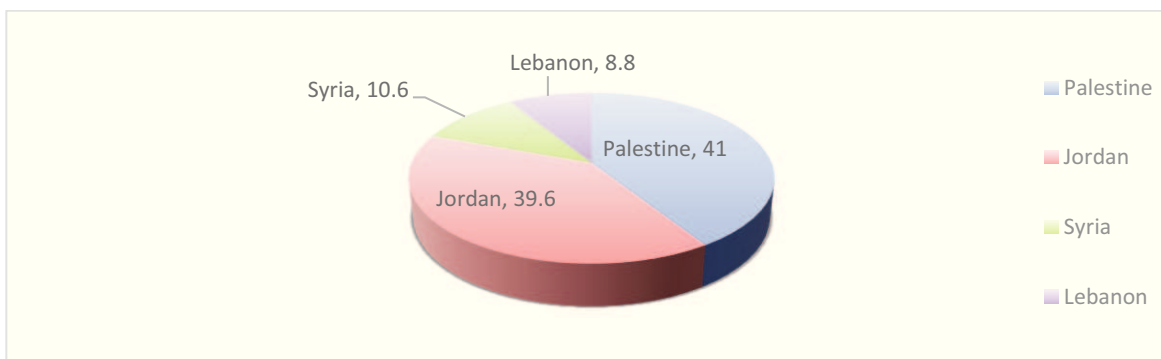
Figure 27: The World Palestinian Population by Refugee Status at the End of 2015 (12,365,761)



Source: The author by (BADIL, 2012) & (PCBS, 2015)

From the figure above, we notice that the registered refugees constitute 42.6% of the total population around the world, and more than half of them live outside of Palestine (BADIL, 2012). Moreover, the refugees constitute 41% of the Palestinians in Palestine according to the data of PCBS. Moreover, they constitute 27.1% of the population in West Bank compared to 67.3% in Gaza Strip (PCBS, 2015).

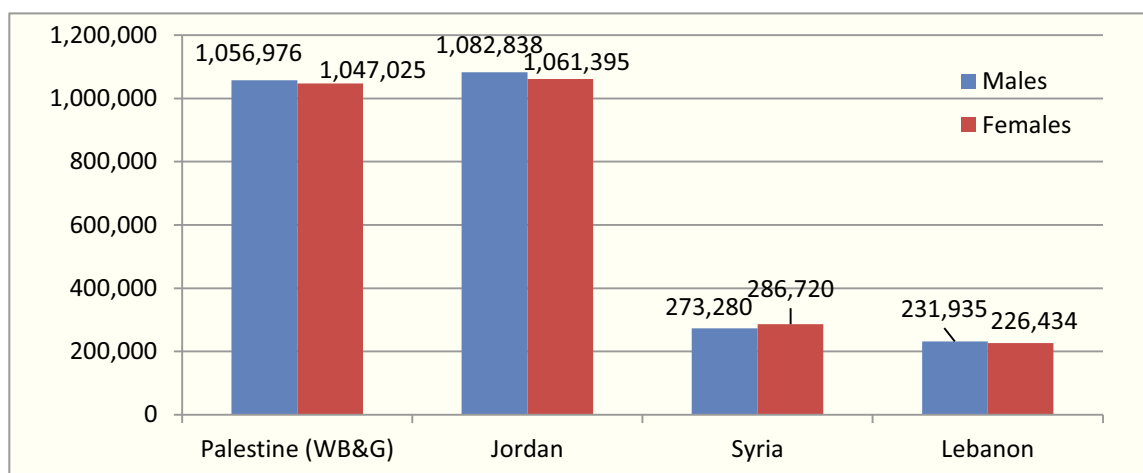
Figure 28: Distribution of the Palestinian Refugees in Refugee Camps at the End of 2015



Source: The author by (UNRWA, 2016)

According to the last statistical review of PCBS and UNRWA on Palestinian registered refugees in 2015, the total number of Palestinian refugees is 5,266,603, where the number of the refugees living in Palestine is 2,104,001 persons to constitute about 41% of the population there and about 40% of total Palestinian refugees in the world, and about 17% of total Palestinian population in the world.

Figure 29: The Registered Palestinian Refugees by the Gender and Country of Residency at the End of 2015



Sources: The author by UNRWA & PCBS

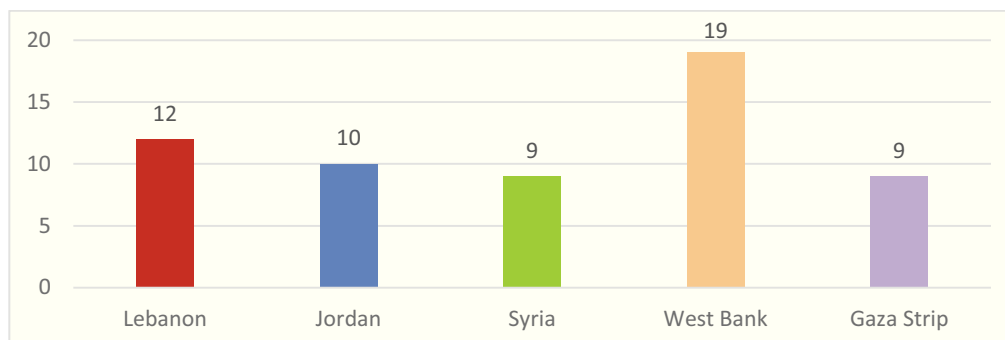
On the other hand, the other 3 million refugees living outside WB&G were concentrated mainly in neighbor Arab countries, where Jordan has the highest number of the registered Palestinian refugees to reach 2,144,233 refugees at the end of 2015; in addition to more than 100,000, who are not registered as refugees (UNRWA, 2016).

However, the demographics and conditions of the Palestinian population vary according to living conditions and services provided in each country. This depends on the regulations, degree of rights, and opportunity to access work in each country.

Most of the Palestinians living in Jordan and Israel live in better living standards and enjoy more stability in their work compared to Palestinian refugees in Syria and Lebanon, who suffer more due to the regulations there that deprive them from working formally and benefiting from the social security benefits (BADIL, 2012).

Most of Palestinian refugees stay in 58 refugee camps, 27 of them are in Palestine. These camps were built by the UNRWA, which is the responsible agency to provide basic services of health-care and education, to create job opportunities, and to offer other short assistance and relief programs for poor families (UNRWA, 2012).

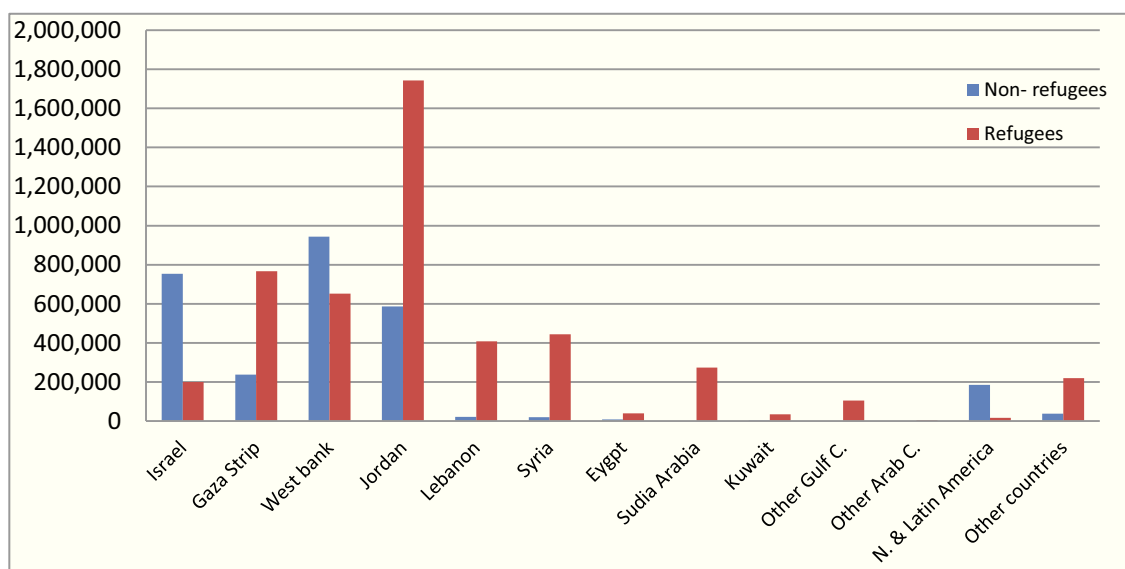
Figure 30: The Number of Official Refugee Camps Responsible from UNRWA by Country



Sources: The author by UNRWA & PCBS

Furthermore, other Palestinian refugees moved through the last period to other countries of the world searching for jobs and more stability. Here are the last available statistics of the Palestinians living abroad by their refugee status.

Figure 31: The Palestinians Distribution in Countries by their Refugee Status as in 2000



Source: The author by Palestinian National Information Center (PNIC)

Demographic Brief of Palestinian Refugees Living in Refugee Camps Abroad:

The Palestinian refugees abroad are concentrated mostly in neighbor Arab Countries; where, they have been living in these countries for more than 60 years. This long period has been enough to make some changes in the demographic and economic structure of these groups of population. The following table shows the main demographic aspects of Palestinian refugees in neighbor Arab countries in 2010:

Table 3: Main Demographic Aspects of Palestinians Refugees in Neighbor Arab Countries in 2010

Country	Household Size	Population growth Rate	Average Fertility	Crude Birth Rate	Infant Mortality	Mortality Rate (1-5)
Jordan	4.8	2.4%	3.5	29.2	22.6	25.7
Syria	4.1	1.6%	2.5	29.2	28.2	31.5
Lebanon	3.9	2.1%	3.2	25.8	19.0	21.7
Israel	4.4	2.2%	3.5	26.2	7.0	2.7

Source: The author by UNRWA Statistics - 2010, & (PCBS)

The data in the table above shows the differences of the demographic aspects of the Palestinian refugees by country of residence at the end of 2010. The surprise is that the demographic aspects of Palestinians in each country are similar to those in the country of residence, which show changes in their demographic aspects by time have happened. We find in Jordan the largest household size is at 4.8 and the highest population growth rate is at 2.4%, while the least population growth rate was in Lebanon at 1.6%. These differences could be related to the level of education and labor access of the female. On the other hand, Syria had the highest infants and children mortality rates at 28.2% and 31.5%, respectively. While, Israel had the least at 7% and 2.7%, respectively, which refers to the level of health-care provided in each country.

1.3- Economic Overview of Palestine

The economic factor is one of the most important factors to be considered in the process of designing pension systems. The Palestinian economy has a privacy related to the political situation and regulations of economic activities. For better understanding the economic situation and aspects of Palestine, first we briefly introduce the political and regulatory framework of the economy.

From 1967 to 1993, the Palestinian economy was completely under Israeli governance and regulations as an occupation entity, which tried to integrate the economy in WB&G to the Israeli economy by using labor, opening borders with Israel and applying the Israeli financial and tax system.

Now, the Palestinian economy is regulated through "Annex 3 - Economic cooperation" and "Annex 5- Paris Protocol" of Oslo Peace Agreement, which was signed between Israeli government and Palestine Liberation Organization (PLO) in 1993. "Paris Protocol" regulates the economic relations with Israel in four sectors; labor, trade relations, fiscal issues and monetary arrangements (Negotiation Affairs Department of PLO).

The agreement was planned for the interim period, which was estimated to last for about 5 years only, through which the two sides were supposed to continue negotiations until reaching a final peace solution and declare the Palestinian State. However, this did not happen, and the realities on the ground have changed over time. Thus, this agreement has not been suitable or practical any more as these economic agreements have turned to be as a guarantee to keep Israeli superiority over the Palestinian economy.

The results were a deteriorating Palestinian economy and weak market with many restrictions imposed by Israel on imports and exports, water, electricity, fuel supply, communication, monetary policies, labor, and taxations.

In 2000, the second Uprising "Intifada" was launched and Israel imposed long-term closures to borders and increased check points between cities in West Bank. These measures have caused a long-term economic crisis as well, given that the Palestinian government depended largely on donors to meet the budget deficit and to be able to pay its commitments to the private sector and to basic needs.

By imposing restrictions on exports of Palestinian products, the private sector has been close to collapse, the informal sector was encouraged, and the unemployment rate increased, where many Palestinians depended on humanitarian aids led by UN agencies. Then in 2006, the internal political structure has changed when Hamas Movement had won the elections of Palestinian Legislative Council (PLC), and led the national government coalition. This was followed by many Israeli and International reactions against that government, ended by a financial crisis and very strict borders closure of Gaza Strip. Finally, the internal political division occurred in 2007, where Hamas had control over Gaza Strip, which is considered as separated part from West Bank. Further, Israel imposed complete closure on borders of Gaza Strip, including personal movement except some limited cases. At the same time, Rafah Gate with Egypt, which is the only border gate to the world, was kept closed most of the year except some days for limited number of humanitarian cases. By 2010, a little lighter policies implemented toward Gaza Strip. On the other side, the conditions in West Bank have been better compared to the case in Gaza, since it has more stability. The PA could achieve some economic reform plans, and there was more free movement of persons abroad across Jordan (BADIL, 2012).

However, with the world economic crisis and shortage of donors, PA was not able to meet its financial commitments and the local products were not able to compete with Israeli products and other imported products. It seems that PA will remain depending for a while on donors' assistance as an essential part of the budget to be able to meet its financial obligations and commitments, and to have a recovery plan (CIA, the World Fact Book).

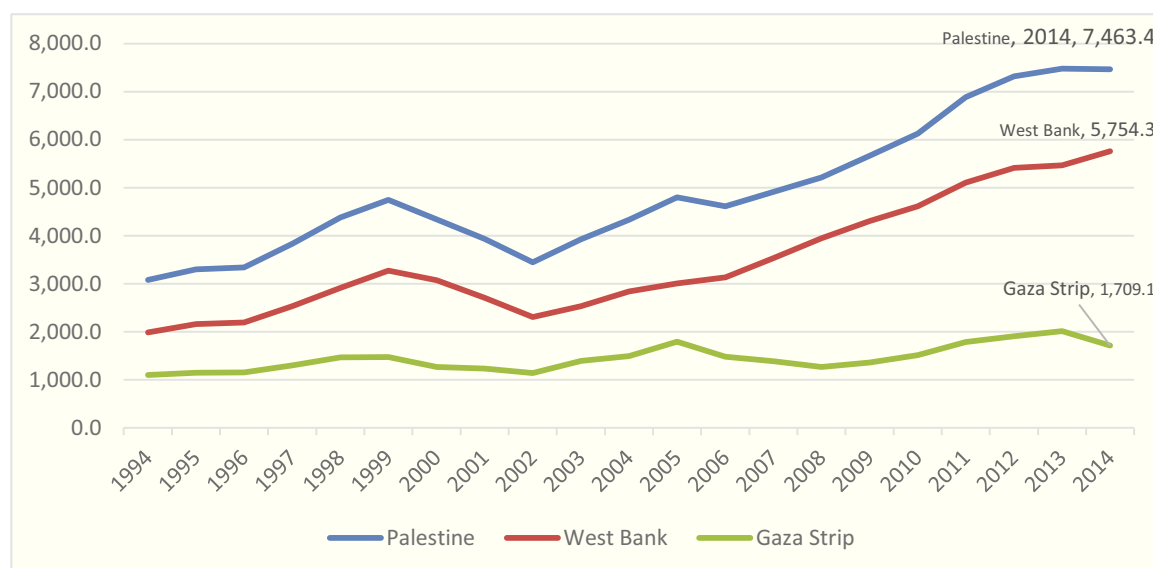
According to a recent World Bank report in 2012 on the Palestinian Economy, the Israeli restrictions are considered as the major impediment to sustainable economic growth in Palestine and confirms the urgency need of the Palestinian economy to the promised payments of donors. The report also spots the light on the Israeli settlements and areas under Israeli control as one of the obstacles against having sustainable economic growth in Palestine. Upon the "Interim Agreement" the Palestinian Territories are classified into four divisions, which determine the level of control of PA or Israeli occupation on each division. Area C is completely under Israeli control and was supposed to be delivered to the Palestinians gradually until the final agreement of peace negotiations. This area comprises about 61% of the total West Bank area, and controls very strategic positions including the

borders and resources of water and energy. PA does not have any authority towards these areas including municipal planning. On the other side, Israel expands the settlements by joining new lands from Palestinians, where they grew by 35% in the period from 2000 to 2011 (World Bank, 2012).

1.3.1- Gross Domestic Production (GDP)

GDP is a very important indicator to reflect the economic activities and growth. I started the data from the year 1994 as the date of establishing the Palestinian Authority (PA) and starting to have a Palestinian economy and institutions. In this paragraph, we overview the nominal GDP, real GDP, and GDP per capita as each of them gives different indication to the economic growth and inflation factor as well as the distribution to individuals.

Figure 32: Real GDP in Palestine in the Years 1994 - 2014 (In Millions of USA Dollar)



Source: The author by PCBS Data

By reviewing the figure above, we notice the GDP performance generally has fluctuated through the last period between sharp ups and downs with different contribution rates of the regions of West Bank and Gaza Strip.

By time, we see that West Bank has an increasing higher share of the Palestinian GDP than Gaza strip with a larger gap in the recent years. West Bank contribution to the total GDP as in 2014 was higher by more than three times of Gaza, where it was 5,754.3 million USD compared to 1,709.1 million USD in Gaza Strip. Thus, the effect of Gaza was less essential

on the total performance. At the same time, West Bank contribution to GDP could realize a continuous growth; while, Gaza Strip could realize a growth only till 2000. Then, there was a sharp decline in the production of Gaza, where its level in 2008 returned to be close to its level in 2000 and 1994 at 1,264.8 million USD, which means less share in the total GDP; at about 24% compared to 36% in 1994. However, the growth could occur again by 2010, when the Israeli restrictions were tempered.

The following table compares both the nominal and real GDP values in Palestine by region, where the base year was 2004. Thus, we can see clearly the inflation effect on the value of real GDP compared to nominal GDP, which records higher values after the base year and lower values before.

Table 4: The Nominal GDP⁷ Compared to Real GDP⁸ by Region in Palestine in Selected Years (In Million USA Dollar)

	1994	Ratio	2000	Ratio	2005	Ratio	2010	Ratio	2014	Ratio
Nominal GDP										
West Bank	1,817.3	63.9%	2,995.9	69.5%	3,029.9	62.7%	6,630.0	74.4%	9,803.5	77.1%
Gaza Strip	1,026.0	36.1%	1,317.7	30.5%	1,801.9	37.3%	2,283.1	25.6%	2,912.1	22.9%
Palestine	2,843.3	100%	4,313.6	100%	4,831.8	100%	8,913.1	100%	12,715.6	100%
Real GDP										
West Bank	1,981.2	64.3%	3,070.0	70.8%	3,003.8	62.6%	4,609.0	75.3%	5,754.3	77.1%
Gaza Strip	1,099.5	35.7%	1,265.9	29.2%	1,792.9	37.4%	1,513.3	24.7%	1,709.1	22.9%
Palestine	3080.7		4,335.9		4,796.7		6,122.3		7,463.4	

Source: The author by PCBS Data

Indeed, this difference in production is related more to the political events and the different policies imposed by Israel against West Bank and Gaza Strip. There was a growth in both West Bank and Gaza Strip till 1999, when the political deterioration started between Israel and PLO after signing the peace agreement in 1993. That was followed by the second Intifada in 2000. After the death of the former president Yasser Arafat in 2004, there was an economic growth again, which may refer to the expectation of a hope of political solution. However, this growth did not last long because of the Legislative Council elections of 2006, where Hamas won the majority in the Palestinian Legislative Council and led the national government coalition. Israel imposed restrictions on the Palestinian

⁷ The Nominal GDP is at the current prices without the effects of inflation or deflation.

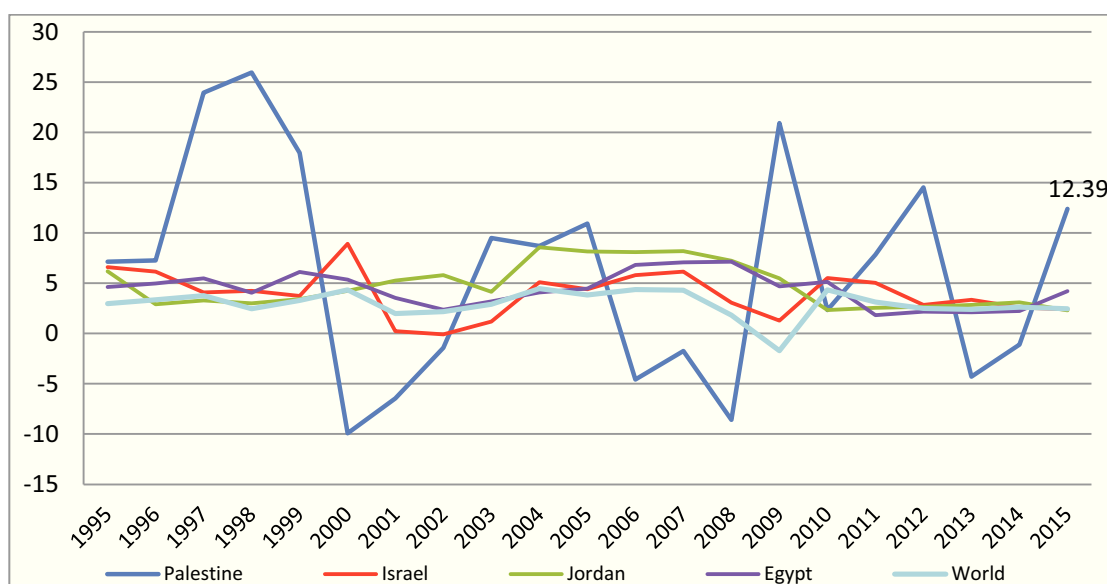
⁸ The real GDP is calculated at the absolute prices compared to the base year 2004, where values are adjusted to inflation and deflation.

government and so the donors, who refused to deal with a government that included members from Hamas (BADIL, 2012).

Under these pressures, an internal conflict emerged between Hamas and PA, which ended by the control of Hamas over Gaza Strip in July 2007. While the conditions in Gaza were deteriorating, West Bank could have more steady economic growth.

The Palestinian GDP has been the most fluctuating in the region, which was not related to performance of World GDP indicator, rather to the internal political conditions. While, in Israel, Jordan, and Egypt, it seems that their GDP is more related to the World changes, with some minor deviations due to their own situations.

Figure 33: GDP Growth Rate in Palestine Compared to Countries in the Region (1995 - 2015)



Source: The author by World Bank Data and PCBS

In 2015, Palestine achieved the highest GDP growth compared to the other countries in the region at 12.39%, while other countries were as follows; Egypt at 4.2%, Israel at 2.4%, Jordan at 2.3%, and the average world at 2.46%. This fluctuation in GDP growth performance would remain related mainly to political development, which creates a case of uncertainty for any sustainable development plan. Therefore, the pension systems may need some kind of reserve fund to be able to overcome the crises, in addition to more diversity in investments in both the allocation and location to avoid the high risky environment.

GDP per Capita

As we noticed above, West Bank contribution to the total GDP is much higher than Gaza Strip; however, to understand the difference of living standards and level of income in Palestine, it is better to know the GDP per capita, the poverty, and the equality distribution. According to the PCBS data, the GDP per capita in Palestine was 1,327 US Dollar as in 1994, where it was 1,371 in West Bank compared to 1,257 in Gaza Strip.

Until 2006, the GDP per capita of Palestine returned to the level of 1990s at 1,449 US Dollar under the impact of the decrease in GDP per capita of Gaza Strip.

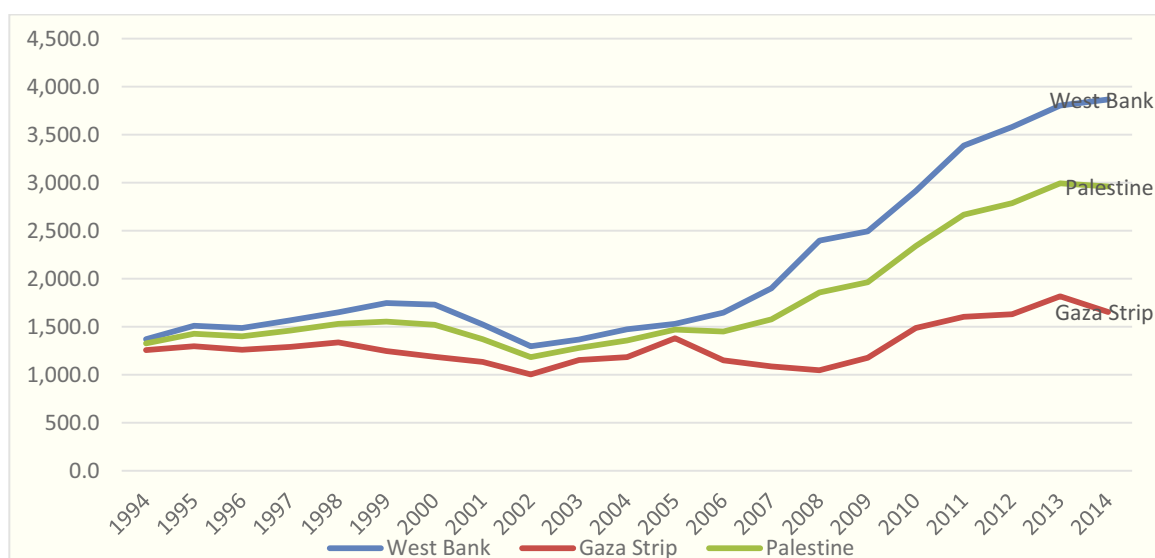
Table 5: Gross Domestic Production Per Capita of the Palestine in Selected years at Current Prices (In USA dollar)

	1994	1997	2000	2003	2006	2008	2010	2015
West Bank	1,371	1,567	1,731	1,365	1,646	2,396	2,913	2,866
Gaza Strip	1,257	1,291	1,188	1,152	1,150	1,046	1,487	1,370
Palestine	1,327	1,460	1,519	1,281	1,449	1,856	2,339	2,255

Source: The author by PCBS Data

On the other hand, the gap between West Bank and Gaza Strip was considered as not very high yet, which was at 1,646 US Dollar compared to 1,150 in Gaza Strip as in 2006. However, since then the gap continued to increase to have GDP per capita in West Bank at 2,255 US Dollar compared to 1,370 in Gaza Strip, which is considered almost the double of Gaza Strip. The total GDP per capita recorded the peak at 2,992 in 2013.

Figure 34: GDP per Capita of Palestine (1994 - 2014) in Current Prices Basis – (In US Dollar)

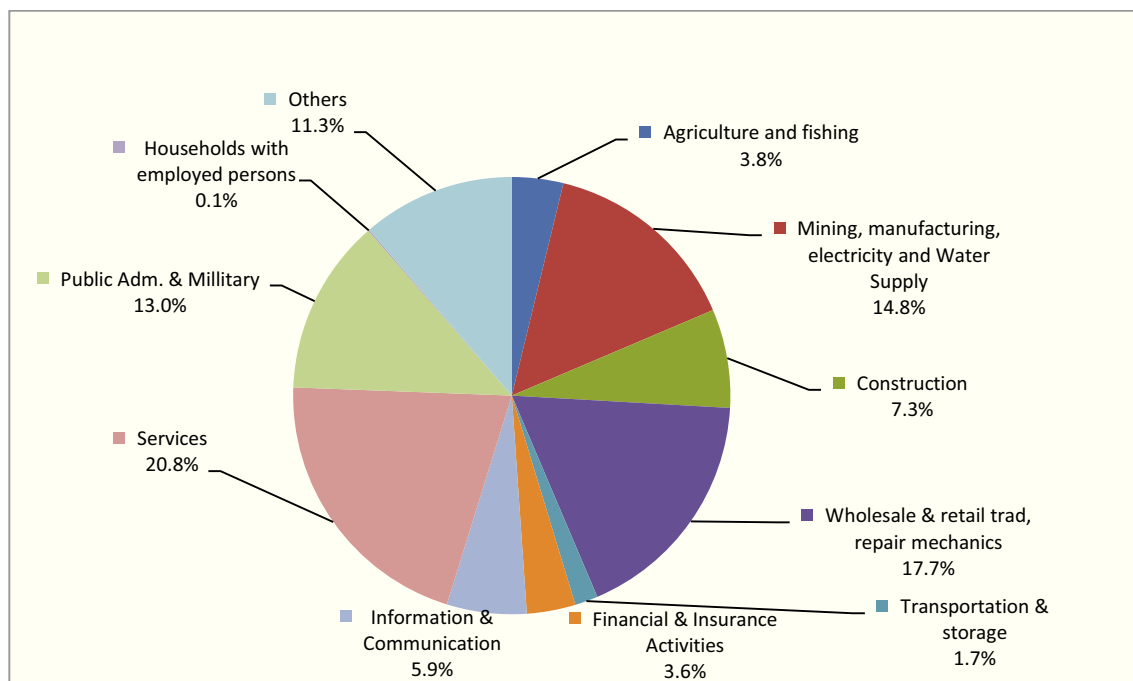


Source: The author by the World Bank Data and PCBS

As we see in the above figure, the GDP per capita is higher in West Bank. The figure also shows that the gap between West Bank and Gaza Strip had been increasing since 2005. However, the GDP per capita in Gaza Strip has been more fluctuating due to political development, while in West Bank it has been increasing steadily to increase the average GDP per capita in Palestine as well. While, the recovery in the economic growth in Gaza Strip was driven mainly by two factors; the aids inflow and easing the restrictions on entry of goods from Israel and movement of persons imposed by Israel. This economic growth in Gaza was led by a boom in construction sector, which was suspended for more than four years. However, any negative shock impacts negatively the economic growth and income in Gaza Strip, which shows how volatile is the economy in Gaza Strip, noting that the GDP per capita in Gaza Strip is about its level in 1990s (World Bank, March 2012).

Services sector is the largest sector contributing to the GDP in Palestine at 20.8%, followed by Wholesale & retail trade and repair mechanics, then the Public sector at 13%. On the other hand, agriculture and fishing contributes only with 3.8% of the total GDP.

Figure 35: Percentage of Contribution to GDP by Economic Sector in Palestine, 2014

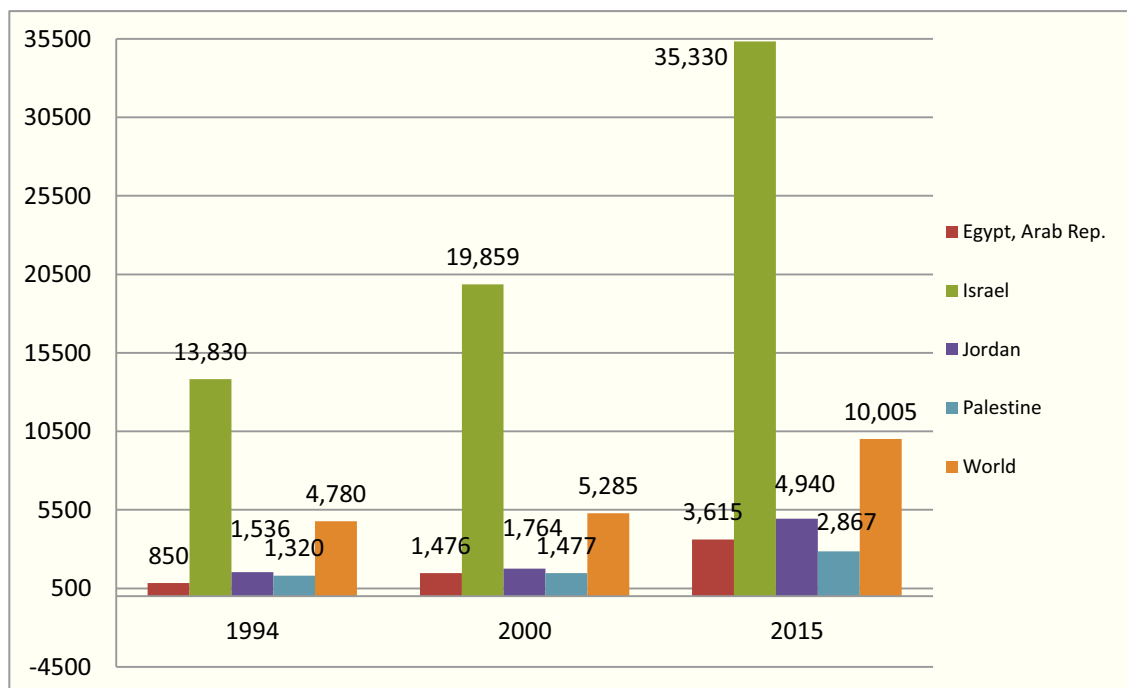


Source: (PCBS, Palestine in Figures 2014, 2015)

Compared to the regional countries, the GDP per capita in Palestine is close to the level of GDP per capita in the regional countries, and it is much less than the GDP per capita in Israel and the average world.

Since 1994, the GDP per capita in Palestine has decreased compared to other countries. The GDP per capita in Palestine was at 1,320 US dollar in 1994, compared to GDP per capita in Jordan and Egypt at 1,536 and 850 US dollar, respectively. While in 2015, it has increased to 1,594 US dollar compared to GDP per capita in Jordan and Egypt at 4,940 and 3,615, respectively. That means the level of living standards in Palestine was developed with very slow rate compared to other regional countries. While, it is still very low compared to Israel and developed countries, where it is 10,005, 35,330 for the average World and Israel, respectively.

Figure 36: GDP Per Capita by Country in Selected Years (1994, 2000, 2015) - (In US Dollar)

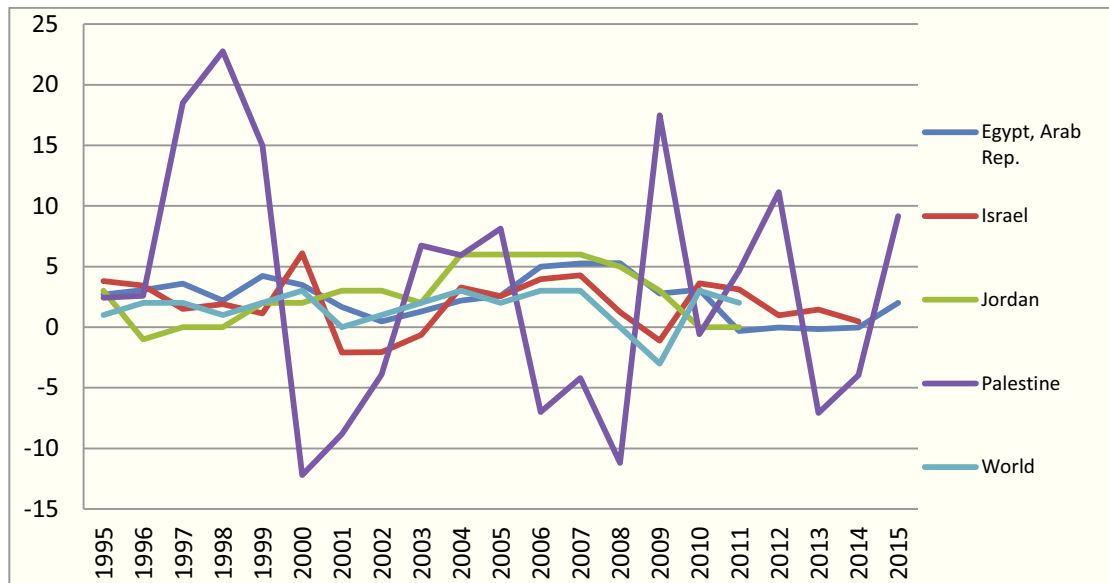


Source: The author by the World Bank Data and PCBS

By reviewing the above figure, we notice that the GDP per capita in Israel has been doubled more than 2 times from 1994 to 2015; whereas, the average world has doubled about 2 times, Jordan about 3 times, and Egypt about 2.3 times, while Palestine has increased at about only 20% through the same period.

Moreover, the GDP per capita in Palestine has been fluctuated sharply through the last two decades compared to other regional countries. The political instability has clear relation with GDP per capita as we focus on the main political conflict events and stability. Israel may have the second fluctuated GDP per capita, but in smoother curves as it has more independent and stable economy.

Figure 37: Growth Rate of GDP Per Capita by Country (1995 - 2015)



Source: The author by the World Bank Data

It is clear that Palestine income has been the least increase and the most fluctuated one in the last two decades, this would impact living standards and increase poverty rate among Palestinians, while the impact on the pension system would be worse on PAYG systems as the generated contributions would not increase to offer the increasing pension expenses. Creative solutions are needed in order to increase economic growth and income in the available political instability.

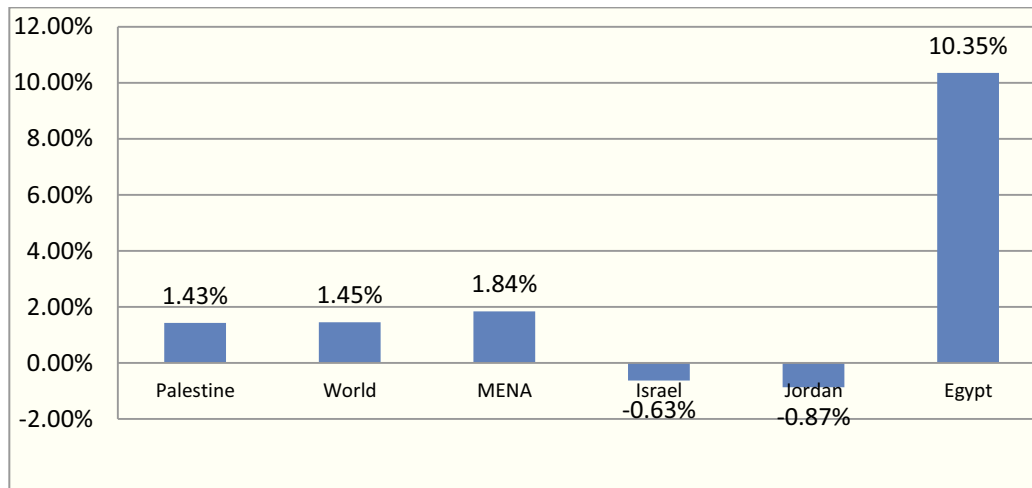
1.3.2- Inflation Rates⁹

Historically, from 1997 until 2015 Palestine annual inflation rate averaged 3.64%, reaching the highest record of 15.08% in 2008 and a record low of 1% in 2001. In 2015, the inflation rate in Palestine was 1.43% compared to (-0.87%), 1.44% and 1.84 in Jordan, the World

⁹ Consumer Price Index (CPI), used to measure inflation, is published by the PCBS in Palestine.

and MENA region, respectively. While, Palestine inflation rate is still higher than inflation rate in Israel, which is at (-0.63%); whereas, it was 10.36% in Egypt as illustrated in the figure down.

Figure 38: Inflation Rates in Palestine Compared to Regional Countries as in 2015

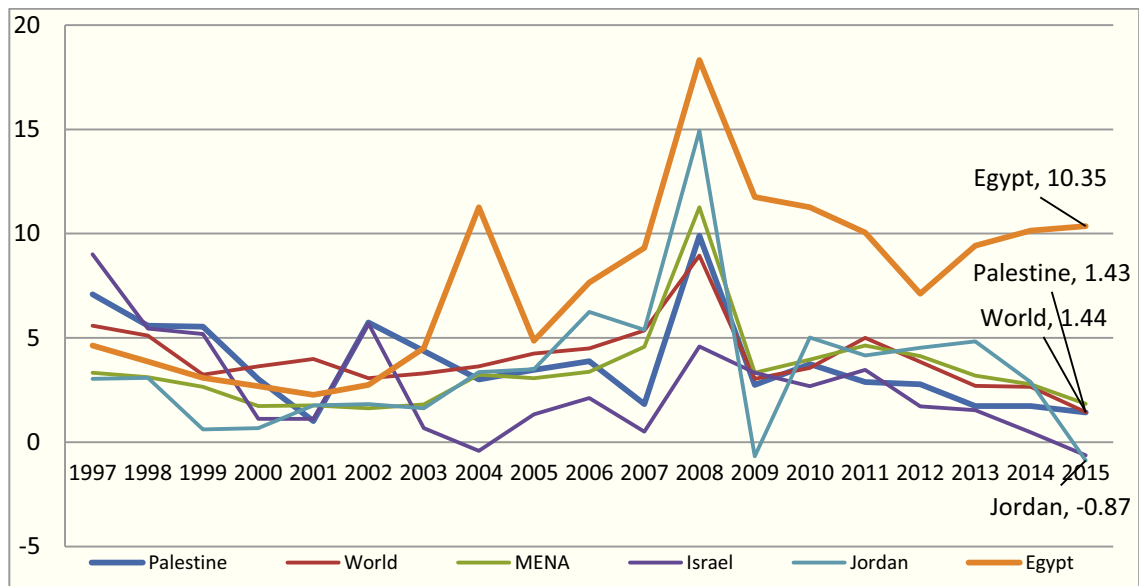


Source: The Author by World Bank Data and Jordanian DOS

Palestine Monetary Authority (PMA) states that *"Inflation in the Occupied Palestinian Territory (OPT) is largely imported inflation and shows high dependency on world prices, particularly for food and fuel"* (PMA, 2012, P4).

According to "Paris Economic Protocol", the PA is committed to Israeli VAT and prices of some certain goods, like gasoline price, which must be within 15% of its price in Israel, and the VAT should not be lower than two points of that in Israel on the same good (Portland Trust, 2012).

Figure 39: The CPI of Palestine Compared to Regional Countries (1997 - 2015)



Source: The author by World Bank Data, and PCBS Data.

By reviewing the diagram above of the inflation rates of Palestine compared to other countries, it shows that the inflation rate in Palestine was the closest to the world inflation rate than other countries of the region. However, when it is compared with the Israeli inflation rate, we find that it was closer at the beginning of the period, then started to be higher after the Second Intifada in 2001.

Because the Palestinian economy is so closely linked with the Israeli economy in currency and taxes, one would assume that prices should change in the same direction. Although, the Palestinian economy is bound to the Israeli one and still uses the same currency NIS beside the usage of USD and JOD for some commodities and for savings; however, the inflation rate in Palestine was higher. That refers to the Israeli policy against the Palestinians by imposing borders closure on Palestine, hard regulations and delays in imports and exports and even the daily transportations. These regulations increase the cost of the goods and create scarcity in some goods also, which push the prices up. Israeli companies as the main importer to Palestine, estimated at about 73% of total imported products at 2000, could realize high profits. On the other hand, the increase in wages have not matched the increase in prices of goods, which causes a decrease in the living standards (PCBS, 2012).

1.3.3- Poverty in Palestine

The poverty is one of the most difficult global problems, which exists in all societies but with different degrees and in relative manner. The social and economic problems start with high poverty rate, where avoiding the negative consequences on security, health and education becomes harder and the solution becomes more difficult. Thus, poverty has been an international concern. According to the third part of Versailles Agreement of 1919, “*Permanent world peace cannot be established without social justice*” (The Palestinian Centre for Human Rights, 2006: P5). Further, ILO Declaration of Philadelphia in 1944, which states: “*Poverty anywhere is a threat to propensity everywhere*”, raised the poverty issue internationally as a human right without excluding or specifying any group of the societies. Thus, poverty was set clear as a social and economic problem that would affect all the societies (ILO).

With the global crisis in 70s of the last century, the concern of poverty increased producing important theories about the growth and redistribution of income. No doubt that the growth has its positive effects on the living standards and the reduction of poverty, where the poverty concept is the contrary to growth and development. Hence, the world has been more concerned about poverty, regarding its impacts and its relation to the economic growth, and the wealth redistribution.

Recent international efforts to reduce poverty were the Millennium Development Goals (MDG) that were initiated at the Millennium Summit in September 2000 by the United Nations. The declared main target was to reduce the extreme poverty through a series of time-bound goals with deadline of 2015. The eight goals of the MDG cover areas of poverty, education, gender equality, child mortality, health, environment, and global partner for development. Most of these goals could be achieved through using the social security systems as a tool or an enhancing mechanism. However, introducing social security systems alone is not enough as there should be a comprehensive plan to include other related institutions and the legal framework to achieve the harmony of implementation. In this context, by achieving the determined goals of MDG, the income inequality would be reduced gradually across countries and on the global level.

In a society with high poverty rate, the government should provide essential services by public institutions and guarantee the access of poor people to these essential services and

commodities. These measures are considered as investment in human capital, and enhances the equality and harmony in the society; otherwise, the consequences on the society as a whole are negative, particularly on security, health, and education. The main challenge is to choose how to solve the problem of poverty in the given facts and available resources. In this context, there is a wide debate on the role of the state and the market mechanisms in eliminating the poverty rate. The governments around the world applied different redistribution policies and assistance programs to solve the poverty and inequality problems. However, the efforts to reduce poverty could succeed in some societies more efficiently than the others, and almost have been limited and lack of sustainability to some areas. Moreover, the informal social assistance plays important role in poverty alleviation in all societies. However, the formal assistance programs have been crowding out the informal assistance in the degree that is related to the society norms and laws. Thus, each society has a privacy in solving its problems with poverty, whereas the redistribution policy alone could have its negative consequences in the future.

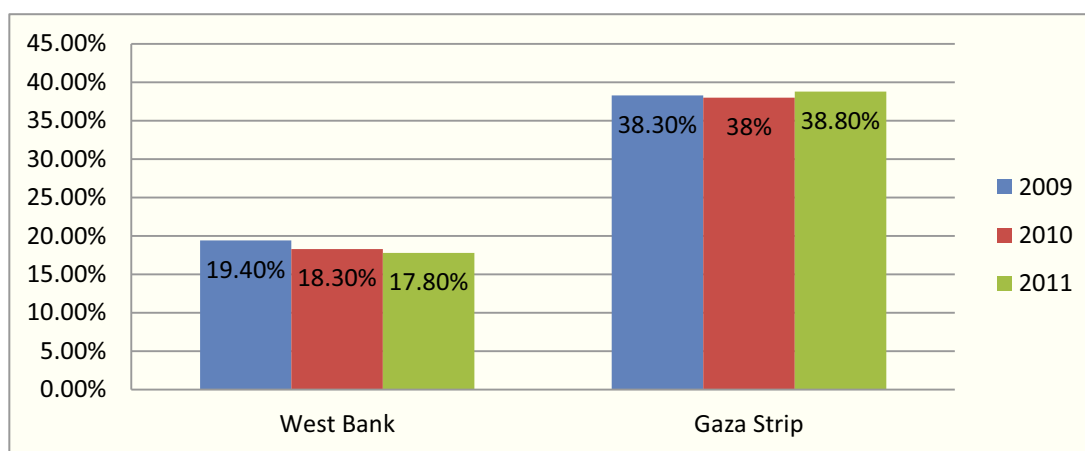
There are more than one measuring method of poverty, which make comparing poverty hard for researchers and policy makers. Therefore, the definition of poverty line in each country is different. Even measuring poverty by the income, does not reflect the reality of poverty in each country or a group of countries because they have different living standards. Generally, the poverty is related with per capita income and economic growth; however, other measures have significant effect on the poverty rates and alleviation such as: unemployment, inflation, inequality in income distribution, and wealth (World Bank, 2001).

There has been a debate regarding the used method to measure poverty, where the common one is a purely relative income poverty, which establishes the poverty threshold as the amount of a percentage of median equivalent household income per adult of each living country. However, the critics to the use of this measure are related mainly to determining the minimum income and the adequacy problems with this measure in different societies with different norms and living standards, which have explicit normative content (Bradshaw et al., 2011). The result of these critics is to search for alternative to assess poverty and adequacy, which led to a renewed interest in budget standards methodologies

as the “Minimum Income Standard” for Britain and “Standard Budgets” for Austria, Belgium and Spain.

In the Palestinian case, the data of PCBS survey that is conducted on consumption, income, and level of poverty in 2011 indicate that the poverty rate is 25.8%: it was 17.8% in West Bank compared to 38.8% in Gaza Strip¹⁰. While, 12.9% of the individuals in Palestine were suffering from deep poverty according to consumption patterns; 7.8% in West Bank, and 21.1% in Gaza Strip.

Figure 40: Poverty Rates in Palestine by Region in (2009-2011)



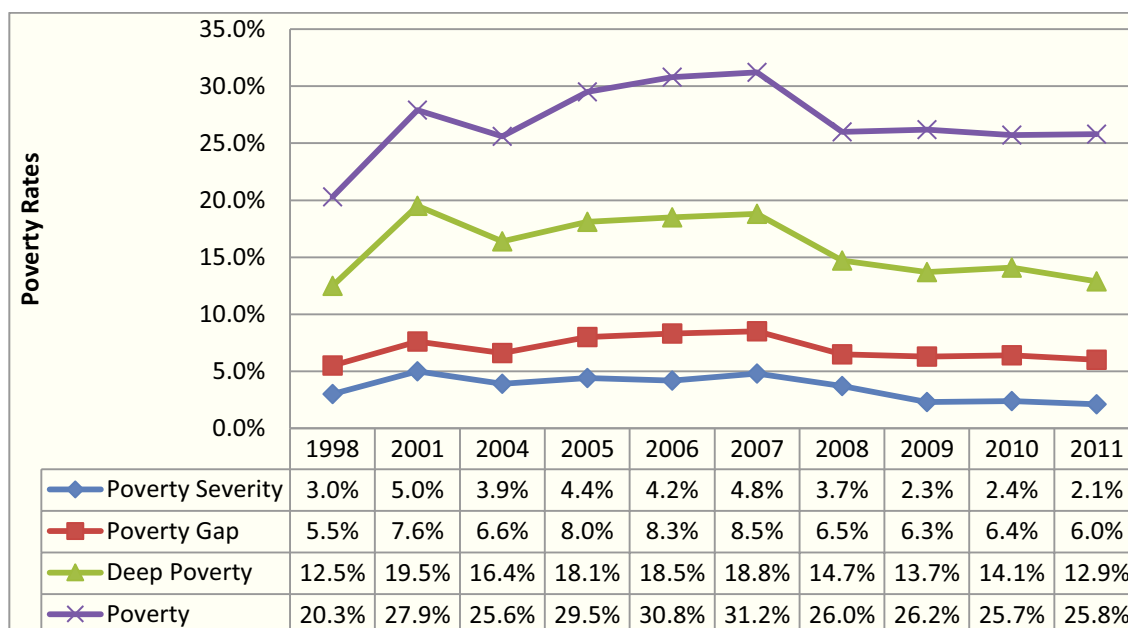
Source: The author by (PCBS)

In the last decade, the economy of West Bank and Gaza Strip has developed differently, where the Poverty rate in Gaza Strip is higher than West Bank. The poverty rate in Gaza Strip has reached to one of the highest rates in the world, peaking to 41% in 2008, while in West Bank it was 19.5%. Further, the poverty rate increased in the years 2009 to 2011 from 38% to 38.8% in Gaza Strip, while it decreased from 19.4% to 17.8% in West Bank at the same period. Furthermore, 12.9% of individuals were under the deep poverty line¹¹: 7.8% in the West Bank and 21.1% in Gaza Strip as in 2011.

¹⁰ During 2011, the relative poverty line and the deep poverty line in Palestine according to consumption patterns, for reference household consisted of 2 adults and 3 children, were 2,293 NIS, and 1,832 NIS, respectively.

¹¹ According to PCBS, the poverty definition was developed in 1997 as follows “The definition of poverty combines absolute and relative features and is based on a budget of basic needs expenditures. Two poverty lines were developed according to actual expenditure levels of Palestinian households (the expenditures of households with 2 adults and 4 children were taken as the reference household). The first, termed “deep poverty line” was calculated to reflect a budget for food, clothing and housing. The second,

Figure 41: Poverty Rates¹² in Palestine in the Years (1998 – 2009)



Source: the author by PCBS Data and reports.

* The indicators of poverty for 2008, were based on estimates due inability to collect Gaza Strip data of the said year.

Moreover, the income data indicate that 47.6% of Palestinian individuals has wages less than national poverty line: 35.6% in West Bank compared to 67.1% in Gaza Strip.

Moreover, the poor people in Gaza Strip are poorer than poor people in West Bank, and it is noticed that the poverty rate was the highest in refugee camps at 35.4% followed by urbanized areas at 26.1%, then rural areas at 19.4%. Furthermore, the poverty severity¹³ is the highest at refugee camps at 16.2% followed by urbanized areas at 13.7% then rural areas at 7.4% (PCBS, 2011).

However, there was a revision made with the assistance of the World Bank poverty experts to the methodology of estimating the poverty due to the difference in living standards

"poverty line" adds other necessities including health care, education, transportation, personal care, and housekeeping supplies" (PCBS, Press Release - Page1, 2010).

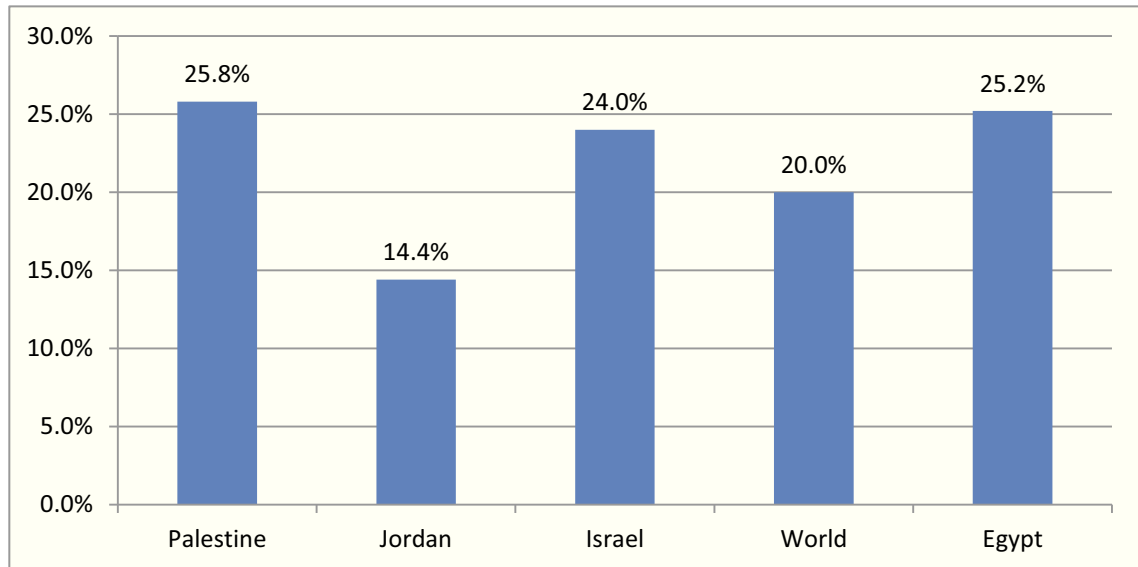
¹² The poverty by headcount index, which simply measures the proportion of the population that is counted as poor.

The poverty severity index (also known as the squared poverty gap index, P2) averages the squares of the poverty gaps relative to the poverty line. It is one of the Foster-Greer-Thorbecke (FGT) class of poverty measures that allow one to vary the amount of weight that one puts on the income (or expenditure) level of the poorest members in society (the World Bank definition).

¹³ The Poverty severity index is basically a poverty gap. It measures the gap between "Poverty line" (P1) and "the average income of poor people" (P2). The greater the gap the deeper poverty they are in.

between West Bank and Gaza Strip¹⁴. The poverty rates after using the new methodology were less than the previous ones, which confirms the importance of the methodology used to measure the poverty.

Figure 42: Poverty Rates by Country and Average World as in 2011



Source: The author by Jordanian (DOS), Palestine (PCBS), Egypt (CAPMS), and Israel (NII), and World (CIA Fact Book).

From the figure above, it is not surprising to find that the poverty rate in Palestine is the highest in the region in 2011. However, the poverty rate is related to the national poverty line in each country, which is not standard internationally and related to living standards and social security system of each country. So, we can find the poverty in Israel is high at 24%, which is close to the rate of Egypt that is at 25.2%, compared to the poverty rate in Jordan that is the least in the region at 14.4%. However, the average income in Israel is about seven times of the average income in Jordan as the living standards is higher in Israel.

According to the Palestinian Centre for Human Rights report in 2006, the high rate of poverty in Palestine is in large part a result of being under occupation and political instability in the region, starting with the mass displacement of the population of many towns and villages in 1948 to others in WB&G and abroad. Then, occupation of WB&G

¹⁴ The new methodology has focused on measuring the changes on living conditions through fixing the two lines of Poverty and deep Poverty for the year 1997, and updating them using the Consumer Price Index (CPI) to monitor the inflation of the two lines during the period (2004 – 2009).

in 1967 that caused another population displacement, followed by the first Intifada in 1987 and Gulf War in 1990. Further, the second Intifada in 2000 after Oslo peace agreement has very negative effects on the economy and daily life. Since 2006, the internal conflict between Fatah and Hamas political parties, the complete closure on Gaza Strip Borders, and Partly on West Bank with many military check points between cities were added to the reasons of poverty and deterioration of the economy and social stability (Palestinian Centre for Human Rights, 2006).

Furthermore, according to the Palestinian Economic Council for Development & Reconstruction (PECDAR), the losses of the Palestinian economy through the year of 2000 only are estimated at about 16.6 billion USD. All of these events in addition to countless of occupation practices cost the Palestinian economy and individuals many billions of dollars and hold the poverty in high rates (PECDAR, 2007). Furthermore, statistics of PCBS indicate to a significant increase to more than 64% only through the period from the beginning of the second Intifada to April 2001; whereas in West Bank it was 55.7% compared to 81.4% in Gaza Strip (Palestinian Centre for Human Rights, 2006).

In accordance with a report of the World Bank published in 2001, it concludes that the high rate of poverty in Palestine refers to the low economic development, where the key determinant of household poverty is the employment status of the household head and his/her level of education and the family size (World Bank, 2003). Meanwhile, according to the PCBS surveys and census of 2007, it was found that the unemployed household heads have the highest poverty rates, and one employed person in the household could reduce the poverty, while 2 employed persons in the household would significantly improve the living standards of the household.

As a result of the major displacement in 1948, United Nations created refugee camps and United Nations Relief and Works Agency (UNRWA). The Palestinian refugees lived in bad conditions and crowded areas lacking the basic life conditions; however, they could survive by the relief aids of UNRWA and other social assistance programs, and a high ratio still dependent on these social assistance programs up to date.

The following table highlights the importance of the provided social assistance in reducing the poverty rate. According to PCBS data, 58.2 % of families in Palestine have at least one member that had received humanitarian aid. The social assistance programs reduced

poverty rate by almost 16.88% in Palestine: 10.7% in West Bank compared to 21.2% in Gaza Strip. While, it reduced the poverty severity by 26.6 in Palestine: 20% in West Bank compared to 30.3% in Gaza Strip (PCBS, 2011). The impact of social assistance on reducing poverty in Gaza Strip is higher as both the poverty rate and assistance programs are higher, which is important to the survivorship of people there. Further, the impact of social assistance on poverty severity is also higher as this group is less in number and the cost is less to improve their living conditions. It is estimated that about 80% of people in Gaza Strip receive some kind of social assistance, which indicates to the large ratio poverty in Gaza Strip compared to West Bank.

Table 6: The Poverty Ratio among Individuals Before and After Social Assistance in Palestine as in 2010

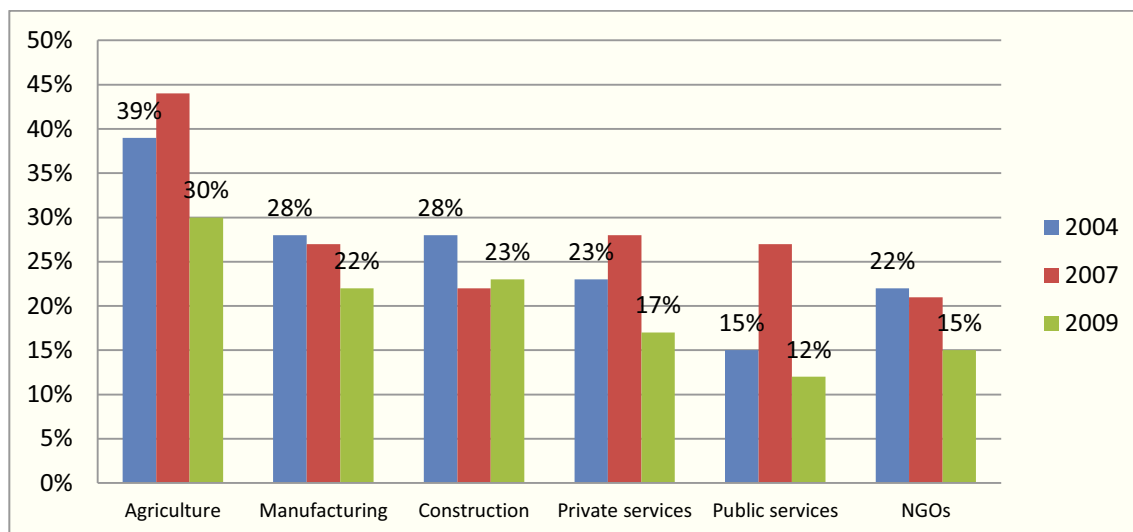
Region	Poverty		Poverty Severity	
	Before Assistance	After Assistance	Before Assistance	After Assistance
West Bank	20.5	18.3	11.0	8.8
Gaza Strip	48.2	38.0	33.0	23.0
Palestine	30.9	25.7	19.2	14.1

Source: (PCBS) Poverty Report, 2011.

Formal social assistance is distributed in both cash and in-kind forms through various programs and institutions¹⁵. Moreover, some kinds of informal social assistance are also available, which contributes to reduce poverty among relatives and small communities. According to PCBS data the poverty rate distribution by the sector of employment in Palestine is as follows: the highest rate of poverty was among families working in agriculture at about 30% in 2009, followed by construction, manufacturing, and private services at 23%, 22% and 17%, respectively. Public services and NGOs have the least poverty rates at 12% and 15%, respectively (PCBS).

¹⁵ Chapter three explains in details the programs, kinds, and values of social assistance in Palestine.

Figure 43: Poverty Rates by Sector of Employment in Palestine in Selected Years (2004, 2007 and 2009)



Source: The author by PCBS Data

In regard of social aspects, it is found that females headed families are poorer than those led by males. Further, the poverty is proportional with family size and families having more children; whereas, the highest percent of poverty is among the youth between (18 – 24) years old at 24.9% and the children under the age 18 years old at 27.2%. While, the poverty at old age is at 22.2%.

Table 7: The Poverty Rate According to the Real Consumption by Age Category in Palestine as in 2011

<i>The Age Category</i>	<i>Poverty Rate</i>
<i>Children (less than 18 Years)</i>	27.2%
<i>working age population (18 – 59) Years</i>	24.9%
<i>Old People (Over 60 Years)</i>	22.2%
<i>Total Population</i>	25.8%

Source: PCBS, 2013, the Database of Family Expenses & Consumption Survey, 2011, Ramallah, Palestine.

Even the difference in poverty rates between age groups is low, the poverty rate among old-age population is less than children. This may refer to the fact that family with children normally is a large family with almost young members. While, people over the age of 60 years do not have or have less children in the family as their sons and daughters are supposed to be separated to other house. Further, old parents may receive support from their sons as well. Thus, the income seems larger for old-aged compared to children due to

the chosen equivalence scale of income distribution¹⁶. Moreover, another interpretation could be related to the consumption itself, where the children have more needs of education, health-care, leisure, food, and clothes compared to old-age people. However, the old-age people still vulnerable as the priority may go to children in the same household, and as they have less opportunities to receive formal assistance, acknowledged that about 65% of old-age population aged 65 or more are living under poverty line.

On the other hand, the consumption facts of poor compared to non-poor are shocking. Given that poor families constitute 38.2% of the population compared to 61.8% for non-poor, poor families consume only 19.3% of goods and services. Thus, the consumption rate of poor families was one-third of that of those over the poverty line and a quarter of the clothing and health-care services. In addition, poor people in Gaza Strip consume 23.5% of the food compared to 76.6% for non-poor families.

On the other hand, it is noticed that the inequality in Palestine increased in 2010; whereas, the GINI factor¹⁷ increased from 38% in 2009 to 41% in 2010 (PCBS, 2011).

In conclusion, the poverty rate in Palestine is high and living standards is low in an increasing gap of inequality. For stability and equality, there should be a sustainable development plan to employ the available resources in the most efficient way and benefit from the demographic dividends. Otherwise, these youth people will face an increasing problems, which will be reflected on the society and form extra burden on public budget. Relief programs alone are not enough for development and production. No doubt that on the short-term the organization of assistance distribution on the needed persons in efficient manner would have more impact to reduce poverty and reduce the expenses. However, investing and providing incentives for production and innovation and facilitating businesses and access to labor market are the most significant tools for poverty reduction on the medium and long term in Palestine. Moreover, we need to have strong financial and insurance sector to provide financing mechanisms and protect businesses and labor as well.

¹⁶ The definition of Equivalence of Scale is *“an index converting nominal incomes of heterogeneous households in comparable measures of well-being”* or *“A tool that allows us to make possible meaningful comparisons between households of different sizes and composition”*. According to Bellu and Liberati, the concept “equivalence of scale” has two methods: the first is considered a simple per capita measure, or it is more sophisticated that takes into account economies of scale within the household that may operate with regard to the consumption of certain goods (Bellu and Liberati, 2005).

¹⁷ GINI factor was used to measure the injustice of income distribution.

Finally, social security systems are supposed to protect people at the end of their service to any natural or disability reason. Thus, it is a protection mechanism that smoothens the changes in income due changes of environmental circumstances through life cycle. Besides, social security systems also provide benefits for poor and vulnerable people on solidarity basis that should have a significant role to reduce poverty. Given that social security system coverage has been limited to public sector, the majority of population need a protection mechanism through a proper social security system.

1.3.4- Labor Market

Following the migration wave in 1948, a high density of population was created in West Bank and Gaza Strip with lack of job opportunities and stability. There were no enough investments to provide new jobs for the crowded labor force, which depended for a while on UNRWA relief aids. Later, thousands of Palestinians tried to have job opportunities in Gulf Arab countries, and some Palestinians in Gaza Strip were encouraged to have high education by the Egyptian government through scholarships. While, West Bank was joined to Jordan and Palestinians there had the Jordanian citizenship. However, after 1967 when Israel occupied WB&G, Israeli occupation did not allow the Palestinians outside WB&G to return back except small numbers. Moreover, barriers were imposed on travel of individuals outside WB&G, particularly from Gaza Strip. At the same time, there were no real investments in WB&G that would create new job opportunities. Palestinians did not have another choice than working in Israel as labors with comparatively higher salaries compared to living standards in WB&G. These conditions encouraged young people to leave schools early in order to work in Israel, which led to less education rate at that time.

By the start of Intifada in 1987, Israel imposed constraints on workers and many regulations for security reasons. These regulations were as hell for the workers who had to depart early at 4:00 am and return after 9:00 pm at the evening, beside the bad treatment they met in the way (Human Rights Watch, 2012). The numbers of workers started to decline particularly from Gaza Strip; where in 2006 Israel completely denied to grant working permissions for workers from Gaza Strip. While, it started to compensate the labor shortage

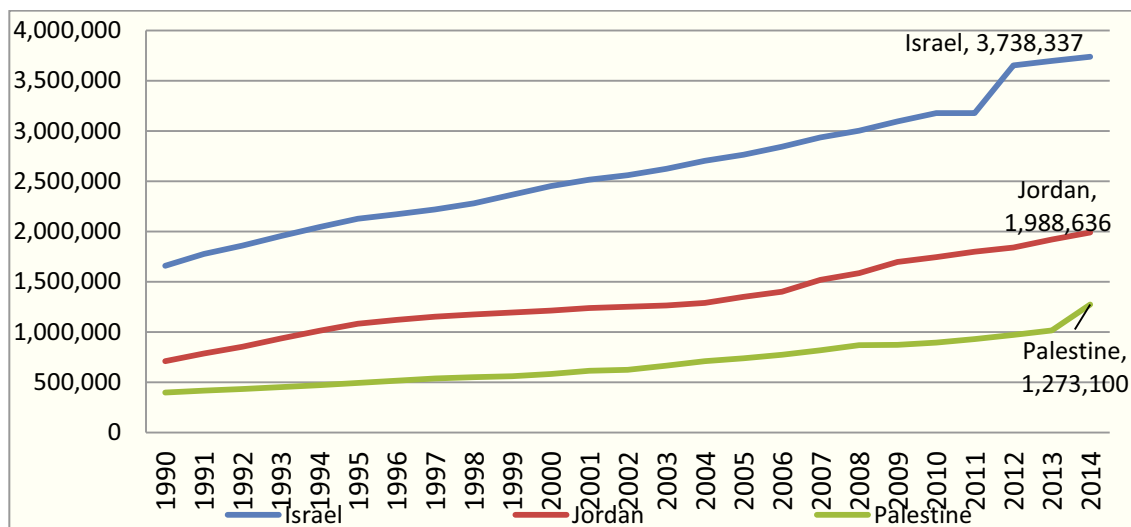
from Gaza Strip by increasing the working permissions for workers from West Bank, in addition to the persons who could reach the work place in Israel illegally (PCBS).

The workers from West Bank were able to access Israel and work illegally; however, that was not possible for workers from Gaza Strip, because of the well-controlled borders by Israel on Gaza Strip as it is comparatively much smaller in size and with no geographical boundaries as the case in West Bank.

1.3.4.1- Labor Force by Gender, Age, and Sector Categories

According to the statistical survey conducted by PCBS at the end of 2015, the size of labor force in Palestine is small compared to other neighbor countries. At the end of 2014, the labor force in Palestine was 1,273,100 compared to 1,988,636 in Jordan and 3,738,337 in Israel. Through 2015, the labor force in Palestine grew by 4.08% compared to 2014 to reach 1,325,000 at the end of 2015; 844,300 in West Bank and 480,700 in Gaza Strip.

Figure 44: The Labor Force in Palestine, Jordan, and Israel through the Period (1990 - 2014)



Source: The author by World Bank Data & PCBS Data

It is expected that in the near future there will be very escalating increase in the number of labor force in Palestine, because about half of the population at present time are young and after education they will join the labor force. Jordan has almost a similar growth rate of the labor force that is also expected to remain high in the near future. However, the advantage in the Jordanian case is the availability of investment and openness to the world, which would create new job opportunities in and outside Jordan. Further, we could notice a steady

increase in labor force in Israel also, which is caused by immigration of Jews from other countries to Israel. However, these persons will retire earlier and it would be estimated that they will cost the state more since there is no long working careers and have high life expectancy.

In the Palestinian case, the lack of sustainable development programs and few investment opportunities pushed the government to solve the unemployment problem through hiring large numbers of labor force in public sector without sustainable development plan. This policy created other problems in the efficiency of public sector itself, committed the government with high salaries to large number of labor force without efficiency of productivity, and created inequity in distributing the public resources.

According to the PCBS data, the public employees form about 22% of those in employment, 34.4% in Gaza Strip and 16.7% in West Bank, which indicates to a higher percentage of public sector employees in Gaza Strip than in West Bank.

On the other hand, the labor force in private sector faces serious problems such as low wages, informal sector, high unemployment, lack of mandatory social security system, and inequity. Moreover, there are some other groups, which could not join the labor force in Palestine such as those working in Israel, working abroad, and females. These groups need some kind of protection from old age, disability, death, and unemployment periods.

Table 8: Percentage Distribution of Employed Persons Age 15+ Years from Palestine by Region and Sector, (ILO Standards), LFSQ4, 2015

	<i>Public Sector</i>	<i>Private sector</i>	<i>Other Sectors</i>	<i>Israel & Settl.</i>	<i>Total</i>
<i>West Bank</i>	16.7	65.2	1.3	16.8	100
<i>Gaza Strip</i>	34.4	59.6	6.0	0.0	100
<i>Palestine</i>	22.0	63.4	2.8	11.8	100

Source: The author by PCBS, 2016

As mentioned above the opportunity to work in Israel is not possible for labor from Gaza Strip; while, 16.8% of labor from West Bank work in Israel. Further the Private sector still form the majority of jobs in Palestine at 63.4%, which is higher in West Bank at 65.2%. This distribution of jobs is important as it reminds to the significance of private sector as a large group of the total employees and need for protection through social security system. Further, employees in Gaza Strip has less job opportunities compared to West bank, which due to the closures of borders and less investment.

On the other hand, daily wages are the highest in Israel at 200.6 NIS, followed by other sectors including NGOs at 119.7 NIS and public sector at 99.5 NIS. The lowest wage is in Private sector at 69.9. However, there is a clear gap in wages between West Bank and Gaza Strip. The average wages in West Bank recorded 120.1 compared 61.3 in Gaza Strip, which reflects the wage gap in all sectors. However, the highest gap was in Israeli wages compared to the private sector wages, which recorded in West Bank more than twice of that in Gaza Strip.

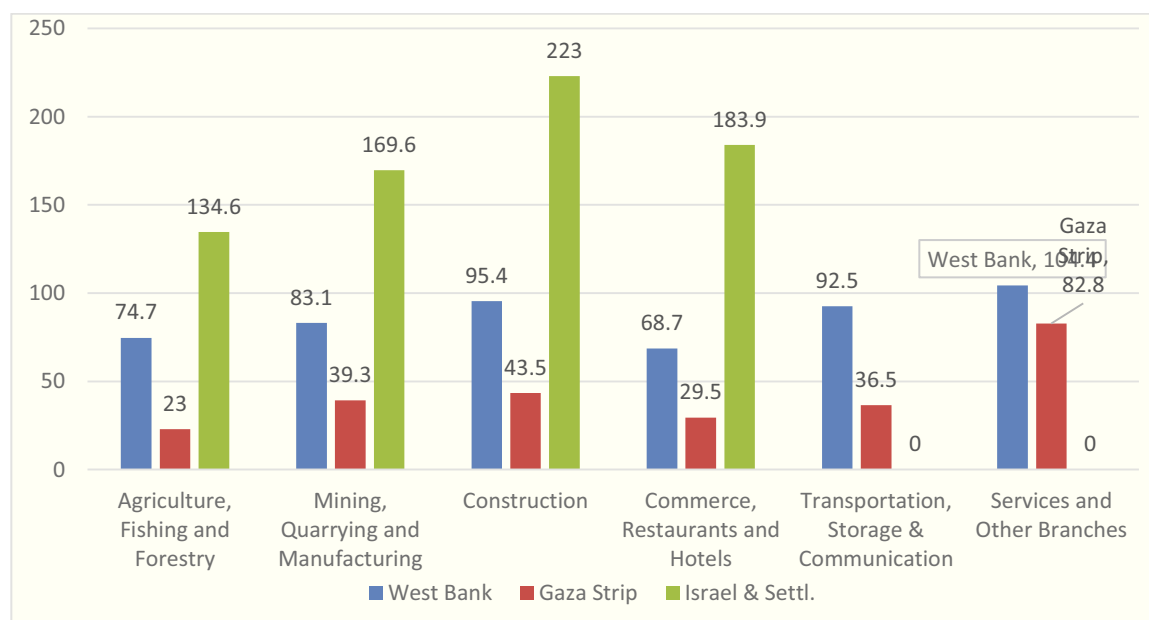
Table 9: Average Daily Wage in NIS for Wage Employees from Palestine by Region and Sector, (ILO Standards), LFSQ4, 2015

	<i>Public Sector</i>	<i>Private Sector</i>	<i>Other Sectors</i>	<i>Israel & Settl.</i>	<i>Total</i>
<i>West Bank</i>	107.3	84.7	129	200.6	120.1
<i>Gaza Strip</i>	84	41.2	115	0	61.3
<i>Palestine</i>	99.5	69.9	119.7	200.6	103

Source: The author by PCBS, 2016

The difference in wages indicates to a difference in living standards between West Bank and Gaza Strip. Moreover, the wages in private sector in Gaza Strip is significantly low, which indicates to the need for protection of the labor force there.

Figure 45: Average Daily Wage in NIS for Wage Employees from Palestine by Economic Activity and Place of Work (ILO Standards), October - December, 2015



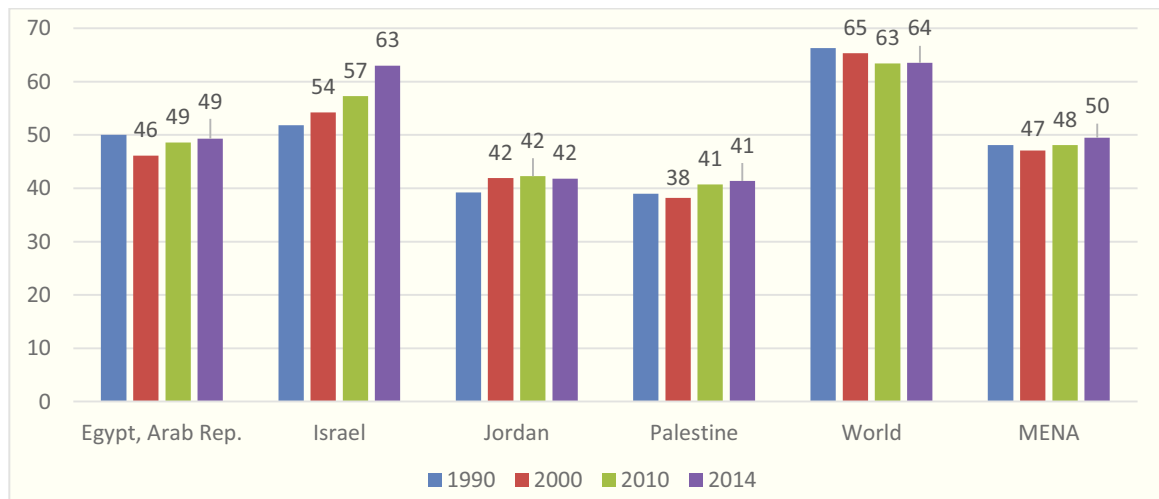
Source: The author by PCBS, 2016

Regarding the economic activity, the lowest wages are in agriculture and fishing in Gaza Strip at 23 NIS compared to 74.7 and 134.6 in West Bank and Israel, respectively. While, the highest wages are in the construction sector in Israel at 223 NIS compared to only 43.5 in Gaza Strip and 95.4 in West Bank. The highest wages in Palestine were in services sector at 104.4 in West Bank and 82.8 NIS in Gaza Strip. The differences in wages are available in all sectors, where they are the highest in Israel followed by West Bank. These differences should be in consideration of labor and income redistribution policies to achieve equity and efficiency of productivity in some vital sector like agriculture and mining and manufacturing to have stronger economic growth.

The Participation rate:

The labor force participation rate in Palestine was 46.2%: 46.4% in West Bank and 45.7% in Gaza Strip. It is the least compared to the other countries in the region and world rates, as it is illustrated in the following figure at 41%; where, the rates in average World, Israel, Egypt, MENA region and Jordan are; 64%, 63%, 49%, 50%, and 42%, respectively as in 2014.

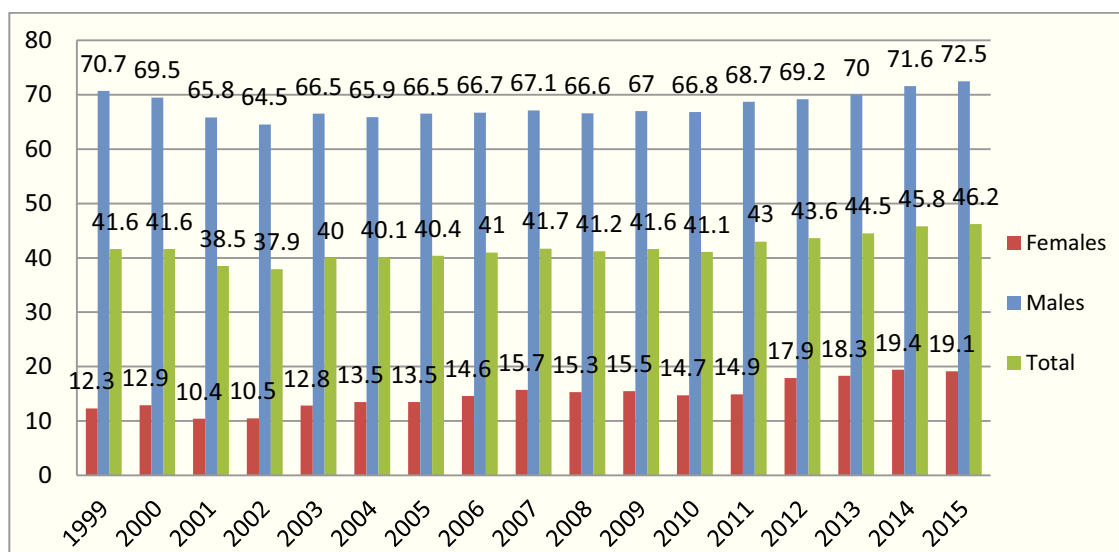
Figure 46: Labor Force Participation Rate in Palestine Compared to Regional Countries in Selected Years 1990, 2000, 2010, and 2014



Source: The author by World Bank Data

The participation rate of females in Palestine is still small compared to males’ participation rate, where it was 19.1% compared to 72.5% for males at the end of 2015.

Figure 47: Participation Rate of Labor Force in Palestine by Gender (1999- 2015)



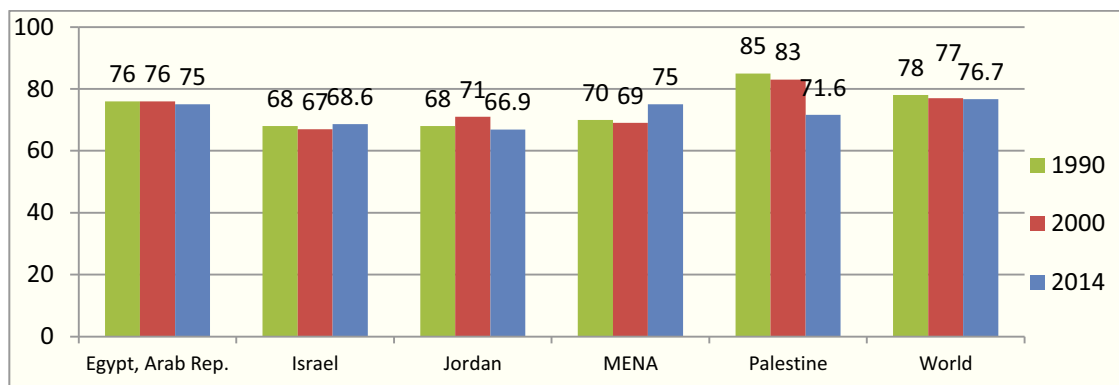
Source: The author by PCBS Data

There was a gradual recovery through last decade in the total labor force participation rate, where it declined to 37.9% in 2002, then it could reach again to 46.2% at 2015, but with different rates between females and males, and between West Bank and Gaza Strip.

Although the participation rate of females in labor force has been increasing since 2001 from 10.4% to 19.1% in 2015, the gap between the female and male labor participation rate is still too large (PCBS, 2016).

On the other hand, the male participation rate has decreased in the last two decades in most of MENA region and the average world. In addition, the gap between countries is considered low. The highest male participation rate was in the World average at 76.7% in 2014, while in Palestine it declined from 85% in 1990 to 71.6 in 2014 and 72.5% in 2015. This high male participation rate to labor force is almost related to unemployment as it includes the majority of labor in developing countries. However, in developed countries, where the participation of female is higher like in Israeli case, the male participation is less compared to developing countries and shared more with female labor.

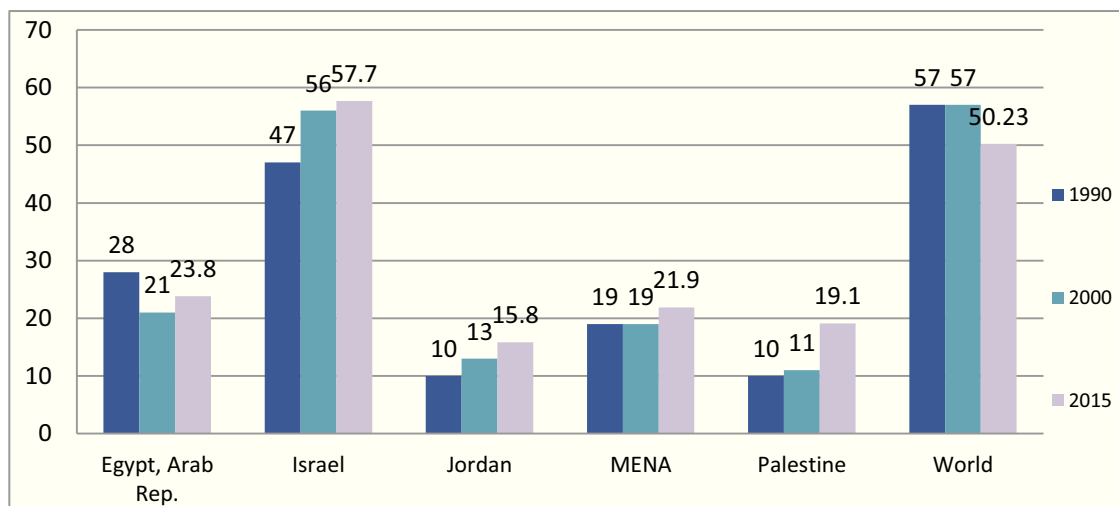
Figure 48: Male Labor Force Participation Rate in Palestine and Regional Countries in 1990, 2000, 2014



Source: The author by World Bank Data.

The female labor participation rate in both Palestine and Jordan is considered very low compared to the other regional countries and average world labor participation rate. In 2014, it was the lowest in Jordan at 15.9%, followed by Palestine at 19.4%; while, the average MENA region developing countries was at 21.9%, and Egypt at 23.8%. The average world rate was at 50.3%, while the highest rate of the region was in Israel at 57.7% (World Bank Data).

Figure 49: Female Labor Force Participation Rate in Palestine and Regional Countries (1990, 2000, and 2014)



Source: The author by World Bank Data

There was an increase in the participation rate of females in most countries in the region, and there is a gap between countries like Israel and the average world compared to the MENA region countries. The female labor participation rate is related to social factors, level of education, and unemployment rate.

From the following table we can find that among females, the young females at age group of (25-29) has the highest participation rate in the labor force at 31.9%; where, it decreases gradually by age. On the other hand, the female young groups have the least participation rate in labor force at 22.6% and only 1.9% for age groups of (20-24) and (15-19) respectively. Males share more than females in all age groups, whereas the highest was among those in ages (35-39) at 95%.

Table 10: Labor Force Participation Rate of Persons Aged 15 Years and Over in Palestine by Age Group, Gender, and Region (According ILO Standards), October - December, 2015:

Age Category	Gender		Region		Total
	Males	Females	West Bank	Gaza Strip	
15 - 19	36.4	1.9	21.5	16.6	19.5
20 - 24	71.1	22.6	46.8	48.1	47.3
25 - 29	90.2	31.9	60.2	64.1	61.7
30 - 34	92.3	27.8	58.1	65.3	60.8
35 - 39	95.0	25.8	61.4	60.4	61.0
40 - 44	84.4	23.9	60.8	57.2	59.6
45 - 49	89.4	21.4	57.4	53.6	56.1
50+	56.8	11.3	34.5	31.8	33.6
Total	72.5	19.1	46.4	45.7	46.2

Source: The author by PCBS Data, 2016

On the regional level, the participation rate of labor force was distributed in close rates at average 46.4% in West Bank and 45.7% in Gaza Strip, except the youngest age group, where it was higher in West Bank at 21.5% compared to 16.6% at Gaza Strip.

Table 11: Labor Force Participation Rate of Persons Aged 15 Years and Over in Palestine by Years of Schooling, Gender and Region (ILO Standards), October - December, 2015

Education Years	Gender		Region		Total
	Males	Females	West Bank	Gaza Strip	
0	25.0	4.7	9.7	9.5	9.6
1 - 6	71.8	9.9	40.0	51.6	43.5
7 - 9	72.7	7.3	46.0	41.7	44.5
10 - 12	73.4	8.8	44.4	35.3	41.2
13 +	74.3	44.8	57.0	62.6	59.3
Total	72.5	19.1	46.4	45.7	46.2

Source: The author by PCBS Data, 2016

The data in the table above indicates that female labor participation rate is remarkably higher for those with more than 13 years of education at 44.8%, compared to other lower groups. At the same time, participation rate of males seems that it is not related to education, and this refers to their distribution on available economic activities in Palestine.

On the other hand, the labor participation by region is more in West Bank in all education categories, except for the category of the education over 13 years, whereas Gaza Strip has slightly higher labor participation rate than West Bank. This may refer to the fact that part of labor in West Bank are working in Israel, which is limited to labor and some skilled professions in construction, manufacturing and some services, which do not need for higher education.

Regarding refugee status, female refugees in Palestine have more participation rate in labor force than Non-Refugees in both West Bank and Gaza Strip. While, male refugees have less participation rate. However, the difference is not large, which indicates to unserious differences between refugees and non-refugees.

Table 12: Labor Force Participation Rate of Persons Aged 15 Years and Over in Palestine by Gender, Region and Refugee Status (ILO Standards), October - December, 2015

Refugee Status	Males	Females	West Bank	Gaza Strip	Total
Refugee	71.6	21.0	47.3	46.0	46.5
Non-Refugee	73.2	17.7	46.1	45.1	45.9
Total	72.5	19.1	46.4	45.7	46.2

Source: The author by PCBS Data, 2016

In conclusion, labor participation rate depends mainly on the economic activity in both West Bank and Gaza Strip. Each region has different economic activity and other social characteristics, which effect the participation level for both genders.

The Services sector is the largest economic activity of labor force in Palestine at 36.7%, particularly in Gaza Strip that recorded 53.6%.

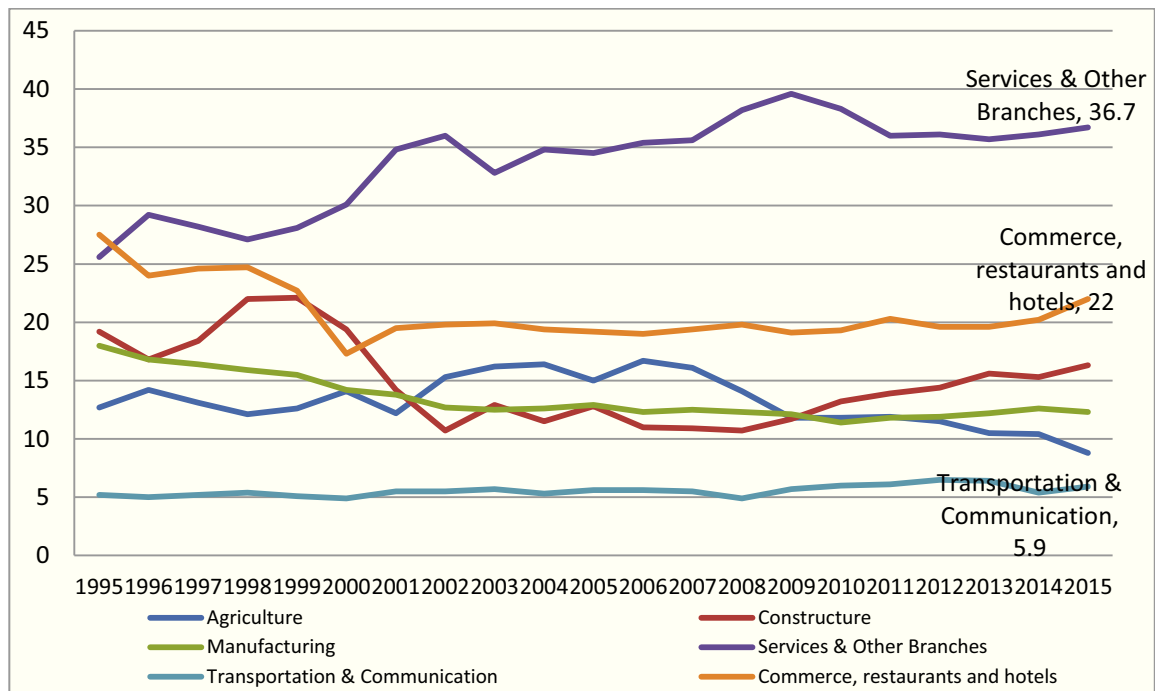
Table 13: Percentage Distribution of Employed Persons Aged 15 Years and Over from Palestine by Economic Activity and Place of work (ILO Standards), October - December, 2015

Economic Activity	Place of Work			Total
	West Bank	Gaza Strip	Israel & Settlements	
Agriculture, fishing and forestry	9.8	6.4	9.5	8.8
Mining, quarrying and manufacturing	15.1	6.8	12.4	12.3
Construction	12.2	6.6	61.5	16.3
Commerce, restaurants and hotels	22.0	19.7	11.0	22.0
Transportation, storage and communication	6.0	6.9	2.4	5.9
Services and other branches	34.9	53.6	3.2	36.7
Total	100	100	100	100

Source: The author by PCBS Data, 2016

Regarding the distribution by economic activity, the construction and agriculture, fishing and Forestry sectors are at 16.3% and 8.8%, respectively. The Palestinian workers in Israel and Israeli settlements from West Bank that work in construction sector are at the largest economic activity and form 61.5% followed by 12.4% in manufacturing.

Figure 50: Economic Activities in Palestine at the Period (1995 - 2015)



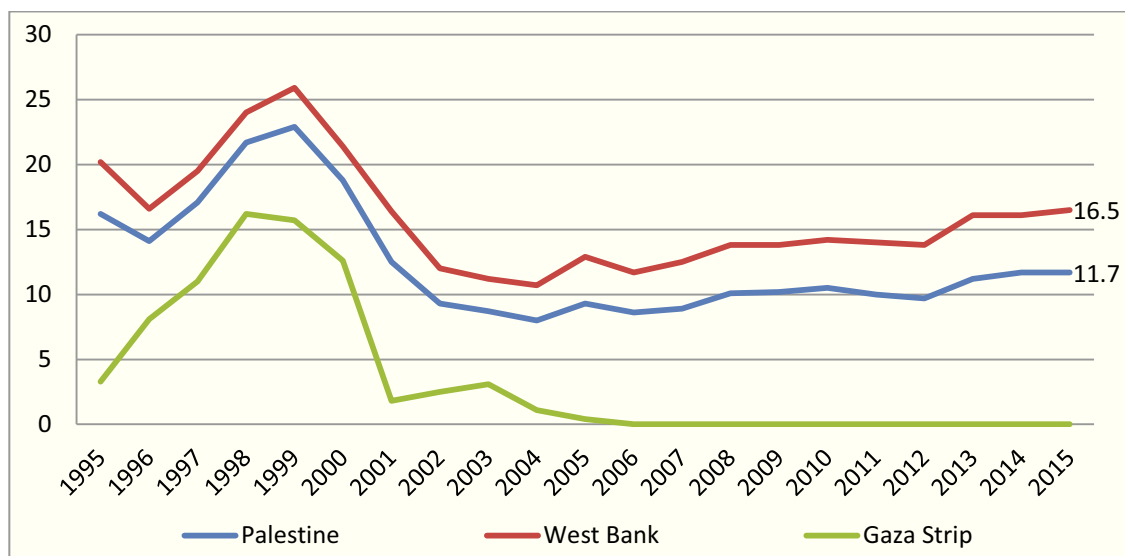
Source: The author by PCBS Data (PCBS, Web site)

The figure above illustrates the change in the economic activities in Palestine at the period from 1995 to 2015. As noticed, the main change in economic activities starts with the second Intifada in 2000, where the Israeli policy against Palestinians had changed and imposed a border closure and limited movement of persons and commodities. The Constructure and Elementary occupations had declined sharply with more than the half; however, it increased again to be 15.5% in 2015 from 10.7% in 2008. At the same time, Crafts and related trade and Manufacturing had declined gradually. Agriculture had the lowest level in 2015 at 8.8% compared to 15.3% in 2002. Works at services increased to have the highest participation rate of labor force in Palestine, peaking at about 39.6% in 2009. The second noticed increase was in commerce, restaurants and hotels to be 22% from 19.6% in 2013.

1.3.4.2- Palestinian Labor Force Employed in Israel & Settlements

After Israeli occupation to West Bank, Gaza Strip and Eastern Jerusalem in 1967, Israel depended on the Palestinian labor force to meet its needs of workers, particularly in construction and agriculture. The Palestinian workers in Israel constituted about 23% of the total participating labor force in Palestine in 1999 (Arab Thought Forum, 2003). After the second Intifada in 2000, the number of the Palestinian labor working in Israel has decreased sharply to reach the least rate at 8.6% in 2006. Then in 2015, it has increased gradually to reach 16.5%, where the total Palestinian labor has been only from West Bank. The number of workers in Israel depended on the level of conflict escalation between Israel and Palestinians; where, the number of the Palestinian labor in Israel declined in the first Intifada in 1987. Then, it increased after Oslo Peace Agreement in 1993. While, it decreased again by the beginning of the second Intifada in 2000 (BADIL, 2012).

Figure 51: Ratio of Employed Palestinians in Israel & Settlements (1995 - 2015)



Source: The author by PCBS data (PCBS, web site)

In 2000, there were about 130 thousands of workers had been working in Israel; however, after the Second Intifada in 2000, most of them lost their jobs. By 2002, Israel published only 32 thousands of working permissions, and only about half of them could reach their work and benefit from the permissions (Arab Thought Forum, 2003).

Israel dispensed workers from Gaza Strip completely in 2006, and increased the number of workers from West Bank, and replaced the needed gap by workers from Turkey and other

Asian countries. However, these workers were more expensive to Israel and need other social and medical services for them and their families, compared to the Palestinian workers. Moreover, it is easier to end contract with the Palestinian workers or hiring workers without contract for short periods; however, the workers who reach their work without working permission are considered as illegal workers.

According to the last labor force survey by PCBS in 2015, the number of Palestinian workers in Israel and Israeli settlements reached 115,200 at the end of 2015. About half of them 68,100 had a permit, 33,400 worked without a permit, and 13,700 of the Palestinian workers working in Israel had the Israeli Identity or foreign passport (PCBS, Q4-2015).

Since 2009 Israel has changed the regulations of Palestinian workers in Israel to be considered as foreigner; however, there is still a debate about the social security rights of Palestinian workers worked in Israel in the period from 1970 to 2009. According to a report published in February 2010 by the Israeli organization "Kav LaOved" or "Workers' Hotline", which defends the rights of workers in Israel, the workers benefited of their end of service rights only about 7%. The estimated rights of the Palestinian workers in Israel is more than two billion Dollars (Kav LaOved, 2010).

Moreover, there are many cases of workers from Gaza Strip in Israel unable to get their rights through Israeli courts, given that Israel imposes more tightened restrictions on Gaza Strip and the workers are unable to attend to courts and regulations were changed to be more restrictive on the Palestinian workers (B'TSELEM, 2012).

These facts about the Palestinian labor force working in Israel or abroad raise part of their problems and the vulnerability to poverty at the end of their services. This is supposed to be in consideration of the decision makers to protect this large group of the labor force.

1.3.4.3- Unemployment

The high unemployment rate became a permanent problem in the Palestinian society because of Israeli occupation practices and its regulations that prevents the freedom of investment and trade in Palestine. Besides, there is no clear sustainable development plan. Since 2000, Israel extended its aggressive hostility against Palestinians. It destroyed many factories and agricultural lands in West Bank and Gaza, and imposed very strict closure on

the borders, particularly of Gaza Strip, which was isolated from the world. This closure included people movement from and to Palestine and even between the cities, where there were many military check points widely allocated between cities in West Bank.

Furthermore, Israeli products crowd the Palestinian products as Israel allows exporting its products into the Palestinian markets and preventing the Palestinians to export their products abroad and even between West Bank and Gaza Strip.

The Palestinian Authority lacked the ability to plan because of the Israeli practices and instability on the ground, which did not encourage investors to have long-term investments to realize growth and create job opportunities. Moreover, under this reality some of the existing investors were forced to close their factories or sell their equities ending the investment in Palestine, which increased the unemployment sharply in that period to very high rates, particularly in Gaza Strip.

Israel decreased the number of permissions to Palestinian workers in Israel sharply. In Addition, the Palestinian Authority started to suffer from financial crisis and had to apply austerity regulations, so, it reduced new hiring to public sector. These job losses and slow growth in the labor market effected consumption in the internal markets and many lost their jobs in the private sector too (Arab Thought Forum, 2003). All these negative shocks on labor market and economy were coincided together with sharp increase in the working-age population as the younger population is the majority of the total population structure.

According to the survey of PCBS at the end of 2015, the number of unemployed Palestinians in Palestine was 342.2 thousand representing an unemployment rate of labor force participants at 25.9%: about 157.7 thousand unemployed labor in West Bank and 184.5 thousand in Gaza Strip, which represented an unemployment rate at 17.3% in West Bank compared to 41% in Gaza Strip.

The unemployment rate among refugees is higher than Non-refugees, particularly in Gaza Strip, which reached at 39.9% compared to 35.2% for non-refugees as in 2015. While, in West Bank the rates were less but with higher unemployment rate of refugees, which was at 19.3% compared 18.5% of non-refugees. Females also have higher unemployment rates than males by both region and refugee status.

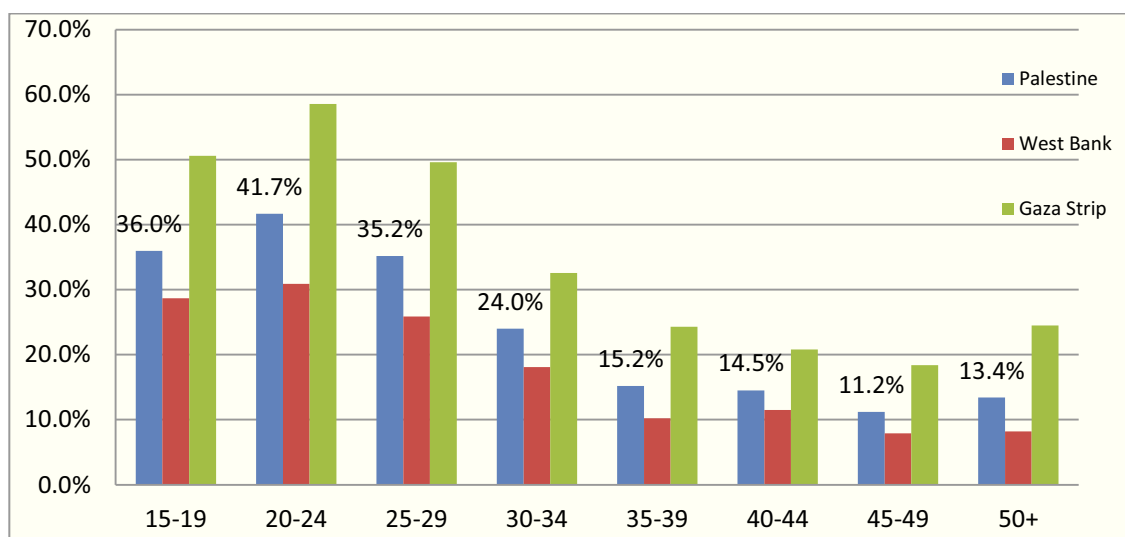
Table 14: Unemployment Rate of Persons Aged 15 Years and Over in Palestine by Region, Gender, and Refugee Status (ILO Standards), October - December, 2015

Refugee Status	Gender		Region		Total
	Males	Females	West Bank	Gaza Strip	
Refugee	26.5	48.5	19.3	39.9	31.4
Non-Refugee	19.3	32.3	18.5	35.2	21.8
Total	22.3	39.7	18.7	38.4	25.9

Source: The author by PCBS, 2016.

Regarding the age group, the highest unemployment rate at the end of 2015 was among youth group aged (20-24) years at 41.7%. Then, the younger age group is at 36% followed by the group aged (25-29) at 35.2%. It is noticed that the unemployment rate has decreased by age in both regions, while it slightly increases again for those over the age of 50 years.

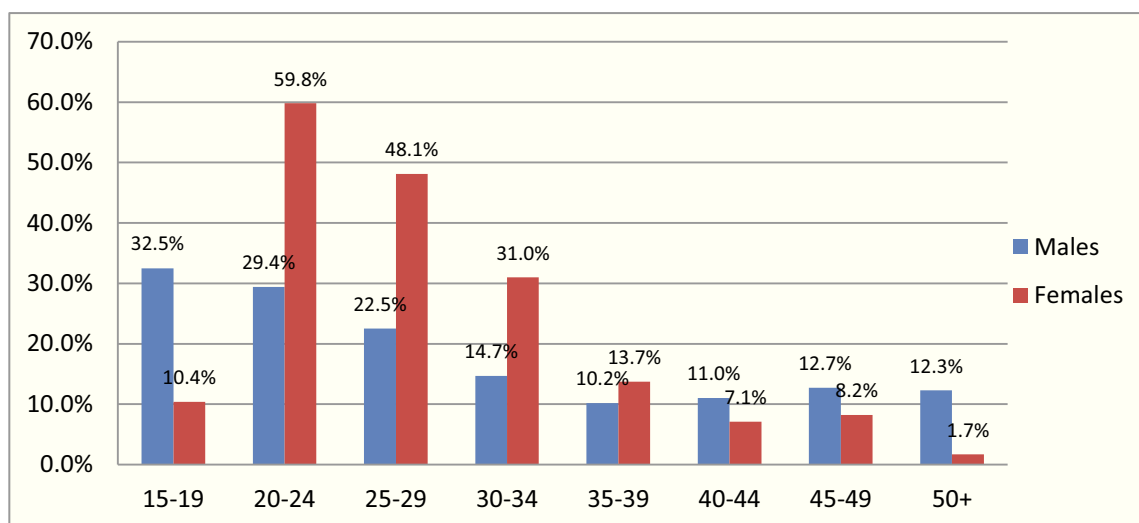
Figure 52: Unemployment Rate of Participants in the Labor Force Aged 15 Year and Over in Palestine by Age Group and Region at the End of 2015



Source: The author by PCBS, 2016

The unemployment rate by gender shows that the females in the age group of 20-24 is the highest, while for males the highest rate was among those in younger age group at 32.5%. On the other hand, the least unemployment rate was at different age groups in males and females. For males it was at 10.2% for age group of 35-39, while for females it was 1.7% for those over the age of 50 years. The unemployment rate of females participating in labor force is higher than males in youth aged groups with wide gap, which may refer to the effort of new graduated females to search for a job, which is more frequently than those at older ages.

Figure 53: Unemployment Rate of Participants in the Labor Force Aged 15 year and over in Palestine by Age Group and Gender – at the End of 2015

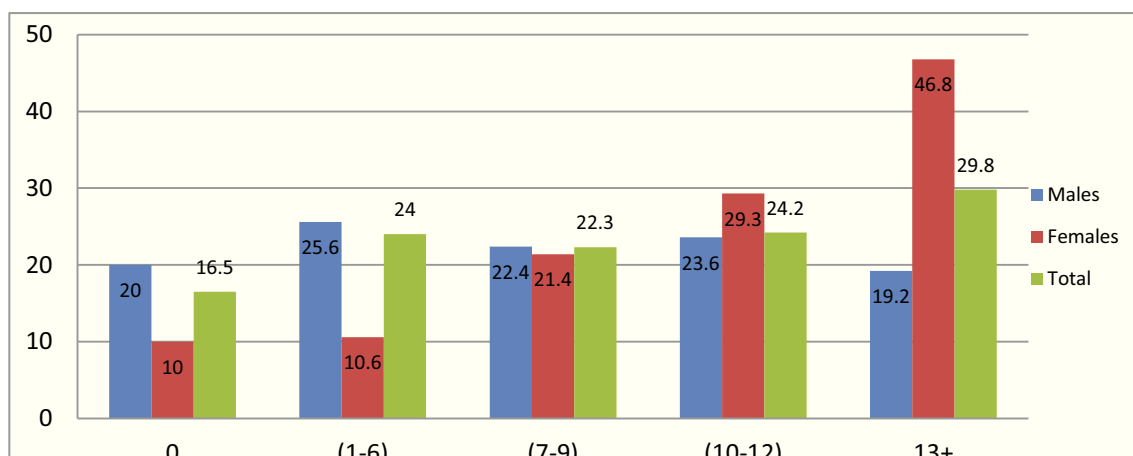


Source: The author by PCBS, 2016

This high unemployment rates among youth labor force groups means that the Palestinian society is facing long-term problem of unemployment and there should be an urgent solution; otherwise, these numbers will be accumulating causing a logarithmic increase in the unemployment rate. Moreover, this unemployment problem strongly impacts the total pension replacement rate at the end of service as the total accumulated contributions are less for those with longer unemployment period. On the other side, the longer unemployment period increases the expected costs of any proposed unemployment insurance. Thus, the unemployment problem should be solved in some development programs that support younger employees that should deduct pension contributions at least for the minimum wage to help them to have adequate pension at the end of service.

For education years, the highest unemployment rate at the end of 2015 was at 29.8% among those attained more than 13 years of education, given that among females it was the highest rate also at 46.8% compared to males at 19.2% for the same group. While, the highest unemployment rate for males was at 25.6% for those attained 1-6 years of education. The higher rates were among those with less educational attainment, which may refer to the type of available economic activities in Palestine, which almost require low education with low wages more than highly skilled and professional jobs.

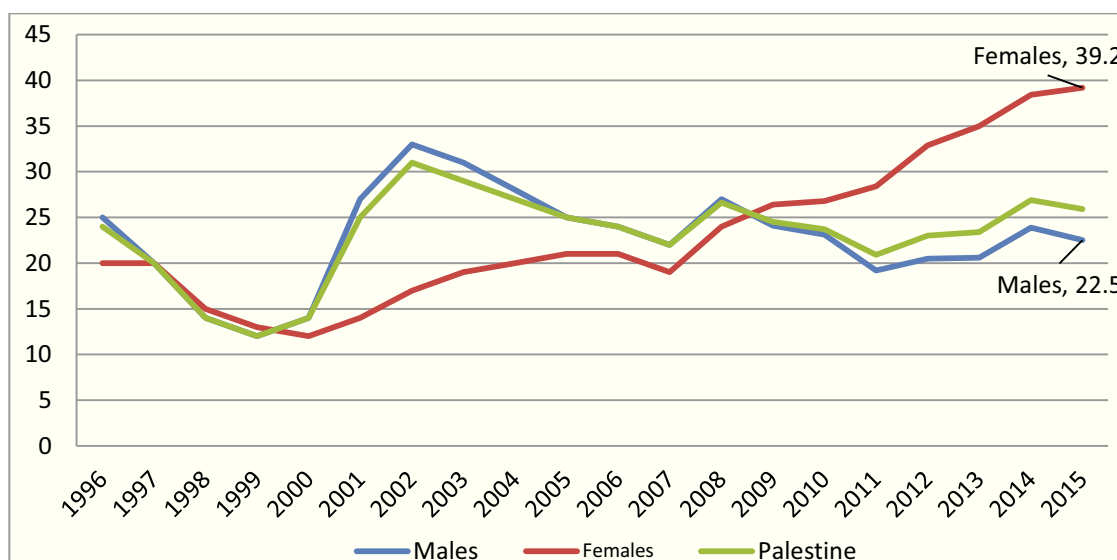
Figure 54: Unemployment Rate of Participants in the Labor Force Aged 15 year and over in Palestine by Education Years and Gender - at the End of 2015



Source: The author by PCBS, 2016

By reviewing the following figure, we notice that in 1990s, the unemployment decreased to its least levels in the last two decades for both males and females and that refers mainly to relatively political stability in that period, where new employment opportunities had been available for new graduates from both genders into the public sector services. In addition to the growth in the private sector as well, besides the increasing regulated employment in Israel.

Figure 55: Unemployment Rate in Palestine by Gender from (1996-2015)



Source: The author by Data of World Bank & PCBS Web

After 2000, there was an increase in the unemployment for both genders, but it was higher for males because of the high numbers of workers who lost their jobs in Israel, where the majority were males. In addition, the PA applied austerity regulations, which limited hiring new employees into the public sector services. The decrease became sharper in 2006 and 2007, where the private sector started to deteriorate. The main reason of this decline was political instability, because of the internal political division and suspension of peace negotiations with complete closure to borders of Gaza Strip and imposing very strict one on West Bank with many check points between cities.

In 2008, there was a diversion point, where the unemployment rate of females jumped highly to exceed the unemployment of males. This increase probably refers mainly to the increasing demand for work by females. In addition to the decrease in unemployment rate of males due to the employment of new male workers in Israel from West Bank, given that there was no real growth to the economy in Palestine.

According to the PCBS survey in 2015, the average unemployment rate in Palestine is 10.7 months; however, there were differences in figures between females and males, and between West bank and Gaza Strip. It is found that the average unemployment duration for females is longer than males in both West Bank and Gaza Strip, and it is longer in Gaza Strip than in West Bank with large gap.

Table 15: The Average of Unemployment Period¹⁸ in Months in Palestine by Region and Gender (ILO Standards), April - June, 2012

The Region	Male	Female	Total
Palestine	9.2	17.5	11.6
West Bank	3.7	9.5	5.3
Gaza Strip	14.8	24.4	17.8

Source: The author by PCBS, 2016

1.3.5- Informal Labor

Through the time, the term of Informality was defined differently, which almost refers to diversity of the types of informality. In this respect, Gasparini and Tornarolli (2009) illustrated the informality as “*ambiguous from theoretical point of view and difficult to implement empirically*” (Gasparini and Tornarolli, 2009, P.15). They introduced the

¹⁸ Unemployed period means the period of being Unemployed since the individual was available for work or leaving last work

informality definition in two concepts: the "productive" definition that target the low-productive jobs, including family-based activities and small jobs, and the "legalistic/ social protection" definition that classifies only labor with no access of any kind of social protection or labor rights. In this framework, ILO (1991) productive definition of informality was *"The economic unit with scarce or even no capital, using primitive technologies and unskilled labor, and with low productivity"*. Further, the Gasparini and Tornarolli (2009) defined it as *"The individuals that belongs to any of the following categories; 1) unskilled self-employed, 2) salaried worker in a small private firm, and 3) Zero-income worker"*. While, ILO (2002) legalistic definition was *"Whose labor relationship is not subject to labor legislation and tax rules, and has no access to social protection or right to certain labor benefits"*, and according to Gasparini and Tornarolli it is *"the salaried worker is informal if s(he) does not have the right to a pension linked to employment when retired"*. Schneider and Enste (2000) introduced commonly used working definition that was used by Edgar L. Feige (1989, 1994), Schneider (1994a), Frey and Werner Pommerehne (1984), and Herald Lubell (1991), as *"All economic activities that contribute to the officially calculated (or observed) gross national product but are currently unregistered"*.

Schneider and Enste (2000) argues that the definitions develop depending on the available legislations and labor market, which changes from country to the other and from time to time; besides, it may depend also on the measuring method.

Thus, measuring the informal economy faces several problems due to difficulty to define those working in shadow. However, Schneider and Enste (2000) could measure the size of the shadow economy in 76 countries from different economies including developing, transition and OECD countries, using various methods, in order to determine its development and size in various countries and over extended period of time. In their research, they classified the countries according to the region and economic development. The results showed that the shadow economy in Africa was 68-76% for Nigeria and Egypt, and 39-45% for Tunisia and Morocco. For Latin American countries, there were two groups, one was measured at 40-60%, and the other was at 25-35%. While, the least was in OECD countries, and the least of them were Japan, United States, Austria and Switzerland at 8-10%.

According to ILO reports, non-agricultural employment in the informal economy remains relatively high in most of the developing countries. However, ILO experts highlight the diversity between the countries in the same region. Even the non-agricultural employment in the informal sector represents 82 percent of total employment in south Asia, 66 percent in sub-Saharan Africa, 65 percent in East and South-East Asia (excluding China), 51 percent in Latin America and 10 percent in Eastern Europe and Central Asia, the differences are wide between some countries in the same region due to their subsistence agriculture of their economy (ILO, 2013).

Table 16: Country Comparison of Informal Employment Levels (non-agricultural), Percentage

Latin American and the Caribbean	Uruguay	Plurinational State of Bolivia
	40	75
Sub-Saharan Africa	South Africa	Mali
	33	82
Southern & Eastern Asia (excluding China)	Thailand	India
	42.3	83.6
Northern Africa & Middle East	Turkey	West Bank & Gaza
	30.6	58.5

Source: ILO (2013)

The informal sector in Palestine has been an important issue to discuss by policy makers. Even there are no certain numbers to indicate the rate of the contribution of informal sector, but some recent studies and surveys concluded that it has been highly contributing to the GDP and labor market. Sabra and Other (2014) estimated the shadow economy in Palestine for the period of 2008-2012 to be between 57-88% of the GDP (Sabra & others, 2014). Besides, there are some reports on the informal sector that were done for international institutions like the US Agency for International Development (USAID) in 2003, and World Bank in (2004) and a statistical report was recently prepared by (PCBS) with support of Economic and Social Commission for Western Asia (ESCWA) in 2009. According to ESCWA report in 2011 on informality for the period of 2000-2007, it found the informal employment represented about 45% of all non-agriculture employment in Palestine. The same ratio was in Egypt compared to 50% in Lebanon and 30% in Syria (UN, 2011). The informal sector enterprises and labor have been growing over time since the second Intifada in 2000, where people tried to seek new resources of income after losing their jobs in Israel or in Palestine. Moreover, the political instability increase unemployment and

lacking a strategic growth plan of the government encouraged the people to think of their own small and micro enterprise or some other economic activities (MASAAR, 2003).

However, the results of the study of USAID suggested that the scope of employment growth in the informal sector in Palestine was insignificant and static with little growth, which was supported by the evidence of the difficulties of the situation facing businesses in all sectors

The total estimated informal enterprises were about 110 thousand, which mostly were in West Bank and about 50% of them were established during the years 2000 - 2002 (MASAAR, 2003).

Whereas, the report of Palestine Economic Policy Research Institute (MAS) conducted in December 2004, indicates that about 52,487 enterprises were found operating in Palestine in 2003, which constitutes about 69% of the total number of enterprises in the Palestinian economy (MAS, 2004).

The study conducted by MASAAR for USAID found the capital investment in informal sector is generally small, where, the average capital size of the enterprise is 7,221 US Dollar, and the enterprises with capital exceeding 50,000 US Dollar constitutes only 2.4% of the total enterprises in informal sector, which are concentrated in West Bank (MASAAR, 2003).

In regard of economic activity distribution, most of the informal businesses are in trade activities, which were estimated at about 46%, followed by animal husbandry and in service activities (USAID, 2004).

The most important characteristic of the informal enterprises is that two thirds of them do not have employees, where, the average of employed persons per enterprise is 1.87, and it is found that about 75% of the employees in the informal enterprises are relatives of the owner. Further, it was estimated that about 94% of the employees in informal sector were males. On the other hand, the average annual wage per employee in informal sector was about 800 US Dollar, where, average wage in West Bank was higher than that in Gaza Strip (MAS, 2004).

According to the USAID report, the significance of the informal sector is in the consideration of it as source of employment and income, which on average contributes to

more than 50% of the monthly income of about 100 thousand households, which constitutes about 25% of the Palestinian population in 2004.

According to ILO, the employees in the informal economy are in general more exposed to income insecurity and work-related health risks. Thus, they face higher risks of poverty compared to those in the formal sector. Even not all the employees in the informal economy may be classified as vulnerable and poor, the ILO classify the majority of them as exposed to inadequate and unsafe working conditions, and have high illiteracy levels, low skill levels and inadequate training opportunities. Further, they have less certain, less regular and lower incomes compared to those in the formal economy. They also suffer longer working hours, an absence of collective bargaining and representation rights and, almost have ambiguous or disguised employment status. Finally, they are physically and financially more vulnerable because worker in the informal economy is either excluded from, or effectively beyond, the reach of social security schemes, safety and health-care, maternity and other labor protection legislations (ILO, 2013).

These characterizations could highly reflect the Palestinian labor conditions as the informal economy is the dominant one in Palestine, which needs urgent actions for protecting the majority of the Palestinian labor.

1.4- The Political Overview

The important part of the political aspect is to know about the development of the Palestinian laws and how they are legislated. The Palestinian laws are mixed of many inherited laws and regulations from the different regimes that ruled Palestine through the last century, where the Palestinian legal scholar Muhaisen has best described the Palestinian Law as follows: "*the legal system in 'Palestine' consists of layer upon layer of law that almost all remain in effect*". This refers to the fact that many rulers of West Bank and Gaza Strip overlapped within the last century. There still exists a patchwork of Ottoman, British, Jordanian, Egyptian, and Israeli laws in operation (MAS, 2008).

1.4.1- Main Historical Events Determined the Political Status

The Ottoman Rule over Palestine (1516 - 1917)

The Ottoman rule lasted from 1516 to 1917. Until the breakdown of Ottoman Empire, the Ottoman law was the only law implemented in Palestine, which is considered as one of the main sources of the present Palestinian law.

The British Mandate over Palestine (1917 - 1948)

Ottoman Empire was followed by the British Mandate over Palestine for about 26 years (July, 1922 - May, 1948). The British Mandate published regulatory laws and systems in form of orders by the High Commissioner of Council, who exercised both all executive and legislative powers (Birzeit University). The high commissioner's orders played an important role in changing the demographic and political aspects in Palestine. In addition he had amended and regulated some certain issues, but remained on the Ottoman law as the main juridical and regulatory source (Nakhleh, 2004).

The creation of Israeli State, and the Jordanian and Egyptian Rule over the West Bank and Gaza Strip, Respectively: (1948 – 1967)

The Israeli State was created over 78% of Palestine on 14 May 1948, which is known as the 1948 borders of Israel, which did not include Gaza Strip, West Bank, and Eastern Jerusalem. In the period from 1948 to 1967, Egypt ruled Gaza Strip, while Jordan ruled West Bank and Eastern Jerusalem.

The laws and regulations of Jordan were completely applied on West Bank and Jerusalem and remained the Ottoman law and some British mandate laws in effect for certain issues. However, in Gaza Strip, Egypt did not join Gaza to Egypt, but appointed a military governor over Gaza and Northern Sinai. The governor was responsible to publish orders to amend certain issues while, it remained on the Ottoman law and British mandate law in effect.

In 1957 Egypt established the Legislative Council of the Gaza Strip to be the responsible body of the legislative authorities in Gaza Strip, which appointed the first Palestinian president to Palestine Liberation Organization (PLO) in 1962 and approved the first constitution that reflected the features of the Ottoman and Egyptian laws (Birzeit University).

Israeli Occupation to WB&G since 1967

In 1967, Israel extended its borders by occupying Gaza Strip and Sinai from Egypt, in the South, West Bank and Eastern Jerusalem in the East, and Golan from Syria in the North. By the Israeli occupation to Gaza Strip, West Bank, and Eastern Jerusalem, Israel declared the control over the legislative, judicial and executive authorities in WB&G and appointed different Israeli military governors over Gaza Strip and West Bank, while, Eastern Jerusalem was joined to Israeli law in 1980 (Birzeit University).

The military governors in West Bank and Gaza strip, remained on the old laws as the main source of jurisdiction and published more than 1,400 military orders in West Bank and about 1,200 military orders in Gaza Strip for regulating and amending certain issues. In 1981, Israel changed the military rule to be civil administration, but the past military orders preserved an important part of the juridical system in WB&G, where the Israeli settlements in WB&G were under the Israeli law and were excluded from the law and regulations applied in WB&G (Merrai, 2000).

Thus, different laws and regulations were applied to West Bank and Gaza Strip because of different historical regimes and regulating systems.

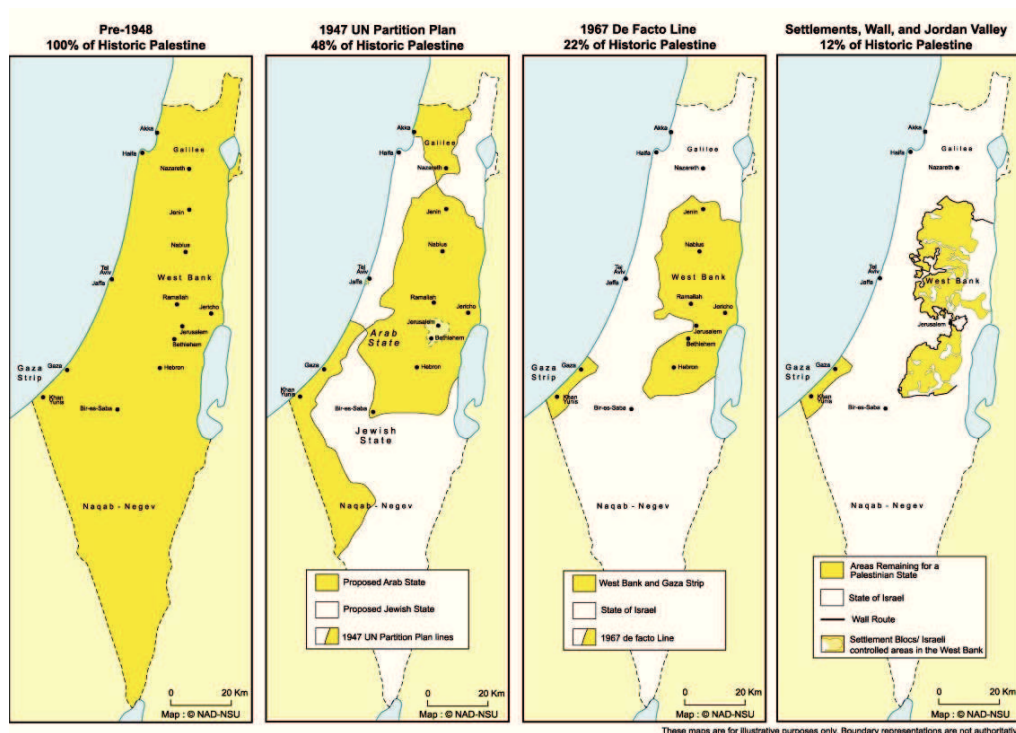
Oslo Peace Agreement and the Establishment of the Palestinian Authority (PA) since 1994

In 1993, Israel and the (PLO) signed Oslo peace agreement, by which the Palestinians established the Palestinian National Authority (PNA) to govern themselves. Oslo

agreement was an interim agreement that addressed certain issues. However, the two parties were supposed to continue their negotiations to address other primary issues of conflict, including: demarcation of the border, fair distribution of water resources, refugees' problem and their right to return, the Jerusalem city and holy places, the Palestinian prisoners, settlements in West Bank, and security arrangements.

The authorities given to the Palestinian Authority (PA) were not complete and not clear. Israel transferred some of the authorities and land gradually to PA and kept many authorities to itself like the registration of civilian issues, borders control, and external trade agreements, and transfer of goods abroad. The first order of the former president Yasser Arafat was to cancel all orders and regulations that were legislated by Israeli occupation (Nakhleh, 2004). This makes the judicial system very confused and faced many complicated cases. PA recognized that it had to review and unify laws and regulations. According to Merrai, he sees that the legislation procedures in Palestine were almost published by a military foreign governor and so, the laws do not reflect the benefits of Palestinian people, he claimed for a comprehensive review for all legislations in Palestine to have one unified judicial framework (Merrai, 2000).

Figure 56: Descriptive Map of the Historical Change on the Palestinian Land from 1947 to 2016



Source: Mint Press News (mintpressnews.com).

The second uprising "Intifada" in 2000 and deterioration in Palestine:

Oslo peace process did not end the occupation rather than it is interim agreement to end the occupation and prepare for the Palestinian State. PA had to organize its agenda and work on internal issues seriously. Even if it could achieve some success, it was not easy at all. There were many financial, social, and security problems that PA had to solve with limited resources. In addition, the lands of WB&G were fragmented by the Israeli controlled areas which represented more than 61% of West Bank and 50% of Gaza Strip as in 2000. Israel remained the settlements in WB&G in the most strategic sites that enables it to control the water resources.

Moreover, Israel did not respect the signed agreement; where in practice the borders were undefined and many violations were committed against the Palestinians and PA. This situation created a weak authority that is unable to serve population and to set a strategic development and growth program.

In 2000, there were essential global changes that affected the Palestinian case negatively. The peace process negotiations reached a blocked way, and could not reach a final solution and the Camp David summit was the last serious effort before the start of the Second Intifada. However, the second Intifada was followed by the Israeli and American elections, and followed by the September 11, 2001 event in USA, which started to deal with other problems in the Middle East with more priority.

Internally, the long occupation and the first Intifada accumulated instability and many social and economic problems, which exhausted the Palestinian society.

The most important achievements of PA were that building the Palestinian national institutions and retrieving the Palestinian entity on the ground and being represented in the international arena after years of absence, and it guaranteed the return back of thousands of the Palestinian refugees abroad. It also could solve many legislative problems, particularly the problem of different laws that regulate Gaza Strip and West Bank differently, which people still suffer from this difference in Laws.

Further, there was a conflict on the executive structure of the Palestinian Authority. Besides, the emergence of the corruption problem in PA and the lack of security control in Palestine, increased the popularity of Hamas movement against Fatah for some people and the power of PA was deteriorated.

In 2005, Israel decided the withdrawal from Gaza Strip unilaterally, and kept control over Rafah cross borders through 2005 agreement, in which European inspectors share control with Israeli remote control by cameras.

In 2006, Hamas as the largest political party outside the PLO won the 2006 parliament elections that resulted in a coalition national government by its leadership. However, a financial crisis started after Israel had imposed a boycott on the government, which was followed by a boycott of some donors. This led to increasing internal political tension that turned to armed conflict between Fatah and Hamas as the largest two political parties that have contradictory goals and different ideologies. In 2007, the armed conflict led to full control of Hamas on Gaza Strip, which is not geographically connected with West Bank. Thus, Hamas formed a government in Gaza Strip, while the president who moved to West Bank formed another government of Fatah.

Hamas ruled Gaza Strip and Fatah ruled West Bank, while the legislative council has been completely suspended except some separated and ineffective committees work in West Bank and Gaza Strip. Many efforts have been done to prevent the division and then to end it but all were failed. Moreover, the disabled legislative council and internal political split of Fatah and Hamas that would lead to more divisions to Palestinian community and create a legal vacuum or conflict in laws and judge.

On the other hand, the peace negotiations between Israel and Palestine failed to reach a final agreement and has stopped mainly because of building settlements in West Bank. The transitional period was extended with no final solutions, in which Israel could control back many areas in West Bank and change the rules to its benefits as it has the power on the ground. In general, Palestinians look for to have their independent state and reach to an agreement with the Israeli occupation regarding the main conflict issues.

In the last two decades, the majority of Palestinians lived in poverty conditions, lack of development programs with a focus on relief programs only, and deprivation of many workers from working opportunities by destroying available factories, banning building new ones, banning travel to work abroad or in Israel. As a result of the internal political instability and being under occupation, the Palestinian people suffer in their daily life, and afraid of the ambiguity of their future destiny.

1.4.2- The Current Political Situation of Palestine

The current political system of the State of Palestine is a presidential parliamentary system that chooses both the president and members of the parliament in separated elections. The balance of power is controlled by the separation of powers of the three authorities: the executive, legislative, and judicial. According to Essa (2012) the Palestinian experience in political systems is weak. While, Palestine had a constitution that is imposed by occupation or foreign governments, so that it almost did not reflect the people and lacked stability (Essa, 2012).

By the establishment of Palestinian Authority (PA), it was formed from a council of 24 members in 1993, which was developed to a legislative council of 88 members in 1995. The government formed the legislative council but follows the president in responsibility. Later, the political system changed gradually with no clear separation of powers. By 1999, there was preparation for the Palestinian constitution by some politician and experts without sharing or consulting other political movements and people. The new law was published in 2002 as basic step towards the establishment of the State of Palestine after 10 years of peace agreement. Finally, in 2003 the amended basic law determined the current used constitution, which increased the number of the members of the council to 132 and determined more specifically the authorities of each of the president and government. Essa (2012) concluded in his study that the Palestinian system is not clearly identified and is a mix of presidential and parliamentary to fit the instability conditions and the available political structure.

However, Palestine Liberation Organization (PLO) has a higher authorities than PA, which was established in interim period for certain purposes. PLO has a council that joins representatives of the major political parties at the time of its establishment (MUWATIN, 2013).

As Palestine still under occupation, its political system is considered as interim. PLO is the first official entity that represented the Palestinian people after the occupation and was first recognized by Arab League in 1974. Now, it is the legal representative in the United Nations as a permanent monitoring member. It included the main available political parties at that time. PLO is the entity that signed the peace agreement with Israel in 1993, which

resulted in establishing PA as an interim entity to administer and govern Palestinian issues in West Bank, Gaza Strip and Eastern Jerusalem for 10 years. Then, until reaching the final peace agreement to establish the State of Palestine on the borders of 1976. PLO remains the higher entity of the political structure that represents and follows the Palestinian issues in and out of Palestine.

However, with the stagnancy status in the peace negotiations, PLO tried other political solutions to realize the Palestinians right of an independent state through the international community and institutions. As of 14 September 2015, PLO could acquire from 193 member states of UN and two other non-member states the recognition of State of Palestine as a right for Palestinians and to end the occupation. This step opened the gate to the State of Palestine to be a permanent non-member state in UN, which gives the right to apply to other international institutions to claim the rights of Palestinians to have their independency and end occupation.

However, the political structure on the ground still the same due to many political reasons. Palestine has a temporary constitution that is known as “the Basic Law”. But after the recognition of the State of Palestine, there are many efforts to reform the political system of the Palestinians to represent all the Palestinians living in Palestine and abroad. Any political reform aims to join all significant political parties that is supposed to be integrated into the political arena of Palestine on agreed basics that guarantee the rights of living in dignity, free, and democracy. Reminding that there is about 50% of the Palestinians live abroad as refugees and significant political parties work outside the PLO frame.

With the establishment of Palestinian Authority, some political parties refused Oslo peace and remained out of the political arena. However, after Hamas won over the 2006 elections, all parties realized the significance of Hamas and other political parties, and there will be no final solution that could be implemented without their agreement. The conclusion and attitude is to end the internal political division and reform PLO and the political system with a new constitution for the State of Palestine. According to a recent study by MUWATIN (2013), the internal political conflict and division of 2006 revealed defects in the Palestinian political system that should be fixed and some issues should be agreed between parties to guarantee a peaceful transfer of authority in the future and solve the different views in respectful and democratic way (MUWATIN, 2013).

Hamas administers Gaza Strip through the Oslo Agreement framework, laws, and regulations that were effective until 2007, where there are some cooperation between the administration of Gaza Strip and the government in West Bank to solve these main problems of people, particularly in education and health. However, Gaza Strip witnessed an instable economy and a collapse of private sector because of border closure and two wars that launched against it, in addition to continuous military operations around borders and assassinations by airstrikes. On the other hand, West Bank witnessed an economic growth in the same period of 2007 till 2010; however in 2011, the economy deteriorated again and Israel stopped the transfer of the tax revenues.

At the same time, PA could build the national institutions to be able to administer an independent State and has renewed part of the infrastructure, and developed number of laws and regulations by a presidential decree. However, these developments still incomplete and unsustainable since Gaza Strip was excluded because of the political division. While, the new laws need the approval from the Legislative council in its first assembly, which seems not possible at the short-term.

At present, the draft of laws are prepared and reviewed by the government, then the Ministers Council raises the third draft to the presidential office for review and publishing in a decree or resolution form. According to article (43) of the constitution (The Amended Basic Law), the Presidential decree has the same effectiveness and strength as the law; however, it is should be approved by the legislative council in its first meeting. In case it is not approved by the legislative council, it is considered canceled (The Amended Basic Law, 2003).

Off course, the longer the Legislative Council does not assemble, the more complex and difficult to cancel the presidential decrees and the more different regulations emerge between West Bank and Gaza Strip.

In conclusion, the Palestinian political situation is instable and have a strong impact on legal and economic affairs, which is reflected on the Palestinians' rights and the level of living standards. There should be a reform for the political structure to unify the nation in one leadership in a democratic system with equal rights. Then, organizing the elections of

new assembly is inevitable to be able to meet the peoples' will and benefits. On the other hand, there should be an end for occupation to realize peace, development, and prosperity. Otherwise, it is harder to perform any effective and sustainable pension reform with the international standards.

Chapter Two

“Pension Systems: Challenges and Reform Trends - The Literature Review”

2.1- Introduction

Recently, the social security systems has been one of the most priority issues on the agenda of politicians and policy makers since it increasingly interferes in almost all aspects of life and has the effect on the micro as well as the macro-economic figures.

Originally, the emergence and development of social security systems have been related to the needs of the individuals and societies to income security against current and potential future risks and the scarcity of the available resources. In fact, some kinds of informal social security have been available along the history of human being in organized societies; however, the regulation of formal social security systems is relatively recent development. Thus, each society has developed its particular social security system in consonance with the economic, demographic and socio-political variables. However, to the best practices and better design of the social security in any society, there have been common objectives and principles that were developed and agreed on by related experts and international institutions.

Myles (2001) considered the old age and disability pension programs of social security system as a feature of developed economies (Myles, 2001). Accordingly, the development and coverage scale of formal social security systems are often limited to the developed societies. There is consonance in the previous literature of social security that these systems are very sensitive to the environmental changes. Besides, they have long-term effects, which make them more difficult to design and assess. Consequently, these systems have to be adapted to the environmental changes in order to meet their objectives and keep on their sustainability. However, the financial crises were almost the main initiator for social security reform processes, in order to reach the optimal design that guarantees the realization of their objectives. On the other hand, the unions and other political groups as well as the employers usually resist the reform measures of reducing benefits and increasing the contributions or retirement-age, which form challenge for the reform process in most of countries. Thus, the development of the social security systems is a continuous and long process. The difference in systems across the countries reflects the different social and economic structure and the development of the country, in addition to the political will. In 1950s and 60s, the research focused to develop the objectives and principles. Then, since 1980s a new wave of structural and parametric reforms has been launched starting from

Chile. Nowadays, the current literature of social security includes many examples from developed and developing countries across many parts of the world with different forms and financing mechanisms. However, the common feature of them is that they discuss the realization of the objectives in the framework of macroeconomic policies.

The literature review in this research will focus on analyzing the old-age pension systems as part of the social security systems, deliberating the typology, structure, governance and financing mechanisms and highlight the main challenges and trends of pension systems reforms. Moreover, we aim to analyze and assess the pension system reform in Palestine in the light of the previous literature review and best practices of pension systems across countries, through which we will try to understand the driving forces behind reforms, and how the characteristics of each system were developed.

In order to answer the primary question of how to develop a sustainable, adequate and comprehensive pension system in Palestine, we need to address the current situation within the economic, social, and political variables and to analyze the existing social security system.

This research is a contribution to the efforts that have been done to design an optimal pension system in Palestine through reviewing the previous studies regarding the pension system in Palestine and providing analysis of the available data. The proposed pension systems should protect the population against the available risks of poverty and variability of income during life career through fair redistributive mechanisms.

In this section, we will introduce the literature review of social security with focus on the pension system and highlighting the main principles, objectives, and typology then; discuss the main challenges and trends of pension reforms. The last section will focus on the literature review of the Palestinian pension system by reviewing the recent studies and available proposals compared to the applied schemes.

2.2- The Concepts and Definitions

For better understanding of the objectives of the social security and pension systems, it is important to understand the concept, principles and types of social security first. Understanding the concepts of social security is crucial for the social policy research, since there is confusion in choosing the measuring method. Jorgen Goul Andersen (2007) argues that the classical measure, level and change of public expenditures or social expenditures as percent of GDP, is insufficient, in addition to the comparability problems, which is presented as a matter of selection of indicators or dimension of indicators – that has been described as the “dependent variable problem” (Green-Pedersen, 2004). Indeed, Goul Andersen (2007) concluded that the current confusion is reflected also in the vast number of concepts that has been suggested to solve the problem of selection of indicators, or to describe what is seen as the dominant trend in social protection.

The Social Security systems

The social security systems are defined and described in many ways; however, considering the common understanding, (Myles 1995: 446) described the social security as “*the coverage against disability and inability to work due to old age*”, and Spicker (2013) describes the social security as “*a term that used for financial assistance in whatever form it may take*”.

By time, new approaches have expanded the essence of the social security concept in line with the enhanced human rights under the international conventions besides the development of societies and science. Indeed, the social security programs had become more mature and developed providing better understanding and more objectives; as a result, more expanded definitions were introduced.

Holzmann and Jorgensen (2000) introduced new conceptual framework for social protection grounded in “Social Risk Management” with the purpose to minimize the diverse risks for the individual and to prevent poverty. As discussed by Holzmann and Jorgensen (2000) and Holzmann and Hinz (2005), the “Social Risk Management” approach repositions the traditional areas of social protection (labor market intervention, social insurance and social safety nets) framework that consists of three strategies (prevention, mitigation and coping), three main arrangements (informal, market-based, and public) and

different subjects involved (individuals, households, government, etc.). The sources and characteristics of risks matter for the design and implementation of instruments. They also defined social protection as “*public interventions to (i) assist individuals, households, and communities better manage risk, and (ii) provide support to the critically poor.*” (Holzmann and Jorgensen, 2000). However, Piron (2004) argued that the approach could be refined or strengthened by an explicit adoption of the Rights based approach.

While, Collier D. and Messick R. (1975) determined five basic programs to be consisted in any social security system. These programs provide cash payments to the individuals to protect them against lost income due to injury related to employment, sickness and maternity, old age, unemployment, and to supplement income for families with dependent children. However, they did not consider the medical care as basic in the definition of social security (Collier D. and Messick R., 1975).

Likewise, The International Social Security Association (ISSA) defined it as (ISSA, Website):

"Any program of social protection established by legislation, or any other mandatory arrangement, that provides individuals with a degree of income security when faced with the contingencies of old age, survivorship, incapacity, disability, unemployment, or rearing children. It may also offer access to curative or preventive medical care".

Meanwhile, the International Labor Organization (ILO) presents a broader scope of the concept; according to ILO the social security covers all measures providing benefits, whether in cash or in kind, to secure protection from; poverty and social exclusion, insufficient family support, lack of access to health care, and lack of work-related income. (ILO, 2010)

On the other hand, the International Labor Organization (ILO) considers the benefits of “medical care” and the “Income Security” as the two main functional dimensions of any social security system. These were first introduced by the ILO, upon its Income Security Recommendation (No. 67) for 1944 and the Medical Care Recommendation (No. 69) of the same year, as essential elements of the social security. The social security definition is stated by ILO as follows:

“Social security is the protection that a society provides to individuals and households to ensure access to health care and to guarantee income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner”.

By time, the definition was developed to include more benefits like, the ILO's extended definition which includes: Medical care, income support for Sickness, Old age, Unemployment, Disability, Survivors, Maternity, Maintenance of children, Employment injury, and Protection against poverty and Social exclusion. Meanwhile, the European commission adopted seven of the above mentioned and added the Housing as one of the basic social security elements (World Social Security Report ILO, 2010). The United Nations, OECD and other organizations adopted some of the mentioned elements to their definition and changed classification¹⁹, but these different definitions and classifications of programs are specific to certain countries, which are considered as developed. It is difficult to generalize or adopt them all one time to the rest of the world countries. However, it is important to take into consideration these definitions as a benchmark in the process of reform and try to adopt the programs in line with the needs of the local society and within the available resources and tools.

We conclude from the previewed definitions that they have one common principle that is *“security of good life conditions for the individuals in the society”.*

This reminds us with the role of welfare state and the definition of poverty, in which the state is responsible to provide services, secure its residents from the expected risks, and compensate them for natural hazards, through certain systems and by the available resources. Meanwhile, the poverty measures are relative from one country to the other, depending on the norms and living standards of the society (UNICEF, 2012). Thus, we can develop the definition of social security to be:

“The efficient measures against the potential risks in a society to secure adequate income on equality and solidarity basis”.

¹⁹ For more information about the definitions of "Social Security" see the book of "World Social Security Report , ILO, 2010) PP. (18-21),

The social Protection

On the other hand, the term “social protection” is used with a wider variety of meanings than “social security”, to include all formal and informal protection measures taken in the society. At the same time, it refers to protection measures to secure basic needs and protect from social risks targeting the poorest and most vulnerable or excluded members of the society.

The Social Transfer

While, “social transfer” refers to the means to provide benefits under the social protection and social security measures, either in cash or in kind. The formal social transfers are performed under various social security schemes targeting certain groups of society to solve social problems. Some of these schemes are contributory where the transfer occurs among certain members in reciprocal way and financed by regular contributions paid by members; while, other schemes could be in universal with defined conditions of benefits, which are almost financed by taxes.

The Pension systems

According Kulu and Reiljan (2004), pension systems are related to the income of the beneficiary through his/ her working period; further benefits are determined mainly by monthly contributions. They summarized the aim of old-age pension system in the following points: *“keeping the living standards, reduction of inequalities and promotion of social inclusion for elderly or for those unable to work”*. (Kulu and Reiljan, 2004, P. 9)

2.3- The Main Principles of Social Security Systems

In the light of the various definitions of social security, there is a set of principles and objectives that, all well-designed pension systems share. These have been set out in numerous OECD, World Bank, and ILO reports. We will discuss in this chapter the main principles and objectives, as well as the guidelines and standards of the social security as discussed by the researchers and the international institutions. I believe this review will enhance our understanding and focus on the points that should be covered in the reform analysis of the retirement system in Palestine.

2.3.1- The social Security is a Right

The social security was introduced as a right to individuals of the society that guarantees protection on reciprocal basis through all possible means. Spicker (2013) argued that while searching for alternative methods for welfare definitions than the traditional poor relief, it was largely developed through cash benefits that were developed differently in societies. He concluded that at least two different kinds of responses were developed; one was the development of benefits as a right of citizenship; the other is the establishment of cooperative subscription as a basis for cash support (Spicker, 2013).

The philosophy of the development of communities to live together is to have more protection against the existing risks and to afford better living conditions by cooperation in achieving tasks. This corresponds to the view of ILO in explaining the emergence of communities, which refers to the needs and the risks throughout the life cycle (ILO report IV, 2011). The needs for protection depend on both “Macro” and “Micro” concerns of each individual or households (ILO, 2010).

For the same reason, Aristotle tried to explain the development of villages and how the city came into being. This leads us to the argument of how to realize equity, in the status of available variety in abilities and conditions among individuals in the society; at the same time, it is required from individuals with more abilities to support other weak ones.

According to Aristotle, the city was developed gradually and naturally, by the force of the need of the individuals to each other; however, he argues *"an individual needs the city more than the city needs an individual"*. Thus, for the harmony of the society, the individuals should belong to the city more than himself, which is important for the survival of the

community as a whole (Clayton, 1998). In return, the community guarantees the right of protection and security for its members to survive without discrimination. This reciprocal benefits relationship between the community and its members is important for the harmony of justice and the survival.

However, in modern developed societies, the state had to intervene to redistribute the wealth and to protect the needed members through social security systems. In most of the world constitutions, the state is obliged to protect its citizens and promote their welfare as one of the essential responsibilities. In explaining the social security in United Kingdom, Spicker (2013) stated that *“The welfare state, founded in the 1940s, promised a comprehensive set of measures, provided at the best level possible, as a right of citizenship”*(P.85). While, Piron (2004) concludes that human rights norms and standards necessitate us to draw attention to specific groups and provide them with additional protection. He also emphasized on social security as a human right, which should be a principle of any policy planning.

Although the social security coverage over the world population is still low, there was a consensus in the international institutions on introducing the social security as a basic human right. Upon the provision of the ILO of considering the benefit and poverty protection as a right, benefits should be specified precisely, and the protection against poverty measures should be in line with the conventions of social security with a minimum benefit levels. (ILO, 2010)

With the creation of ILO in 1919, it stated the right to social security among its primary responsibilities. In 1944, ILO reaffirmed this mandate of the social security in its "Declaration of Philadelphia", which guarantees basic income for all needed and comprehensive medical care, as well as, provisions of children welfare and maternity protection. The "Income Security Recommendation (No. 67/1944)", which was the first international legal instrument to stipulate the right to social security as a right belonging to all, and the "Health care Recommendation" (No. 69/1944) was the first international commitment to the extension of social security to all. Further, it paved the way to recognize the social security as human right in "Universal Declaration for Human Rights" by the

General Assembly of the United Nations in 1948, particularly articles (22)²⁰ and (25)²¹, and in later years, in the (ICESCR) - provision no. 9, which includes more than 160 countries around the world (ILO report IV, 2011).

Finally, concerning the globalization and equality, some go further arguing that human right obligation of social security is also at the international levels, which requires certain forms of cooperation between states. However, this claim has faced many obstacles, where it was opposed by most of the rich countries, which prefer to play this role as donor states without any obligation (Piron, 2004). According to Sholkamy and Hallez (2010), some international institutions like the World Bank and IMF had been tried to encourage developed nations to offer support to developing countries, where the president of the World Bank, Robert Zoellick called for 0.7% of developed countries stimulus packages to be devoted for supporting developing countries, with social protection featuring strongly in this support. This attitude was enhanced by a campaign for a Global Social Floor/ minimum social protection package. Isabel Ortiz, called attention to growing poverty in developing countries, due to the financial crisis as opportunity to demand basic social protection for all people in all countries (Sholkamy and Hallez, 2010). Furthermore, in 2004 the World Commission on the Social Dimension of Globalization reaffirmed on the need for increased international solidarity. However, there are other practical obstacles against the globalization of social security as argued by Denis Bouget (2003), where several domains can influence convergence in social protection. Thus, he stated, “*the*

²⁰ **Article 22**

“Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.”

²¹ **Article 25**

“(1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control”

global convergence is often conceived as resulting from the domestic dynamics of each social risk". (Bouget, P.676 – (3)).

In this perspective, the 2005 World Summit of the United Nations established the principle that each society was responsible for people's social well-being, at least when it came to defining minimum social objective. Indeed, up-to-date there are more than 160 states committed themselves to the article (9) of the International Covenant on Economic, Social, and Cultural Rights (ICESCR), which states that "*The State Parties to the present Covenant recognize the right of everyone to social security, including social insurance*".

2.3.2- The Universality

Universality of access to the social security systems, which means access to all, is important to realize equity and justice in income security, health services and education level to all citizens within the available resources (ILO, 2010). This principle corresponds with the article 1 of the Universal Declaration of Human Rights, which states that, "*All human beings are born free and equal in dignity and rights*". (ILO, 2011)

Moreover, the objective of extending of the social security systems in both horizontal and vertical directions, which is not yet possible to achieve in the short-term in most societies, seeks to realize the universality of the systems at its final end. ILO has played a distinctive role in adopting the inclusion of social security as one of the main principles of human rights. In its International Labor Conference in 2009, ILO adopted the Social Protection Floor (SPF) approach incorporated into the Global Job Pact, which requests countries that do not yet have extensive social security to build adequate social protection for all; drawing on a basic social protection floor and urges the international community to provide development assistance, including budgetary support to build up a basic social protection floor on a national basis. (ILO, 2011)

On the other hand, Holzmann and Jorgensen (2000) highlight the contribution of the World Bank to social inclusion, which is considered as one of the main objectives of the World Bank's mission and work. Further, according to Holzmann and Hinz (2005), the Bank's perspective on pension systems and reforms is based on the deep conviction that every individual should have access to retirement-income support in one form or another and that the current provisions are in most cases inadequate, function poorly, and need reform.

2.3.3- Solidarity

The Code of Social Security declares in its first article “*the organization of social security is founded on the principle of national solidarity*” (ILO, 2010). Further, the European Council Recommendations No. 92/441/EEC and No. 92/442/EEC consider solidarity as a fundamental obligation in the developed society.

In this perspective, the development of solidarity is an idea, developed from the turn of the century, considered as the most important justification for welfare. It means that all contributors (including workers and employers) should want to support the social security system (Brown, 2008). On the other hand, Brown (2008) outlined the solidarity as one of the principles for the design of any social security pension system; he also believes that it may be necessary to provide significant benefits to wealthy participants to guarantee the solidarity of these workers in the support of the system as a whole (Brown, 2008).

As a result, the social security and pension systems are supposed to be used by the state as redistributive mechanisms of income to apply its welfare policies.

2.3.4- Collective Actuarially Balanced Levels of Contributions and Benefits

The benefits of the system should be balanced with the overall contributions paid in addition to a minimum rate of return in order to realize the financial sustainability and the efficiency of the system. Brown (2008) outlined the first principle for the social security pension systems in his paper, stressing that the total cost of the system must be affordable and sustainable, regardless of the financing source. Thus, the benefits will be paid for by a combination of taxes, contributions and investment income (Brown, 2008).

Meanwhile, the rate of return could be determined in various ways depending on the availability of funds. Indeed, in the funded systems, the return of investments in the market is the main determinant of the calculation of the rate of return. While, in the Non-funded Notional Defined Contributions (NDC) Systems, the calculation mechanisms of rate of return are more complex and depend on other factors than the market performance, which are determined in a way to keep the financial balance of the system.

However, according to the ILO, the minimum benefit replacement rate and the minimum level of revenues of the social security funds in case of savings schemes should be

monitored and guaranteed by the state to keep the sustainability and liability of the system (ILO, 2010).

2.3.5- Responsibility for Governance

The role of state in granting the entitlements of benefits to beneficiaries of the system is important to the sustainability and liability of the system, which will be reflected in the commitment to the system from one side and to the harmony and stability of the economy and society as well. There is a consensus that the contributors and employers should take part of the governance of the funds and systems; however, the state is still the main partner in determining the main policies and control over the operations and setting the different regulations regarding the social security. The state has the responsibility in increasing the awareness and directing the culture of citizens in having responsibility and self-commitment to the systems for the overall benefit. In order to realize this role of state, the state should be the guarantor of social security rights (ILO, 2010).

2.3.6- Outcome Focus

The social security systems are introduced to achieve some purposes; however, the challenges and political bias could divert these systems from their main objectives. By reviewing the applications of social security systems internationally, it was noticed that deficiencies occurred in many systems in achieving the main objectives or principles, while trying to solve other problems and challenges or to achieve other objectives and policies. Example of such cases is the trade-off between the maximizing beneficiaries' welfare and maximizing economic efficiency. Furthermore, Brown (2008) outlined another important case, in which the benefit/ contribution structure should not encourage workers to evade participating, and/ or to leave the workforce early.

2.4- The Objectives of the Social Security Systems

All social services can be viewed as fulfilling a range of objectives to meet the needs of the society. Some researchers and international institutions adopted the main

objectives of social security from its point of view, to work as standards and guidelines to design and develop the optimal social security system.

Briggs (2006) stated the importance of the welfare state to the market in at least three objectives: 1) guarantee of a minimum income to individuals and families, 2) enable individuals and families to meet certain social contingencies and, 3) ensuring that all citizens without distinction of status or class are offered the best standards available (Briggs, 2006).

Further, Spicker (2013) introduced the social security as a response to poverty and to needs; in the time, he tried to identify the kinds of needs in relation to deprivation. He discussed the extent of the purposes of social security; clarifying that the relief of poverty constitutes only a part of the functions of social security, which also have a significant aspect of the economic structure in many countries (Spicker, 2013).

Thus, he also concluded that the kinds of aims of social security services or programs, are not limited with the poverty relief alone, but are blunt instrument that can be turned to many different purposes. Hence, to define the social services, Spicker (2013) highlighted the importance of common aims rather than the employed means to achieve these aims (Spicker, 2013).

In this context, Barr and Coulter (1990) define three strategic aims of social security (Barr and Coulter, 1990:274–276):

- *“Income support, including poverty relief, protection of living standards and redistribution of an individual’s income through across his/her lifetime;*
- *Reduction of class, racial and sexual inequalities;*
- *Social integration, in a way that benefits permit social participation without stigma.”*

Likewise, ILO stated similar principle objectives of social security as follows (ILO, 2011):

- *“Reducing income insecurity, including the eradication of poverty, and improving access to health services for all people, so as to ensure decent working and living conditions;*
- *Reducing inequality and inequity;*
- *Providing adequate benefits as a legal entitlement; while*

- *Ensuring the absence of discrimination on the basis of nationality, ethnicity or gender; and*
- *Ensuring fiscal affordability, efficiency and sustainability.”*

On the other hand, Kulu and Reiljan (2004), described the aim of old-age pension system as *“a combination of maintenance of the living standard, reduction of inequalities and promotion of social inclusion for the elderly or for those unable to work rather than mere provision of a minimum level of social security throughout redistribution function”* (Kulu and Reiljan, 2004: P.9).

While, Holzmann and Hinz (2005) discuss the primary goals of mandatory pension systems according to the World Bank’s perspective, which state that the pension systems should provide adequate, affordable, sustainable, and robust benefits, while the secondary goal is the contribution to economic development (Holzmann and Hinz, 2005). Likewise, Hauff (2002) highlighted the positive contribution of social security to the economic development of an industrialized or developing nation (Hauff, 2002). However, Barr (2006) presented the definition of pension schemes from both individual and public policy viewpoints. According to Barr, the individual has two purposes: 1) consumption smoothing over life cycle, and 2) insurance, particularly in respect of the longevity risk. While, the public policy has two objectives: 1) poverty relief, and 2) distributional objectives (Barr, 2006).

While, ILO, Briggs, Barr and Coulter, and Kulu and Reiljan focus in their definition on achieving the main objectives of pension systems to reduce poverty of vulnerable groups through certain mechanisms, the others like Spicker, World Bank, and Hauff tried to include other objectives for pension systems as they believe it can contribute to economic development as well. I think the principle objectives should be as identified by the first group as priority, but it should not ignore how to develop the economic objectives as well. Pension systems can contribute to economic development and effect local investment opportunities as they can accumulate huge amount of contributions; but that should not violate the principles of pension systems and international standards of the objectives.

In conclusion, we notice that all reviewed definitions and objectives of pension systems share the principles of having financially balanced, affordable, flexible system that provide adequate income and protect from the available risks of low income by equal redistributive means.

The designing process of the social security systems is critically important to insure the harmony with the environment of the society, as well as consistency among the objectives; particularly, some objectives are contradictory. Therefore, it is important to keep tracking the current objectives of the existing social security systems, in order to determine the priority of these objectives to meet the needs of the society better. Thus, each society determines its priorities among the objectives of social security according to its privacy of political, economic and social factors. For instance, in the period immediately after World War II, the main objective of social security in Europe and Japan was to give relief for the needy and to prevent poverty, while in the United States the social security was developing in different way. Nowadays, the social security objective is not limited to the relief for the needy and to prevent of poverty, rather it is changing to wider security of national life.

In this regard, Brown (2008) tried to order the priorities of any well-designed social security system, arguing that the first priority should be the mitigation and alleviation of poverty among the elderly population. Then, the second is to help citizens maintain an acceptable standard of living after retirement. The third priority goal is solidarity, followed by the guarantee of significant minimum benefit, which could be financed from tax revenues. He added the priority goal that the system should not create perverse economic incentives, including incentives to stay out of the formal economy. Further, it should not create incentives for workers to leave the workforce early. Finally, the system should not encourage unnecessary absences from labor force.

In order to achieve the objectives of social security, the functions are introduced to determine the structure and the activities of the social security systems. According to Hauff (2002), the social security has dual function, the first is concerned with preventing a deterioration in living conditions of targeted groups, while the second is improving the living conditions to guarantee at least the minimum basic criteria (Hauff, 2002). According to the Japanese social security institution, even there are many overlaps among the functions of social security systems; they were classified into four functions: a) a social safety device (social safety net), b) redistribution of income, c) diversification of risks, and d) social and economic stability.

While, Bovenberg and van Ewijk (2011) introduce the functions to pension systems in three main points: a) life-cycle planning, b) inter-generational risk sharing, and c) intra-

generational risk sharing. They asserted on the importance of each of these functions to poverty alleviation, where it is included in each of functions.

These functions of Bovenberg and van Ewijk may reflect the definition of Barr to pension schemes objectives, particularly the consumption smoothing over life cycle of personal viewpoint and distributional objectives of public viewpoint.

According to Piron (2004), World Bank's new approach of the Social Risk Management (SRM), which was introduced by Holzmann and Jorgensen, for the same purpose of poverty alleviation, but in new perspective of social security and in broader context to include all formal and informal measures to manage risk in three stages of risk development; protective (preventive), mitigation, and coping. Under the social risk management, the personal as well as the public measures are important for protection.

The aforementioned functions confirm the fact regarding the main objectives of social security and pension systems as public measures to protect individuals from various types of risks along their life. However, since these public measures accumulated huge assets besides enormous cash flows in the economy, the policy makers tried to design new forms of social security systems that could provide other goals to the society and economy as well. The practical experiences show that these secondary objectives sometimes could divert the social security and pension system from their original main objectives. Thus, there were standards and principles formulated by international institutions as guidelines to assist policy makers keep track of their plans of developing the systems.

2.5- Development of Social Security Systems and Pension Systems

The social security is a general term that was limited to the social assistance to poor or needy households at certain time in some societies. Before the emergence of the formal social security, the societies had various forms of informal social security that provided the minimum social assistance to some poor people. However, these programs had some problems related mainly to the coverage and effectiveness to solve the poverty problem.

The first formal social security systems emerged in moderate form, which were limited to certain groups of the total population, with limited benefits and objectives. However, after the World War II, there was an international consensus on the importance of social security in absorbing the risks and fluctuations in income resulting from various social conditions and economic crises. Thus, the social security systems were recognized as a human right by the international institutions, which accelerated the coverage expansion over populations of many nations around the world. As a result, some international standards were developed to include income security, health care, maternity, insurance and other programs, to meet diversified social security needs of people in each society.

Each country has developed its pension system by introducing more benefits and designing several schemes for various groups of people to respond to their needs and available risks. However, each society has chosen to organize its social security and pension systems in consonance with historical, social, economic and political privacy. Therefore, there are various types of pension systems structures and even the similar systems were organized by different ways. In this regard, Bovenberg and van Ewijk (2011) argued that the international heterogeneity in organizing the pension systems is likely to remain in the future. Thus, the development trends of social security are still changing in order to meet the changing needs and other exogenous challenges that are also changing over time.

Table 17: Overview of National Social Security Systems in Selected Countries as in 2013

Country	Sickness	Maternity	Old-age	Employment injury	Invalidity	Survivors	Family Allowances	Unemployment
Palestine	A.	B.	A.	B.	A.	A.	A.	None
Algeria	A.	A.	A.	A.	A.	A.	A.	A.
Egypt	A.	A.	A.	A.	A.	A.	None	A.
Morocco	A.	A.	A.	A.	A.	A.	A.	None
Tunisia	A.	A.	A.	A.	A.	A.	A.	A.
Israel	A.	A.	A.	A.	A.	A.	A.	A.
Jordan	B.	A.	A.	A.	A.	A.	None	A.
Lebanon	B.	A.	A.	A.	A.	A.	A.	None
Yemen	A.	P.	A.	A.	A.	A.	None	P.
Saudi Arabia	P.	P.	A.	A.	A.	A.	None	A.
OECD Countries	A.	A.	A.	A.	A.	A.	A.	A.

Sources: ILO - World Social Protection Report 2014/15 report, 2014, Pages. 186-195.

Notes²²

The public social security pensions still the main regulator and source of the old age income security; even the public pensions are usually supplemented in that task by publicly regulated private provision. According to the ILO report, in OECD countries, 59 percent of old age income comes from public pension transfers; while, 24 percent from employment and self-employment, and 17 percent from capital income – mainly private pensions. Thus, it is noticed that in OECD countries, there is positive relation between the coverage by public pension and the share of public pensions in old persons' income, and negative relation with poverty. While, in other countries with large informal economy, the same relation exists only where coverage by non-contributory pensions is at high level as in South Africa (ILO report, 2014).

Presently, social security in developed countries covers a wide range of benefits on a large scale, which has not easily been achieved. Nevertheless, the social security in developing countries is still limited in kinds of benefits and scale of coverage due to the economic shortage or political instability. Robalino and others (2005) found the evidence from MENA region that pension systems are facing important structural problems, where the systems favor middle- and high-income workers on the expense of low-income workers. Further, the coverage is relatively limited to certain groups, mostly employees in the public

²² A.: At least one program anchored in national legislation.
 B.: Only benefit in Kind (e.g. medical benefit).
 L.: Legislation not yet implemented.
 P.: Limited provision (e.g. Labor code only).

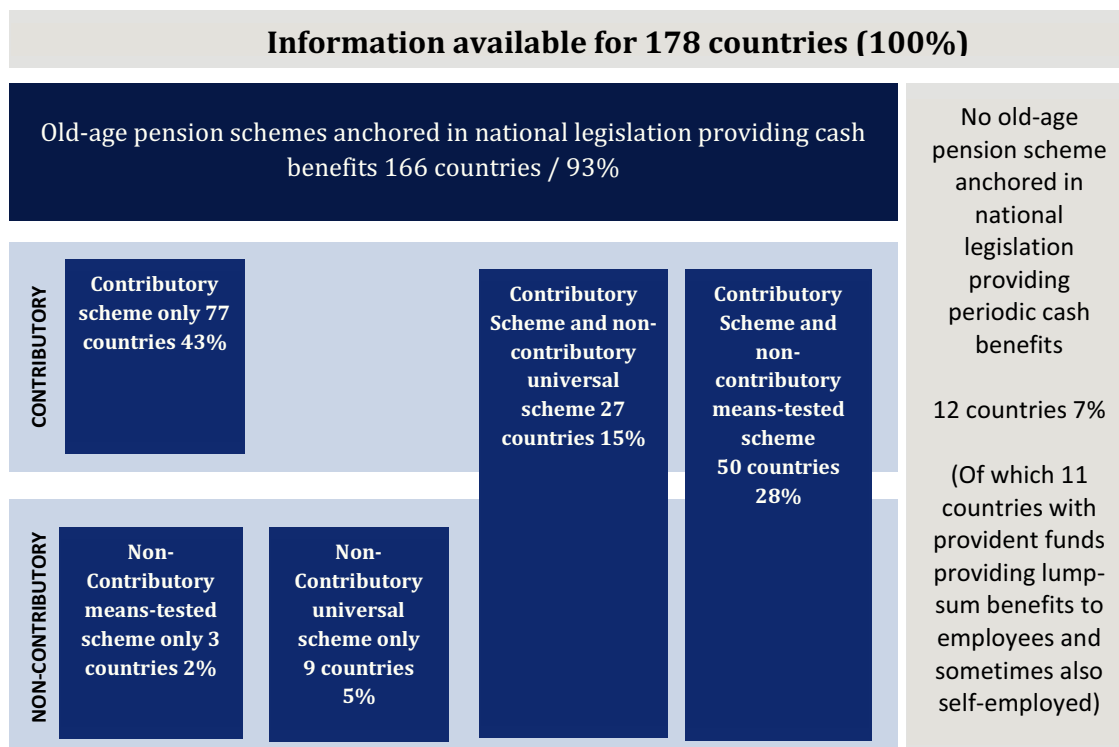
sector and formal private sector (Robalino and others, 2005). On the other hand, ILO (2010) concludes that the social security systems perform an important role as social and economic stabilizers during national and global economic crises through social transfers, which demonstrated their capacity to act as economic stabilizers in developing countries as well. Further, ILO reports indicate that from the point of view of societies, the existence of social security generates stability that improves economic growth and performance and acts as economic stabilizer (ILO, 2009 and 2010).

2.6- Typology of Pension Systems and Financing Mechanisms

There were various approaches to classify the types of pension systems applied around the world and large set of options of pension reform resulting from different combinations. Even all Pension systems perform the same functions and face the same challenges; the same type of systems can be organized in different ways due to the specific history and institutions of a particular country.

According to the data of ISSA, ILO's report of 2014 on World social protection classifies benefit types provided by mandatory or quasi-mandatory schemes in 178 countries. The data indicates that 166 out of 178 countries provide pension often through a combination of different types of contributory and non-contributory schemes; while, only the remaining 12 countries provide only lump-sum benefits through provident funds or similar programs (ILO, 2014).

Figure 57: Overview of Old-age Pension Schemes anchored in National Legislation, by Type of Scheme, 2012/13



Source: ILO - World Social Protection Report 2014/15 report, 2014, P. 77.

In 77 countries, the contributory basis schemes cover only employees in the formal economy and exceptionally certain groups of self-employed. In another group of countries, the contributory pension schemes are complemented by non-contributory schemes, either for all old age persons or for only those below a certain income threshold.

Table 18: Old-age Pensions: Key Features of Main Social Security Programs in Selected Countries

Country	Date of first law	Type of program	Statutory pensionable age (No. of Years)		Contribution rates: Old-age, disability, survivors (Percentage)			Estimate of the legal coverage for old age as a percentage of the working-age population							
								Total (Mandatory & voluntary; contributory & non-contributory)		Contributory mandatory		Contributory voluntary		Non-contributory	
								Total	Women	Total	Women	Total	Women	Total	Women
Palestine	1964	Social insurance	60	55	10	12.5	Any deficit	5.90	1.43 ²³	5.90	1.43	0.0	0.0	0.0	0.0
	2005	Social insurance, Mandatory individual account (DC), and Non-contributory pension	60	55	10	12	No contribution								
							Total cost								
Algeria	1949	Social Insurance	60	55	7	10.25	Subsidized minimum pension	36.0	10.5	36.0	10.5	0.0	0.0	...	
		Non-contributory pension	n.a.	n.a.	Total cost								
Egypt	1950	Social insurance	60	60	13	17	1% of covered monthly payroll plus the cost of any deficit	39.3	13.1	39.3	13.1	0.0	0.0	0.0	0.0
Morocco	1959	Social insurance	60	60	3.96	7.93	No contribution	21.7	8.8	21.7	8.8	0.0	0.0	0.0	0.0
Tunisia	1960	Social insurance	60	60	4.74	7.76	Subsidized contributions for young graduates, persons with disabilities, and other categories of workers	44.6	23.1	44.6	23.1	0.0	0.0	0.0	0.0
Israel	1953	Social insurance	70	67.33	0.34-3.85	1.3-2.04	0.25% of insured persons' earnings	100	100	61.5	56.6	0.0	0.0	38.5	43.4
			65-67	60-64		n.a.	Total cost								

²³ Given that, 56.4% of the Palestinian working age population are outside labor force, while 72.41% of them are females.

Country	Date of first law	Type of program	Statutory pensionable age (No. of Years)		Contribution rates: Old-age, disability, survivors (Percentage)			Estimate of the legal coverage for old age as a percentage of the working-age population							
								Total (Mandatory & voluntary; contributory & non-contributory)		Contributory mandatory		Contributory voluntary		Non-contributory	
								Total	Women	Total	Women	Total	Women	Total	Women
		Means-tested non-contributory pension			n.a. ²⁴										
Jordan	1978	Social insurance	60	55	5.5	9	Discretionary/ irregular contribution	41.7	12.7	33.3	12.0	8.4	0.7	0.0	0.0
Lebanon	1963	Social insurance: lump-sum benefits only	64	64	No contribution	8.5	No contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saudi Arabia	1969	Social insurance	60	55	9	9	Any operating deficit	18.8	6.3	18.8	6.3	0.0	0.0	0.0	0.0
Syrian Arab Republic	1959	Social insurance	60	55	7	14	No contribution	23.8	7.9	23.8	7.9	0.0	0.0	0.0	0.0
Yemen	1980	Social insurance	60	55	6	9	No contribution	18.9	2.2	18.9	2.2	0.0	0.0	0.0	0.0

Source: ILO - World Social Protection Report 2014/15 report, 2014, P. 237-261 and data of PPA and ISSA.

²⁴ n.a.: Not applicable, not available.

Thus, each country chooses and develops its system and the way in organizing the system that fits better and reflects the political, social, and economic privacy and development. Even the parameters of contributions and benefits as well as the eligibility conditions are different from country to other in the same region. However, in developing countries the retirement age is less than that in developed countries due to less life expectancy from one side, and the lack of professional reform to the age of retirement to reflect an actuarial balance of the system and the ability of people to produce and work. In this section, we will review in short the main types and approaches of pension systems.

2.6.1- PAYG Systems

Conde-Ruiz and Profeta (2007) argue that Pay-As-You-Go (PAYG)²⁵ social security systems may involve different types of redistribution across generations, but the types of the social security system determine the degree and direction of the distribution policy and its effect on poverty.

The Bismarckian Systems

Historically, Germany became the first nation in the world to adopt an old-age social security insurance program in 1889, designed by Germany's chancellor, Otto von Bismarck. Nowadays, many countries in the world has been adopting the Bismarckian pension model, regardless the modifications applied to the model by different countries, including Germany.

Originally, the Bismarckian system provided contributory retirement and disability benefits. Participation was mandatory and contributions were taken from employees and employers. This system worked together with the workers' compensation program, sickness insurance, and unemployment insurance to provide comprehensive system of income security based on social insurance principles. However, common four key institutional variables determined the Bismarckian model as "Social insurance state" rather than "social welfare state": 1) entitlements are associated with employment status, where

²⁵ The PAYG concept is related to the unfunded types of pension systems, have some or no accumulated funds to pay all the rights of all beneficiaries at any time, rather the contributions should be adjusted annually to pay the pension benefits.

these systems were primarily aimed at insuring industrial workers, who paid contributions; 2) social benefits are in cash, transfer-based, proportional, earnings-related and expressed in terms of replacement rates, or called contributory benefits; 3) financing mechanisms are based on social contributions; and 4) administration structure are para-public. The Bismarck model is applied in France, Belgium, the Netherlands, Japan, Switzerland, most Arab countries, and in some Latin American countries.

The Beveridgean Systems

The Beveridgean system refers to the UK government Beveridge Plan, published in 1942. Initially Lord Beveridge designed the system with flat benefits to be financed by flat contributions rate through tax payments. However, later modifications changed the contributions rate to be proportional to the earnings and the benefits became inversely related to earnings, with a minimum income guarantee.

This kind of means-tested social security system is applied in many ex-colonized by Britain with some modifications including New Zealand, most of Scandinavia and Spain. This system faced many critics because of the government control. Most of the countries adopted amendments on the system and introduced other systems beside it.

2.6.2- Defined Contribution (DC) Scheme (Funded)

A DC system is relatively modern form of pension systems, introduced in Chile for the first time in 1980s. Few years later, many countries applied the DC system as part of the institutional pension structure, particularly in Latin American and high-income countries. It is earnings-related contributory system, in which contributions are transferred to individual private accounts regularly, where the contributor can choose how to invest the accumulated funds in his account. At retirement, the beneficiary owns the accumulated fund to finance the rest of his life through annuities or other various options, which depend on the regulations in each country. DC schemes are run by private sector, but the government has a supervisory and regulatory role to protect contributors and ensure transparency.

Barr (2006) criticized this scheme since claiming that it leaves the individual to face the risks generated from macroeconomic performance, or bad management behavior, and lack

of information and ability to follow the markets. While, Lindbeck classified the DC scheme as more financially actuarial but it is still criticized as inadequate.

Lindbeck (2006) defined the DC system as “*one where the contribution rate is fixed, which means that the pension benefits must be endogenously adjusted from time to time to ensure that the pension system remains financially viable*”. Meanwhile, according to Palmer (2007), the Sweden’s new defined contribution schemes of both the NDC and FDC are based on fixed contribution rates of the individual earnings. Palmer supports the fixed contribution rate of DC system arguing, “*The defined contribution framework with a fixed contribution rate creates financial stability and inter-generational fairness in the sense that all future cohorts will pay the same percentage of their earnings into the pension system*” (Palmer, 2007: P.5).

2.6.3- Notional Defined Contributions (NDC) Scheme (Non-funded)

According to Palmer (2006), NDC system was a result of the interchange of ideas and discussions among pension experts and politicians²⁶. Palmer (2006) defines the NDC as “*a defined contribution, PAYG pension scheme*”.

According to Palmer, in the NDC schemes the contributions are noted on an individual account at fixed rate of individual earnings, unlike DC schemes that are funded. Thus, in NDC schemes there is no accumulated fund to be invested in markets like DC schemes, but they depend more on the economic growth and demographic factors. The NDC benefit is a life annuity, which is actuarially calculated upon the beneficiary’s claim at any time after a minimum age of retirement (Palmer, 2006).

2.6.4- Multi-pillar Pension System

Since 1981, many countries around the world has moved toward the multi-pillar system, particularly in Latin America and Eastern Europe. Originally, the multi-pillar system consists of two mandatory pillars and a voluntary one. The first mandatory pillar is a

²⁶ It was first implemented in Sweden in 1990s, followed by Italy, then a number of states in central Asia and Eastern Europe, which almost had a transition economy after the collapse the Soviet Union in 1990.

publicly managed, tax-financed arrangement designed to provide a social safety net for low-wage earners, the second mandatory pillar is a defined contribution scheme; while, the third pillar is voluntary for contributors, who would like to increase their contributions to increase their income after retirement. However, each country has adapted the multi-pillar pension systems to fit its specific needs, which resulted in the emergence of various models. The main models of Multi-pillar pension systems are; The OECD Model, Chile's Pension Saving Account (PSA), and The Notional Account System (Portland Trust, 2007). Multi-pillar pension systems represent a new trend in the pension reforms because they provide a number of solutions for the specific needs of groups in the society and the challenges that systems face to achieve their objectives upon the international standards. Therefore, Holzmann and Hinz (2005) consider multi-pillar systems as one of the objectives of pension reforms, of which the diversity in benefits, finance methods, and risks is one of the most prominent features. However, Holzmann and Hinz (2005) propose to use the PROST²⁷ model to project any pension reform proposal that is not accompanied by credible cost estimates comparing it with the current scheme in order to test the financial sustainability.

2.6.5- Some Approaches of Pension Systems

There is no standard understanding for the multi-pillar systems, rather the main principles of having diversity of schemes in the pension structures to achieve the predetermined objectives of the systems. In this regard, the following approaches were developed to explain and classify the types and the objectives of each type of the pension systems through the study and design of pension systems.

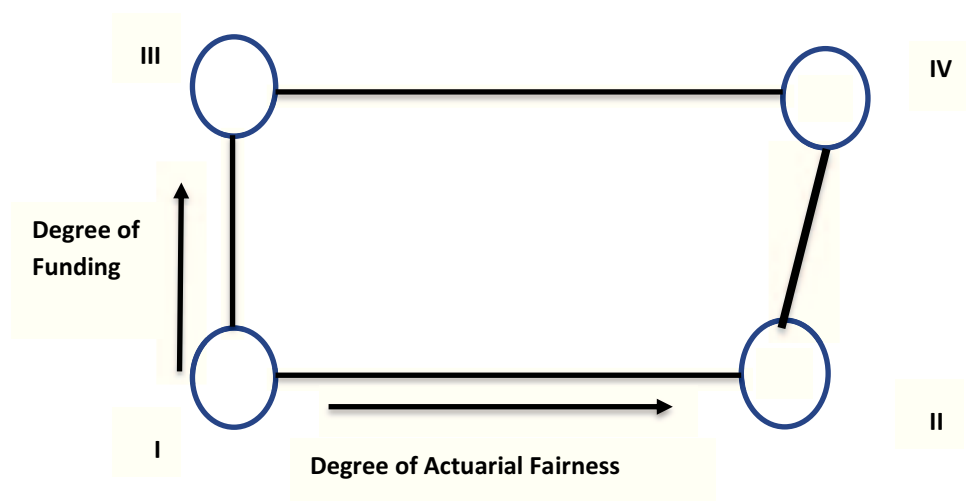
According to Holzmann and Hinz (2005) the pension systems are classified on three-dimensional classification: benefit type (Defined Benefits "DB" or Defined Contribution "DC"), administration (Public or Private), and funding (fully funded, unfunded, or prefunded) (Holzmann and Hinz, 2005).

²⁷ PROST (Pension Reform Options Simulation Toolkit) is a model introduced by the World Bank to test pension reform options as a whole and on an individual level.

In the time, Lindbeck (2006) classified similar three-dimensional classification with replacing the administration by actuarial status, which relates the benefits to the contributions; so, the stronger the relation the more actuarial is the system. Further, Lindbeck classified the pension systems in two dimensions: the funding and actuarial status, considering that all pension systems covered by the two dimensions could be either DB or DC, and taking into consideration the overlapping generation model to provide the analysis, in which the return rate of contributions is calculated upon the funding status of the system. In funded pension systems, the benefits are financed by the return in financial markets on the earlier accumulated contributions; while in unfunded pension systems, the return depends on the growth of current income of working population in formal sector, since the benefits are financed by the current flow of contributions or taxes of active populations.

This typology of pension systems results four prototypes of pension systems: 1) non-actuarial unfunded system that provides tax-financed lump-sum pension benefits, 2) non-funded actuarial, which indicates to NDC systems, and is considered as “quasi-actuarial” since the average and marginal return is less than in the fourth prototype, 3) a non-actuarial fully funded, 4) actuarially fair fully funded systems - DC systems.

Figure 58: A Taxonomy of Social Security Systems



Source: Lindbeck, 2006: P.72.

Moreover, the World Bank has developed one of multi-pillar pension system approaches, which consists of five pillars. Holzmann and Hinz (2005) distinguished three pillars of earnings-related contributory pensions as was originally proposed by the Bank in 1994. The first pillar is unfunded, mandated, and publicly managed pension plans that seeks to alleviate poverty. The second is mandatory, funded, and private pension plans that seek to replace income. While, the third is voluntary funded pension plan that seeks to keep the income level of individuals with high income and create new opportunity for investments. The Bank's new approach has two other non-earnings-related pillars: the first is "zero-pillar", "basic" or "social pension", universal, financed by budget, and publicly managed scheme, while the other is complementary other formal social programs and individual financial and nonfinancial assets, voluntary scheme (Holzmann and Hinz, 2005).

While, Bovenberg and van Ewijk (2011) developed earnings-related pension systems approach, depending on two dimensions; governance of pensions (public or private) and scope of individual choice in pension insurance (choice oriented or mandatory oriented). In the first dimension, they discuss the role of public and private sector in administering the pension systems. They claim that pure public and private systems do not exist, but there are state-oriented and private-oriented systems, which have various tasks that can be distributed in alternative ways over the government and private sector.

According to the second dimension, the extent of choice is multi-dimensional, where during the working life, individuals may be able to select the contribution level and investment portfolio, as well as at the retirement, they may choose how to receive the benefits and insurance upon the available financial market and types of annuities.

The following figure illustrates the approach of Bovenberg and van Ewijk (2011) in four prototype models upon the mentioned two dimensions. The models are classified between the mandatory state system and market-based system to have state, liberal, corporatist and market models.

Figure 59: Typology of Pension Systems:

	Individual choice		
State organized	Liberal	Market	Privately organized
	State regulated + individual choice of pension provider. (<i>U.K., Chile</i>)	Individual choice of pension savings and provider. (<i>USA</i>)	
	State	Corporatist	
	Comprehensive public Bismarckian or NDC system. (<i>France, Sweden, Germany</i>)	Employer related pension funds. (<i>Netherlands, Switzerland</i>)	
	Mandatory		

Source: Bovenberg and van Ewijk (2011)

The State model is mandatory comprehensive public systems with limited scope of individual choice, in which provides poverty alleviation as well as the earnings-related benefits. It has both life-cycle planning and intergenerational risk sharing functions. It encompasses both the Bismarckian and NDC systems, which traditionally have been financed by the public budget; however, new reforms target to reach automatic adjustment mechanisms.

The liberal model aims to synthesize the state and market models by combining state regulation with individual responsibility. Thus, the state organizes the basic pension and controls earnings-related pensions, but leaves space for private administration and insurance as well as individual choices.

The corporatist model is mandatory and comprehensive, in which the state provides basic pension, while pension funds organize earnings-related pension insurance for workers in specific sectors, which are typically governed by representatives of the employers and the unions. The model leaves little scope for individual choice of portfolio and the level saving through regulating some incentives.

In the market model, the responsibility of earnings-related pensions is of the private sector on voluntary or mandatory basis. While, the responsibility of the state is to provide a basic flat social pension to avoid poverty in old age and to regulate the private sector through regulation and provisions, which result in more transparent systems and more scope of individual choices. The benefits can be in lump-sum or transferred into annuities through

insurance companies. Almost the Anglo Saxon welfare states, as UK and USA, conform to the market model, although the reforms in UK have liberal model orientations. They employ defaults to guide individual decisions and stimulate the privately provided pensions to supplement their public systems (Bovenberg and van Ewijk, 2011).

Further, Esping-Andersen (1990) developed another similar classification that distinguishes the Scandinavian, Anglo-Saxon, and Corporatist pension systems, which correspond more or less to the three prototypes of state, market and corporatist, respectively, of the mentioned approach of Bovenberg and van Ewijk (Esping-Andersen and Cnaan, 1990).

However, the World Bank multi-pillar approach reflects the two dimensions approach of governance and flexibility of choice: the first pillar is publicly managed while; the second and third pillars are privately managed.

Furthermore, it reflects the choice flexibility in the third pillar, while it is mandatory in the first pillar; however, the second pillar is mandatory but leaves for the beneficiaries the right of choice of some issues (Holzmann and Hinz, 2005).

2.7- Challenges of Pension systems

The pension systems face common challenges in all countries, which is not related only to the developing countries, but the developed countries as well; however, still there are some particular challenges related to the privacy of a country or a group of countries. Bovenberg and van Ewijk (2011) argued that the effect of having similar challenges in a group of countries resulted in having pension contracts that have been developed in similar directions even these systems are organized differently.

While, Robalino (2005) argues that the main challenges, in developing countries against having developing pension systems, are slow growth and high unemployment as the case in Yemen, Egypt, West Bank & Gaza and Iraq; while, the developed countries face mainly the challenge of aging population that increase the dependency ratio highly like the case in Italy, Spain, and Austria. Furthermore, Robalino (2005) finds that in countries at the very early stages of reform, the challenges facing pension systems are poorly understood and are not part of the government's agenda (Robalino and others, 2005).

Palier (2010) stated that since the emergence of Bismarckian system in Europe, it functioned on the assumption of "full male employment", as the main breadwinner of the family. However, he argues that "*since 1970s the social and economic changes (increasing capital mobility, intensified competition between economies, deindustrialization, mass and structural unemployment, population ageing, and rising female labor market participation) have increasingly challenged the functioning of the Bismarckian welfare systems and called for adaptation and reforms*" (Palier, 2010: P.44).

In this regard, the ILO report (2011) outlines three main interlinked challenges for social security in all nation contexts: 1) to cover all in need, 2) to provide benefits adequate in both social and economic terms, and 3) to secure sustainable financing. However, it concludes that participative governance is the key to successfully addressing these challenges (ILO, 2011).

Thus, coordination is needed among countries on the international level to benefit from the experiences and applications between countries and explore common challenges and optimal solutions. Some international institutions play this role like ILO, World Bank and ISSA, and could achieve good steps in this field.

As mentioned previously, the international institutions have developed some standards and guidelines that aim to help countries developing their systems and extending coverage to protect all the populations. These institutions do not have authority over the countries or pension institutions; rather, they only provide technical assistance and the opportunity to share experience with others. The following are the main challenges as described in literature review and international specialized institutions:

2.7.1- Extending Coverage

According to ISSA definition, the concept of “Extension of Coverage” refers to three dimensions: increasing the number of people covered, increasing the range of benefits, and increasing the level of benefits (ISSA, 2012). Therefore, it is one of the main common global challenges and the most important one that should have more attention from policy makers and researchers as well, considering the mentioned fact in ILO report of 2003 that *“more than half of the world population is excluded from any type of statutory social security protection”* (ILO, 2003).

Most literature review highlight the fact that the global coverage is still moderate, particularly, in developing countries. Although all the countries applied some form of social security, they could not cover all of their citizens, nor could provide all benefits. For long time, it was assumed that in middle and low-income countries social security coverage would increase in line with economic development, which was not proved. According to the formal statistics and data available at World Bank, ISSA, and ILO, the great majority of the world population still lacks access to social security coverage because of the informal sector (ILO, 2011).

In low and middle-income countries, the coverage ranges from about 5 percent to almost 50 percent, with an average of 20 percent (Holzmann and Hinz, 2005). In contrast, in the high-income countries the coverage almost exceeds 90 percent. While in sub-Saharan Africa and South Asia, only an estimated 5 percent to 10 percent of the working population has some social security coverage (ILO, 2010). Europe is the region with the highest level of social security expenditure at nearly 25 percent of GDP, followed by North America at 16.6 percent. Africa has the lowest level at 4.3 percent of GDP.

In most countries, the public sector employees have the advantage and enjoy the right of coverage of some kind of pension system, while the informal sector has been the main obstacle for some individuals and groups to be covered and protected even in developed countries. The self-employed represent the vast majority of informal economy worker in addition to those who are not covered or worked at small or family enterprises.

According to ILO, about half of the world's countries cover seven or eight branches of social security provisions that are almost limited to high-income countries, while the others provide only limited statutory protection. Thus, the coverage is still limited to some groups of the societies, while many others are deprived from the basic rights of social protection. However, the degree of coverage of the total population depends on the total development in regulations, values, experience, and resources of each country (ISSA, 2012).

Kulke and Others (2008) has discussed a number of trends of the objectives of social security for low-income countries, which face some economic and social problems including; low economic development, high rate of mass poverty, high rate of informal sector, agricultural dominant production, traditional family structure, and low level of social insurance coverage. In this context, the suggested objectives that provide solutions for low-income countries are achieving universal access to basic benefits to combat poverty, reducing income insecurity upon economic performance, reducing inequality, introducing the benefits as a right, ensuring the absence of all kinds of discrimination, and ensuring fiscal affordability, efficiency and sustainability.

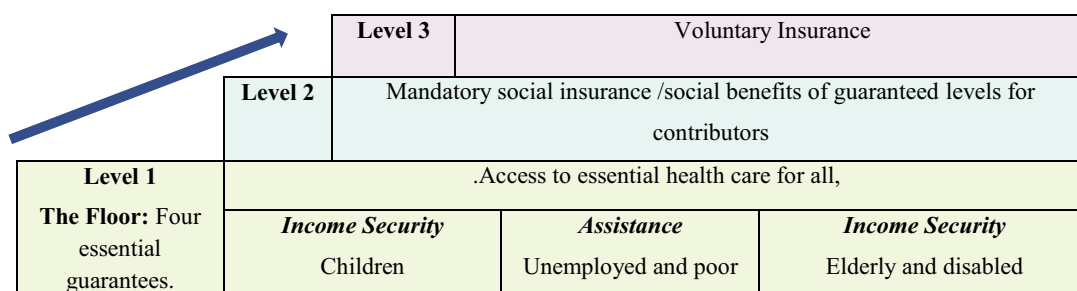
According to Robalino (2005), extending coverage of formal pension systems concerns policy makers for two main reasons; protecting more segments of population from low income risk and providing more financial resources and having larger risk sharing scale. However, he argues, *“the expansion of coverage today brings higher revenues today but also higher expenditures in the future”*, which suggests a simultaneous action to adjust the balance of the system to avoid future crisis (Robalino and Others, 2005).

The ILO suggested **“the integrative approach”** strategy as the starting point for social assistance in low-income countries, in which the available social assistance and benefits in the country have to be coordinated with other supportive measures (Kulke and Others, 2008).

In this regard, some countries started to reshape their social assistance programs to merge them to social security systems, leaving the narrow “safety net” to a “social inclusion” framework, which incorporates access to a range of basic services, and which in turn would enhance the capabilities of poor people and reduce poverty over the long term (Kulke and Others, 2008).

Furthermore, the social security staircase was developed as a metaphor for the extension of social security coverage, which provides a strategy of extension that is appropriate to all countries at all stages of development. It is comprised of three levels of coverage; the first is the floor that is for the protection of the basic needs and level of protection and comprise of four essential guarantees: access to essential health care for all, income security for children, income security for elderly and disabled, and assistance for unemployed and poor. The second provides income-related benefits and the last is the voluntary insurance for high-income population with various programs that is open for private sector under the supervision of the state (ILO, 2010).

Figure 60: The Social Security Staircase



Source: ILO, Extending Social Security to All, P. 20, 2010.

Even the coverage rate in developed countries is high compared to developing ones; they still suffer from the coverage problem of some groups, particularly those in informal sector. Whitehouse and others (2009) noticed that few countries in Europe that had introduced changes designed to expand coverage of mandatory pension system in the two decades prior to the research. In this regard, Switzerland has reduced the earnings floor, which allows part-time and low waged workers to be covered. The UK had relaxed qualifying conditions for the basic pension, which will result to increase coverage of female to full basic income from 30 percent to 90 percent in 2050 (Whitehouse and Others, 2009).

Another notice that Whitehouse highlighted on the expanding coverage policies in OECD countries is that most of the changes had mainly been aimed at private pensions. Australia and Norway mandated employer contributions to individual pension accounts, and extended the coverage of occupational pensions to include the other 40 and 50 percent of the workforce population, respectively. Further, France, Germany, Ireland, Portugal and most of Central and Eastern Europe had introduced new private pension plans with tax privileges. Australia had encouraged the voluntary retirement savings. However, the occupational plans were not popular as the governments had hoped, where the impact of the introduced policies had ranged from 1 percent in Poland to 64 percent in Germany. While, he described the KiwiSaver scheme introduced by New Zealand in 2008 as a success experience, which required individuals to opt out of rather than opt in to private pensions. The total coverage of employees to private savings had increased to 43.3 percent by 2009, while before the KiwiSaver the coverage of the employees under the occupational pension and personal plan was 13 percent and 5.5 percent, respectively (Whitehouse and Others, 2009).

On the other hand, Hinz, Holzmann, Tuesta and Takayama (2013) have achieved a review of international experiences of matching contributions for pension systems in order to reduce gaps in the participation in formal pension systems. The experiences of some Latin American countries including; Mexico, Columbia and Peru, where they have high levels of labor informality and large low-income groups, aim mainly to make mandated scheme more attractive to lower income groups. They concluded that the potential likely to be greatest when there is large informal middle income population. While, India introduced an interesting experience to coverage expansion outside the mandated schemes as universal approach. Its experience is more relevant for low coverage countries with low-income population outside the formal labor market. The New Pension Scheme (NPS) was established as substitute for fiscally unsustainable civil servants scheme to join the informal sector workers as well. Thus, NPS seeks to leverage record keeping, use of aggregate agents and simplified account structure with lower fees to reach low-income informal sector, and provide annual match of contribution of 1,000 RS (USD 25) for all enrolled with no means test (Hinz and Others, 2013).

Other experiences that targeted coverage expansion outside mandated schemes were directed to sector or group specific approach. China has introduced rural scheme and urban scheme, which considered as successful one as it could cover 358 million by the end of 2011, which expect to have full coverage of about 500 million in 2013. However, this success to coverage expansion was not from informal labor alone as the pension system was limited to public sector only. Likewise, Tunisia and Korea introduced schemes for fisherman and famers, while Peru encouraged the micro enterprises.

2.7.2- Unaffordability and Fiscal Deficit

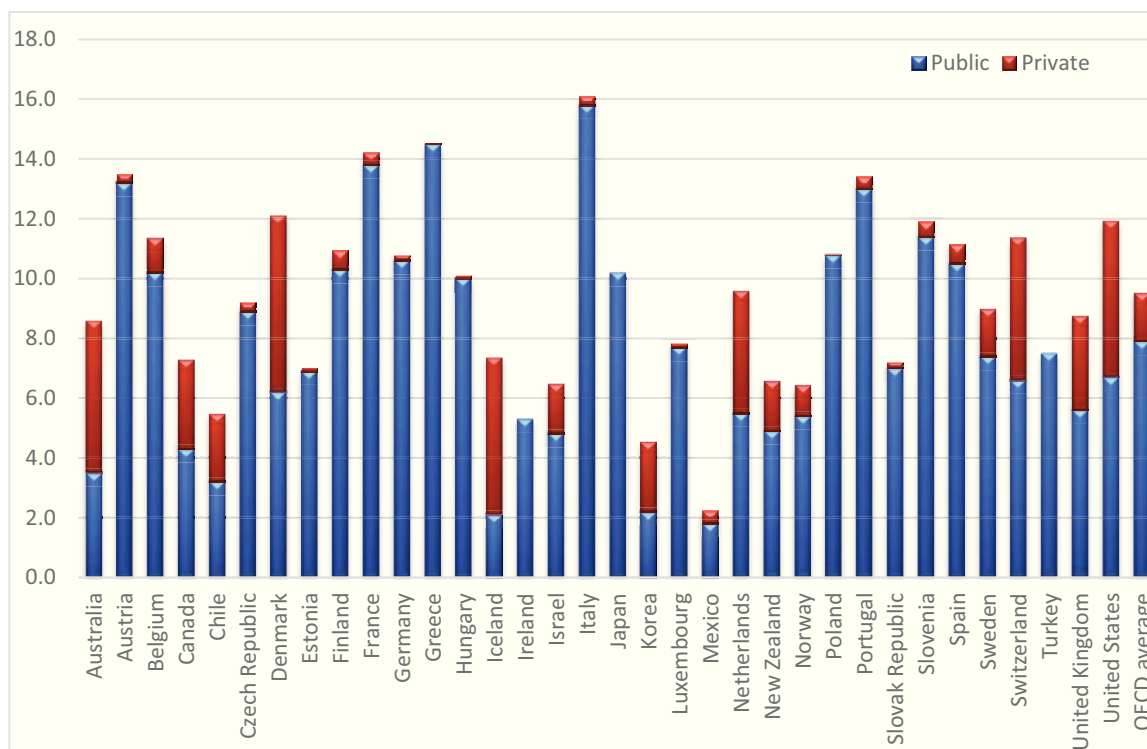
“Affordability refers to the financing capacity of individuals and society” (Holzmann and Hinz, 2005: P.56). Another important challenge of pension systems is keeping the financial balance of the system between benefits and contributions, in the time of continuously increasing bill of pension expenditures mainly due to generosity of the benefits provided by the systems and aging of societies.

The fiscal unsustainability has been the main driving force for pension reforms in most of the systems around the world. According to recent literature review in this field, the results of the politicians’ irresponsible rewards to pensioners particularly, by easing early retirement conditions and decreasing retirement age, have increased the expenses of pension funds to high levels, to be the third expensive item after health and education in OECD countries (Pensions at Glance OECD, 2009). The average public pension expenses of OECD countries currently are more than 7.9 percent of GDP as in 2011; nevertheless, it is expected to exceed 14 percent by 2050. Further, the average private pension expenses is 1.6% as in 2013 (OECD Data, 2016). The unsustainability in the pension systems alongside the increasing old age dependency and decreasing fertility, have accelerated and accumulated fiscal deficits. According to OECD report of Pensions at Glance in 2009, unsustainability problem of the systems emerged more with the economic crises where governments were unable to cover the deficit of its budget as well as the deficits in pension systems of PAYG schemes (Pensions at Glance OECD, 2009).

If we compare the expenses of pension funds as a percentage of GDP, we notice in the following figures that the public expenses compose the majority of the total pension expenses in most countries, even those shifted to private funds like Chile, Italy, Sweden,

and Poland. However, the expenses of private sector are expected to increase sharply, compared to public pension expenses, since they did not mature yet.

Figure 61: Public and Private Pension Expenses as Percentage of GDP of OECD Countries as in 2013 or Later

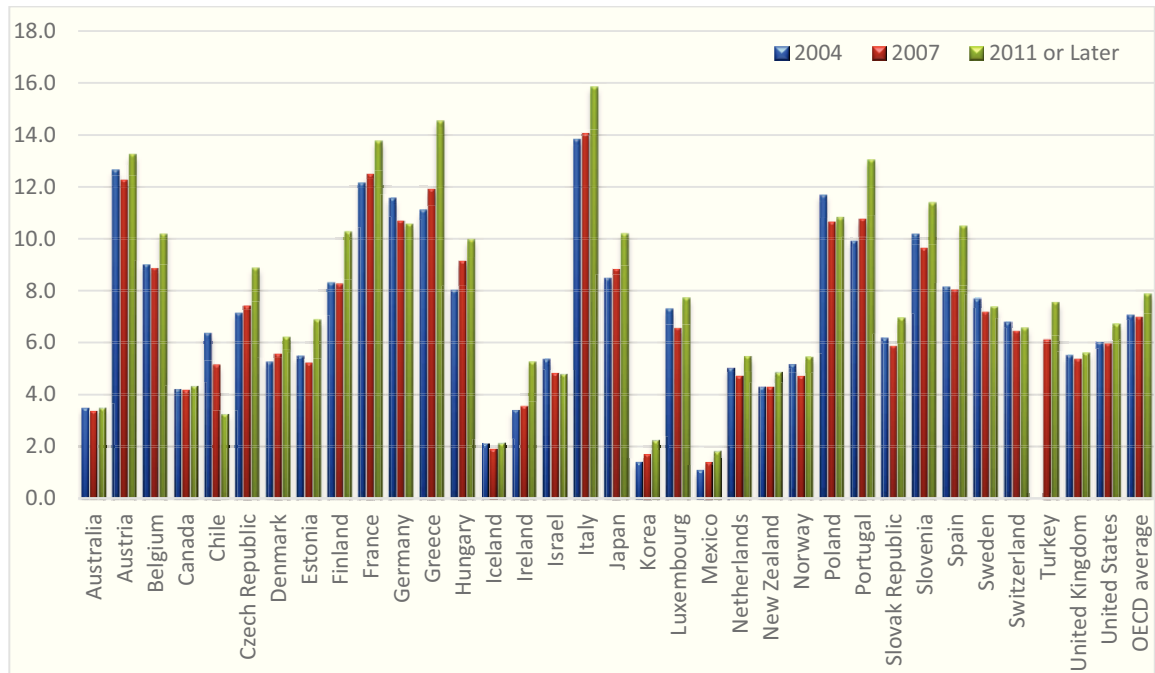


Source: The author by OECD, 2016.

Furthermore, both public and private expenses have an increasing trend; even they are fluctuating in some countries. The average of OECD countries indicators shows a decrease in the public expenses in 2013 compared to 2004, while increasing for private expenses. However, the public expenses returned to shift up, while the private expense also increased sharply until 2013. The general trends of changes in expenses are almost related to the financial crises and economic recession occurred in 2008 and after.

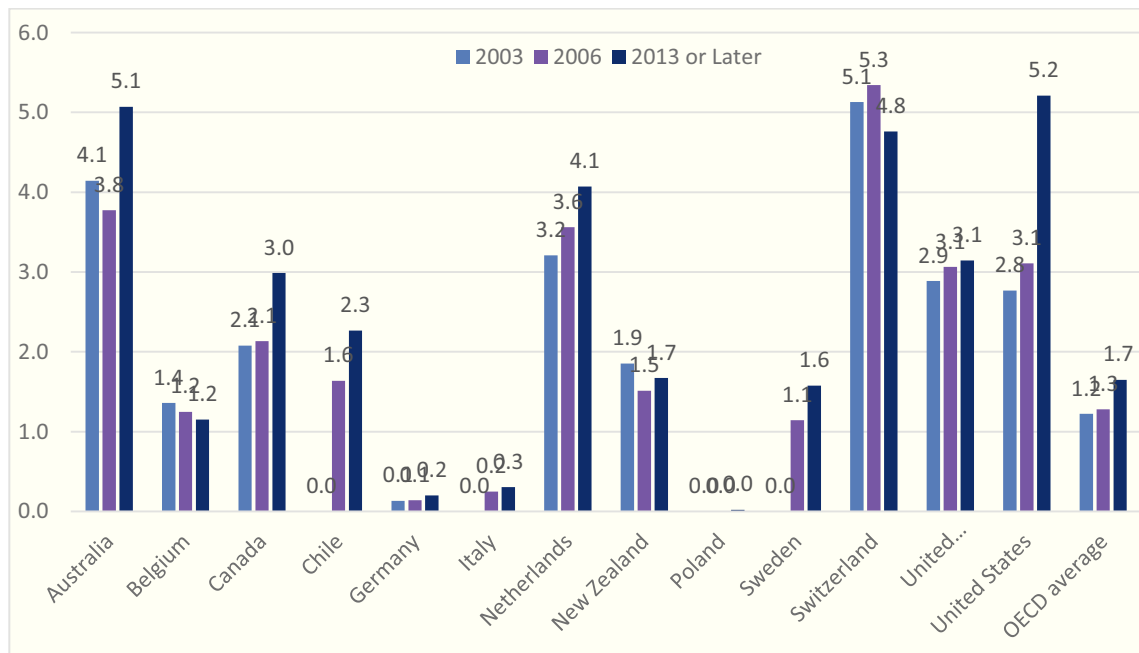
In addition, the diversity in performance among individual countries depends on the type of the pension system in each country besides the pace of change of the reform and the economic and demographic changes (OECD, 2015).

Figure 62: The Public Pension Expenses as a Percentage of GDP of OECD Countries in Selected Years of 2004, 2007, and 2011 (or Later)



Source: The author by OECD Factbook (2011), and OECD (2016).

Figure 63: The Private Pension Expenses as a Percentage of GDP of Selected OECD Countries in Selected Years of 2003, 2006, and 2013 (or Later)



Source: The author by OECD Factbook (2011), OECD (2016).

On the other hand, Martin and Whitehouse (2008) tested the future entitlements of about 30 OECD and European countries, which had pension reforms through the last two decades and Whitehouse and others (2009) reviewed the pension reforms in 38 countries. They concluded that there is a clear trend in reform processes to reduce the future pensions of the today's employees using various measures such as reducing replacement rate of pensions, increasing contribution and/ or increasing retirement age (Martin J. and Whitehouse E., 2009).

In this perspective, Marek Gora (2013) highlighted the increasing scarcity of resources for financing the social security institutions as the main challenge societies face today. In fact, all countries experienced a fiscal deficit in their social security systems, tried to solve this problem in different ways. Only some could reduce the negative effects successfully, while others did not even take action yet. However, the political factor plays important role in the success of the pension reform process, particularly, where the unions are strong besides the economic crises, as what happened in France in 2010, when the government wanted to raise the retirement age. Meanwhile, Poland had a successful experience in passing its pension reform to the public²⁸.

Furthermore, Barr and Diamond (2006) argue that the government has to reduce its expenditures in other fields due to the lack of resources. Otherwise, the enterprises and individuals, working in the formal sector, will have to pay more to finance the system by increasing the contributions or to cover the government's deficit directly (by taxes) or indirectly (by increasing the public liabilities). Accordingly, negative macro-economic consequences emerge as inflation, high informal sector, recession of the economy and/ or high rates of unemployment, increasing poverty rate of the population (Barr N., and Diamond P., 2006). Likewise, Holzmann and Hinz (2005) argue that increasing the benefits will be on the cost of higher contributions rate, which have negative consequences. In this respect, the World Bank's experience concludes a contribution rate of 20% for middle and

²⁸ The paper of (Marek Góra, 2013, The Political economy of pension reforms: selected general issues and the Polish pension reform case, IZA Journal of Labor & Development) presents a review of the reasons of the Polish experience success.

high-income countries and the threshold of 10% for low-income countries with a well-developed structure of collection.

The average contribution rate in OECD 34 countries was 19.2 percent of gross income in 1994 compared to 19.6 percent in 2012. While, the contribution rates of the employers are higher than the employees' at 11.2 percent compared to 8.4 percent at 2012. Further, there is a gap in contribution rates among countries, which ranges from 35 percent of gross income in Estonia in 2004 to only 5.2 percent in Canada as in 1994 (OECD Pensions at a glance, 2013).

Nonetheless, according to ILO report the global discussion on social expenditures and financing has started to shift from the perspective of the "cost of social security" to a more forward-looking one of "*investment in economic growth and social cohesion*" (ILO, 2011). This perspective is correspondent with the statement of Robalino (2005) that "*better living standards for the elderly can result only from sustained economic growth*", which clearly calls to focus on economic growth as the only real solution on the long-term (Robalino and Others, 2005: P.4).

In this regard, the middle and low-income countries increasingly concern how to increase levels of social expenditures and finance them, rather than containment. However, the gap of social security expenditures between high-income, in one hand, and middle and low-income countries, on the other hand, is still very high. While, in low-income countries, the largest share of the expenditures goes on health-care and the dominant expenditures in other countries are on old-age pensions, the high-income countries can expand and afford the expenses for other benefits. In this perspective, assessment and setting the priorities of expenses allocation of public expenditures are the most critical issues to deal with the future financial deficit of social security systems in order to protect people from risks; besides, achieving the optimal economic growth and social cohesion. However, while reducing the benefits, the main challenge that emerges is to keep an adequate pension for the present and future beneficiaries (OECD Pensions at Glance, 2009).

2.7.3- Adequacy

As defined by Holzmann and Hinz (2005), "*Adequacy refers to both the absolute level (preventing old-age poverty) as well as the relative level (replacing sufficient lifetime*

earnings) of retirement income that the pension system will provide” (Holzmann and Hinz, 2005: P.55). In this perspective, ILO argues that the coverage challenge is closely connected to the notion of adequacy; otherwise, the coverage is not meaningful. Further, the adequacy is not concerned only with the level of benefits, but it has both economic and social aspects.

Adequacy of the pension is one of the main objectives of the pension systems; however, the scarcity of financial resources and increased old-age dependent ratio press towards decreasing benefits. In order to prove this fact, Martin and Whitehouse (2008) tested the future entitlements of about 30 OECD and European countries that had pension reforms through the last two decades. The results show that there is a clear trend to reduce these future pensions of the today’s employees using various measures such as; reducing replacement rate of pensions, increasing the years of work counted in the average salary for calculating pensions, increasing contributions, and/ or increasing retirement age (Martin and Whitehouse, 2008). However, Whitehouse (2009) stated that while reducing the benefits, the main challenge that emerges is to keep an adequate pension for the present and future beneficiaries (Pension at Glance, OECD, 2009). Choosing the benchmark to measure the adequacy is difficult to determine; however, ILO social security conventions contain adequacy benchmarks to provide guidance in this respect. For example, the ILO convention no. 102 sets minimum adequacy standards for benefits. While economic adequacy of benefits requires levels and entitlement conditions to be acceptable to contributors and taxpayers, only meaningful benefits effectively cover those in need can create a willingness among contributors and taxpayers to finance various policies. Further, financing should be equitable and affordable to all protected persons (ILO, 2011).

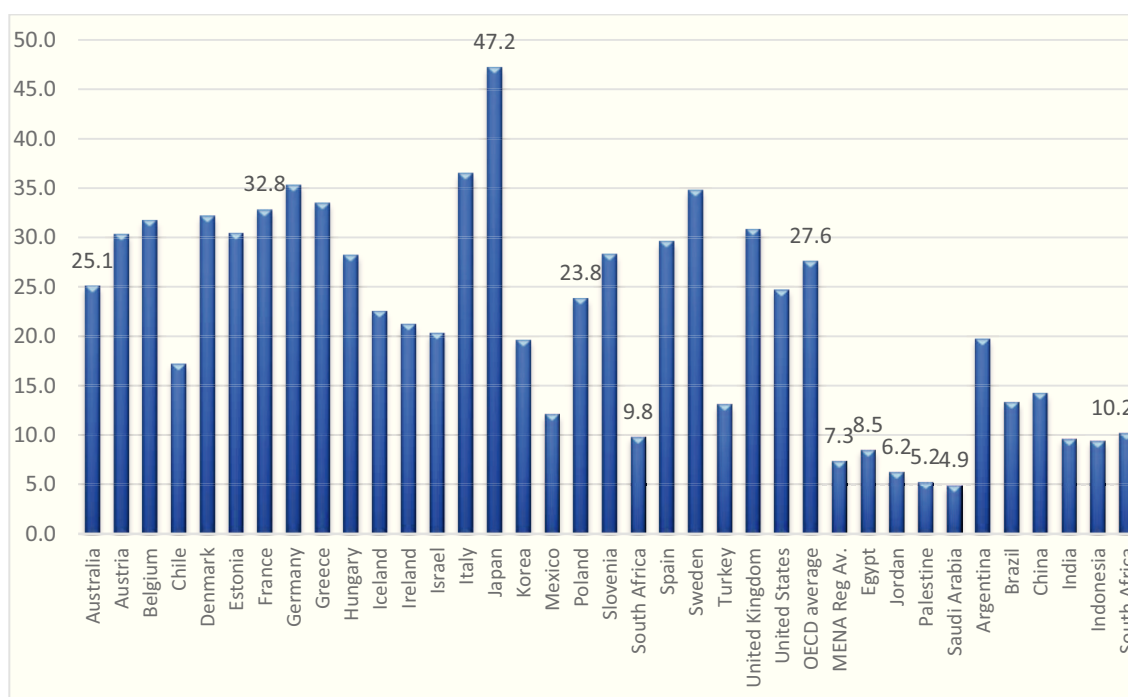
However, the recent policies of adequacy almost target the minimum income and redistribution of wealth rather than keeping the living standards of the beneficiaries. Ireland, Korea and UK had increased the level of their basic pensions. Australia had targeted an increase of 10.8 percent in the public pension in 2008. France, Belgium, Finland, and Spain will all increase minimum pensions. While Slovenia tends to have more progressive benefit structure by reducing the ratio between the lowest and the highest pensions.

2.7.4- Demographic Changes

As the pension systems depend mainly on contributors at workforce age to fund the beneficiaries aged over retirement age, disabled, and survivors, which distribute risk and wealth among different generations. Thus, the ratio of beneficiaries to the contributors of the system in any pension scheme is essential to keep the financial balance and accordingly adjust the parameters of the system, including the contribution rate, accrual rate, replacement rate, and retirement age.

The demographic structure is affected by fertility rate, mortality rate, life expectancy, morbidity, and immigration. As result of one or more of the recent changes in the aforementioned rates, the aging population has been one of the main challenges facing the developed countries in keeping the financial balance of their pension systems.

Figure 64: The Old-age Dependency Ratio in OECD and Selected Countries in Latin and MENA Regions as in 2015



Source: The author by World Bank Data, OECD, and Pensions at a Glance 2015.

The highest old-age dependency ratio was in Japan at 47.2 percent of population aged between 15 and 65 years old, compared to the least ratio in Saudi Arabia at 4.9 percent. The average old-age dependency ratio of OECD countries was 27.6 percent with the notice that it is higher at Western European countries than Eastern and Latin American countries.

Although the developing countries have relatively young population, Robalino (2005) expected a rapid increase in old-age dependency ratio to take place only after two decades from 2005, due to the improving medical care, education, and economic growth. The medical care increases the life expectancy and decreases the mortality rate, while the education decreases the fertility rate and increases healthy life. Further, the economic growth creates more opportunities to work and cause inside immigration and less fertility rate. On the contrary, the economic recessions and instability cause outside immigration. The evidence indicates to a different development of demographic change along the last decades between countries; however, the trend is towards to increasing aging population with a remaining high gap between developed and developing countries.

2.7.5- Slow Growth and High Unemployment

According to Kulke and Others (2008), social security challenges in the low-income countries relate mainly to a level of economic development insufficient administrative and governance capacities. Thus, the mass poverty is dominant in the society due to extreme income disparities (Kulke and Others, 2008).

In this regard, Robalino (2005) noticed that the operational conditions of pension funds in the MENA region improves with the macroeconomic stabilization, which creates a better environment for investors; accordingly, realizing higher revenues for pension funds from more contributions and higher interest rates. Thus, stimulating economic growth and job creation in the private formal sector is a critical challenge to cover larger rate of labor force and provide an adequate standard of living during old age. However, he adds that sustained economic growth is essential for having better living standards for the elderly (Robalino and Others, 2005).

After all, the ILO report concludes that governance critically influence all mentioned challenges, representing the only practical way of finding a sustainable balance between the challenges. It suggests that the good governance, with well-informed social dialog and consensus, can allocate resources better, set up schemes, and a minimum level of adequacy can be ascertained (ILO, 2011).

2.8- Trends and trade-offs of pension systems reforms

The objectives of the systems and the needs of the society guide the policy makers to determine the trends of social security and pension systems; however, some environmental factors could deviate the pre-determined objectives of social security. Furthermore, the design of pension system faces the problem of trade-offs between objectives, which needs a good governance. Therefore, the main challenge remains in how to design a system that brings the needs and predetermined objectives within the social security standards. In order to overcome these challenges in the design process, the recent pension reforms have followed some trends that coincide as much as possible with these standards of social security.

2.8.1- Trend 1: A Mechanism for Financial Balance Stability

In the last two decades, almost all of the countries made more than one reform process while, little ones could have some kind of balance in their systems or accumulate modest funds (Whitehouse and Others, 2009). However, these social security systems reforms affected labor market and savings and others left beneficiaries without adequate income to survive like in Eastern European countries and Latin America.

As a response, one of the trends in designing the social security systems is to find the financial stability through a mechanism that keeps the financial sustainability without distorting the principles and objectives of social security. The researchers believed that would release the policy makers from the pressures of different stakeholders and avoid any future abuse to serve political goals (Chlo'n-Domi'nczak and Mora, 2005).

One of these mechanisms is to link the replacement rate to the career income average and other economic and demographic factors to have fair and sustainable system balance as well as the adequacy of the benefits, where the improved ICT systems facilitate the registration of entire labor-market history. France has mandated the average earnings measure from the best 10 years to best 25 years in the public scheme, while Italy, Sweden, Finland, Austria, Slovak Republic, Poland, The Netherlands, and Portugal replace the best years to lifetime average years of earnings. However, this method has problems related to valorization of earlier contributions and pension indexation during retirement (Whitehouse and Others, 2009). According to Holzmann and Hinz (2005) and Holzmann and Palmer

(2006), another main attitude in designing the pension systems is to have a fixed contribution rate rather than the benefits for more stable labor supply and saving decisions. Indeed, one of the most prominent suggested tools as the best to realize this was introducing private accounts and applying an effective investment policy of the accumulated pension funds in order to keep the income level along economic fluctuations. While, another tool was developing the calculation method of the replacement rate of pensions in DB systems by integrating demographic and economic factors into the calculation equation.

However, a recent tool was introducing the NDC schemes to replace the DB schemes and function as the DC schemes with notional private accounts, which was defined by Palmer (2006: P.18) as “*An NDC scheme is a defined contribution, PAYG pension scheme*”. The NDC system guarantees a pension that reflects economic growth through linking the calculation method to the several demographic and economic variables, with minimum pension guarantee. In this regard, Whitehouse and Others (2009) argued that indirect cuts in future benefits have been more common than direct cut, and noticed that the final change to pension systems is to link pensions to changes in life expectancy, which were done in four different ways. The first, introducing DC private accounts and annuity systems; the second, introducing the NDC systems; the third, linking between the value of public pension benefits and life expectancy; and finally, linking pension eligibility age to life expectancy automatically as was introduced by Denmark (Whitehouse and Others, 2009). Nevertheless, Palmer (2006) argues that NDC does not contribute directly to the national savings as funded DC schemes. Moreover, unlike the DC scheme, the NDC scheme adds to the private notional accounts of contribution an internal rate of return, which is determined by the many factors underlying the development of economy, while the rate of return in DC scheme depends on the market performance. According to ILO report of 2014, some policies of automatic balancing mechanism have negative consequences on increasing relative poverty of old population. Sweden suspended pension adjustments during the crisis as a result of automatic balancing mechanism. Moreover, some countries adjusted the pensions at a significantly lower rate than the increase in wages or average incomes, as Poland did adjust pensions at only 20 percent of real wage growth. As a result, the poverty rates among retirees increased from 10 to 18 percent in Sweden and from 7 to 14 percent in Poland through the period from 2005 to 2012 (ILO, 2014).

It is expected that more countries will move towards adapting this trend as one of the main solutions for financial stability of their systems, which will result in reducing the benefits.

2.8.2- Trend 2: Diversity of risks through Multi-pillar Systems

The social security and pension systems have become very complicated with multiple objectives, which need a structure that guarantees integrated data under unified governance or regulator body. Many controversial opinions have been expressed in academic discussions regarding each kind of pension system reviewing the advantages and disadvantages.

The Bismarckian system tends to be proportional to earnings and does not redistribute within-cohort, so, it has a typical feature of high pension spending and low-income inequality. While, in the Beveridgean system benefits are not related to contributions, which is almost at flat rate, while the contributions are proportional to earnings. Thus, it redistributes within-cohort and targets more the poorer groups of the society (Conde-Ruiz and Profeta, 2007). As a result of these features, the low-income group of population supports Beveridgean system, and the high-income group seeks to minimize their tax contribution and invest in private accounts schemes with tax deductions and advantages; while, the middle-income group prefer the Bismarckian system (Conde-Ruiz and Profeta, 2003). In this regard, Lindbeck (2006) highlights the basic distinction between funded and unfunded (PAYG) systems that the benefits in funded are financed by the return in financial markets on earlier accumulated pension fund, but in unfunded (PAYG) systems the benefits are financed by the current flow of contributions or taxes from the active population (Lindbeck, 2006).

The best structural reform that would comply with this trend of social security and pension systems is the Multi-pillar system. As stated by Holzmann and Hinz (2005) that the recent experience of pension systems, in dealing with challenges and needs of the society, demonstrated that the multi-pillar design is better able to deal with the multiple objectives of pension systems. Thus, it would be able to deal with poverty reductions, income smoothing, heterogeneity of individual choices, as well as the various economic, political, and demographic risks facing any pension system. This attitude depends totally on the political will, priorities, and the available resources.

The World Bank has played important role to introduce a multi-pillar pension system and to cooperate with many countries to apply its model, in which there is a trend to encourage savings.

On the other side, Kotlikoff (1999) presents critics to the Bank's approach, by discussing the disadvantages of the approach and reviewing the pension reform experience of Kazakhstan, which led to huge accumulated loans of the country to the Bank.

In this regard, he stressed on the definition of "mission failure" within the Bank, which is *"the failure to make the loan rather than as failure to require appropriate policies as equivalent for the loan"*. In this context, he accused the Bank with exerting pressure on the client countries to accept its policies through these loans (Holzmann and Hinz, 2005).

According to Kotlikoff (1999), even the Bank's approach is organized in different ways in different countries; it still has the same principles and functions, which introduces saving in private accounts that shifts the risk to the beneficiaries. Further, Holzmann and Hinz (2005) advocated the approach of the World Bank that it focuses on lending to support the implementation of mandatory privately managed funded second pillars. They presented the relation between lending a loan in some period and the scheme of pension system, which indicates that lending was distributed approximately equally between single and multi-pillar reform efforts.

However, the main criticism of Kotlikoff (1999) is about Bank's insistence on investing pension fund assets at home. Such investments in developing countries almost need development in the financial markets and pension and insurance sector with high costs and risks, while the developed world produces the kinds of financial products at very much lower cost that involves international risk diversification and exploitation of economies of scale.

While, the Bank advocates the local investment policy of pension funds by providing the following four excuses: 1) maintain or increase domestic investments and develop the pension and insurance sector, 2) Political reality to make the reform publicly accepted, 3) only portion of assets abroad is permitted, 4) terms of trade makes investing all pension assets abroad too risky.

Thus, Kotlikoff (1999) concludes that the local investment, without achieving economic growth, would create risk of the contributors' retirement income due to: 1) the weak

domestic pension and insurance companies, 2) the nominal government bonds that are subject to effective default via government-produced inflation, and 3) mortgage and other private loans whose repayment is also subject to great risk. Hence, the minimum pension first pillar, financed on the PAYG basis, is introduced to excuse a very high degree of extremely risky domestic investment in the privatized second and third pillars.

In the transition period, the contributions are directed to the private accounts leaving no contributions to finance the beneficiaries of the old PAYG system. In addition, the PAYG pillar is financed by the public budget, which means direct foreign loans from the Bank, in the case of excluding increasing the taxes, creating more future risks.

Kotlikoff (1999) presented an alternative new approach, called “Personal Security System” (PSS). The PSS approach has some new 14 features as guideline of any new pension system that organizes the procedures related to contributions, benefits of the previous system, investments, and some administrative issues. In short, as reported by Kotlikoff (1999) the advantages of the PSS reform proposal are: 1) improving benefit-tax linkage, 2) protecting non-working spouses, 3) improving intra- and inter-generational equity, 4) resolving the existing pension system’s long-term funding problem, and 5) ensuring workers a very high level of retirement income (Kotlikoff, 1999).

However, each country has its privacy in choosing and applying the pillars of social security systems. Exploring this privacy is important to understand the most optimal model for any country. In this regard, some countries introduced the funded defined contributions (DC) system that could be either on mandatory or voluntary basis. Some countries introduced the (DC) system alongside the traditional PAYG like France, Germany; while, some others converted totally to the private accounts Defined Contributions (DC) system like Chile that was the first sample to apply. In addition, another recent trend in pension systems was to introduce the nominal defined contributions (NDC) system together with (DC) system like Sweden, Italy and Poland. Holzmann and Hinz (2005), defend the NDC scheme as more explicit and transparent than funded DB scheme. Moreover, even the DB scheme has been developed in some developed countries to be more actuarially, the experience proved that it is politically difficult to re-adjust the related parameters and increments of the DB systems rather than in NDC schemes. One more advantage of NDC

is that it allows for easy and quick harmonization between different schemes (Holzmann and Hinz, 2005).

Barr (2006) discussed that all pension schemes face macroeconomic shocks, demographic shocks, political risks, but the privately managed DC scheme faces additional risks of management risk, investment risk and annuities risk. He added implementing NDC scheme could avoid at least the management risk and investment risk.

However, in earnings-related individual account systems of DC and NDC schemes, new problems raised related to the finance of the benefits of individuals with insufficient earnings through working period and to other benefits that are not related to earnings, since the benefit formula contains no built-in redistribution of the system's revenues. Therefore, these schemes must be supplemented with some form of low-income support scheme, in the form of minimum income or minimum benefit guarantee, besides any other noncontributory rights, which are financed with general tax revenue that is exogenous to the individual account schemes (Palmer, 2006).

2.8.3- Trend 3: Flexibility to Individual Heterogeneity and Solidarity

Furthermore, Bovenberg and van Ewijk (2011) discussed some trends of pension systems, and the institutional responses. The first trend they discussed is regarding the social security function of life-cycle planning, in which the pension systems were recently developed to be more flexible in choices and more tailored to heterogeneity in individual life-cycle planning, which needs structuring the choice architecture more carefully. The argument depends on the assumptions of the heterogeneity of households and their lack to basic financial knowledge, computational ability and willpower to implement optimal life-cycle planning and the associated intertemporal financial decisions under uncertainty. Therefore, pension agencies tailored different options of pension systems for these individual differences, in which better ICT has improved the possibility to collect more data about individuals and record individual contributions. Chile and UK provided flexibility in choice of service providers, Sweden provided flexibility in retirement age and investments of DC component, and New Zealand provided flexibility in contribution rate. Moreover, for those contributors who do not want to have risk in their investment allocation, default option is kept available that is increasingly popular.

The second trend is regarding the function of intergenerational risk sharing, which has trade-offs with labor market efficiency and limiting political and discontinuity risks. Hence, various trends aim to move these trade-offs away from risk sharing. As far as more intergenerational risk sharing is concerned, more pension systems determine ex-ante how major macro-economic risks (wage and employment risks, demographic risks, financial market risks) will be allocated over the various stakeholders. Accordingly, aging affected financial balance of the pension system negatively, and the response was to increase the retirement age, decrease replacement rate or a combination of both, and to fix the contributions rate to avoid the market distortion.

The third function is regarding the intra-generational risk sharing. By making it compulsory, it becomes redistribution of resources policy. However, it has trade-offs with longevity insurance and human capital insurance. The first is related to combating selection and accommodating heterogeneity. Accordingly, by forcing people to take out pensions, the government helps to create efficient longevity insurance but at the cost of perverse solidarity between short-lived vulnerable agents and long-lived richer agents. On the other hand, human-capital insurance affects the insurance of idiosyncratic human-capital risks: the better people are insured against loss in human capital, the fewer incentives they face to prevent this loss. Thus, the government policies that discourage savings and labor supply are involved in the human-capital insurance.

In this regard, the trend is to have more heterogeneity and more moral hazard; however, the heterogeneity brings more costs to the systems, which makes insurance of human-capital risks more costly; hence, labor-market distortions. Further, the function of redistribution and poverty alleviation is separated from the earnings-related pension system and put in zero-pillar, which is financed by taxes.

Finally, Bovenberg and van Ewijk (2011) concluded that the similar responses to common trends faced by all retirement systems do not mean that all systems can be expected to evolve toward one unique 'optimal' system.

2.9- The Pension Reform

According to the experience of some countries, the social security and pension reform process could be long lasting process with gradual implementations of some provisions and several reform packages, like the experience of Germany, France and Italy, or it could be one-time radical reform, which almost introduces completely new system, like Chile and Poland.

Thus, each experience of the reform processes has particular factors to achieve the success, depending on the given environmental structure and changes in that particular country; however, many experiences could be transferred or have similarities with other countries with some accommodation to the privacy of each country. Good examples of such experience transfer are the Chile experience of the defined contributions (DC) schemes to most of Latin American countries in short time, and the Sweden experience of introducing the NDC scheme in multi-pillar system, which was introduced in many other countries after few years, although each country has organized its system differently. Thus, some international institutions as ISSA, ILO, World Bank acted to provide database and organize some meetings of experts to exchange information and experience of the system development and provide technical support that could save a lot of effort to the social security systems development in many countries around the world.

Most of recent pension reforms were initiated with clear objectives to provide solutions to the challenging problems in the systems. Otherwise, the systems would not function properly to achieve their goals. Thus, for successful reform process, each country should achieve predetermined objectives and propose solutions for predetermined social and economic problems in determined time plan within the international standards of social security and according to the ability to afford for the reform process.

2.9.1- Analysis of the needs for the Pension Reform

The recent social security reforms were mainly introduced to solve financial crises and as precautionary action against various risks facing societies. Thus, the pension reforms became a need for most of the countries more than ever.

Since the establishment of the first formal social security system in Germany in 1880s, almost all of the social security systems in the world experienced several reforms in their history. However, the early stage reforms were to increase the benefits, decrease contributions rate and/ or to reduce the retirement age or eligibility to the pension in order to achieve political gains, undermining the environmental changes and without taking into consideration the actuarial balance on the long run. Unfortunately, these reform policies had long-lasting negative effects on the macroeconomics of those countries.

For instance, the pension system of Bismarck started by the retirement age of (70) years old as a fully funded system, while the average life expectancy at birth for men was less than (45) years old. Nowadays, the retirement age has been (55 - 68) while, the average life expectancy at birth approaches up to 84 years old in some countries and expected to increase more. Indeed, (Börsch-Supan & Wilke, 2006) highlights the fact that some of the earlier systems could accumulate capital of contributions to form fully funded pension systems, which is contrary to the status. These kinds of reforms were almost for short-term political reasons; however, they did not recognize the future risks of these kinds of reform, which definitely lead to financially unsustainable systems, and more challenges in the future.

In this context, Holzmann and Palmer (2006) determined three main reform pressures on pension systems, emphasizing on the fiscal pressures as the main trigger for the pension reform, referring that to the distorting reasons of the dynamic balance of contributions and benefits, such as aging and population stagnation or decline, scarcity of resources, and economic contractions. As a result, the rapidly increasing liabilities under the current systems started to cost the active workers and governments highly, which could have its negative implications on other aspects of life, income stability of individuals and economic growth. Thus, it dictates the need to take immediate action. The second pressure is socioeconomic changes because of urbanization and industrialization. This has two main implications; rising the female labor force participation and changing the family structure. The third is the globalization, which requires new way of regulating and operating public programs including pension programs, as well paying attention to economic effects of pension schemes, and facilitates a larger risk pool and more diversification. In the time, Holzmann and Hinz (2005) add a fourth reason to the need for a reform that is examining

the inadequacy of the system in most countries. There could be more reasons or less in each country, which need an analysis to determine the real problems in the society and the needs for a reform.

Robalino (2005) indicates to the importance of having the objectives for designing pension reforms. Therefore, he suggested two levels of discussion for the policy of the design of pension reform: a) general principles and objectives for the pension system and b) mechanisms for implementation. However, Holzmann and Hinz (2005) highlighted the fact that even the goals of reform are universal; the policy choices of each country are substantially determined by the inherited system.

One of the most important initiatives of the social security systems reform processes is to solve the fiscal balance problem of the systems that guarantees the system sustainability.

In this regard, Holzmann and Hinz (2005) stated that the World Bank policy in supporting the pension reforms across countries has two essential principles: 1) enhancing stability and sustainability by diversifying the risks and a reserve fund and 2) accommodating the conditions and circumstances. The other objectives of pension system are still essential for comprehensive pension system, but upon the available environmental factors. Moreover, the sensitive nature of the pension systems to the environmental changes requires periodical update and re-evaluation of the objectives of the reform to simulate the changing needs and priorities.

2.9.2- The Options of the Pension Reform

The reforms differ in the pace of change, structure and scope of objectives. In this context, Holzmann and Hinz (2005) discussed five main options for reforming a typical publicly managed and unfunded defined-benefit scheme. The first is parametric reforms that keep the institutional structure. The second is a notional defined contribution reform that changes the structure of benefits but keeps public administration and the unfunded nature as well as freezes the contribution rates. The third is a market-based approach that provides fully funded and defined-contribution or defined benefit arrangements under private management. The fourth is public prefunding that provides defined benefits or defined contributions that are publicly administered. Finally, the fifth is multi-pillar reforms that diversify the structure of benefits, administration, and funding of the pension system.

At the same time, they suggest a number of country-specific options for reform that depend on a number of considerations, taking into account the development status and income level of the country. The most important of these considerations are the existing pension scheme, the special reform needs, and the (enabling or disabling) environment.

In this context, Holzmann and Hinz (2005) suggested some features in each of the three considerations. The suggested features of inherited system are the existence or absence of heterogeneity, the level of coverage and the type of benefit and funding. For reform needs, the features are fiscal issues, low rate of return, multiplicity of systems, and coverage. While, for enabling environment, the features are macro and fiscal room, administrative capacity, minimum financial sector, and government commitment to reform. The analysis of these considerations of the country suggests a policy progression from mere focus on poverty-oriented systems in low-income countries through systems with more features of benefits and pillars that are feasible in high-income countries (Holzmann and Hinz, 2005). Thus, the poor countries have fewer options; while, rich countries with supportive environment have more options. However, considering the inherited system in the reform process is important for the best choice in all cases.

Holzmann and Hinz (2005) went further by discussing the options of the design choices within the three main pension pillars, in which there are varied ways to organize each pillar, considering the probable trade-offs in each option. While, the design options should be directed to achieve the objectives of the pension system within the given environment. According to the introduced discussion of options, the first pillar could be a flat benefit, means-tested defined benefit with a flat minimum pension, proportional or progressive earnings-related defined benefits, or defined benefit in the form of a nonfinancial defined-contribution system. The second pillar would be defined contribution market based management on competitive basis, while this type of scheme was not encouraged to low-income countries, neither to be publicly administered. Even, the scope of choice is more available in this system, there is a strong trade-off between cost and choice, in addition to the need for government regulations to organize this sector and protect clients.

Since the third pillar aims to encourage middle- and high-income individuals to save for more future benefits, the scheme is in advantage of a particular group of population, which

could provide tax deductions privileges. This scheme cannot substitute any other schemes since it is not in the scope of the objectives of pension system (Holzmann and Hinz, 2005). Upon the suggested considerations of countries, Holzmann and Hinz (2005) classified countries into three groups according to their income (low-, middle-, and high-income), and summarized various options of pension reforms for each case. The cases of concern in this study are under the low-income countries, post-conflict and emerging reform and oriented cases, which are similar to the Palestinian case.

The pension reform options in the post-conflict case are to provide basic support and services via social funds, non-governmental organizations, and international aid and avoid the introduction of costly civil servant schemes and the compensation of freedom fighters via pensions. In addition, in the emerging and reform oriented case, where the existing system is the notional defined benefit for public sector with limited coverage, the options are to undertake parametric reform of the unfunded system; introduce, regulate, and supervise the voluntary system; introduce and test noncontributory pensions.

Thus, there are more than one option to determine the pension system design; however, the social values are important to determine the final accepted design of the pension system.

2.9.3- Environmental Changes Beside the Pension Reform

The social security systems play important role in the modern societies, due to the implications they have on social stability, in addition to their role in providing protection against financial risks, which is considered as one of the main responsibilities of the state towards the citizens guaranteed by the international conventions as well as most of the constitutions (ILO, 2010). However, the social security systems are very sensitive to the environmental changes, where any unexpected change can result in failure of them to achieve the expected goals.

For successful pension reform, Mitchell (1998) discussed in her paper how pension systems protect participants against a range of micro- and macroeconomic risks, and how other institutions and regulatory changes would support the pension system reforms. Thus, she observed that it is important to change the environment itself as much as we can to be consistent with the future pension reform (Mitchell, 1998). This view enhances the second policy of the World Bank in supporting pension reforms as stated above by Holzmann and

Hinz (2005) that is “accommodating the conditions and circumstances”. Adapting the environment will be very important to enhance the implementation rather than being an obstacle. This can be in some strategic plan to control the demographic structure, and reevaluation and organization of the social protection programs, changes in the related financial and labor regulations and economic policies of saving and interest rates. Having such consistent environment will help to have efficient, affordable and equitable pension systems. However, this needs a very strong political will and stability, more investments in human capital and infrastructure, and a long-term strategic plan, which means longer time for implementation.

According to Mitchell (1998) there is an accord that the environmental changes have doubled the effect of the risk to have fund’s debt in some countries, particularly, the demographic changes and GDP low growth.

As discussed above, most of European countries have been suffering from high aged population due to the increase in the life expectancy and the decrease in fertility. Likewise, most of the developing countries started to have the trend of increasing number of aged people in their populations. Some of the developing countries did not recognize the problem yet, since they still have small rate of old aged population and the coverage is limited to some groups of population (Robalino and Others, 2005).

2.10- Comparative Review of Some Regional Social Security Systems

The international experience is also rich with many successful cases of the social security reforms with various types of systems and different objectives and pace of implementation. It is opportunity to review some cases that could have similarities in objectives or in some environmental conditions of the Palestinian case. As the International Social Security Association (ISSA) has the most recent and comprehensive information regarding social security system around the world, we referred mainly to its publications to have comparative analysis of the following countries according to the available data as in 2014 (ISSA, 2015). This section introduces a review for the social security system in three countries that have similar demographic or economic indications to the Palestinian case or having impact on the Palestinian labor force as in the Israeli case. The target from this review is to help us learning new practices and experiences from other similar cases in order to have the most proper pension system reform.

2.10.1- Jordan

Jordan has a similar population structure as that of Palestine and close living standards. Further, part of the population in Jordan is originally from Palestine and share relative relations, particularly with those in West Bank as it was joined to Jordan from 1948 to 1967. The most similar problems with Jordan are low female participation rate that was estimated at 15.9% in 2014 and the high informal labor and unemployment rate. The recently legislated social security system of 2016 for the private sector in Palestine is very similar to that of Jordan. However, Jordan has more economic and political stability and a little different trends in the population structure as well, which has a more decreasing fertility rate. So, it is worthy to have a closer look at the applied pension system in Jordan. The social security system in Jordan has developed after the 2001 reform, as it included more benefits, then it has noticeably increased the coverage rate since 2009 and 2010 reforms that made the system as mandatory for all employees in all private sector and voluntary for labor force working abroad, self-employed, and those out of labor force. After this reform, the social security system in Jordan was applied in very strict conditions and with an economic growth, which helped to extend coverage over population. The last social security reform resulted in enacting the 2014 social security law, which enhances the

system sustainability. According to the new system, coverage includes all employees, residents and citizens in Jordan, except some public employees that are covered by a special system. The voluntary coverage is available for all categories, and the only exclusion is for the casual labor.

The social security system in Jordan is a contributory partially funded DB system. The total contribution rate starts from 21.25% up to 23.75%; 7.5% from the employee and 14.25% up to 16.25% from the employer. The old-age insurance fund is the main one that provides benefits of old age, disability, and survivors. Besides there are the funds of maternity and unemployment insurance as well.

Old-age Insurance Fund

The contribution is mandatory for all labor and business owners working in Jordan, while it is voluntary for self-employees and those out of labor force or working abroad.

The total contribution rate for this fund is 17.5%. The ensured person pays contributions at 6.5%²⁹ of gross monthly earnings, while the employer pays 11%. The voluntary contributions are committed to pay the total contributions. The system has a maximum and minimum limits for contributions³⁰.

The eligibility for old-age benefits is at retirement at the age 60 for males or 55 for females with at least 180 months of coverage, including 84 months of paid contributions, while continuing contribution 5 years more is possible to either qualify for, or increase the value of the old-age pension. On the other hand, the early retirement is allowed at age 50 with at least 252 months for males and 228 months for females or age 45 with at least 300 months of contributions. While for hazardous professions, it starts at age 45 with at least 216 months for males or 18 months for females.

For disability pension, the insured must be assessed with a total or partial incapacity for work by a medical committee and have at least 60 months of contributions including 24 consecutive months.

For Survivor pension, there should be at least 24 months of contributions including six consecutive months for the deceased. The pension is distributed among eligible survivors

²⁹ The contribution rate started at 5.5% that rises by 0.25% each year until reaching 6.5 in January 2017, while the employer pays 9% (rising by 0.5% each year until reaching 11% in January 2017).

³⁰ The national monthly minimum wage is 190 Jordanian dinars, and the maximum monthly earnings used to calculate contributions are 3,000 dinars.

according to specified ratios in a schedule in the law, which including a widow, disabled widower with no income, the daughters and dependent sisters until being married or employed, the sons until the age 23, dependent brothers under the age 18, and the parents with no income.

The Benefits are determined at accrual rate of 2.5% per annum of the average of the last 36 covered monthly wage up to 1,500 dinars, plus 2% per annum of the amount above 1,500 dinars. Dependent's supplement is added by a percentage of pension for each dependent at least 10 dinars and up to 100 dinars for the first one, or 25 dinars for each person if more, up to 24% of the pension. Further, the pension is reduced proportionally for early retirement according to a predetermined schedule in the law and it is based on average salary of the last 60 months.

While, the ineligible contributors at retirement age receive a lump-sum payments as a percentage of covered wages, determined according the service period.

The disability benefit is determined as 50% of average monthly contributions of the last 36 months for the first 1,500 dinars plus 30% for the amount above 1,500 dinars. Further, the pension increases by 0.5% for each year of contribution for the period of 60 to 119 months, and by 1% for the period above 120 months of contribution, given that there is no maximum limit. The pensions of survivors is determined at the same way of disabled pensions, but distributed to the survivors according to their ratios in the schedule.

The pensions are adjusted annually according to the CPI up to 20 dinars, except the early retired cases until they reach the age of retirement.

Maternity Insurance Fund

The maternity benefits are funded by a contribution paid by the employer at 0.75% of the monthly wage. It is only for the employees working in private sector and Jordanians working in diplomatic missions or for international organizations that have at least six months of coverage before childbirth. The females receive 100% of their last monthly earnings for up to 10 weeks.

Work Injury Insurance Fund

The work injury benefits are funded by independent fund by a contribution paid by the employer at least 2% of the monthly wage that may be increased up to 4% depending on the risk of work. The benefits are qualified for temporary or permanent disability as

determined by the medical committee. The partial disability rate is determined according to the assessed loss in working capacity as a percentage of the insured monthly wage. Further, the medical benefits are also covered by work injury fund including; the medical treatment, transportation, hospitalization, and rehabilitation services. While, the survivors' benefits because of the work injury are determined at 75% of the last wage, distributed on the survivors according to a schedule in the law. Further, funeral grant at 500 dinars is paid.

Unemployment Insurance Fund

Finally, the unemployment insurance includes employees working in private firms with at least one worker. It is financed by a contribution at 1% of monthly earnings paid by the employee and at 0.5% by the employer. The employee qualifies the unemployment benefits if he/ she has at least 36 months of old-age insurance coverage before the date of entitlement to unemployment benefits. It is paid for up to three months for contributors with less than 180 months, and up to six months with contributions of 180 months and more. The first month is 75% of the last wage, then 65% and 55% for the second and third months, respectively, and 45% for the following 3 months.

2.10.2- Iraq

In Iraq, instability is the most prominent feature that is mutual with the Palestinian case. Even Iraq is a very rich country with oil as natural resource, the living standards is low because of instability and high costs of war and conflict with low investment in industrial production. There have been high rates of immigration from Iraq that would cause opposite side wave of immigration in the future. The above mentioned reasons make from Iraq a suitable case to have a look to the structure of social security system.

The social security system in Iraq was first initiated in 1956 as a provident fund. The currently implemented laws refer to social insurance law 1971; in addition to two recent laws that were approved in 2014. The first law is the retirement law and the second is the social assistance law that have been implemented gradually from 2014 for the resident and citizens of Iraq with household per capita below the national poverty line³¹.

³¹ The national per capita poverty line is 105,000 dinars a month as in 2014, (\$1.00 USD = 1,166 dinars).

The social security system in Iraq is a contributory partially funded DB system that provides benefits of old age, disability, and survivors for old-age fund; besides, the maternity, health care, work injuries, and unemployment schemes. While the social assistance program is non-contributory that is financed by the government. The total contributions rate for all funds is 17%, while for oil industry it is 25.1% of the payroll wage; only 4.1% from the employees, and 12.9% from the employers in all sectors except the oil industry that pays 21%.

Old-age, Disability, and Survivors Insurance Fund

The old-age fund is mandatory, in which the coverage includes the employees of enterprises with three or more workers. Source of the fund is mainly the monthly contributions, which cover the benefits of old-age, disability, and survivors. The contribution rate for all employees is 4.1%, while employers pay 9.9% of monthly payroll compared to 15% for employer in the oil sector.

The contributors are eligible for a pension at age of 60 for males and 55 for female with 20 years of contributions, or at any age with 30 years of contributions for males and 25 for females. After retirement age employment must cease. While, the contributors that are ineligible for a pension, receive a lump-sum benefits as old-age settlement. However, means tested social assistance is paid for those unable to work and does not qualify for any social insurance pension. On the other hand, the disability benefits are eligible for a permanent or long-term loss of at least 91% of working capacity, or for partial disability cases that assessed with a permanent or long-term loss of working capacity of 35% to 90%. While, the survivors of a retiree or that entitled to receive an old-age pension or full disability pension at the time of death, are eligible for a pension. The eligible survivors include widow(s)/ widower(s), a dependent mother, father, sister, and brother. Further, the social assistance is paid to the eligible survivors but over the age of 63 for widows and divorced women.

Old-age benefits are determined at accrual rate of 2.5% of the average wage of the last three years of contributions per annum of service. Likewise, disability benefits accrual rate is 2.5% of the average wage of the last three years per annum. However, the partial disability is assessed by the medical committee as a percentage of the full pension. Regarding the survivors' benefits, the spouse receives 60% of the old-age or disability

pension, while each of the orphans under the age 17 receive 40% with a maximum combined rates at 100% of total pension. Unmarried daughters and disabled sons under 17 years old receive 60%, while sons continue receiving a pension until 27 if they are studying. In case there is no other survivors, 40% of the pension is paid for a dependent mother, father, sister, or bother. The social assistance is paid for households with income that is less than the national per capita poverty line, so the difference between the monthly household per capita income and 105,000 dinars is paid, up to 420,000 dinars a month for a family with at least four members.

Sickness and Maternity Insurance Fund

Sickness and maternity benefits cover employees of enterprises with three or more workers, which is funded from employers by 1% of monthly payroll and 3% for employers in the oil industry. The contributors are eligible as they contribute. The benefit for sickness benefit is 75% of the average wage during the months before the incapacity began. It is paid after an eight-day waiting period (paid by the employer) for up to six month or two years for certain diseases. For maternity, 100% of the wage is paid for at least 14 weeks including eight weeks before the expected date of childbirth, which is extendable for up to nine months if needed by medical committee. Further, if females decide leaving employment because of pregnancy, they receive a lump-sum payment of one month's benefit for each year of contributions.

On the other hand, the medical care is provided for insured persons and their independents in government health-care centers and hospitals, funded by the labor and social security institution.

Work Injuries Insurance Fund

While, the work injuries cover employees of enterprises with five or more workers. The employers pay 2% of monthly wage and 3% for the oil industry. Like the maternity and medical care, there is no minimum qualifying period. For temporary disability benefits, 100% of the last wage is paid after an eight-day waiting period until recovery or certification of permanent disability. The employers pay the waiting period. For permanent disability, 80% of the average wage is paid in case of total disability. For partial disability cases, a percentage of total pension is paid as assessed by the medical committee, while a

lump-sum payment is paid for those with a disability rate less than 32%. The survivors' benefits are the same as in the old-age fund.

Finally, the unemployment was supported under the social assistance program, where the Health and Welfare Fund is authorized to provide employment assistance. However, the recent labor law of 2015 requires the employers to provide some payments in certain cases as closure or downsizing or death in order to protect the employees. The amount is two weeks' pay for each year of service.

Further, by 2014 the Ministry of Labor and Social Affairs provides family allowances for all citizens and residents under the national poverty line, and cash benefits to the needy citizens. The qualified are a family of a person that has been incarcerated for more than a year, an unmarried females older than 35 years, or 18 years old and lives without parents, a ward of the state, and married student couples.

2.10.3- Israel

Israel has different economic figures than Palestine and other regional countries, where GDP and life standards in Israel are higher. However, the shared points are the political instability and demographic figures, where the population is close to that of the Palestinian and the immigration rate is high but almost the opposite side. Further, the most important reason to review and compare with the Israeli social security system is the fact that large number of Palestinian labor force is working in Israel and some of them already benefit from the laws there. Besides there are some economic and financial agreements and regulations with PA. Thus, there could be some issues to share with the Israeli social security system to facilitate transfer from Israeli labor market to the Palestinian, which would make the Palestinian labor integrate easier to the local labor market and keep their rights. Other probability refers to the fact that Israel already occupies Palestine, but after Oslo peace agreement Palestinians have had their right of self-government on some civil affairs on some regions. That situation was not supposed to be final, but to have a two state solution with defined borders and agreement on other issues in final negotiations between the two parties. One standing possible probability, even it is weak, the collapse of negotiations and peace efforts and to have either one state solution for both populations, or full control of Israeli occupation over the Palestinian population and land.

The social security system in Israel started from 1953 with the national insurance, then other systems were introduced gradually to include old-age pensions in 1957, disability pensions in 1974, income support in 1980, income support benefits in 1982, and long-term care benefits in 1988³². The total contributions rate of the social security funds is 6.15% up to 28.91% of earnings above 60% of the national average wage. The employee pays in total 3.49% up to 11.94%, compared to employers at 2.11% up to 16.42%, while the government contributes a total of 0.55% of earnings.

Social Insurance and Social Assistance Fund (Old-age – Disability – Survivors Benefits)

The social insurance and social assistance system covers Israeli residents, but excludes those immigrated to Israel after the age of 60. The benefits include old-age and survivors pensions, disability benefits, and long-term care. The social assistance system is means-tested that is financed by contributions from the employee, employers, and the government at different rates that depend on income.

The total contributions rate for the social insurance and assistance fund is 2.31% up to 8.77% of earnings above 60% of the national average wage: 0.34% up to 5.85% from the employee, 1.6% up to 2.55% from the employer, and 0.37% from the government.

For old-age and survivor pension, the contribution rate is 0.22% up to 5.85% from the employee; 1.3 up to 2.04 from the employer; and 0.25% from the government. For the disability benefits, the contributions rate is 0.11% up to 1.86% of earnings above 60% of the national average wage from the employee; 0.26% up to 0.42% from the employer; and 0.10% from the government.

For the long-term care, the contributions rate is 0.01% up to 0.14% of earnings above 60% of the national average wage from the employee; 0.04% up to 0.09% from the employer; and 0.02% from the government. The maximum monthly earnings used to calculate contributions are five times the old-age basic amount as of January 1 each year³³.

³² The system is run by the National Insurance Institute under the general supervision of the Ministry of Social Affairs

³³ Given that the old-age basic amount is 8,648 NIS.

The eligibility of social insurance earnings-tested pension is 70 years old for males and 68 for females that gradually increases to age 70 from 2017 to 2020, besides there should be 60 month of coverage in the last 10 years or a total of 144 months of coverage. No qualifying period for insured females, who are widowed, divorced, abandoned, married to an uninsured husband, unmarried and aged 57 or older at the time of immigration to Israel, or receiving a disability pension during the month before reaching the retirement age.

Income supplement is paid if income, including the old-age pension, is less than the minimum income established by law, and dependent supplement is paid for a dependent spouse or child. Further, a special old-age benefit is paid to new immigrants not insured because of their age at the time of immigration.

Disability pension is eligible for those aged 18 to the retirement age and contributed for earnings-tested old-age pension. There is no qualifying period, but must have either a total assessed degree of disability of at least 60% for one or more impairment, 40% for one impairment (at least 25%), and 50% for a housewife with a disability. Full pension for disabled with greater than 74% and if income from employment is less than the monthly national average wage³⁴. Otherwise, partial disability is paid as a percentage from the full pension. Other additional supplements and pensions are paid for disabled insured, depending on the income and disability status.

Long-term care benefit is a right for retirees over the retirement age for an earnings-tested old-age pension, who need for help to perform daily functions and with income less than 1.5 times the national average wage that increases with a spouse and a child.

The survivor pension is paid to a widow(er) or child up to 18 years old, or older ages with certain cases. Death grant and funeral grant are paid also.

For old-age benefits, social insurance is paid at 17.7% of the monthly old-age basic amount and additional 1% to pensioners aged 80 and older. Further, income supplement is paid for pensioners younger than 70 years old at 30.3% to 65.2% of the monthly old-age basic amount, depending on marital status and the number of children. While, it is at 31.2% to 66.5% if aged 70 to 79, and 32.6% to 68% if aged 80 or older. For retirement deferral, an increment at 5% of the pension is added for each year retirement deferral. Additional

³⁴ The national average wage is 9,464 NIS, while the monthly minimum wage is 4,650 NIS as in 2016.

supplements are added to the dependents and seniority. Besides, the income support benefit is added as a percentage to the pension at 20% to 25% to an individual pensioner and 27.5% to 37.5% to a couple without children.

For permanent disability benefits, Social insurance at 25% of the disability basic amount plus an additional 7% of the resulting amount are paid. Partial disability is paid as a percentage of the full disability pension according to the medical committee assessment. Additional percentage of the pension is paid depending on the income and disability percentage, in addition to the dependent's supplement. Further, long-term care benefit is paid as earnings tested at percentages of 91%, 150%, or 168% of the full disability pension, according to the depending degree on the help of others.

For survivor benefits, the pension is paid at 17.7% of the monthly old-age basic amount to widow(er) aged 50 or older or caring for a child, 13.3% to a widow(er) age 40 to 49 with no child. Child increment at 8.3% is paid for each child. Beside the funeral grant and the death grant, additional increments are added or deducted depending on the children number and benefits from other fund.

Sickness and Maternity Insurance Fund

Regarding the sickness and maternity fund, all employee are covered by sickness benefits, while maternity benefits cover the employed, self-employed, and persons in vocational training.

Maternity grant is paid to insured female and the wife of the insured, working persons living abroad; while, medical benefits are paid for all persons residing in Israel.

The contributions rates are in total 3.34% of earnings up to 6.36% of earnings above 60% of the national average wage. The employee pays 3.1% up to 5% of earnings above 60% of the national average wage for medical benefits and 0.04% up to 0.87% of earnings above 60% of the national average wage for maternity benefits. While, the employer pays 0.11% up to 0.40% of earnings above 60% of the national average wage for maternity benefits. Further, the government pays 0.09% of earnings for maternity benefits.

The eligibility for cash maternity and paternity benefits is at least 10 months of coverage in the last 14 months or 15 months in the last 22 months. While, partial benefits is paid with at least 6 months of coverage in the last 14 months. Benefits are also eligible for

Adoption of a child younger than 10 years old with at least 14 months of contribution. Other expenses are paid for pregnancy risks and hospitalization grant.

Work Injuries Insurance Fund

Regarding work injury insurance, the coverage includes employed and self-employed persons, vocational trainees and those undergoing vocational rehabilitation, working prisoners, foreign residents working in Israel, migrant workers working in Israel, and some Israelis working abroad. The security forces and military are excluded. The system is funded through a contributions rate at 0.37% of earnings up to 4.47% of earnings above 60% of the national average wage. While, the self-employed pays 0.37% of the earnings up to 0.68% of earnings above 60% of the national average wage. The government contribute with 0.03% of insured and self-employed person's earnings.

For eligibility of insured persons, the temporary disability of at least 9% and the permanent disability of at least 20% are eligible without minimum period of contribution. Lump-sum grant is paid for permanent disability depending on the percentage of disability. Other income supplements are paid depending on income, dependents, and marital status. The fully disabled person receives 75% of the earnings, while the partially disabled receives a percentage depending on the assessed degree of the disability. Further, the survivor pension of the work injury is 40% to 100% of the old-age or disability pension of the insured person.

Family Allowance Fund

Family allowance is paid for residents with one or more children. The contributions rates are 1.32% of earnings up to 2.4% of that above 60% of the national average wage. The employer pays 1.32% up to 2.08% of earnings above 60% of the national average wage. While, the government contributes with 0.8%. The benefits depend on the number, age, and studying status of children.

Unemployment Insurance Fund

Finally, the unemployment insurance covers the employed residents of Israel including certain military personnels, while self-employed are excluded. The contribution rate from the employee is 0.01% up to 0.21% of the earnings above 60% of the national average wage, while from the employer it is 0.03% up to 12% of earnings above the national average wage. The government contributes with 0.06% of the earnings. For eligibility, the employee must be involuntarily unemployed, registered at labor exchange, and ready and

able to perform any suitable work, with at least 12 work months of contributions in the 18 months before unemployment. Daily benefit of 20% to 80% of daily wage before unemployment is paid with a maximum limit for up to 50 to 175 days, depending on age and number of dependents. The unemployment is paid for four consecutive months.

2.10.4- Discussion and Conclusions

The reform process in Israel is more frequent followed by Jordan, while in Iraq the currently operating system is since 1971, which indicates to the degree of development and responsiveness of each system to the environmental changes. In order to understand the differences between these systems, we focus the comparative analysis in this section on the following four points that form the main principles for any pension system:

2.10.4.1- Structure and Financing Mechanism

By comparing the social security systems of the above mentioned cases, we find all are partially funded PAYG DB systems and contain the old-age, work injury, maternity, and unemployment funds. These funds are almost the most important to be in line with the international standards of social security. However, the parameters of each system is different depending on the development and privacy of each case. Further, Israeli system provides two additional programs of long-term care and Family Allowance. While, the public system in Palestine is limited to the old-age insurance for public sector employees. The good news is that the new SSL of private sector introduces three programs of old-age, work injury, and Maternity to be implemented in the first stage, then other four programs would be introduced gradually according to the possibility.

The total contributions rate of the social security systems is different from country to the other, where the highest total contribution rate is at the Israeli system. At the same time, it could be the least rate as it ranges from 6.15% up to 28.91% in total; 3.49% up to 11.94% from the employee, 2.11% up to 16.42% from the employer, and 0.55% from the government. This refers to the redistribution policy followed to impose higher contribution rate on those with higher income and to exempt those with larger family size from contributions.

Table 19: The Contribution Rates in Palestinian Pension Systems Compared to Selected Regional Countries

<i>Fund</i>	<i>Old-age</i>			<i>Maternity</i>			<i>Work Injuries</i>			<i>Unemployment</i>		
	Employee	Employer	Gov.	Employee	Employer	Gov.	Employee	Employer	Gov.	Employee	Employer	Gov.
<i>Palestine</i>												
<i>PPL-2005</i>	10	12	0	-	-	-	-	-	-	-	-	-
<i>SSL-2016</i>	7	9	0	0.2	0.3	0	0	1.6	0	-	-	-
<i>Jordan</i>	6.5	11	0	0	0.75	0	0	2 - 4	0	1	0.5	0
<i>Iraq</i>	4.1	9.9 - 15	0	0	1 - 3	0	0	2 - 3	0	-	-	-
<i>Israel</i>	0.34 -	1.6 -	0.37	3.14 -	0.11 -	0.09	0	0.37-	0.03	0.01-	0.03 -	0.06
	5.86	2.55		5.87	0.40			1.47		0.21	12	

Source: The Author by data of ISSA and PPA.

While, in Jordan it ranges from 21.75% up to 23.75%; 7.5% from the employee and 14.25% up to 16.25% from the employer, depending on the risk of the job for the work injury insurance. In Iraq, the total contributions rate is 17% compared to 25.1% from those working in oil industry. Compared to the other cases, the employee in Iraq pays the least contribution rate at 4.1%. The employer in oil industry pays the highest contribution rate at 21% compared to other industries in Iraq, as it is rich in oil and form the main source of production in Iraq. In Palestine, the contribution rate is a fixed rate for all categories, and comparatively high in relation to the benefits. For public system, the total contribution rate is 22%; 10% from the employee and 12 from the employer. While, in SSL of 2016 the total contribution rate is 18.1%; 7.2% from the employee and 10.9% from the employer.

In all mentioned cases the government is a guarantor to pay the benefits in case of deficit, given that they all are supervised by some form by the Ministry of Labor or Social Affairs. That gives trust to the system and may encourage compliance and voluntary contribution if available. In this regard, the law in Jordan, Iraq, and Palestine mentions clearly the government as a guarantor that should cover the benefits in case of financial deficit; however, the law in Israel implies contributions rate to some funds from the government to support financing the fund and guarantee the financial balance.

Thus, all cases do not follow the international trend in this respect, where there should be an automatic mechanism that guarantees the balance of the system by modifying the parameters according to annual check to the system as followed by France and Germany or Sweden and Italy. In Palestine and Jordan, an actuarial study is requested by the law every 3 years to modify the parameters of contributions and benefits that guarantee a

financial balance, which also is not applicable in Palestine as the procedures to modify the parameters need a modification of the pension law itself.

2.10.4.2- Adequacy and Income Redistribution Policy

The old-age benefits in Iraq are still depending on a fixed accrual rate for all retirees, while in both Jordan and Israel there is a redistribution policy that is applied through different benefits for different income levels compared to poverty line or a minimum wage limit. Thus, the Iraqi system could be more generous for high income contributors; leaving some others with inadequate income. Palestine also has the problem of fixed accrual rate for benefits as in Iraqi case, which lacks for a redistribution policy. Further, the wages in all cases has a maximum level to be pensionable, and there is a minimum pension in all systems, except that of public sector in Palestine.

Although there is a minimum wage limit, it does not mean the pension is adequate because it depends on the living standards and purchasing power of the determined minimum pension. Thus, there is no minimum pension for public pension beneficiaries in Palestine, but the basic salary proposed to ineligible retirees is less than the poverty line and about half of the minimum wage. Likewise, the minimum pension proposed in SSL of 2016 is also about half of the minimum wage. While, pension in Israel was adjusted to minimum or average wages in many cases in a way that guarantees an adequate pension that protect the beneficiaries from poverty, given that the minimum wage in Israel is higher than the average wages in Palestine.

On the other hand, the retirement age for Jordan, Iraq, and Palestine is 60 years old, compared to 70 in Israel. Given the average life expectancy has been improving in these countries, 10 years more of contributions and less payment of pensions means much higher opportunity for financial balance of the system and more benefits are possible for the beneficiaries and their survivors as the case in Israel.

Unfortunately, the main problems in Palestine are the high rates of unemployment and informal sector and its related low wages problem, which absolutely will result in inadequate pensions. Therefore, it is hard to raise the age of retirement to meet the increase in life expectancy and improved health status. Thus, the pension for many cases in the

public pension system is getting much lesser, so there is a need to determine the minimum income of pensioners related to the living standards as determined for the wages.

The optimal solution is to have a redistribution policy for income as that in Israeli system or to deduct contributions from the higher pensions to finance other assistance programs. On the other hand, some incentives should be offered to the low-skilled with low wages or voluntary contributors to benefit from the system.

The age of retirement is supposed to be raised gradually to avoid sharp shocks in labor market. Further, longer service after retirement age should be encouraged by some incentives like the case in Israeli system and Jordanian one, where the pension increases according to an actuarially based benefit factor. While, the early retirement cases should be discouraged by deductions imposed on these cases to have less pensions, and should be limited by certain age as well.

The demographic structure indicates that the increase in the number of youth labor force is at its peak and is expected to continue so for more decades as about half of the population are younger than 20 years old. This advantage of the available high demographic dividend in Palestine requests a good strategic plan to attract investments and find job opportunities with social security for these generations. Otherwise, this advantage of demographic dividend will be lost and they would be added to dependents of the population.

2.10.4.3- Family Support and Females

In this regard, we find the social security system in Israel is more specified regarding the family structure details, particularly for pregnant females and families with children. Given that the female participation to labor force is high compared to the MENA region countries, the Israeli system targets the family more than the females, so it supports children, old-aged, maternity and paternity as well. While, in Jordan and Iraq the concept of supporting family is different as it is directed more towards females and children. Although there is a detailed schedule that determines the benefits of survivors at different ratios depending on their numbers, there is no advantageous benefits for the retirees with larger family or more dependents.

Moreover, the female is eligible for survivorship as long she does not work or unmarried. Given that the female participation rate in labor force is low, the burden on the system

would be high and its outcome is discouraging females to work. Palestine has the same problem as in Jordan and Iraq regarding the survivorship benefits for females. Further, working females in Jordan, Iraq and Palestine has advantageous eligibility conditions compared to males. While, Israel would end this inequality of gender gradually by 2017 until 2020.

On the other hand, only the Israeli system provides support for needed old-age or disabled contributors through the long-term care program. However, in each of Jordan, Iraq, and Palestine it is not mentioned in any fund in the law, reminding that the family structure in the three countries is different than that of Israel, in which the needed persons and old-aged receive assistance from the family members.

Moreover, the public pension law in Palestine allocates a basic salary for ineligible public servant retirees, and a basic income of 100 US dollar for old-aged, who have no other income or support. Both are paid by the government. While, Iraq provides services and cash support for the needy citizens. In Palestine, the old-age benefits would not be costly as the old-age population ratio is small compared to other countries, particularly in Israel. However, any proposed benefit should take in consideration the current trends and future population structure and costs, in order to have a financially sustainable system.

2.10.4.4- Unemployment Insurance

Even unemployment is provided in each of Israel and Jordan, it is applied differently. In Jordan, the contribution is fixed at 1.5% for all categories from employees and employers (1% from the employee and 0.5% from the employer). While, in Israel it ranges from only 0.09% up to 12.27%, in addition to a government contribution of a fixed rate at 0.06%, given that the highest contributions rate is on the employer for high salaried employees. Further, the eligibility for unemployment benefits in Israeli system need to be registered to labor office in order to offer a suitable job. While, the value of unemployment benefit in Israel differs according to the level of income, in Jordan it starts at 75% of the last wage and decreases each month until 45% from the fourth to sixth months. In both Iraq and Palestine, the unemployment insurance is still not applied because it is very high and because of other barriers as economic stagnancy. SSL of 2016 for private sector included the unemployment insurance; however, it was suspended until the situation can afford to.

On the other hand, the more details we need to calculate the benefits, the more complicated IT systems are needed. Diversity of benefits to each family structure, different income levels, and more historical or demographic data records needed to calculate the benefits, the more costly the system will be, but the trade-off is the more equity and sustainable the system is.

Chapter Three

“Analysis of the Current Social Security System in Palestine”

3.1- Introduction

It is important to understand the current social security system to be able determine the challenges and needs, then design and test a reform proposal for the Palestinian pension system compared to the international standards and trends as well as some other practices. This chapter provides an analysis for the current social security system depending on the data from Palestinian Pension Agency (PPA), reports of Ministry of Health (MoH), Ministry of Social Affairs (MoSA), and the Palestinian Central Bureau of Statistics (PCBS); besides, the data of two surveys and 2007 Census performed by PCBS related to the subject. Indeed, the chapter elaborates the social security through five sections including the legal framework, pension systems, social assistance programs, health-care insurance, and the household measures of the financial stability.

The first used survey is “The Poverty Survey of 2003”. The survey targeted all Palestinian households that resided in Palestine in 2003. The sampling frame consisted of all enumeration areas (EAs) constructed from the Population Housing and Establishment Census, 1997. The survey is based on a random sample of 3,725 households, of which 3,127 households completed the interview. The completed interviews are distributed by region as 1,899 in West Bank and 1,228 in Gaza Strip. The sample is a two-stage stratified cluster random sample. The first stage involved the selection of a stratified random sample comprised of 227 enumeration areas. The second stage involved the enumeration of the first 16 dwellings from the beginning of each selected enumeration area. Three levels of stratification were made:

1. Stratification by West Bank and Gaza Strip (WB&G).
2. Stratification by Governorate.
3. Stratification by type of locality which comprises: (a) Urban (b) Rural (c) Refugee Camps
4. Overall 3,127 out of 3,519 questionnaires were completed, recording 90 percent of response rate.

Concerning the second survey of “The Palestinian Expenditure and Consumption Survey for 2011”, the data was collected through a questionnaire of two parts, the first is for the personal data filled at the beginning of the month and the second part is about expenses and consumption of goods and services through the month.

The survey targets all Palestinian households, who are usually in Palestine. The calculated sample size for the survey is about 4,317 households, 2,834 households in West Bank and 1,483 households in Gaza Strip. The sample is stratified cluster systematic random sample with two stages. In the first stage, the selection of a systematic random sample of 215 enumeration areas. While, in the second stage the selection of a systematic random sample of 24 households from each enumeration area selected in the first stage, which consists of buildings and housing units with average of about 120 households in it. In the sample, the population was divided by governorate and type of locality.

In the second stage, a systematic random sample of 16 households was selected from each enumeration area selected in the first stage. Also selected a systematic random of 16 households of the enumeration areas of 80 household and over. While, the enumeration areas of less than 80 households, systematic random of 8 households were selected. The population was divided by governorate and type of locality.

In the survey, the Palestinian territories were divided into 4 main areas as follows: Gaza strip, Northern, Middle, and Southern of West Bank, where the population distributed 41.03%, 24.29%, 19.78% and 14.90%, respectively.

3.2- Legal Framework of Social Security in Palestine

The legal system in Palestine has a problem related to the development of political history in Palestine and the region, which has created a collection of active laws from consequent different regimes that had control over Palestine since the Ottoman Empire before a century. After the Ottoman Empire, the British Mandate controlled Palestine, then the Jordanian rule over the West Bank and the Egyptian control over Gaza Strip. The 1967 war resulted in the Israeli Occupation of WB&G and Eastern Jerusalem. In 1993, the Palestinian Authority was created upon Oslo Peace Agreement to have control over some areas in WB&G until reaching to a final agreement of the Israeli-Palestinian conflict to end the Israeli occupation. However, the political efforts to reach a final peace agreement failed several times, which created complicated legal and economic problems due to the case of integration with the Israeli occupation in legal, economic and financial issues. Consequently, PA had to build institutional capacity and revise the legal structure in the State of Palestine.

Nonetheless, PA has signed number of international agreements and conventions related to social security rights; particularly, ILO agreement No. 102 of 1952 on social security (minimum standards) and the agreement No. 3 of 1971 of the Arab Labor Organization Standards, which state the minimum level of social security. Thus, the current legal framework governing the social security in Palestine comprises of a set of laws, legislations and strategies.

The articles (22 – 25) of the Palestinian Basic Law of 2003 (the constitution) guarantees the rights of health care, social and income insurance and labor to all citizens. In particular, article (22) states, *“1- The Law organizes the insurance services of social, health, and disability and old age pensions. 2- Care of the families of Martyrs and the politically arrested and care of injured, harmed and disabled are duty to be organized by law, and the Palestinian National Authority guarantees for them the services of education and health and social insurance”*.

Moreover, the active laws comprise of the old laws inherited from previous regimes and some others that were passed by PA to improve and cover the gaps of the previous laws. The following are the most important laws that organize the social security provisions and the rights of labor in Palestine including; working hours, holydays, paid maternity for employed females, and insurance of health care, disability, death, and old age:

- Number of pension laws that organize the pension rights, particularly, the Public Pension Law No 7/2005 and its amendment of the Presidential Decree No. 5/2007.
- The Palestinian Civil Service Law (No. 4/1998) and Security Forces Service Law, which relate to the public sector employees (civil servants and the military),
- The Palestinian Labor Law (No. 7/2000) for private sector employees,
- The Palestinian public health law (No. 20/2004), and
- The law for the rights of disabled,

Recently, the government has developed sets of draft laws related to reform the social security and health-care that have been prepared and approved the Social Security law of 2016 only. Since 2011, the government has assigned the work to specialized technical committees from the related ministries and other related parties to develop sectoral strategies to the related fields in cooperation with the European Commission, which came out with national strategies of social protection, the national employment, the national

health, the education, and the gender. The technical report of the social protection committee concluded that the funds are mismanaged due to the fragmentation of the social security sector, the diversity of governmental and non-governmental parties working within it, the weakness and ineffectiveness of the coordination efforts, and the dependency on the availability of funding. The committee has set its strategy upon three main challenges in the Palestinian society to face; poverty, marginalization, and social exclusion. On the other side, the government has recently in the late 2016 published a new social security law that is supposed to be comprehensive to organize the pensions and social security system for private sector separately and under administration of new institution and with the supervision of Ministry of Labor. In this regard, the committee reached to an agreement with tri-parties to introduce a mandatory system and leave the voluntary contribution for other informal labor or individuals, but still there some needed bylaws that organize the coverage extension process and the establishment of the related institution. In conclusion, there is a high opportunity to develop and apply a comprehensive social security system reform by enhancing the institutional structure and legislations; however, there are a number of serious challenges may prevent the success of these efforts. Legally, the Palestinian political structure, internal political division and conflict, and the status of being under occupation are of the most important challenges to apply any pension system. Further, the compliance with other laws as labor and public pension laws need a review to ensure the harmony of applying the law and transfer of people between different pension systems. The most important other challenges are the high rate of exposure to poverty among Palestinians, high informal sector, and the economic dependency, besides the tight restrictions of Israeli occupation.

3.3- Pension System

3.3.1- Schemes of Pension System

The Public Sector

The Palestinians lack of a comprehensive social security system due to political instability through its modern history, whereas the fact that Palestine remains under occupation prevents sustainable development and strategic planning. By the establishment of the Palestinian Authority (PA) in 1994, PA inherited a fragmented public pension system that was organized by two laws and related military orders, which refer to previous regimes that ruled the regions of WB&G through the last century.

Currently, the Palestinian Pension Agency (PPA) administers and supervises four active public pension schemes in Palestine, including three phasing-out public sector schemes for the public sector employees, and the new scheme of Public Pension Law No. 7 for 2005 that was supposed to extend coverage to all formal labor employees in Palestine. PPA also is responsible of implementing technically the law of retirement and rewards for the members of the legislative council and the government, and the Law of rewards for the president of the Palestinian State.

Table 20: The Active Public Schemes in Palestine under the Administration of PPA:

	Scheme	Organizing Law	Coverage	System Type
Phasing-out schemes	Scheme I	No. 8 of 1964	Civil Servants, local government employees, and members of PLO ³⁵ in Gaza Strip, paid from the public budget, who were 45 years old and over on 01/09/2006.	DB
	Scheme IV	No. 34 of 1959	Civil Servants and members of PLO in West Bank, paid from the public budget, who aged 45 and over on 01/09/2006.	DB
	Scheme III	No. 16 of 2004	Security forces and some members of PLO, paid from the public budget, who were 45 years old and over on 01/09/2006.	DB
	Scheme II	Public Pension Law No. 7 of 2005	Includes all Palestinian population from public sector, who aged less than 45 years on 01/09/2006 and all non-governmental employees of other categories of population. ³⁶	Multi-pillar DB&DC

Source: The author by data of PPA

³⁵ PLO: Palestine Liberal Organization, the member of PLO were allowed to choose the scheme according to their age, work, and region.

³⁶ By 2011, only some public institutions, universities, and municipalities were allowed to join the system voluntarily. While, at the beginning of 2016, a presidential decree of the Social Security Law was published to establish new institution of social security to cover private sector instead of PPA; however, due to demonstrations against the law it was suspended and published a new version with amendments according to recommendations of the National Social Security Committee that involves related parties.

The previous phasing-out schemes are defined benefits unfunded or partially funded schemes. “Scheme I” is organized by “The Insurance and Pensions Law No. 8 for 1964” for the public civil servants in Gaza Strip, which was published under the Egyptian rule to Gaza Strip. While, “Scheme IV” is organized by “The Civil Retirement Law No. 34 for 1959” for the public civil servants in West Bank, which was published under the Jordanian rule to West Bank.

“Scheme III” is organized by “The Insurance and Pension Law No. 16 for 2004” for the Palestinian members of security forces, which was legislated by the PA in 2004.

“The public pension law No. 7 for the year of 2005” was published to establish “Scheme II”. The 2005 reform aimed to unify the pension provisions for all formal employees of the Palestinian population under one independent institution, the “Palestinian Pension Agency” (PPA). According to the 2005 reform, the new regulations are supposed to be applied to all categories except the public sector employees, who were over the age of 45 years old at the implementation date of 01/09/2006. These senior public sector employees continue to benefit from their previous pension schemes, and no new entrants are allowed to contribute to these old schemes but only to the new scheme. Thus, the three old schemes are phasing out of active members by 2021.

The Public Pension Law has legally included the private sector in Palestine for the first time, but on voluntary basis. It also introduced the multi-pillar system for the first time, which is composed of three pillars: Basic Salary for old age population, “Defined Benefits” (DB) and “Defined Contributions” (DC) systems.

The basic salary guarantees an income for old age people, which is financed by tax. However, it is applied only for old age from public sector employees, who are not eligible for pension after retirement. While, the DB system guarantees the services of insurance for old age, total invalidity, and death. The system does not organize the services of maternity rights, partial disability or work injuries, sickness, unemployment insurance and family support; rather, some of these services are organized by the employment laws such as; the civil service law for civil servants, the security forces law for security forces members, and labor law for the private sector employees. Indeed, this means inequality among categories,

particularly for the private sector, where the system does not organize these services well and there is difficulty to mandate the employers to apply the law provisions. Moreover, many critics were indicated to the public pension system even by the World Bank, which considered the system as unsustainable and called for another reform in the parameters and some provisions. Therefore, in 2007 an amendment was published by a presidential decree No. 5 for 2007, which made the public pension system as mandatory on the private sector, besides some other provisions that aims to lower the costs of benefits. However, its extension to non-governmental organizations remained limited to some public and non-governmental institutions as universities and municipalities as they are regulated on voluntary basis due to some obstacles. Besides, the “National Committee for Social Security” had been working on Social Security Law for the private sector, which has been approved just in September 2016. Thus, joining private sector to Public Pension Law is not allowed any more.

Table 21: The Characteristics of Public Pension Systems in Palestine:

Characteristics	Scheme I Law No. 8 of 1964 for Civil Employees in Gaza Strip	Scheme II Public Pension Law No. 7 of 2005	Scheme III Law No. 16 of 2004 for Security Forces	Scheme IV Law No. 34 of 1959 for Civil Employees in West Bank
Retirement Age	60	60	60	60
Contribution Rate	22.5%, (Employee: 10% & Employer 12.5%),	DB. Scheme 16%, (Employee: 7% & Employer 9%) DC. Scheme 6% (Employee 3% & Employer 3%)	22.5%, (Employee: 10% & Employer 12.5%),	Employee: 2% nominal contribution on wages. Employer: 0%, but it is committed to pay benefits when due.
Income Measure	Average wage of the last 3 years	Average wage of the last 3 years	Average wage of the last 3 years	Average wage of the last 3 years
Accrual Rate	2.5% per year	2% per year	2.5% per year	2.5% per year
Maximum Replacement Rate	70%	None	70%	70%
Pension Indexation	PCI index of PCBS			
Minimum Pension	No	No	No	No

Source: The author by data of PPA.

Private Sector

The private sector in Palestine suffers from high rate of informal labor, while it does not enjoy any public social security services except some private programs. Thus, it has been totally deprived from any public pension system at the end of service, rather lump-sum compensation payments upon the termination of service that is organized by Labor Law No. 7 for 2000 or by some provident funds that were established by some large companies and NGOs.

The absence of public pension system for the private sector has pushed the labor force in Palestine to think of substitutions for their social protection. Upon a survey performed by Portland Trust in 2007, it found that only few companies, some business unions and associations, and some Non-Governmental Organizations (NGOs) established reserves for severance pay liability. While, some of them developed provident funds that almost are managed by themselves to cover the compensation benefits of their employees upon termination of service. Unfortunately, these provident funds are voluntary and not universally available (Portland Trust, 2007).

PA was concerned in developing the social security for all Palestinians, where it developed the Social Insurance Law No. 3 for 2003 to be supervised by the Ministry of Labor. However, it was strongly criticized as unsustainable system by the World Bank, which pushed toward abolishing the law by the presidential decree No. 5 for 2007 in article “18”. By publishing the public pension law No. 7 for the year 2005 and its amendment by the presidential decree No. 5 for 2007, the coverage of private sector had been changed to be mandatory rather than optional. Thus, the private sector in Palestine had the opportunity for the first time to be covered by the public pension law under the administration of PPA with other categories of the Palestinian society.

However, the implementation of the law on private sector progressed in very careful steps as there have been many challenges, which slowed down extending coverage procedures. The first regulating bylaw was published in 2010, and the first implementation started by joining some universities and municipalities in 2011. The coverage remained voluntary, since there is no mandatory mechanism that enforces employers to insure their employees, and even in the joined institutions, the coverage is not compulsory by the institution to all

employees. The DC funded scheme was applied on a voluntary basis for the beneficiaries as well to attract the employers and institutions.

By late 2014, the first actuarial study had been accomplished to measure the financial balance of Public Pension law of 2005, which in turn recommended for further reforms. Besides, there are opposing political lobby, which pushed towards having a new private institution with new legislation for private sector retirement. According to their argument, the Public Pension Law does not insure the work injuries insurance nor the maternity or unemployment. In addition, the law does not deal with the Palestinian workers, who work in Israel and settlements, and even abroad, which exist in large numbers as part of the Palestinian reality. Finally, there are caveats of the employers in the private sector to pay contributions in the same fund of the public sector, due to the highly accumulated arrears of contributions at government and early retirement policy of public sector employees, which let them prefer not to take the risk under one umbrella (ILO, 2014).

For all mentioned reasons and upon the recommendation of the National Social Security Committee, a presidential decree of the Social Security Law (SSL) was published in October 2016 to be universal social security system to cover all society except those covered under public pension law from the public sector institutions. SSL of 2016 requires establishing a new social security institution that would cover the private sector on PAYG basis and provide a complementary funded DC scheme for the part of the salaries exceeding the maximum pensionable ones on a voluntary basis that would be paid by the employee.

The new SSL of 2016 provides new benefits that are not covered by the public pension law and promises of more benefits to be implemented gradually upon the financial ability. However, upon the strong opposition of the labor union under a wide range of critics, SSL of 2016 was modified upon an agreement with other parties. Provided that the critics mainly focused on the pension accrual rate, contribution rates, the expected high administrative costs, and unclear regulating procedures regarding mandatory coverage.

Thus, SSL of 2016 provides new concepts and comprehensive coverage of social security system in Palestine, which is expected to be the basis of any future development in social security that plays significant role to reduce poverty and offer adequate income for most groups of the population in Palestine.

3.3.2- Financing the Pension Systems

The Public Sector

The phasing out schemes are Defined Benefits PAYG partially funded schemes, which are financed by monthly contributions deducted from the employees' salaries and paid by the employers. Schemes "I" and "III" impose 10 percent on the employee, and 12.5 percent on the employer. While, "Scheme IV" imposes only 2 percent on the employee, and 0 percent on the employer, but the MoF as the employer is committed to pay the benefits when due. On the other hand, "scheme II" is a multi-pillar system that has Defined Benefits PAYG partially funded pillar and Defined Contributions fully funded pillar. The Defined Benefits pillar imposes contributions rates of 7 percent on the employees and 9 percent on the employers of the monthly salary. While, the Defined Contributions pillar imposes 3 percent on each the employees and the employers, transferred to the private individual accounts to be invested, given that the return or lose refers to the contributors. The employees have the right to save more contributions, without commitment of the employer to pay more contributions. Further, there is no incentives of tax deductions or other benefits to encourage contributors to save more.

The earnings covered by public pension systems in Palestine are the basic salary, fixed allowances (linked to the nature of work), annual increment to the basic salary, and periodic allowance connected to the consumer price index (CPI).

The Defined Contribution system is mandatory; however, the Board of Directors of PPA applied the DC system to be voluntarily to the private sector in order to encourage the employers to cover their employees under the DB system only.

The Private Sector

Regarding the private sector and NGOs, they remain uncovered by the public pension law except some non-governmental institutions as universities and municipalities. In seeking other source of insurance, some of the large enterprises had developed saving funds or some kind of provident funds that are administered by the enterprises themselves. The Portland Trust study in 2006 on the available saving or provident funds found that the contribution rates vary widely between the institutions, which range from 8 percent to 25

percent. At the same time, there are no defined benefit plans. Further, even the contributions are not sufficient to generate savings for retirement, they almost are not transferred into the fund, where they are simply nominal accounting entries.

The study concluded that the available provident funds are almost unsustainable due to the lack of accumulated funds or the lack of efficiency in managing the funds. In addition, these funds lack of adequate benefits. Further, the impact of these funds on the local economy is negligible. On the other hand, the companies almost manage the accumulated amounts of the contributions, which prefer to buy its stocks resulting in high risk of the retirement rights in case of bankruptcy of these companies. Besides, some companies delegate the management to small financial institutions that lack of experience, which in turn will not generate the desired profit. (Portland Trust, 2007)

Finally, according to the study these funds do not provide pensions, but lump-sum payments for any reason of the termination of service. Further, the accumulated contributions are not transferable with the employee to any other pension system.

Thus, the results of the study reveals the vulnerable conditions of the employees in private sector in Palestine compared to those in public sector. Further, it also evaluates the level of protection available for them, and estimates the available funds for pension system as an initiative fund. These results give hints to policy makers to add the priority of benefits for starting any pension system that would be socially and financially accepted. The strategy was to share all parties in a national committee to discuss and develop this issue with cooperation with related international institutions. The work of the committee started from 2011 until 2016, where the final draft of the proposed SSL was approved.

Even SSL had some new benefits in its first draft that are considered part of the principles of international standards, it has been amended to respond to the demands of labor union and other parties. Maternity, Work Injuries Compensations, Minimum and Maximum pension, and Unemployment Insurance benefits are main features of any optimal social security system, whereas any proposed reform should not exclude them. However, each of them needs a financing source that would increase the total cost of the system on the economy; given that the type of funds in the SSL is partially funded PAYG system.

The policy makers in cooperation with ILO, have chosen new types of benefits in SSL that are in line with the international standards. However, the implementation of them would

be on stages that are upon the reevaluation of the system and environment. Furthermore, each benefit will have its independent fund that is managed separately.

SSL imposes a contribution rate that totals 18.1 percent, distributed as 16 percent for the benefits of old age, natural deaths, and natural disability (7 percent from the employees and 9 from the employers), 1.6 percent for the work injuries paid by the employer, and 0.5 percent for the Maternity benefits (0.3 percent from the employer and 0.2 percent from the employee). There is another fund for those with salary that exceeds the maximum limit, which will be defined contribution (DC) system and paid by the employee on a voluntary basis. Moreover, the self-employed and voluntary contributors will pay both the employers' and the employees' ratios.

3.3.3- Old-Age Benefits

Eligibility Conditions

For contributors of public pension schemes, the mandatory retirement age at all schemes is 60 years old; however, the least required years to be eligible for a pension is 15 years of service with regular contributions to the system. While, the employees in private sector have the choice to stay at work after the age of 60 until the age of retirement of their internal administrative system: such as the academic staff and the higher Judicial Council, which means that there are no deductions to retire after age 60. The contributors, who have more than 9 years of service, have the right to buy the remaining period to reach 15 years to be eligible for a pension.

The contributors have the right to choose to retire before the age of retirement if they have certain years of service as conditioned in each law for each scheme. For "Scheme I", the contributors with at least 20 years of service can retire from the age of 58 without deduction of the pension; while, those aged from 45 to 58 will have a deduction on their pensions until the age of 60 as specified in the law. For "Scheme III", contributors with at least 20 years of service can retire at the ages of 40 to 50, depending on military rank, and for "Scheme IV" they need at least 30 years of service regardless of the age to retire. While, Scheme II" gives more alternatives to the eligibility of retirement. The contributors need at least age 55 with at least 20 years of service for males and 15 years of service for females, or age 50 with at least 25 years of service for males and 20 years of service for females.

Security forces, laboratories, marines, and miners can retire at age of 50 with 20 years of service.

On the other hand, for private sector, SSL guarantees old-age benefits to contributors after the age of 60 and at least 180 instalments of monthly contributions. While, the early retirement is allowed at the age of 55 and at least 300 instalments of monthly contributions for males and 240 for females; besides, the employee should advise the social security institution and his employer at least 3 months prior to his resignation. While, those working in risky professions are eligible for old age pension after the age of 50 years and have at least 240 instalments of monthly contributions. Further, the handicapped employees are eligible for old age retirement after 10 years of service regardless their age.

Amount of Benefits

For all public schemes, the pension received upon retirement depends on the average salary of the last three years multiplied by the replacement rate, which is determined by the years of service and an accrual rate as specified in the laws for each scheme.

For “Scheme I” and “Scheme III”, the accrual rate is 2.5 percent per year and the maximum replacement rate is 70 percent of the average salary of the last three years. The deduction for early retirement depends on the age and rank for security forces and lasts until the age of 60 as specified in the law. While for “scheme IV”, the accrual rate is 2.67 percent per year and the maximum replacement rate is 75 percent.

However for “Scheme II”, there are two kinds of systems. The first is the DB system, in which the accrual rate is 2 percent per year. The early retirement imposes 5 percent reduction until reaching the age of 60, given that the early retirement is allowed from the age of 55 with at least 15 years of service. On the other hand, the second component of “Scheme II” is DC system, in which the benefits depend on the accumulated amount of contributions in a private account of the contributor with the realized interest. The benefits of DC system may be paid as a lump sum, life annuity, or scheduled payments, depending on the choice of the retiree.

For all schemes, the retirees receive pension supplements of personal allowance of 300 NIS (Equals \$80 USD) per month, dependent’s allowance of 60 NIS for wife, 20 NIS per

child, and allowance of living standards, which is periodically adjusted by a government decree upon CPI.

If the contributors are not eligible to pension at age 60, beneficiaries of “Scheme I” and “Scheme III” would receive a retirement grant as lump sum payment that is equal to 15 percent of the last salary for each service year or nothing if the period of service is less than 3 years. While the beneficiaries of “Scheme II” would receive his contributions back if the period of service is less than 3 years; otherwise, the contributions of the employer at DC component is added with the interest rate. Further, public servant employees receive additional basic pension of 700 NIS (Equals \$190 USD). For “Scheme IV”, the ineligible retirees receive a grant equal to a monthly salary for each service year, and if the contributions were not paid for the service years, the grant would equal 50 percent of monthly salary for each service year.

The reduction in pensions for early retirement may be canceled for public servants in case the termination is upon a decision of the Council of Ministers.

According to SSL of 2016, the accrual rate is 2 percent per year with no limit for the replacement rate of the average salary. The calculated salary is the valorized average monthly salary of the last three years for the employees, the last 6 years for self-employed and 10 years for employers. The pensionable salary are also subject to the maximum limit that equals to 10 times the minimum wages. However, the early retirement cases are subject to a 6 percent deduction for each year under the age of 60, imposed on the pension along life. The SSL guarantees a minimum pension at 75 percent of the minimum wage or of the value of individual poverty line, whichever is higher.

Those who are not eligible for pension, has the lump-sum payments that are equal to the valorized contributions plus the interest rate as determined by the Palestinian Monetary Authority for long-term deposits at the retirement time.

3.3.4- Disability Benefits

Eligibility Conditions

In all public pension schemes, the benefits of disability could be eligible before the age of 60, if the contributor has total disability approved by the medical committee. However, in “Scheme IV” the disabled contributor needs 10 years of service.

However, SSL has two types of disability insurance: natural disability insurance and that caused by work injuries, given that each has a separated fund: the old age fund and work injuries fund, respectively.

The first is financed by the old age fund that guarantees a pension for natural disability of both cases: fully and partially disabled employees, upon the approval of the medical reference. The natural disability is guaranteed for the insured contributors regardless their period of contributions. While, those who are not insured has to have at least 60 instalments of monthly contributions to be eligible. The disability caused by injury of work is eligible upon a medical report of the committee.

Amount of Benefits

In phasing-out schemes, the monthly pension is calculated as old-age pension, but with a minimum replacement rate of 40 percent and a maximum replacement rate of 70 percent; while in “Scheme IV”, the maximum replacement rate is 75 percent. Further, in “Scheme IV”, the disabled contributors need at least 10 service years to be eligible for pension; otherwise, they would receive a grant equal to monthly salary for each service year, or a grant of 50 percent of the monthly salary for each service year, in case the contributions are not paid for the service years. In “Scheme II”, the DB system grants a pension calculated as 2 percent accrual rate multiplied by the service years plus half of the period from disability to the of retirement age of 60. While, the DC system grants the accumulated amount of contributions as lump-sum, life annuity, or scheduled payments.

Moreover, the disabled contributors are granted a lump-sum payment insurance as a percentage of the annual salary upon the last salary received and determined upon a schedule in the law. Contributors in “Scheme I” and “Scheme III” would be granted additional 50 percent of insurance payment, if the disability were caused during or because of the work.

For SSL of 2016, the pension of fully disabled beneficiaries is calculated at the same method as that of old age for the actual contribution period including the paid contribution at the period from the disability age until the age of 60. On the other hand, the partially disabled beneficiaries has a percentage of the fully disabled pension, depending on the percentage of disability. The pension of fully disabled beneficiaries should not be less than

40% of the average salary or 75% of the minimum wage or individual poverty line, whichever is higher. The naturally disabled beneficiaries, who are not eligible for pension, receive a lump-sum payment at the same way of old age.

The second type of disability insurance that is caused by work injuries, guarantees medical care, per deem expenses due to work injury for temporarily disabled beneficiaries at 75% of the last salary, and pensions for those who have permanent full or partial disability.

The pension guaranteed for permanent fully disabled beneficiaries is at 80% of the average salary; while, those who have permanent partial disability are guaranteed a percentage of the fully disabled pension. Besides, for those who have partial disability estimated at less than 20 percent are guaranteed a lump-sum payment only. Moreover, it is possible for retirees to combine both the pension from old age and work injuries funds, without exceeding the twice of the minimum wage; otherwise, the higher is paid.

3.3.5- Survivors Benefits

Eligibility Conditions

For beneficiaries of public schemes, the eligible survivors of the active contributors or beneficiaries have the right of pension as defined in the law; while in “Scheme IV”, the active contributors need at least 10 years of service at death to give their survivors the right of pension. Further, the survivors of beneficiaries, who were receiving a basic salary, are not eligible to a pension.

In all schemes, the eligible survivors are the same including: widow or widows of the contributor, male children and brothers younger than twenty-one (21) years old supported by the contributor prior to his death, male children and brothers until the age of twenty-six (26) years old if pursuing their higher education and supported by the contributor prior to his death; male children and brothers supported by the contributor prior to death and who are unable to earn a living by virtue of physical reasons; unmarried, divorced or widowed female daughters, and sisters; Parents of the contributor; and the husband of the female contributor, who was at the time of her death unable to earn a living in physical terms or unable to support himself.

For SSL, the survivors’ benefits are eligible for two types of insurance; the first is natural death financed from the old age fund, while the second is due to the work accidents,

financed from the work injuries fund. Similar to the disability insurance the funds are separated and the beneficiary can combine benefits from both. Further, the calculation of pensions for survivors is the same as that of disability in SSL, but distributed to the survivors according to the law.

The survivors scale is the same as in the public pension schemes. Given that the eligibility for survivors to the natural death insurance is that the beneficiary had been insured for at least 12 instalments of monthly contributions, or 60 instalments for uninsured contributors. Besides, the survivors of the retirees or of those, who were eligible for a pension before death. Unlike the previous pension schemes, SSL equals the widowers with widows in eligibility and rights. The eligibility of the survivors for the pension ends by having equal or higher income from a regular job; while for those with income less than the pension, the difference is paid. Further, the eligible daughters, widows, and sisters lose their eligibility to the pension once they marry.

Amount of Benefits

The pensions of survivors are calculated in the same way as of the disability; however, the ratios of the survivors are determined upon a schedule in the law and the total ratios should not exceed the 100 percent of the pension. The pension to the widows and unmarried, divorced or widowed daughters and sisters ceases upon marriage or work. Moreover, the lump-sum benefits of insurance and DC component of “Scheme II” are distributed upon the inheritance rules.

For SSL, the pension of the survivors due to natural death insurance is calculated at the same way as old age, then it is distributed on the survivors in accordance with a survivors’ table in the law. The minimum pension of natural death insurance should not be less than 75% of the minimum wage or the value of individual poverty line, whichever is higher. For those who are ineligible for pension, a lump-sum payment is paid for the survivors. Further, funeral expenses are paid at the value of three times of the minimum wage. On the other side, the second type of death insurance that due to the work accident guarantees for the survivors a pension at 80% of the last salary distributed on the survivors in accordance with the table of survivors. The survivors can combine their rights from work injuries and old-age funds for any benefit, as well as the right from work injuries fund and a salary.

3.3.6- Main Challenges of the Pension System in Palestine

This section reviews the Palestinian Pension system to determine and highlight the main problems in the structure that need to be fixed, in the framework of the literature review and the related international standards of the objectives of the pension systems:

3.3.6.1- Limited Coverage of the Public Pension Systems in Palestine

The social security services in Palestine have been provided by public, international, charity organizations and NGOs. Further, the public pension system in Palestine had been limited to the coverage of only the public sector employees, implementing different laws through different institutions; however, by the 2005 reform PPA has been the responsible entity of implementing all public pension schemes.

By the end of 2015 and upon the data of PPA, the total number of contributors was 159,202, which forms about 12.2 percent of the total labor force³⁷ and only 5.6 percent of the total working age population³⁸ of the Palestinian population. It was also noticed that the females form only 24.7 percent of the total contributors to the public pension system, which would be much less in the private sector.

Table 22: Number of Contributors of Current Public Pension Schemes by Gender as in 2015

Gender	Scheme I Law No. 8 of 1964 for Civil Employees in Gaza Strip	Scheme II Public Pension Law No. 7 of 2005	Scheme III Law No. 16 of 2004 for Security Forces	Scheme IV Law No. 34 of 1959 for Civil Employees in West Bank	Total
Females	1,265	36,853	41	1,170	39,329
Males	4,097	112,144	902	2,730	119,873
Total	5,362	148,997	943	3,900	159,202

Source: The author by data of PPA.

³⁷ **The Labor Force** is defined simply as “the people who are willing and able to work” (EconPort, website), “all persons who fulfil the requirements for inclusion among the employed or the unemployed during a specified brief reference period” (OECD, Website), and defined by Palestinian Central Bureau of Statistics (PCBS) as “The economically active population (Labor Force) consists of all persons 15 years and over who are either employed or unemployed as defined above at the time of survey” (PCBS- LFS, 2014).

³⁸ **Working age population** is defined as “persons aged 15 years and older” (ILO, Website), and defined by PSBC in the Palestine as “All persons in the West Bank and Gaza Strip aged 15 years and over” (PCBS- LFS, 2014).

The number of contributors in scheme II has been recently increasing slowly due to the very tight austerity measures in hiring new employees to the public sector, while new contributors from non-governmental organizations have been extending very slowly as joining new institutions to the public pension law has been suspended after the publication of SSL in 2016.

The progress in extending the coverage to the non-governmental sector was very modest due to some caveats related to the financial unsustainability of the new systems, inappropriate of some provisions to the private sector regulations, and instable economic and political situation. By the end of 2015, the total number of contributors from non-governmental institutions in scheme II has reached to only 7,179 contributors from about 70 institutions (PPA, 2015).

The other public schemes are phasing-out schemes that would not have any active contributor by 2021. Moreover, the government is expected to terminate the service of a high ratio of the public sector employees in the next two or three years as part of its strategy to reduce costs and resolve the political conflict, which would accelerate the phasing-out process of these schemes.

Compared to the labor force population, the coverage level is very low, which would imply increasing the costs, inequity in distributing the benefits, and inefficiency of the system. Given the low participation rate of females in labor force, which is only about 19.5 percent compared to 71.5 for males, the number of males having pension coverage is higher than females (PCBS, 2015). Thus, the pension coverage rate among the total female working age population is very low at only 2.8 percent, compared to 8.35 percent among the male working age population. However, the pension coverage rate among female labor force is higher that approached 16.09 percent compared to 11.35 among male labor force as in 2015. The reason of this higher coverage rate among working females can be interpreted in that the females work more in formal sector. However, the overall picture approved a violation case to the international standards of providing protection equally, which requires urgent actions towards extending coverage over the population.

The following tables specify in details the public pension system coverage status of population, working age population and labor force by gender as in 2015.

Table 23: The Number and Percentage Distribution of Total Population by Public Pension Coverage Status and Gender, in Palestine at December 2015

Gender	Total Population Public Pension Coverage Status					
	Covered		Uncovered		Total	
	Number	%	Number	%	Number	%
Total (100%)	205,185³⁹	4.32	4,544,301	95.68	4,749,486	100
Males (71.9%)	147,595	6.12	2,265,805	93.88	2,413,400	100
Females (28.1%)	57,590	2.47	2,278,496	97.53	2,336,086	100

Source: The author by Data of PPA and PCBS.

Table 24: The Number and Percentage Distribution of Persons (Aged 15 Years and Over) by Public Pension Coverage Status and Gender, in Palestine at December 2015

Gender	Total Working Age Population Public Pension Coverage Status					
	Covered		Uncovered		Total	
	Number	%	Number	%	Number	%
Total (100%)	159,202	5.61	2,680,041	94.39	2,839,243	100
Males (75.3%)	119,873	8.35	1,315,858	91.65	1,435,731	100
Females (24.7%)	39,329	2.80	1,363,724	97.20	1,403,053	100

Source: The author by Data of PPA and PCBS.

Table 25: The Number and Percentage Distribution of Labor Force Participants (Aged 15 Years and Over) by Public Pension Coverage Status and Gender, in Palestine at December 2015

Gender	Labor Force Public Pension Coverage Status					
	Covered		Uncovered		Total	
	Number	%	Number	%	Number	%
Total (100%)	159,202	12.24	1,141,171	87.75	1,300,373	100
Males (75.3%)	119,873	11.35	936,030	88.65	1,055,903	100
Females (24.7%)	39,329	16.09	205,141	83.91	244,470	100

Source: The author by Data of PPA and PCBS.

On the other hand, the number of beneficiaries of public pension schemes in Palestine was 45,983 including 23,370 old-age pensioners, 993 disabled and 21,620 survivors at the end of 2015. Thus, about half of the beneficiaries are old age and 47 percent are survivors. The number and percentage of old-age beneficiaries are the highest in “scheme IV” at 67.52 percent, which is natural since it is the earliest system and covered the West Bank region, where the population is more with higher life expectancy. While, the number and percentage of survivors are the highest in “scheme I” as it covers Gaza Strip population that have lower life expectancy rate. Most of the beneficiaries of “scheme II” are also survivors since the members of this scheme are not supposed to be retired yet; while, the

³⁹ The covered persons includes those in the labor force and the retirees.

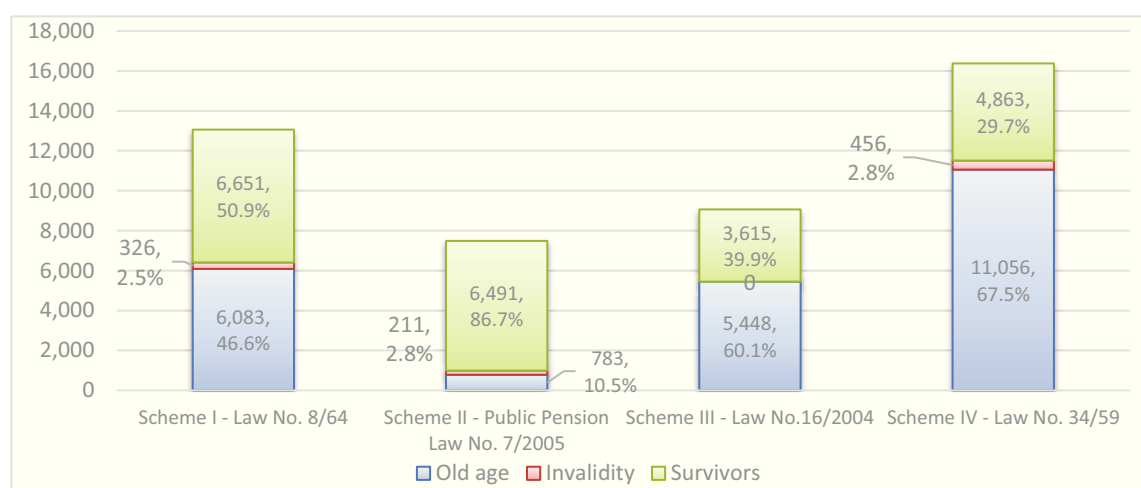
high number of deaths in the scheme may refer to the conflict and political instability in Palestine.

Table 26: The Number and Percentage of Beneficiaries of Current Public Pension Schemes by Type of Benefit at the End of 2015

Beneficiaries	Scheme I Law No. 8/64		Scheme II Public Pension Law No. 7/2005		Scheme III Law No. 16/2004		Scheme IV Law No. 34/59		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Old Age	6,083	46.57	783	10.46	5,448	60.11	11,056	67.52	23,370	50.8
Invalidity	326	2.50	211	2.82	0	0	456	2.78	993	2.2
Survivors	6,651	50.93	6,491	86.72	3,615	39.89	4,863	29.70	21,620	47.0
Total	13,060	100	7,485	100	9,063	100	16,375	100	45,983	100

Source: The author by Data of PPA.

Figure 65: The Number and Percentage of Beneficiaries of Current Public Pension Schemes by type of Benefit as in 2015



Source: The author by Data of PPA.

The high percentage of survivors gives indication to potential risks of the financial balance of the system. The eligibility of large scale of survivors has to be reviewed to reduce the costs of survivors. Some of the proposed policies could be to reduce the scale of survivors and tighter eligibility conditions, imposing some kind of contributions on the beneficiaries with eligible survivors, and setting limits to the income of the survivors to reduce the combined incomes or benefits.

Moreover, the old-age pensioners form 11.5% of the total old age population aged 60 years old and over in 2015 compared to 11.4% in 2011 (PPA Data, 2015), given that the

population aged 60 years and over is only 4.51% of the total population that is estimated at about 211 thousand in 2015 compared to 4.38%, which is estimated at about 177 thousand persons in 2011 (PCBS, 2015) & (UN Data, 2015).

By the publication of the new SSL of 2016, there is a plan to establish the social security institution to start applying the SSL through two years as determined in the law. Extending coverage is expected to be gradually and mandatory to include all categories of the society working in formal labor as well as the voluntary contribution for informal labor and non-working persons. Even there are many obstacles to achieve these steps, there is strong will and efforts of the government to provide a protection mechanism for Palestinians.

3.3.6.2- Unsustainability and Financial Deficit

The World Bank report on Palestinian pension system in 2010 indicates that the current pension schemes with limited coverage on public sector servants⁴⁰ has high expenditures compared to the Middle East and North Africa (MENA) region. The pension expenditures accounted for about 3.96% of the GDP in 2015, while it was 3.6% on average of the MENA region countries. The pension expenditures reached the peak in 2011, where it counted 5.87 of the GDP.

Table 27: The GDP, Annual pension Expenditures and the Ratio of Pension Expenditures to GDP by Year in the Period from (2005-2015) (in Million USD Dollar⁴¹).

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GDP	4,559.5	4,322.3	4,554.1	4,878.3	5,241.3	5,728	6,421.4	6,797.3	7,477	7,463.4	7,724.6
Pension expend.	101.9	128.7	150.32	200.98	230.73	311.44	377.54	384.15	322.3	315.3	295.79
The ratio to GDP	2.23%	2.98%	3.43%	4.12%	4.26%	5.44%	5.87%	5.65%	4.31%	4.12%	3.96%

Source: The author by Data of PPA and PCBS.

This sharp increase in the last decade refers mainly to the increase in the number of retirees compared to beneficiaries, besides the increases that occur on wages as the pensions are

⁴⁰ Up to 2011, the pension system coverage was limited to the public sector; however, extending coverage to include non-governmental schemes was very slow and limited to some universities and municipalities on voluntary basis.

⁴¹ The Dollar equals to four New Israeli Shekels.

indexed to the wages. Various countries with similar percentages of elderly have higher coverage rates and yet expenditures are below 4% of GDP (World Bank, 2010).

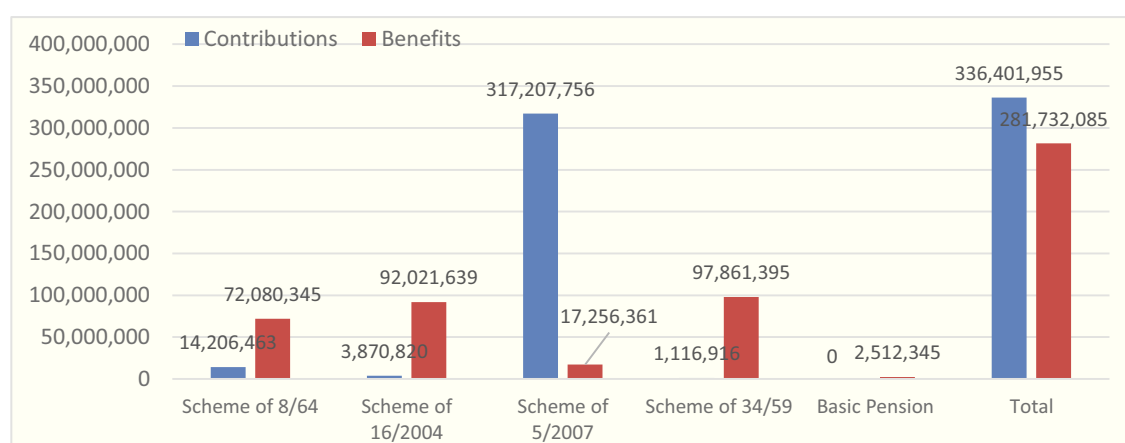
The total pension expenditures is 3.96% of the GDP as in 2015, given that the ratio of pension expenditures has been increasing to be doubled in five years. In addition, the data of PPA as in 2015 indicate that the expenditures of the pension systems form 83.75 percent of the total contributions. Given that 3 schemes are phasing-out in 2021, where there will be no contributions. The future pension scheme is that of law no.5/2007, in which the benefits form only 5.44 percent of the contributions. Further, the expenditures of scheme 34/59, military schemes and basic pension scheme are paid from the public budget.

Table 28: The Annual Pension Expenditures Compared to Contributions by Scheme as in 2015 (in USD Dollar).

Kind of Transfer	Scheme I Law no. 8/64	Scheme III Law no. 16/2004	Scheme II Law no. 5/2007	Scheme IV Law no. 34/59	Basic pension ⁴²	Total
Contributions	14,206,463	3,870,820	317,207,756	1,116,916	-	336,401,955
Benefits ⁴³	72,080,345	92,021,639	17,256,361	97,861,395	2,512,345	281,732,085
%			5.44%		-	83.75%

Source: The author by Data of PPA.

Figure 66: The Annual Pension Expenditures Compared to Contributions by Scheme as in 2015 (in USD Dollar)



Source: The author by Data of PPA.

⁴² Basic pension is paid to civil public servants who were not eligible to receive a pension and have no source of income, so, there are no contributions for it.

⁴³ Expenses include pensions and lump-sum payments of the mentioned schemes, but do not include the pensions of government members and members of the Legislative Council and Governors.

Although the pension expenditures are still less than the contributions, they are expected to exceed the contributions in few years, particularly after 2021, as there are 3 phasing-out schemes and the contributors in the new scheme will start retiring increasingly as the elder contributors reach the retirement age. Furthermore, the contributions are not transferred from the MoF regularly, except some payments and most of the contributions are accumulated as arrears without investment, which reduces the chance to invest the contributions and increase the income of the pension fund. According to the annual report of 2015 of PPA, the estimated arrears accrued to the pension funds have reached about 1.685 billion US Dollar by 2015, (PPA, 2016).

Thus, the system in Palestine shares the same problem of the financial sustainability as in most of developing and developed countries; however, I believe that the reasons are different from those in developed countries. The main challenge of the developed countries' pension systems is increasing old age dependency ratio along with the ageing population driven by the noticed progress in life expectancy, low fertility, and birth rates. However, the case in Palestine is different. Given that the demographic factor is still advantageous even there is a change towards less fertility rate and increasing life expectancy; the low economic growth and high unemployment are the main challenges to have the fiscal balance. Further, the data available on public pension system in Palestine is particular to the public sector, since the coverage has been limited to the public sector employees only. This means that the balance of the system is more related to the hiring and terminating policy of the public sector, than the demographic changes. Further, considering the higher income level in the public sector compared to the private sector, we can interpret the very high pension expenses compared to the GDP.

In this regard, the World Bank projection in 2010 using PROST program, depending only on the data of public sector employees, expected the pension system to have a deficit by 2021, given that the number of public employees fluctuates upon the hiring and unemployment policies of the government rather than the national unemployment rate, demographic changes, or labor market. Further, the salaries in public sector have one upward trend through the working career, while the salaries in the private sector fluctuate much more in both directions. Thus, the private sector needs more privacy in calculating the benefits in order to guarantee the sustainability and protect the workers as well.

Concluding that extending the period of the average salary to calculate the pension may be one of the most important examples that need reform to fit more to the private sector⁴⁴.

However, the expected trend of pension expenditures is to rise highly, implying that the fiscal burden of the pension system will increase as the population is aging. This will have a significant negative effect on the PA's fiscal position, and on its ability to fund capital development projects; in particular, given the absence of investment incentives and variable foreign donor assistance.

In order to achieve the fiscal balance of the pension system, evaluation assessment is essential to adjust the parameters upon the international standards, affordability and the economic and social perspectives. Thus, the expected reform should focus on the generosity of the system taking into consideration the inadequacy of income and the demographic changes. At the same time, the system should be affordable by all sectors, which suffer from economic stagnancy and variable performance. Given that, the increase in contributions or taxes will encourage the informal sector, which is difficult to control due to the status of weak state of law in Palestine.

3.3.6.3- Inadequacy

Since the establishment of the Palestinian Authority (PA), the poverty rate ranged from 31.2% to 20.3% in the best cases and the average level through the last decade was about 26.9%. On the other hand, the unemployment rate was 25.9% by 2015. However, it was noticed that the gap of living standards has been widening between West Bank and Gaza Strip since 2002; whereas, it has been worsening more in Gaza strip⁴⁵.

As in 2015, the Palestinian population structure has a pyramid shape with a flat base, whereas the median age was 19.3. Furthermore, the old age dependency ratio of (60+) and (65+) were (10.76) and (5.21), respectively. Thus, the current demographic figures encourage launching a new pension system in Palestine; however, the economic figures

⁴⁴ The World Bank 2010 PROST analysis has some critical misleading assumptions that may affect the results. One of them is the lump-sum payments entry, which was expressed as just estimated numbers added as percentage of the pensions costs due to unavailable data at that time, besides the used program version did not deal the lump-sums. Further, the PROST analysis should consider all the parameters and assumptions in both public and private sectors to reflect the reality more.

⁴⁵ More details of the economic figures are in Chapter 1.

have negative effects on the social security funds, besides the fact that the demographic structure is very sensitive to political situation that would cause migration possibility in both directions.

The given figures from the Palestinian society regarding high poverty rate, unemployment, and changing demographic structure impose the necessity to have a pension reform that meets the needs of the society, in order to provide protection from poverty due to the risks of unemployment and variable economic situation.

Even the system of 2005 reform is criticized as being generous; the system did not protect the beneficiaries from being under the poverty line. The previous pension schemes has guaranteed a minimum replacement rate of 40 percent of the last salary, while the new system leaves the beneficiaries to face the risk of low income as there is no minimum replacement rate or income, particularly for the disability and death cases. Another risk of low income is related to the survivors, as the scale of benefits of survivors is large to fit the extended family type, the pension is distributed on more persons which results in less ratios and inadequate income⁴⁶.

Table 29: Average Wages of Participants by Scheme and Gender as at December 2015

Gender	Scheme I - 8/64	Scheme II - Civil	Scheme II - Security	Scheme III - 16/2004	Scheme of 34/59	Non-Gov. Schemes	Total
Males	4,067	3,319	3,253	5,828	4,921	3,401	3,331
Female	3,561	2,164	3,321	4,108	4,337	3,146	3,276
All	3,938	3,250	3,255	5,753	4,660	3,370	3,184

Source: The author by PPA data.

The average wages of scheme III is the highest compared to other schemes, which is related to senior security forces since it is phasing-out scheme for old participants. In contrary, the average wages of scheme II, which is related to young participants from civil and security public servants and the non-governmental institutions, are lower than other schemes of senior employees. Further, the wages of female civil servant are the lowest that is under the poverty line⁴⁷, which indicate for high vulnerability to poverty for most of the young

⁴⁶ More details regarding the wages and pensions compared to poverty line are in chapter 5.

⁴⁷ Given that the poverty line in Palestine is 2,350 NIS, which is equivalent to 618.4 US Dollar. (1 US Dollar = 3.8 NIS)

employees after retirement, particularly the females as they already have wages under poverty line in their career.

On the other hand, the notice of the average pensions of the beneficiaries in most schemes is that they are close to the poverty line, which means the retirees are exposed to poverty.

Table 30: Average and Median Pensions by Scheme and Type of Benefit as at December 2015

Type of Benefit	Scheme I - 8/64		Scheme II - Civil		Scheme II - Security		Scheme III - 16/2004		Non-Gov. Schemes		Total Schemes		
	M	F	M	F	M	F	M	F	M	F	T. M.	T. F.	Total
Old Age													
Average	2,509	2,416	2,503	2,568	3,735	2,961	5,155	3,723	2,190	2,021	3,841	2,575	3,712
Median	2,258	2,574	2,672	2,568	3,652	2,778	4,676	3,388	1,969	2,070			3,327
Invalidity													
Average	1,782	1,626	1,691	1,631	1,958	-	-	-	1,431	0	1,712	1,628	1,685
Median	1,575	1,494	1,584	1,626	1,741	-	-	-	1,289	0			1,542
Survivors													
Average	332	701	195	293	292	439	589	1,343	189	504	331	733	618
Median	235	584	156	202	224	285	436	1,005	146	431			429

Source: The author by PPA data.

Note: Scheme IV was excluded due to the lack of updated data as in 2015 and due to lack of pension fund at all for this scheme.

The above table summarizes the data of average and median pensions by type of benefit and scheme. The average old age pensions is 3,712 NIS (USD 976), in which the average pensions of public servants is 3,792 NIS (USD 998) and average pensions of the Non-governmental retirees is 2,188 NIS (USD 576). Also, it is noticed that the highest pensions is for retirees from security forces compared to civil retirees. While, the non-governmental retirees have the least pensions, which may due to the short period of contribution as they have recently joined the public pension system. Further, the females have again less pension compared to males, which is obviously related to the less wages in their careers and may due to the shorter periods of service in average compared to males.

Given that, the poverty line is at 2,350 NIS (USD 618), the disabled and survivors are almost under the poverty line. In addition, the average pensions are higher than the median pensions in all schemes, which means there is a gap in pensions between beneficiaries, implying that more redistribution policy of income is needed.

Another large gap in pensions is between old age pensioners from one side and disabled and survivors from the other side, given that the average pension of survivors is only 618 NIS (USD 163). Furthermore, the pensions are expected to be less by implementing the public pension law, where there is no minimum replacement rate, and the contributions

were split into two components DB and DC schemes. The protection of beneficiaries is one of the main aims of any pension system and should be guaranteed by a minimum pension or universal scheme.

Concerning the private sector, the average income of public sector is higher than that of private sector. Thus, the minimum wage was set at 1,450 NIS (USD 382) per month for the first time in Palestine since January 2013, while the average monthly wage of private sector is 1,953 NIS (USD 514) in West Bank compared to 1,434 NIS (USD 377) in Gaza Strip. Thus, if we consider the average working years is 30 years and accrual rate is 2 percent per annum, then, the expected average pension would be 1,172 NIS (USD 308) in West Bank and 860 NIS (USD 226) in Gaza Strip, which is under poverty line and would have deeper poverty.

3.3.6.4- Inequity

One of the main objectives of the last reform was to unify the existed fragment pension systems, which would achieve the equity in calculating the rights of pension. This aim has been achieved for certain degree on the public sector employees; however, the private sector employees would have less income at retirement as the DC scheme for them is voluntary. Further, the retired public sector employees, who are not eligible for pensions, have the right to receive a basic salary. While, the beneficiaries from other scheme cannot benefit from the basic salary under the same conditions.

Further, there is no mechanism to mandate the employer to cover his employees; therefore, the employees in the private sector face the risk of poverty and low income, waiting the mercy of the employer to cover them. In this regard, some employers agreed with their employees, burdening them higher contribution rates than mentioned in the law as condition to apply for the PPA to join the pension system, even the PPA registers the contributions upon the law.

Fortunately, the Palestinian society has homogenous structure in regard of ethnicity, except some political conflict. Moreover, the inequality of income is on average of the region, which is high and have increasing trend, as the Gini gap was increased from 38 percent in 2009 to 41 percent in 2010. Further, the income per capita data indicates that there is a gap in income mainly between Gaza Strip and West Bank and among the cities.

According to statistical data of PCBS, it has been noticed that there are differences in economic and demographic figures between Gaza Strip and West Bank that need to be in consideration. Gaza Strip has one of the highest poverty and unemployment rates in the world, (39% of people live below the poverty line⁴⁸), in addition to the humanitarian tragedies of health and social cases, while West Bank witnessed more variable economic performance. Therefore, there is a need for more measures of a redistribution of income policy, and unify the retirement rights for all categories of the Palestinian society to enhance equality.

3.3.6.5- Integrity

The Public Pension Law has many provisions that determine in detail the administration and duties of the agency and the related parties. It confirms the independence of the Agency, in which the board of directors (BoD) represents the highest responsible and administrative body that has the right to supervise and direct all activities of the Agency. At the same time, the custodian role is important for transparency and accountability principles. On the other hand, the external investment manager (s) assists the administration to invest the accumulated funds in the most professional way and avoids suspicious abuse. Moreover, PPA has to publish a number of financial reports as mentioned in the law, to the public, the council of ministers and legislative council, to which it is responsible about the performance of the funds.

However, the available political instability has deactivated some of the governance measures, particularly; the inspection of legislative council and the public reports of investment performance of individual accounts. Further, the weak financial markets also restricted the competition, which negatively affected the custodian and investment manager performance.

Some critics were done to the BoD's formation, which does not represent the active workers or their unions to be a channel for communication and response better to the needs of employees. Given the fact that there is only one representative of the retirees, four other

⁴⁸ Palestinian Central Bureau of Statistics (PCBS), report 11 June 2012.

representatives of the governmental institutions as the main employer, and three economists and specialists in the financial issues.

The Palestinian Pension Agency (PPA) needed some capacity building to be able to deal with such new multi-pillar system, including; running the DC component with sophisticated reporting system, assigning external custodian and investment managers for the first time. All these issues need very developed programs and high capacity servers to record all the contributions transferred to the individual accounts. Nowadays, PPA has made great strides in achieving these objectives, however, the nature of these challenges is changing depending on many other variables.

3.4- Social Assistance Programs

This section reviews the literature review of social assistance, which covers the main challenges of the social assistance in Palestine and its role to reduce the poverty. In addition, it reviews the value, financing resources and the distribution policy of the social assistance in Palestine. While doing so, we try to relate the foreign aid to the growth and social assistance programs, and its effect to reduce the poverty.

Following the Oslo peace agreement in 1993, the donor states have undertaken to offer the financial and technical assistance to the Palestinian Authority to the capacity building of institutions and rehabilitation of the infrastructure; in addition to the finance of social and economic projects. However, the payments were about half of the committed amounts and almost were not on time. Moreover, some donors preferred to deal directly with NGOs rather than the PA due to political reasons, applying their own policies and priority of distribution.

This situation caused improper allocation of the resources, focusing on the emergency cases of humanitarian assistance programs and the salaries of public sector employees, rather than productive projects according to a development plan.

Palestinian economy has become heavily reliant on the international aid to the degree that it has become a defining feature of the Palestinian economy. However, it was noticed that the aids are doing little to stave off the rapid deterioration of the Palestinian economy, where the failure of the economy refers mainly to the status of being under occupation and the lack of a strategic development plan. Reminding that many international reports, particularly the World Bank, refer the lack of the Palestinian economic growth and development to the Israeli occupation through the imposed restrictions on movement and access (World Bank, 2014).

The concept of the Social Assistance

The social assistance is part of the social security, and has many forms of applications regarding the social security system and social structure of society. The first social security form was introduced by Germany in 1880s as a statutory social insurance system (ILO Report VI, 2011). However, the term “social security” refers to the welfare policy of President Franklin Roosevelt in 1935 by introducing the “Social Security Act” Leliveld

(1991). In 1948, the social security was introduced internationally as a human right in Article 22 of the General Declaration of Human Rights of the United Nations. However, the definition was introduced in 1952 by the International Labor Organization (ILO) in Convention 102, as follows:

“The protection which society provides for its members, through a series of public measures, against the economic and social distress that otherwise would be caused by the stoppage or substantial reduction of earnings resulting from sickness, maternity, employment injury, unemployment, invalidity, old age and death; the provision of medical care; and the provision of subsidies for families with children.” (ILO, 1984:2-3)

However, Leliveld (1991) argued that this definition is too limited to analyze non-western social security system; where, Woodman (1988) considered this definition might draw the attention to state institutions of social security only, given the fact that in most developing countries only about 10 percent of the population is covered by social security provided by the state. Then, Leliveld (1991) argued that the ILO definition would ignore the other types of support available in the society and not provided by the public services. He could present the following definition:

“Social security is, firstly, the protection by society of individuals or social groups against a fall in their standards of living as result of temporary adversities and, secondly, the promotion by society of those standards of living of individuals or social groups which are below an acceptable minimum level”.

According to Von Benda-Neckmann (1988) social security in developing countries has different priorities and tools of social problem than developed countries, where it refers to the efforts of individuals, kin-groups, villages and state institutions to overcome these insecurities (Von Benda-Neckmann, 1988:10).

On the other hand, we have the (ILO) definition of social assistance as follows:

“Social security benefits that are conditional on the level of income of recipient, i.e. are means-tested or based on similar forms of targeting (e.g. proxy means test, geographical targeting), are generally called social assistance. They are generally a device to alleviate/reduce poverty. Benefits can be delivered in cash or in kind”.

Conditional social assistance schemes require beneficiaries (and/ or their relatives or families); in addition to other conditions, to participate in prescribed public programs (e.g.

specified health or educational programs). In recent years, schemes of this type have become known as conditional cash transfer (CCT) schemes. However, social assistance schemes are usually tax-financed and do not require a direct contribution from beneficiaries or their employers as a condition of entitlement to receive relevant benefits. (ILO Report VI, 2011: 9)

The social assistance in Palestine depends highly on the foreign aids, and one of the main characteristics of foreign aids in Palestine is volatility, which makes the economic performance and growth sustainability critical. Consequently, the poverty rate will increase instead of decreasing. The aid volatility has been a concern of many researchers and policy makers concerned with the growth of poor countries, (Chauvet and Guillaumon, 2007; Eifertand Gelb, 2005; IMF and World Bank, 2005). They spot the light on the problem of aid volatility effect on macroeconomic performance, which could cause instability instead of growth, and then be itself a factor of vulnerability.

Mariam J. Sherman, World Bank- country Director warned from this problem in Palestine *“This vulnerability is extremely relevant to understanding poverty in the West Bank and Gaza. Fluctuations in donor aid, employment – or both – can push many more Palestinians into poverty”*.

This fact necessitates a review of the policies of the PA and donors regarding the flow and utility of aids. On the other hand, according to the argument of (Chauvet and Guillaumon, 2004) in their paper stated that aid is more effective in countries that are more vulnerable to external shocks; the developing countries have higher opportunity to develop and achieve growth by aids, particularly in small populated countries, which could be applicable on Palestine.

3.4.1- Main Figures of Social Assistance

The following review of the social assistance in Palestine depending on the data of the 2006 survey regarding “the Impact of the Israeli Unilateral Measures on the Social, Economic, and Environmental Conditions of the Palestinian Households”, given that the sample of the survey constituted of 8,077 families distributed on all over Palestine.

Table 31: Percentage Distribution of Households by Received Assistance and Region during March-May 2006

Received assistance	Palestine	West Bank	Gaza Strip
Received Assistance	29.4	15.3	56.9
Not Received Assistance	70.6	84.7	43.1

Source: The PCBS, 2006.

According to the results of the survey, only 29.4 percent of the population received assistance in the period of the survey of 3 Months, where Gaza Strip had more ratio of this assistance to reach 56.9 percent compared to only 15.3 percent in West Bank. That is logical since the poverty rate in Gaza Strip is much higher than in West Bank, and the poor people in Gaza are poorer than the poor people in West Bank⁴⁹.

Table 32: Percentage Distribution of Assistance That the Households Received by Assistance Type and Region during March-May 2006

Assistance Type	Palestine	West Bank	Gaza Strip
Food	77.9	62.4	86.7
Money	17.7	31.1	10.2
Jobs	2.5	2.8	2.3
Other	1.9	3.7	0.8
Total	100	100	100

Source: The PCBS, 2006.

Most of the assistance was provided in the form of food to contribute by 77.9 percent of the total assistance in Palestine, followed by the cash payments at 17.7 percent, while creation of jobs had only 2.5 percent. This allocation of assistance does not contribute to economic growth and reduces consumption of the local market, while the poor people still unable to fulfill their other needs. Even the cash assistance is very low as we see in the following table, we have 47.8 percent received less than 200 NIS (about \$50 US), and only 27.7 percent received more than (300) NIS, given that the Minimum wage in private sector is 1,450 NIS monthly.

⁴⁹ The Poverty rate in Palestine is (25.8%), (17.8%) in West Bank and (38.8%) in Gaza Strip.

Table 33: Percentage Distribution of Households, Who Received Assistance by Assistance Value in NIS and Region during March-May 2006

Assistance Value (in NIS) ⁵⁰	Palestine	West Bank	Gaza Strip
Less than 200	47.8	40.7	51.7
200-299	24.5	21.1	26.4
+300	27.7	38.2	21.9
Median Assistant Value	200	200	150

Source: The PCBS, 2006.

Table 34: Percentage Distribution of Households by First Priority Needs of the Households and Region, March-May 2006

First Priority Needs	Palestine	West Bank	Gaza
Food	44.7	46.7	40.8
Education	6.2	6.7	5.4
Jobs	13.0	18.8	17.3
Money	19.7	18.1	22.7
Medical Treatment	8.5	10.0	5.4
Offer a House	6.0	5.7	6.5
Other	1.9	2.0	1.9
Total	100	100	100

Source: The PCBS, 2006.

Table 35: Percentage Distribution of Households by Source of Human Aid (Frequency of Providing Assistance) and Region, March-May 2006

Source of Assistance	Palestine	West Bank	Gaza Strip
MoSA	14.4	11.1	16.2
Other PA Institutions	5.1	10.1	2.2
Political Parties	1.6	1.4	1.7
Charity (Zakat) Committees	1.1	2.1	0.6
International Institutions	9.1	19.2	3.4
UNRWA	45.6	17.1	61.7
Arab Countries	0.1	0.2	-
Charity Institutions	3.5	2.5	4.0
Relatives	14.2	25.7	7.7
Friends, Neighbors, Charitable People	2.1	2.2	2.0
Labor Unions	0.5	1.0	0.3
Local Reform Committee	0.3	0.9	-
Other	2.4	6.5	0.2
Total	100	100	100

Source: The PCBS, 2006.

It is important in the above table to notice that the relatives are the third significant source of assistance in Palestine, where it occurs informally, and this is one of the main characteristics of the Palestinian society, and this agrees with what was mentioned in the

⁵⁰ One US Dollar equals to about (3.9) The New Israeli Shekel (NIS).

literature review regarding the developing countries. UNRWA is the first provider of social assistance programs, followed by the MoSA, International Institutions and PA institutions, respectively. It is clear that most of the assistance depends on the foreign aids.

3.4.2- Why is Social Assistance Essential in Palestine?

Due to the fact that Palestine being under occupation for more than 65 years, where it lacks of a comprehensive social security system, social assistance played an essential role in supporting the needs of poor families. The Israeli occupation to Palestine in 1948 caused the displacement of more than 50 percent of the population. Consequently, most of the people lost their properties and their source of income, where most of the Palestinian population was working in agriculture and trade. The majority of population needed urgent needs, which were not possible to meet with local resources due to the mass displacement and deterioration of economic conditions. Upon the U.N. resolution, United Nations Relief and Works Agency (UNRWA) was created in 1949 to provide humanitarian relief to the Palestinian refugees and displaced persons through providing the basic services and food assistance and works programs, which became its responsibility for the refugees living in what is called refugee camps in Palestine and 3 other neighbor Arab countries. In the 1967, Israel occupied Palestine and Eastern Jerusalem. Then, the number of local charities increased and started to provide assistance to eliminate the human tragedy of the Palestinians, where these charities have many kinds of assistance beside financial one, including food, health and unemployment. Consequently, high rate of Palestinian society started to depend on social assistance as the main source of income, where it has become part of the economy in Palestine.

On the other hand, the most recent available social and economic figures still reflect the negative consequences of occupation. According to the household consumption survey in 2011, the poverty rate in Palestine was at 25.8 percent whereas; it was 38.8 percent in Gaza Strip and 17.8 percent in West Bank. Moreover, as in 2011 there was high unemployment rate in Palestine at 20.9 percent compared to 25.9 in 2015, whereas it was higher in Gaza Strip at 41 percent compared to 17.3 percent in West Bank. The unemployment was higher also among younger age groups, where the highest rate was for age group of (15-24) years

old at 40.7 percent, followed by 30.2 percent to the age group of (25-34), compared to only 12.1 for those over the age of 55 (PCBS, 2015)⁵¹.

The Impact of Social Assistance on Poverty in Palestine

No doubt that the social assistance has positive effect on poverty and the economy in general, but the problem is about the efficiency of using resources to reduce poverty and enhance economic growth, as well as fair distribution of the assistance.

Table 36: The Poverty Ratio among Individuals Before and After Social Assistance in Palestine as in 2010:

Region	Poverty		Percentage of Change	Poverty Severity		Percentage of Change
	Before Assistance	After Assistance		Before Assistance	After Assistance	
West Bank	20.5	18.3	10.7%	11.0	8.8	20.0%
Gaza Strip	48.2	38.0	21.2%	33.0	23.0	30.3%
Total (Palestine)	30.9	25.7	16.8%	19.2	14.1	26.6%

Source: (PCBS) poverty report, 2011.

The above table highlights the importance of social assistance provided in reducing the poverty rate. The social assistance programs reduced poverty rate and poverty severity by almost 16.8 percent and 26.56 percent, respectively. Where, it is reduced by 10.7 percent and 20 percent in West Bank compared to 21.2 percent and 30.30 percent in Gaza Strip, respectively. We notice that the impact of social assistance was greater on poverty severity than absolute poverty, and particularly in Gaza Strip, where the poverty is higher (PCBS, 2011). In the last decade, in spite of the increased social assistance programs, the poverty rate was increasing, which reflects the degree of deterioration of the economic conditions in Palestine and the small contribution of the assistance to the economic growth, due to mainly the allocation by sector and the aids volatility.

3.4.3- Institutions Providing Social Assistance in Palestine

Mainly three types of institutions in Palestine that provide the social assistance programs; the Governmental institutions led by the Ministry of Social Affairs MoSA, the

⁵¹ For more details regarding the Palestinian economic and demographic figures, review chapter 1 of this research.

international institutions led by UNRWA, and NGOs working in Palestine with some contribution of private sector.

3.4.3.1- The Governmental Institutions

The Ministry of Social Affairs (MoSA): It is the main provider of the social security programs in Palestine. Thus, it has a variety of programs that deal with the social problems. The financial assistance is one of the major programs launched by the MoSA, where it provides regularly financial assistance to about 57,000 poor families in West Bank; furthermore, it is working to merge the poor families in Gaza Strip to the program of MoSA.

Moreover, it plans to play an important role in the strategic planning and determining the priorities of the society in regard of social security. It is also an important source of information of the poor families and assistance distribution: thanks to the project of “National Poverty Register”, which will be essential to implement the strategic planning of the MoSA in order to have more regulatory role in the arrangement among other institutions.

Welfare Foundation Families of the Martyrs and the Wounded: It is concerned only with the families of martyrs and wounded Palestinians. The Israeli occupation is considered as the main reason for these cases, given that their families lack the ability to survive without their main household breadwinner. The duplication of income is not allowed according to their system, so it provides a supplement for those having income less than allocated by them. The Palestine Liberation Organization (PLO) established this institution in 1969, which depended on the assistance provided to PLO mainly from Arab countries; however, after the establishment of PA, it started to depend on the budget of PA. It provides a salary, health insurance and other educational assistance according to a special system. However, it has been facing problems in money transfers through the Israeli side, which also practice pressure on the donors to stop supporting such programs.

Ministry of Prisoners’ Affairs: It concerns and follows the affairs of Palestinian political prisoners in Israeli prisons and provides for them salaries and other expenses and compensations in accordance to a special law.

The problem of these last two kinds of assistance is the difficulty to assess the future number of cases, which are caused directly by occupation, and the benefits usually include large group of depended members of the family. In the case of the prisoners, the case could be more difficult, since those who have long years at prisons are considered as members of security forces and will receive a salary and right of retirement, and also could be enrolled in the public sector services after finishing their period of prison.

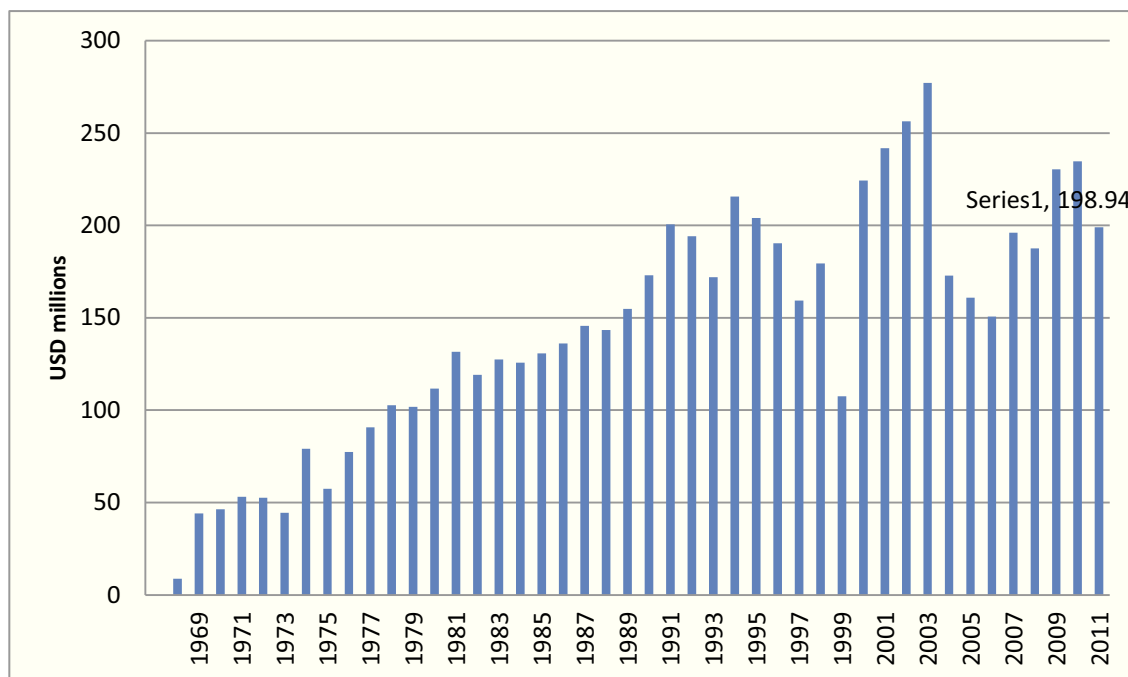
The Presidential Committee: It was established in 2009 to supervise and monitor all aids provided to the (PA), for political control; thus, it has no social purposes.

3.4.3.2- The International Institutions

United Nations Relief and Works Agency for Palestinian Refugees (UNRWA): It was created by the United Nations in December 1949, after the Israeli occupation to Palestine in 1948. It is the second important provider (after the PA) to social security services and job creator for Palestinians living in WB&G, Jordan, Syria and Lebanon. The services it provided over more than 60 years, were very diversified and essential for the survival and development of the Palestinian society including; primary and intermediary education, health care, relief and social services and emergency food and cash assistance, microfinance and job creation, recovery and reconstruction, gender equality and promoting the rights of the most vulnerable.

By 2011, UNRWA covered around (25,000 – 30,000) families out of about (85,000) poor families in extreme poverty, representing about 30 percent of the extreme poverty. However, it was noticed that in the last decade, the services were fallen back due to financial shortage of the donors, political situation and to the rapidly increasing number of refugees. By reviewing the value of assistance provided by UNRWA since 1968, we notice that they used to increase in regular manner to meet the naturally increasing needs. However, after the 1994, a sharp decrease and fluctuations in the value of the assistance, which reflects a case of unclear policy and quality of services provided.

Figure 67: The Foreign Aids to (UNRWA) from DAC Countries in Years 1968-2011



Source: OECD database.

The European Union: It is the main financier for the financial and technical aids of the PA, particularly the cash assistance program of poor families provided through MoSA. (Abd Elkarim) The European Union is considered as the main partner of PA that supports the capacity building of public institutions and social assistance programs. In mid-2009, the EU developed the database for the first time in Palestine of the Public Sector and the beneficiary of some assistance programs through the EU PEGASE system to transfer payments. The EU also provided some commercial privileges that would enhance the growth of the Palestinian economy; however, the Israeli restrictions are obstacle for implementation of such agreements.

Other International Institutions: There are number of international institutions that provide or contribute to social assistance programs in Palestine. The most important institutions are the World Bank (WB), Food & Agriculture Organization (FAO), World Food Program (WFP), UN institutions, and the International Development Agencies. Most of them contribute to the poor assistance programs through the MoSA and UNRWA. However, their programs are almost not sustainable.

3.4.3.3- Non-Governmental Organizations (NGOs) and Private Sector

The NGOs have played important role in the Palestinian society since the Israeli occupation. They were found to provide various services, in order to cover the needs of the society that are not provided or not sufficient by the public institutions. The development of these institutions are related to the needs of the Palestinian population after occupation in 1948, where about 50 percent were displaced to live in very crowded refugee camps in Palestine and neighbor Arab countries. Their role in the society continued even after the establishment of the Palestinian Authority (PA); moreover, their number has significantly increased in the last decade to be about 1,012 association as in 2011 (MoSA, 2013), whereas, there were only 305 in 2000 (MAS, 2008).

Their objectives are diverse in different areas: mostly in the social welfare, health, education and awareness programs besides capacity building through training programs. In a survey, which was done by MAS in 2007, it is found that 49 percent of all NGOs have objectives to provide social assistance. Moreover, 73 percent of NGOs providing social assistance offer food aid, 61 percent provide health-related services, 49 percent offer financial aids and 30 percent of organizations create and offer employment opportunities. It was also found that their charity services programs have decreased from 95 percent in 1999 to be 54 percent in 2007, to the account of the relief and health programs.

The activities of the NGOs are concentrated more on relief programs, which have the same attitude of the other governmental and International policies, but their programs are more specialized in food assistance and health care. This indicates the response of some NGOs to the urgent needs of society and reflects the policies of the donors.

Almost, two thirds of the NGOs were based in the West Bank compared to only about 36 percent in Gaza Strip, while about 55.3 percent were in urban areas, 30.6 percent in rural areas and 14.1 percent in refugee camps (MAS, 2008).

The distribution of NGOs locations is not fairly done regarding the poverty levels, where they are concentrated more in West Bank, while Gaza Strip has high poverty ratio. Even on the level of urbanization, we find them concentrated more in the urban areas and the least in refugee camps where the highest poverty rate.

One of the main problems of the NGOs in Palestine is that most of them are small and have limited scope of work. Only 6.4 percent of NGOs have a large number of beneficiaries,

while the small and medium organizations form about 46.9 percent and 46.7 percent, respectively. Thus, the high number of NGOs does not reflect the value of the total assistance, since only few number of them are active, whereas the others are not, which means that they need more regulation and arrangement between them particularly in the data of beneficiaries and proposed goals.

The other main problem of the NGOs is that they depend highly on the external aids, which make their activities and programs more volatile and uncertain. MoSA data shows that the self-independent revenues form only 20-25 percent, the local resources form 20-35 percent, the governmental support form 10.5 percent, and the international aids form 20-25 percent of the total revenues and the rest is Arab and Islamic Aids.

Although the self-funding revenues have risen from \$13 million in 1999 to more than \$41 million in 2006, their share in the total revenues has remained constant and the NGOs still depend highly on the external resources, due to the increase in the total expenses on programs to meet the increasing demands to assistance programs (MAS, 2008).

The Zakat Committees: It works under the supervision of the Ministry of Religious Affairs⁵², through 11 committees in West Bank and 18 in Gaza Strip, concerning with poor families and orphans. The estimated total value of the provided programs is over \$30 million yearly, which is considered important to reduce the severity of poverty and support poor families and orphans. The main problem of them is the highly dependent on external resources, while the local resources and their own projects formed only 10-15 percent, and the rest is from international resources, and their data is not integrated with MoSA, but the advantage is that they reach the needed and poor people more precisely.

Private Sector: The private sector shares to social assistance by providing support to some poor families or charity organizations. As these aids can be tax exempted, some large firms are encouraged to do that for the social reputation also. However, the role of private sector to the social security is still very small and ambiguous, which needs a review in order to have clear relation between social and economic policies to enhance the social and

⁵² The Zakat Committees locally elected persons, they work to collect the Zakat from people voluntary from local region and other regions locally and internationally, then, redistribute the Zakat to the poor from the same region or the nearest, while 20% are transferred to the Ministry of Religious Affairs. These Zakat Committees work separately than the Islamic Charities, which work to collect Zakat in the same concept, but they are independent completely from government, administered by its BoD. The concept of "Zakat Institutions" refers to both Zakat Committees and Islamic Charities.

economic development leading to accompanied improvement in income redistribution and poverty alleviation.

The private sector role to eliminate the poverty can be more indirect, through concentrating on the growth of the economy itself; then, the market mechanisms will increase the opportunities of work and production, and public income by tax.

In summary, the government needs more coordination and regulation with other partners to work together through integrated database, and with clear policy towards determined goals to reduce poverty. At the same time, the new policy should guarantee a reallocation to the resources to have sustainable financial flow to the production sector as well as other sectors. This sustainability of the cash flow could be guaranteed by establishing a social security fund to be invested and to work as injector in cases of financial shortage.

The following section is an analysis of the data of the poverty survey of 2003 by Palestinian Central Bureau of Statistics (PCBS) on the individuals and households, where the sample population was chosen to represent the Palestinian population in West Bank and Gaza Strip. The analysis focuses on explaining the relationship of receiving assistance in the last month of the survey of the households by socio-demographic characteristics of the heads of household with different scenarios of the characteristics of the sector of employment as well as the kind and source of aids. The analysis also selects the population who depends on wages and salaries of public and private sectors as the main source of income. Then, we explain the health insurance coverage according the socio-demographic characteristics.

3.4.4- Access to Social Assistance by Socio-economic Characteristics

3.4.4.1- Poverty Status

Since social assistance is almost related to poverty and aims to alleviate poverty as the most priority in developing societies, we prefer to start with the poverty status.

As Palestine has a high poverty rate, it is difficult to cover all needs and assist all poor people. Even the people who are considered over poverty line, still have many needs uncovered by their own resources due to the general low income and high prices, whereas, the poverty measurement is a relative issue in the society upon the income.

Among those under poverty line, even the assistance is provided to 72.2% of households, still there are 27.8% of poor households did not receive assistance. While, there are 32.65%

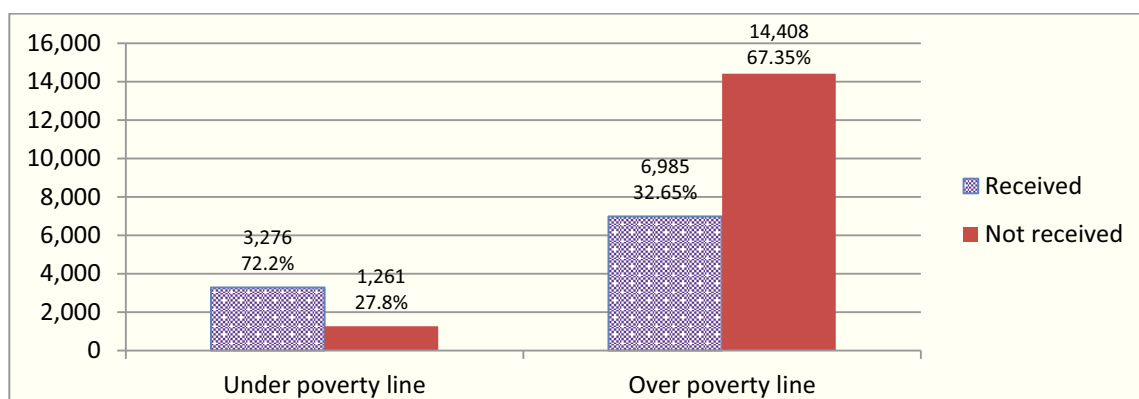
of the households, who are over poverty line, received assistance and 5.91% of them think that they are not in need for assistance.

Table 37: Receiving Assistance by Poverty Status of the Total Population of the Survey

Poverty Status	Received, in need	Received, not in need	Not-received, in need	Not-received, not in need	Not-received, do not know	Total
Under poverty line	3,223	53	1,052	209	0	16,535
(Row %)	(71.04%)	(1.17%)	(23.19%)	(4.61%)		(100%)
(Column %)	(36.04%)	(4.02%)	(12.44%)	(2.916%)		(63.77%)
Over poverty line	5,721	1,264	7,406	6,981	21	21,393
(Row %)	(26.74%)	(5.91%)	(34.62%)	(32.63%)	(0.10%)	(100%)
(Column %)	(63.96%)	(95.98%)	(87.56%)	(97.09%)	(100%)	(82.50%)
Total	8,944	1,317	8,458	7,190	21	25,930
(Row %)	(34.49%)	(5.08%)	(32.62%)	(27.73%)	(0.08%)	(100%)
(Column %)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)

The author by (PCBS) consumption and income survey, 2011

Figure 68: Receiving Assistance by Poverty Status of the Total Population of the Survey

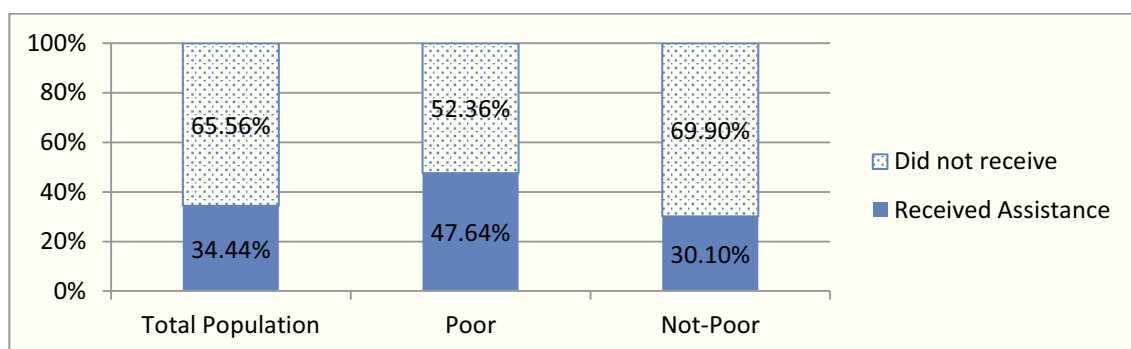


The author by PCBS consumption and income survey, 2011

The data spot some inappropriate distribution to the assistance as there are some in-need and did not receive assistance, while there are some households that received social assistance and they think that they are not in-need.

On the other hand, the poverty according the equivalence income upon the OECD scale, in Palestine is 25.12% of the total population. This poverty rate changes according the method and the scale was taken into consideration to calculate the poverty. Thus, the poverty among the heads of households is 10.68%, whereas it is higher if we use the expenditures method.

Figure 69: The Population Received Assistance by Poverty Status According to the Equivalence Income in Palestine as in 2003



Source: The author by (PCBS) poverty survey, 2003

Among the total population, 47.64% of poor population received assistance compared to 30.10% among non-poor population. On the other hand, among the households in Palestine, who received assistance, 11.72% of households are poor compared to 88.28% of not-poor households. While, among the households, who did not receive assistance, there are 10.13% of poor households compared to 89.32% of not-poor households.

Furthermore, among poor households, there are 37.87% of households received assistance compared to 34.09% of not-poor received assistance.

The households working in the public sector are almost above the poverty line, so the poor heads of households in the public sector, who did not receive assistance, form only 1.29% of households in the public sector and no one received assistance; while, among the not-poor households there is 16.88% received assistance. However, the households in the private sector received assistance are more than public sector at 5.26% among poor households and 21.06% among non-poor households.

Table 38: The Heads of Households Distribution by Sector of Employment According to Received Assistance and Poverty Status as in 2003

Poverty Status	Poor (25.12%)		Non-poor (74.88%)	
	Received Aids	Not-received aids	Received Aids	Not-received aids
Public sector (11.66%)	0%	1.29%	16.12%	83.88%
Private sector (14.21%)	5.26%	94.74%	21.06%	78.94%

Source: The author by (PCBS) poverty survey, 2003

In regard to the aid type, the public sector households are almost not-poor, and received assistance in types of food, medical care, health insurance and cash money. Furthermore,

the private sector not-poor households received assistance from food, medical care, clothes, cash money and health insurance, while the poor households received cash money only.

Table 39: The Distribution of Heads of Households, Who Received Assistance, by the Aid Types According to Poverty Status and Sector of Employment as in 2003

Sector	Public sector (11.66%)		Private sector (14.21%)		
	Poverty Status/ Aid type	Poor (25.12%)	Not-poor (74.88%)	Poor (25.12%)	Not-poor (74.88%)
Food		0	100%	0	100%
Medical Treatment		0	100%	0	100%
Clothes		0	0	0	100%
Job Creation		0	0	0	0
Martyrs Compensation		0	0	0	0
Cash Money		0	100%	2.78%	97.22%
Health Insurance		0	100%	0	100%
Multiple		0	100%	0	100%
Other		0	100%	0	0

Source: The author by (PCBS) poverty survey, 2003

In regard to the aid source, among the public sector households, the not-poor households received assistance mostly from relatives and UNRWA, besides MoSA, charities as well as international charities but with a fewer rate. On the other hand, among the private sector households, most assistance received from UNRWA, relatives and charities, besides some cases from MoSA, international charities and workers unions.

Table 40: The Distribution of Heads of Households, Who Received Assistance, by the Aid Source According to Poverty Status and Sector of Employment as in 2003

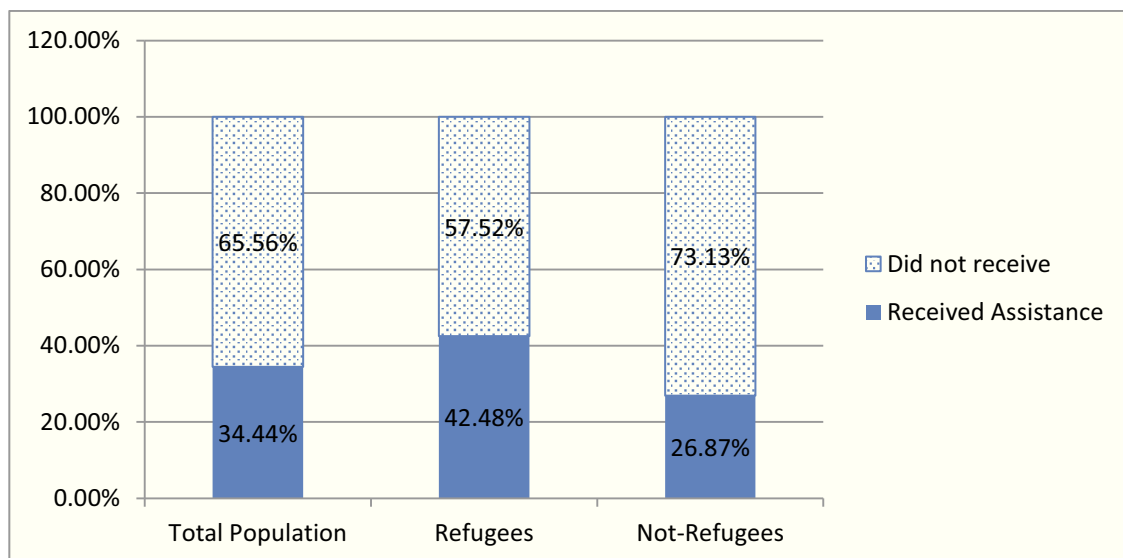
Sector	Public sector (11.66%)		Private sector (14.21%)		
	Poverty Status/ Aid Source	Poor (25.12%)	Not-poor (74.88%)	Poor (25.12%)	Not-poor (74.88%)
Ministry of Social Affairs		0	100%	0	100%
Palestinian Authority		0	100%	0	100%
Political		0	100%	0	0
Charity		0	100%	0	100%
International		0	100%	0	100%
UNRWA		0	100%	0	100%
Arab Countries		0	0	0	0
Charity International		0	100%	0	100%
Relatives		0	100%	2.86%	97.14%
Friends		0	100%	0	100%
Workers Unions		0	100%	0	100%
Local Banks		0	0	0	0
Local community		0	100%	0	0
Others		1.29%	98.71%	0	100%

Source: The author by (PCBS) poverty survey, 2003

3.4.4.2- Refugee Status

Given that the refugees compose 48.50% of the total population of the sample, and 34.44% of the total population received assistance, it is noticed that 42.48% of refugees received assistance compared to only 26.87 % of non-refugee population that received assistance.

Figure 70: The Population Received Assistance by Refugee Status as in 2003



Source: The author by (PCBS) poverty survey, 2003

In regard to the selected heads of households, who work in the public sector and depend on wages and salaries from public sector as their main source of income, it is noticed that they form about 11.66% of the total heads of household of the sample population. Moreover, among the aforementioned heads of households 20.85% of refugees receive assistance compared to only 9.43% of non-refugees. Thus, among the total households in public sector who received assistance, 74.58% are refugees.

On the other hand, the heads of households, who work in the private sector and depend on wages and salaries from private sector as their main source of income, form about 14.21% of the total heads of households of the sample population. Among them, 27.36% of refugees received assistance compared to 14.23% of non-refugees. Thus, among the total households in private sector who received assistance 63.04% are refugees.

Table 41: Heads of Households Distribution by Sector of Employment According to Received Assistance and Refugee Status as in 2003:

Refugee Status	Refugee (48.50%)		Non-refugees (51.50%)	
	Received Aids	Not-received aids	Received Aids	Not-received aids
Receiving assistance Public sector (11.66%)	20.85%	79.15%	9.43%	90.57%
Private sector (14.21%)	27.36%	72.64%	14.23%	85.77%

Source: The author by (PCBS) poverty survey, 2003

In regard of the aid type, the refugee households working in public sector employees and received food assistance form 72.73% of the population, the population who received medical treatment form 75% and those who receive cash money form 75.86%.

While, the refugee households working in private sector and receiving food assistance form 69.05% of the population, whereas, the refugees who received cash money form 55.56% of the population, while only some refugees received medical assistance, health insurance and clothes.

Table 42: Distribution of Heads of Households, Who Received Assistance, by Aid Types According to Refugee Status and Sector of Employment as in 2003

Sector	Public sector (11.66%)		Private sector (14.21%)	
	Refugee (48.50%)	Non-refugees (51.50%)	Refugee (48.50%)	Non-refugees (51.50%)
Receiving assistance				
Food	72.73%	27.27%	69.05%	30.95%
Medical Treatment	75%	25%	100%	0
Clothes	0	0	42.86%	57.14%
Job Creation	0	0	0	0
Martyrs Compensation	0	0	0	0
Cash Money	75.86%	24.14%	55.56%	44.44%
Health Insurance	0	0	100%	0
Multiple	0	0	0	100%

Source: The author by (PCBS) poverty survey, 2003

In regard of the source of the aids, among the households working in the public sector, refugees received assistance more than non-refugees with higher rates regardless the source of the aid. We noticed that among households received assistance from the MoSA, 80% of the households are refugees. While, among those who received from the Palestinian Authority other than MoSA 75% are refugees, compared to 81% among those received from relatives, and all the households received from UNRWA are refugees.

Table 43: The Distribution of Heads of Households, Who Received Assistance, by the Aid Source According to Refugee Status and Sector of Employment as in 2003

Sector	Public sector (11.66%)		Private sector (14.21%)	
	Refugee (48.50%)	Non-refugees (51.50%)	Refugee (48.50%)	Non-refugees (51.50%)
Ministry of Social Affairs	80%	20%	100%	0
Palestinian Authority	75%	25%	50%	50%
Political	0	100%	0	0
Charity	0	100%	50	50
International	50%	50%	33.33%	66.67%
UNRWA	100%	0	95.65%	4.35%
Arab Countries	0	0	0	0
Charity International	0	0	80%	20%
Relatives	80.95%	19.05%	42.86%	57.14%
Friends	0	100%	50%	50%
Workers Unions	100%	0	100%	0
Local Banks	0	0	0	0
Local community	100%	0	0	0
Others	0	0	100%	0

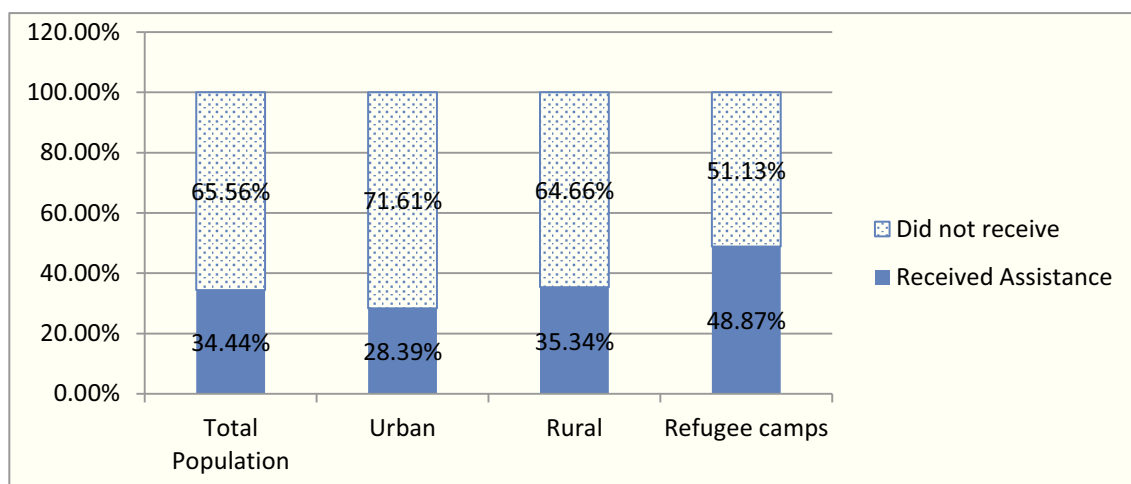
Source: The author by (PCBS) poverty survey, 2003

On the other hand, among the households working in the private sector, the refugees also receive assistance more than non-refugees, except some sources of the assistance do. The Palestinian Authority, charities and friends sources of aid have equal distribution for refugees and non-refugees. However, non-refugees receiving assistance from the international organizations and relatives, form about 66% and 57%, respectively, while the refugees form 95.65% of the households who received assistance from UNRWA.

3.4.4.3- Locality Type

The population in Palestine are living in three locality types: urban, rural and refugee camps. In fact, about 51.42% of the households of the sample population live in urban areas, 27.74% in rural areas and 20.84% in refugee camps.

Figure 71: The Population Received Assistance by Locality Type as in 2003



Source: The author by (PCBS) poverty survey, 2003

Among the households living in urban areas, 28.39% received assistance in the last month of the survey, while those received assistance from urban areas form about 42.21% of the total households received assistance. The households living in urban areas and work in the private sector receive assistance more than those work in the public sector, 16.23% compared to 11.80%, respectively.

Table 44: The Heads of Households Distribution by Sector of Employment According to Received Assistance and Locality Type as in 2003

Locality Type	Urban (51.42%)		Rural Areas (48.58%)	
	Received Aids	Not-received aids	Received Aids	Not-received aids
Public sector (11.66%)	11.80%	88.20%	38.78%	61.22%
Private sector (14.21%)	16.23%	83.77%	55.93%	44.07%

Source: The author by (PCBS) poverty survey, 2003

In regard to type of aid, it is noticed that among the households who work in public sector, there is difference between localities upon the type of aid. Those receiving food assistance form 40.91% of the total population. No urban household received medical treatment, compared to the other localities, 25% from rural and 75% from refugee camps, while 34.48% of the households, who received cash money assistance, are from urban areas.

In regard to the households who work in private sector, those receiving food assistance form 40.48% of the total population, and from clothes assistance 71.43% of the total households, while those who receive cash money assistance form 50% of the total

households. Finally, the households received health insurance form 66.67% of the total households.

Table 45: The Distribution of Heads of Households, Who Received Assistance, by the Aid Types According to Locality Type and Sector of Employment as in 2003

Sector	Public sector (11.66%)		Private sector (14.21%)	
	Urban (51.42%)	Rural (48.58%)	Urban (51.42%)	Rural (48.58%)
Receiving assistance				
Food	40.91%	59.09%	40.48%	59.52%
Medical Treatment	0	100%	0	100%
Clothes	0	0	71.43%	28.57%
Job Creation	0	0	0	0
Martyrs Compensation	0	0	0	0
Cash Money	34.48%	65.52%	50%	50%
Health Insurance	50%	50%	66.67%	33.33%
Multiple	100%	0	100%	0
Other	0	100%	0	0

Source: The author by (PCBS) poverty survey, 2003

On the other hand, it is found that the source of aid has effect on the households receiving assistance. Among the households working in the public sector, those in urban areas were more reachable to many kinds of assistance compared to the households working in the private sector. While the households in public sector received at 25% from Palestinian Authority, only households from urban areas received from MoSA, charities and political parties, the households in the private sector that received assistance were mostly from rural areas and refugee camps. For instance, those received from MoSA are 66.67% from refugee camps and 33.33% from rural areas, from charities there are 50% of households from refugee camps, and 47.83% of the households received from UNRWA are from refugee camps, while the households received from international charity and organizations are more from urban areas.

Table 46: Distribution of Heads of Households, Who Received Assistance, by the Aid Source According to Locality Type and Sector of Employment as in 2003

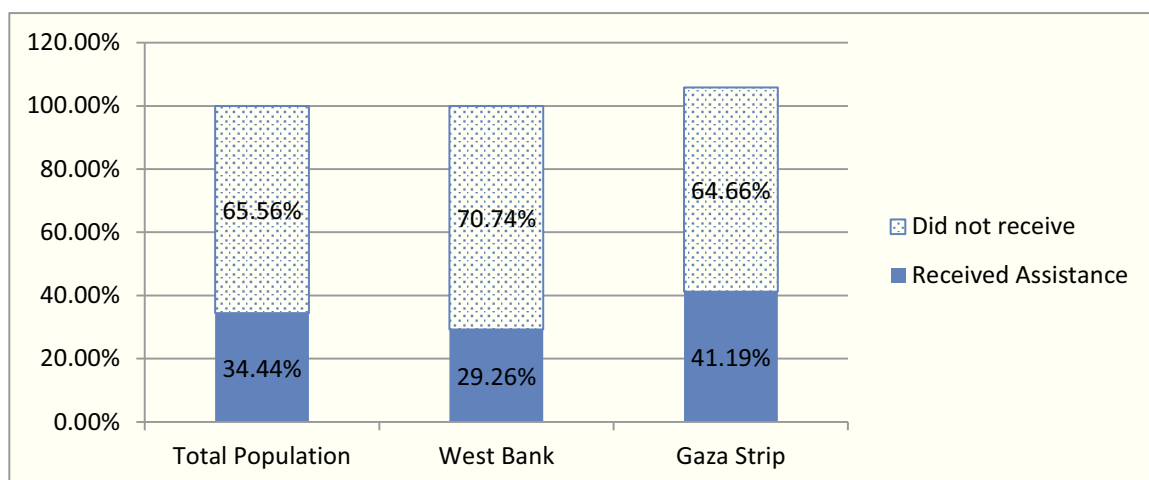
Sector	Public sector (11.66%)		Private sector (14.21%)	
	Urban (51.42%)	Rural (48.58%)	Urban (51.42%)	Rural (48.58%)
Receiving assistance				
Ministry of Social Affairs	100%	0	33.33%	66.67%
Palestinian Authority	25%	75%	0	100%
Political	100	100%	0	0
Charity	100%	0	25%	75%
International	75%	25%	83.33%	16.67%
UNRWA	8.33%	91.67%	34.78%	65.22%
Arab Countries	0	0	0	0
Charity International	100%	0	60%	40%
Relatives	14.29%	85.71%	62.86%	37.14%
Friends	100%	0	25%	75%
Workers Unions	50%	50%	66.67%	33.33%
Local Banks	0	0	0	0
Local community	0	100%	0	0
Others	0	0	0	100%

Source: The author by (PCBS) poverty survey, 2003

3.4.4.4- Region

The Palestinian territories are divided into two main regions; West Bank and Gaza Strip. It is found that each region has different socio-economic characteristics. The population in West Bank constitutes 56.59% compared to 43.41% in Gaza Strip. Here we will highlight the effect of the region on receiving assistance, and the difference between public and private employees, and test the effect of type and source of aid on receiving assistance separately.

Figure 72: The Population Received Assistance by Region as in 2003



Source: The author by (PCBS) poverty survey, 2003

The data indicate that 29.26% of the population in West Bank received assistance compared to 41.19% in Gaza Strip. However, it is also found that the households working in the public sector and depending on the wages and salaries from public sector as the main source of income received less assistance than those in the private sector. Whereas, the public sector employees received assistance in West Bank are more than those in Gaza Strip at 17.93% compared to 14.67% for the later, while the households in the private sector received assistance are more in Gaza Strip at 21.09% compared to 20.12%. That difference in the rates of receiving assistance between West bank and Gaza Strip upon the sector can be understood, if we know that the income of the public sector employees is the same in both regions, while the income of the private sector employees is higher in West Bank as well as the living standards.

Table 47: Heads of Households Distribution By Sector of Employment According To Received Assistance and Region as in 2003

Region	West Bank (56.59%)		Gaza Strip (43.41%)	
	Received Aids	Not-received aids	Received Aids	Not-received aids
Receiving assistance				
Public sector (11.66%)	17.93%	82.07%	14.67%	85.33%
Private sector (14.21%)	20.12%	79.88%	21.09%	78.91%

Source: The author by (PCBS) poverty survey, 2003

In regard to the type of aids, among the households in the public sector there has been little difference between the regions in receiving assistance; however, the difference is more obvious in the private sector than in the public sector.

Among the public sector employees, there are 45.45% of households in West Bank received food assistance compared to 54.55% in the Gaza Strip, and 41.38% of households received cash money assistance compared to 58.62% in Gaza Strip. While, the medical treatment was received only in West Bank, the health insurance was received only in Gaza Strip.

Table 48: Distribution of Heads of Households, Who Received Assistance, By the Aid Types According To Region and Sector of Employment as in 2003

Sector	Public sector (11.66%)		Private sector (14.21%)	
	West Bank (56.59%)	Gaza Strip (43.41%)	West Bank (56.59%)	Gaza Strip (43.41%)
Region/ Aid type				
Food	45.45%	54.55%	76.19%	23.81%
Medical Treatment	100%	0	100%	0%
Clothes	0	0	57.14%	42.86%
Job Creation	0	0	0	0
Martyrs Compensation	0	0	0	0
Cash Money	41.38%	58.62%	69.44%	30.56%
Health Insurance	0	100%	0	100%
Multiple	0	100%	100%	0
Other	0	100%	0	0

Source: The author by (PCBS) poverty survey, 2003

On the other hand, among the private sector employees, there are 76.19%, 57.14% and 69.44% of households in West Bank compared to 23.81%, 57.14% and 30.56% in Gaza Strip received food, clothes and cash money assistance, respectively.

Furthermore, regarding the source of aids, among the households in the public sector there has been also difference between regions in receiving assistance.

Among the households working in public sector and received assistance from MoSA, 80% are from Gaza Strip compared to 20% from West Bank, further, 87.50% of the households received assistance from Palestinian Authority are from Gaza Strip compared to 12.50% from West Bank. While, 75%, 52.38% and 66.67% of the households from West Bank received assistance from UNRWA, relatives and friends, respectively, compared to 25%, 47.62% and 33.33% from Gaza Strip.

On the other hand, among the households working in private sector and received assistance from MoSA, 66.67% are from Gaza Strip compared to 33.33% from West Bank and 75% of the households received assistance from Palestinian Authority are from Gaza Strip compared to 12.50% from West Bank. While, 91.30%, 68.57% and 75% of households

received assistance from UNRWA, relatives and friends, respectively, are from West Bank compared to 8.7%, 31.43% and 25% from Gaza Strip.

Table 49: Distribution of Heads of Households, Who Received Assistance, By the Aid Source According To Region and Sector of Employment as in 2003

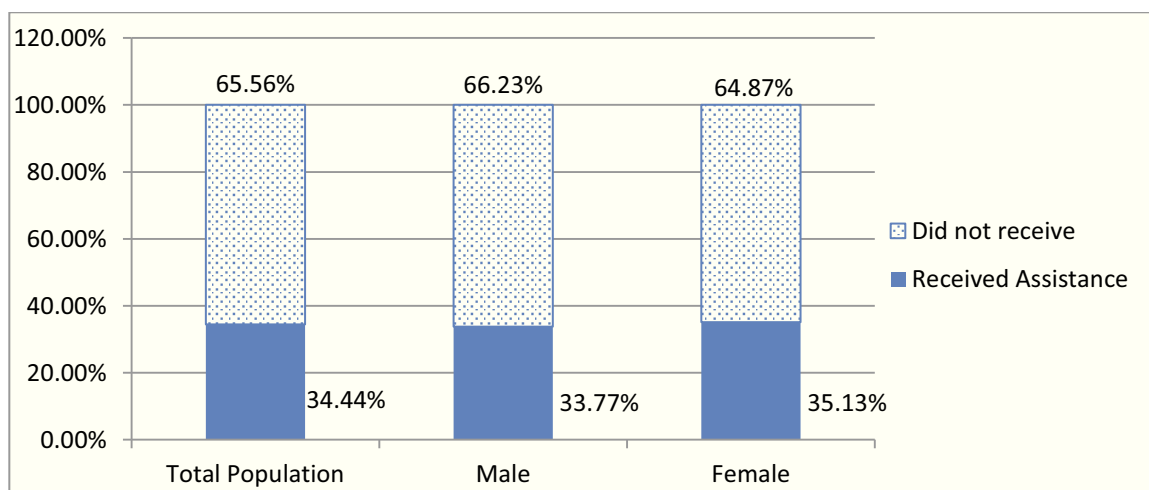
Sector	Public sector (11.66%)		Private sector (14.21%)	
	West Bank (56.59%)	Gaza Strip (43.41%)	West Bank (56.59%)	Gaza Strip (43.41%)
Ministry of Social Affairs	20%	80%	33.33%	66.67%
Palestinian Authority	12.5%	87.50%	100%	0
Political	0	100%	0	0
Charity	0	100%	25%	75%
International	50%	50%	100%	0
UNRWA	75%	25%	91.30%	8.70%
Arab Countries	0	0	0	0
Charity International	0	100%	20%	80%
Relatives	52.38%	47.62%	68.57%	31.43%
Friends	66.67%	33.33%	75%	25%
Workers Unions	0	100%	0	100%
Local Banks	0	0	0	0
Local community	0	100%	0	0
Others	0	0	100%	0

Source: The author by (PCBS) poverty survey, 2003

3.4.4.5- Gender

According to the sample population of the survey, the population in Palestine is composed of 50.44% males and 49.56% females.

Figure 73: The Population Received Assistance by Gender as in 2003



Source: The author by (PCBS) poverty survey, 2003

Among the total population, there is no serious difference between males and females in Palestine in received aids; however, it is found that the gender has impact on the received assistance of the heads of households by the sector of work. Among the male households, 32.13% of the households received assistance compared to 52.48% of females.

Further, among the male households working in public sector, 16.02% received assistance compared to 12.50% of females. On the other hand, the males compose 98.31% of the households working in public sector, who received assistance.

However, among the male households working in private sector, 20.22% received assistance compared to 33.33% of females. On the other hand, the males compose 97.83% of the households working in the private sector, who received assistance.

Table 50: Heads of Households Distribution by Sector of Employment According To Received Assistance and Gender as in 2003

Gender	Male (50.44%)		Female (49.56%)	
	Received Aids	Not-received aids	Received Aids	Not-received aids
Receiving assistance Public sector (11.66%)	16.02%	83.98%	12.50%	87.50%
Private sector (14.21%)	20.22%	79.78%	33.33%	66.67%

Source: The author by (PCBS) poverty survey, 2003

Regarding the aid type among the households in the public sector, the assistance is mostly received by males except food assistance, in which females composed only 4.55%, compared to the private sector, where the females received from food and cash money types of assistance at 2.38% and 2.78%, respectively.

Table 51: Distribution of Heads of Households, Who Received Assistance, By the Aid Types According To Gender and Sector of Employment as in 2003

Sector	Public sector (11.66%)		Private sector (14.21%)	
	Male (50.44%)	Female (49.56%)	Male (50.44%)	Female (49.56%)
Food	95.45%	4.55%	97.62%	2.38%
Medical Treatment	100%	0	100%	0%
Clothes	0	0	100%	0
Job Creation	0	0	0	0
Martyrs Compensation	0	0	0	0
Cash Money	100%	0	97.22%	2.78%
Health Insurance	100%	0	100%	0
Multiple	0	0	100%	0
Other	100%	0	0	0

Source: The author by (PCBS) poverty survey, 2003

On the other hand, regarding the aid source among the households working in the private sector, the assistance also almost received by males except friends at 12.50%.

Table 52: Distribution of Heads of Households, Who Received Assistance, By the Aid Source According to Gender and Sector of Employment as in 2003

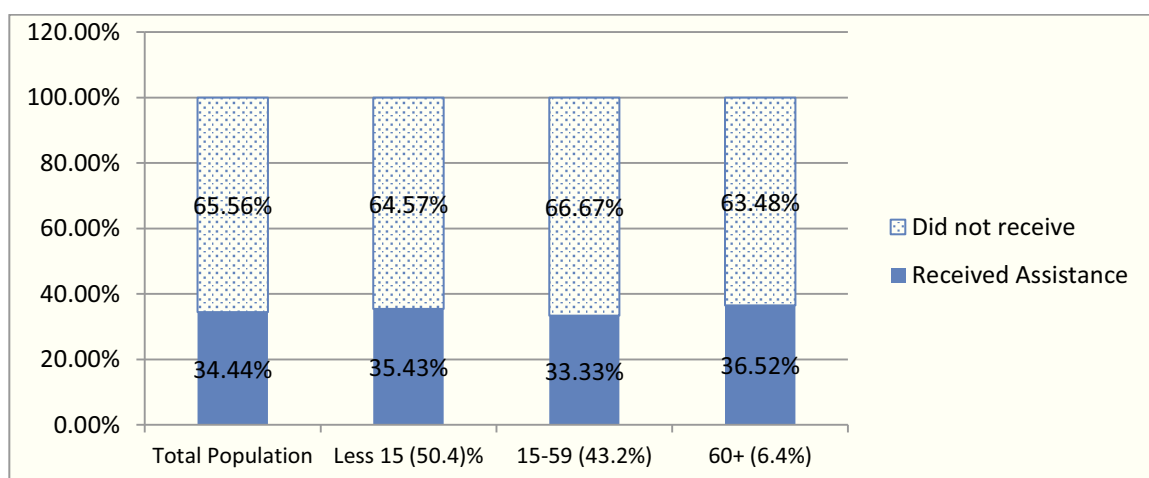
Sector Gender/ Aid Source	Public sector (11.66%)		Private sector (14.21%)	
	Male (50.44%)	Female (49.56%)	Male (50.44%)	Female (49.56%)
Ministry of Social Affairs	100%	0	100%	0
Palestinian Authority	100%	0	100%	0
Political	100%	0	0	0
Charity	100%	0	100%	0
International	100%	0	100%	0
UNRWA	100%	0	100%	0
Arab Countries	0	0	0	0
Charity International	100%	0	100%	0
Relatives	95.24%	4.76%	100%	0
Friends	100%	0	87.50%	12.50%
Workers Unions	100%	0	100%	0
Local Banks	0	0	0	0
Local community	100%	0	0	0
Others	97.75%	2.25%	50%	50%

Source: The author by (PCBS) poverty survey, 2003

3.4.4.6- Workforce-age

The population distribution in Palestine upon the workforce-age indicates that the rate of the population in the workforce-age (between 15 and 59 years old) is 43.21%, while those less than 15 years old form 50.35%, and the old age population over the age of 60 years old form 6.44% out of the total population.

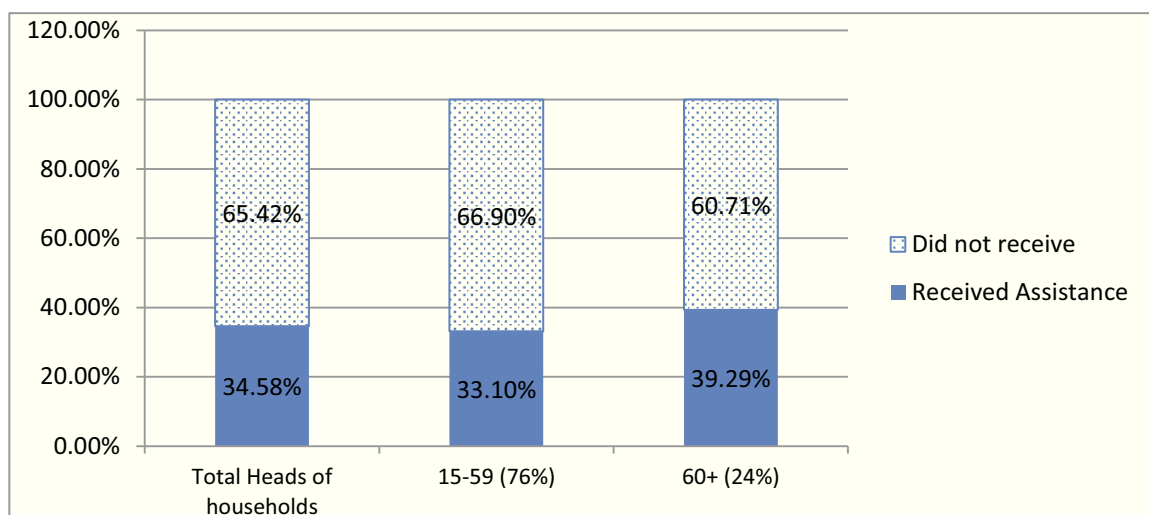
Figure 74: Received Assistance of the Population Compared to Workforce-Age Distribution as in 2003



Source: The author by (PCBS) poverty survey, 2003

By taking into consideration only the heads of households, the population under the age of 15 years old are excluded. Therefore, the heads of households in the workforce-age (15-59) form 76% compared to 24% of those over the age of 60 years old. Among the heads of households in the workforce, 33.10% received assistance compared to 39.29% of those aged over 60 years old

Figure 75: Received Assistance of the Heads of Households Compared to Workforce-Age Distribution as in 2003



Source: The author by (PCBS) poverty survey, 2003

Furthermore, among the heads of households working in public sector, 15.95% received assistance and 94.92% of them are in the workforce-age compared to 5.08% aged over 60 years old. Further, 15.86% of those in the workforce-age received assistance compared to 84.14% did not. While, 17.65% of the old age received assistance compared to 82.35 did not.

On the other hand, among those in the private sector 26.36% received assistance and 84.75% of them are in the workforce-age compared to 15.25% aged over 60 years old. Further, 26.43% of those in the workforce-age received assistance compared to 73.57% did not. While, 25.95% of the old age received assistance compared to 74.05% did not.

Table 53: Heads of Households Distribution by Sector of Employment According to Received Assistance and Workforce-Age as in 2003

Workforce-age Receiving assistance	Workforce-age (15-59)		Workforce-age (60+)	
	Received Aids	Not-received aids	Received Aids	Not-received aids
Public sector (11.66%)	15.86%	84.14%	17.65%	82.35%
Private sector (14.21%)	26.43%	73.57%	25.95%	74.05%

Source: The author by (PCBS) poverty survey, 2003

Thus, we conclude that heads of households in the private sector need more assistance compared to public sector employees, where the salaries are more regular and stable. The old aged heads of households in the public sector do not need assistance as much as those in the private sector; therefore, they have less access but some of them still under poverty line and receive assistance. Moreover, the rate of population received assistance is smaller among the heads of households, who work in both public and private sector with regular salary or wage than those without regular salary.

In regard to the aid type, it is obvious that the heads of the households working in the public sector at workforce-age received more than aged over the 60 years old in all types of aid. They received food assistance at 86.36% compared to 13.64% of those aged over 60 years. Further, only the heads of households at workforce-age received cash money, medical treatment and multiple assistances.

On the other hand, those in the private sector received food assistance at 95.24% compared to 4.76% of the old aged heads of households. Further, only the heads of households at workforce-age received medical treatment, clothes, cash money and multiple assistances.

Table 54: Distribution of Heads of Households, Who Received Assistance, by the Aid Types According to Workforce-Age and Sector of Employment as in 2003

Sector	Public sector (11.66%)		Private sector (14.21%)	
	Workforce-age (15-59) (76.01%)	Workforce-age (60+) (23.99%)	Workforce-age (15-59) (76.01%)	Workforce-age (60+) (23.99%)
Food	86.36%	13.64%	95.24%	4.76%
Medical Treatment	100%	0	100%	0
Clothes	0	0	100%	0
Job Creation	0	0	0	0
Martyrs Compensation	0	0	0	0
Cash Money	100%	0	100%	0
Health Insurance	100%	0	100%	0
Multiple	100%	0	100%	0
Other	100%	0	0	0

Source: The author by (PCBS) poverty survey, 2003

In regard to the aid source for the public sector households, the Palestinian Authority, charity and political sources supported the old age heads of households, while the workforce-age received assistance from relatives and UNRWA. Whereas, in regard to the private sector households, the assistance almost received by the workforce-age from UNRWA and relatives.

Table 55: Distribution of Heads of Households, Who Received Assistance, By the Aid Source According To Workforce-Age and Sector of Employment as in 2003

Sector	Aid	Public sector (11.66%)		Private sector (14.21%)	
		Workforce-age (15-59) (76.01%)	Workforce-age (60+) (23.99%)	Workforce-age (15-59) (76.01%)	Workforce-age (60+) (23.99%)
Ministry of Social Affairs		100%	0	100%	0
Palestinian Authority		87.50%	12.50%	100%	0
Political		0	100%	0	0
Charity		0	100%	100%	0
International		100%	0	100%	0
UNRWA		100%	0	95.65%	4.35%
Arab Countries		0	0	0	0
Charity International		100%	0	100%	0
Relatives		100%	0	100%	0
Friends		100%	0	100%	0
Workers Unions		100%	0	100%	0
Local Banks		0	0	0	0
Local community		100%	0	0	0
Others		0	0	50%	50%

Source: The author by (PCBS) poverty survey, 2003

3.4.5- Main Challenges of the Social Assistance Programs in Palestine

In spite of the existing of number of different social security services provided in Palestine through many NGOs and charities, Palestine still short of an effective and reliable social security scheme. By reviewing the development of these services, we find that they were gradually brought with no clear vision and strategy. In other words, most of them were developed as solutions for crises that brought forth by the Israeli occupation, with short resources and some international aid and relief programs. Most of these programs were not stable and reliable, which created unstable social protection status. The flow of foreign aids was clearly related to political situation; where, it was noticed that most of the donor countries did not commit to their pledges. On the other hand, since the occupation the private sector has been weakened, leaving the economic situation in Palestine deteriorating with high figures of unemployment and poverty. The main challenges of the NGOs of social assistance are as follows:

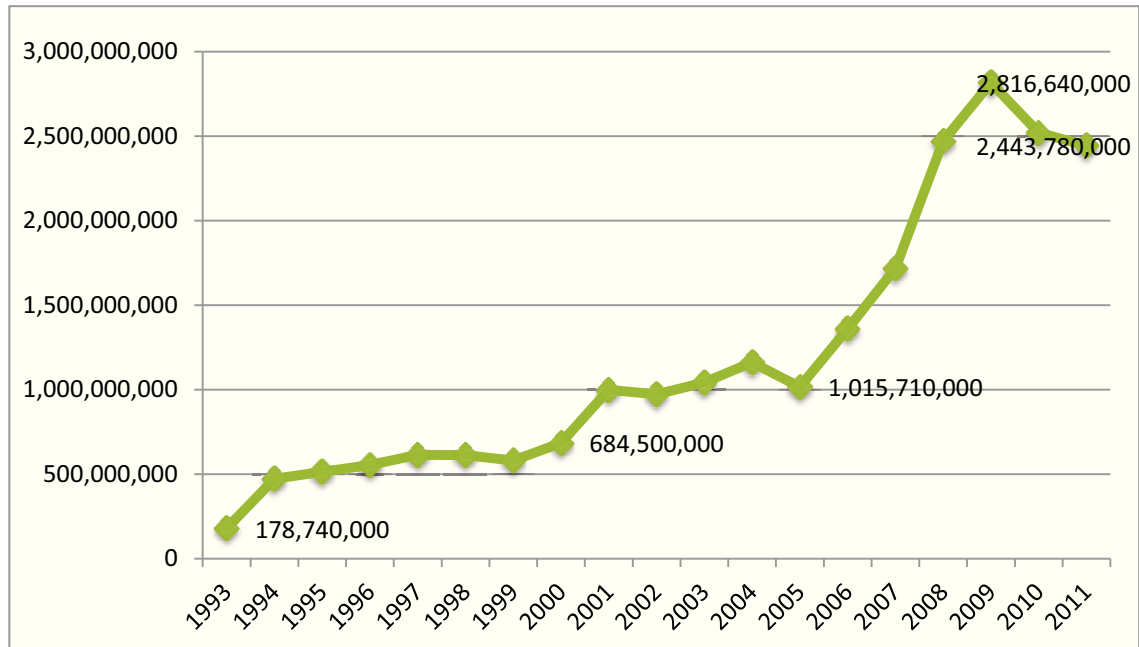
- Having fragile economy in Palestine, the exposure of the Palestinians to repeated unexpected shocks due to the Israeli occupation practices affects directly the living conditions and the economy in Palestine; consequently, it has been never possible to expect the value and time of the risk.

- Small and volatile private sector with large informal labor lead to inconsiderable contribution to social security programs, as well as to weak tax revenues to the government.
- Social assistance programs were developed randomly, where they worked for long period as dispersant institutions without a central arrangement process that would determine and allocate the resources according to the real needs of the society. dedicated
- The lack of a database for the poor and the distributed aids, causing unfair distribution of the resources. Thus, they are not working according to a national systematic plan for development and growth.
- Another important problem is the dependency of assistance programs on the international donors and unsustainable external resources, which makes the flow of these assistance programs unstable as well and subject to the political bargaining. In addition to the fact that high ratio of these aids goes as salaries and wages for foreign consultancy and professionals.
- The short of resources and the increasing needs of assistance with the decline in economic growth, all together pushed the government and the international institutions to rethink about their strategy of using the available resources to contribute to the economic growth and using the social assistance programs in the most effective way to reduce the poverty. Thus, the parties have agreed on the necessity of cooperation and reform the available assistance programs; however, the ideas still primitive and inapplicable due to some obstacles.

3.4.6- Main figures of Foreign Aids

3.4.6.1- Foreign Aids

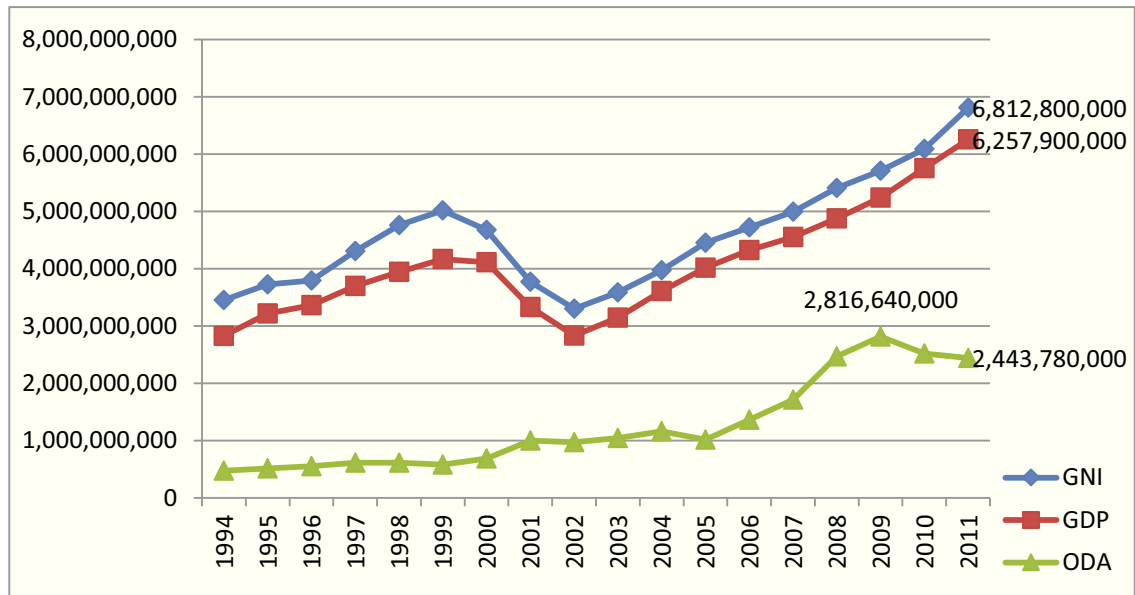
Figure 76: Net Official Development Assistance (ODA) Received in Palestine



Source: The author by World Bank database.

It is noticed in the figure above the increase in the value of Official Development Assistance (ODA) since the establishment of Palestinian Authority (PA) in 1994, particularly after the crises of Second Intifada in 2000 and the share of Hamas in the government in 2006, which have important role in avoiding an expected catastrophic disaster. After 2008, the value has declined again due to the international financial crisis.

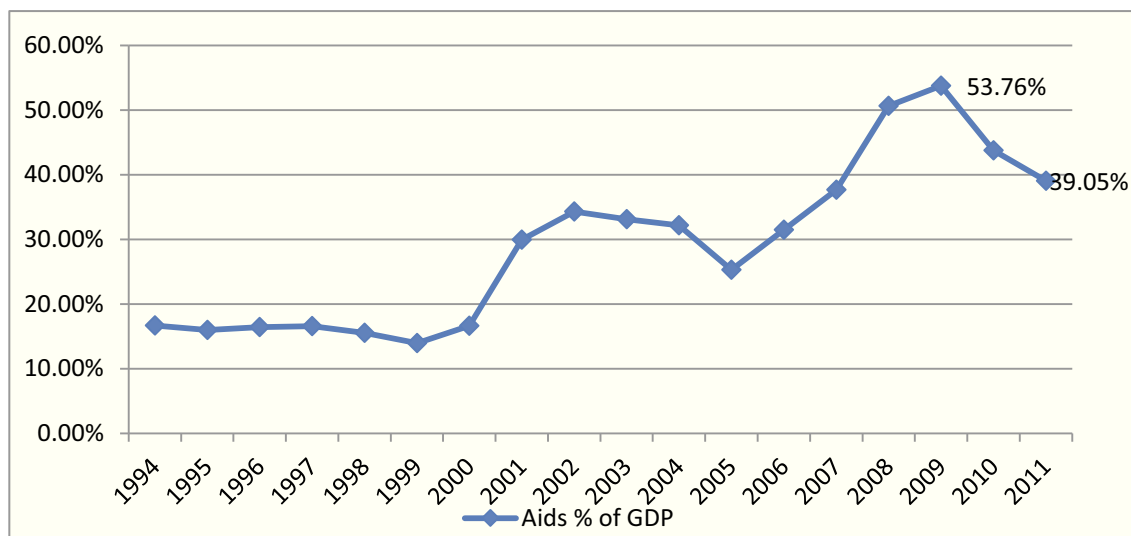
Figure 77: GDP & GNI Compared to the Official Development Assistant in Palestine



Source: The author by World Bank database & PCBS.

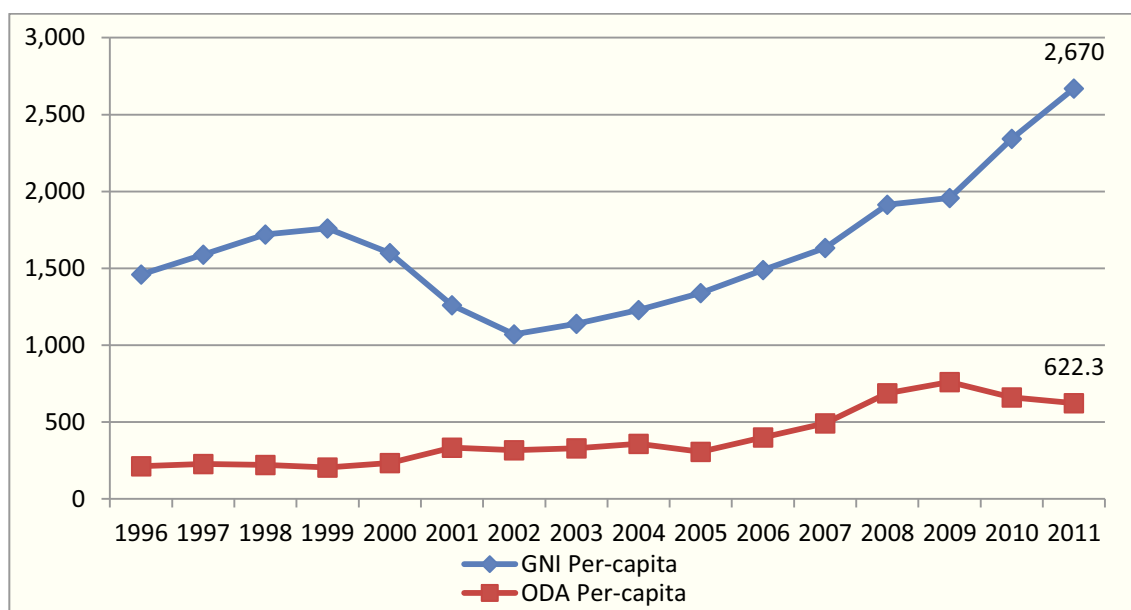
In figure (76) we notice that although the ODA had a significant impact on the GDP growth performance, it seems that the effect of political events was greater, which is obvious in the recession of the year 2000, where the recession occurred in spite of the continued ODA. On the other hand, the economic growth declined in 2012 to 5.9%, after a decrease in the ODA since most of the growth was caused by ODA. According to the Keynesian growth theory, the injection of these cash transfer programs should be continuous; otherwise, the growth will be in case of a flow, where the multiplier of cash transfer programs losses its effect on the economy on the medium to long-term as it did not happen at all.

Figure 78: Official Development Aids (ODA) Percentage of GDP in Palestine



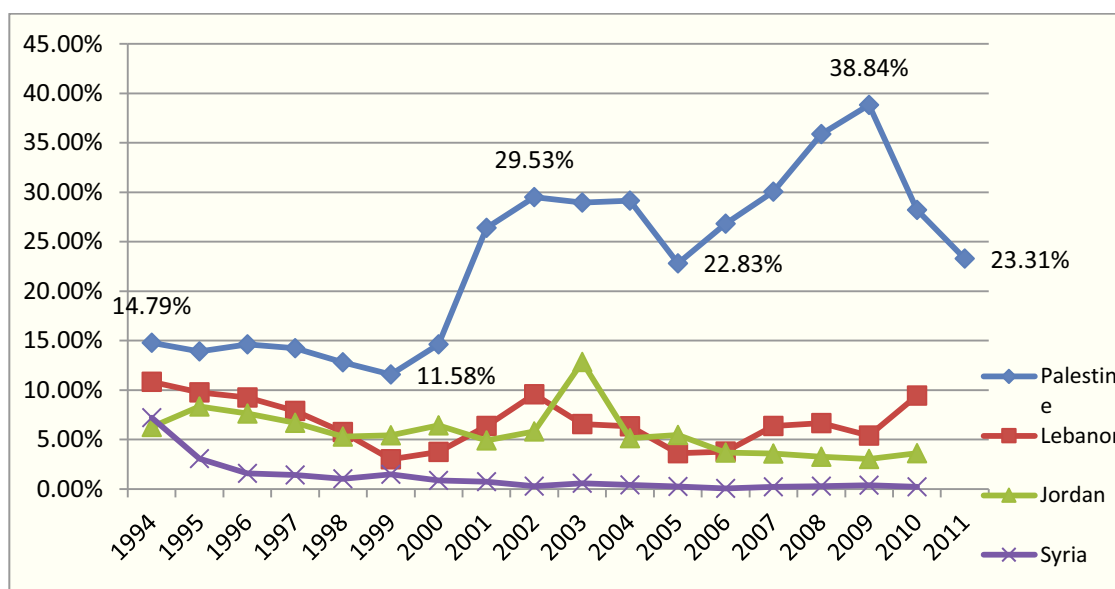
Source: The author by World Bank database & PCBS.

Figure 79: Gross National Income (GNI) & Official Development Aid (ODA) Per-capita in Palestine (1996-2011) (Current USD)



Source: The author by World Bank database & PCBS.

Figure 80: Official Development Aids (per-Capita) Percentage of GNI (per-Capita) in Palestine, Lebanon, Jordan and Syria (1994 - 2011)



Source: The author by World Bank database & PCBS.

The aid dependency ratio⁵³ increased from 14.79% in 1994 to 29.53% in 2002, and then it reached about 40% in 2009. Another important notice of the ODA is that compared to other countries in the region, the aid dependency ratio has been very high compared to the GDP and GNI per-capita. However, it is highly fluctuating which could have negative effect on the stability of the markets and economy, particularly, the ODA exceeded more than 50% of the GDP in 2009 as shown in figure (79).

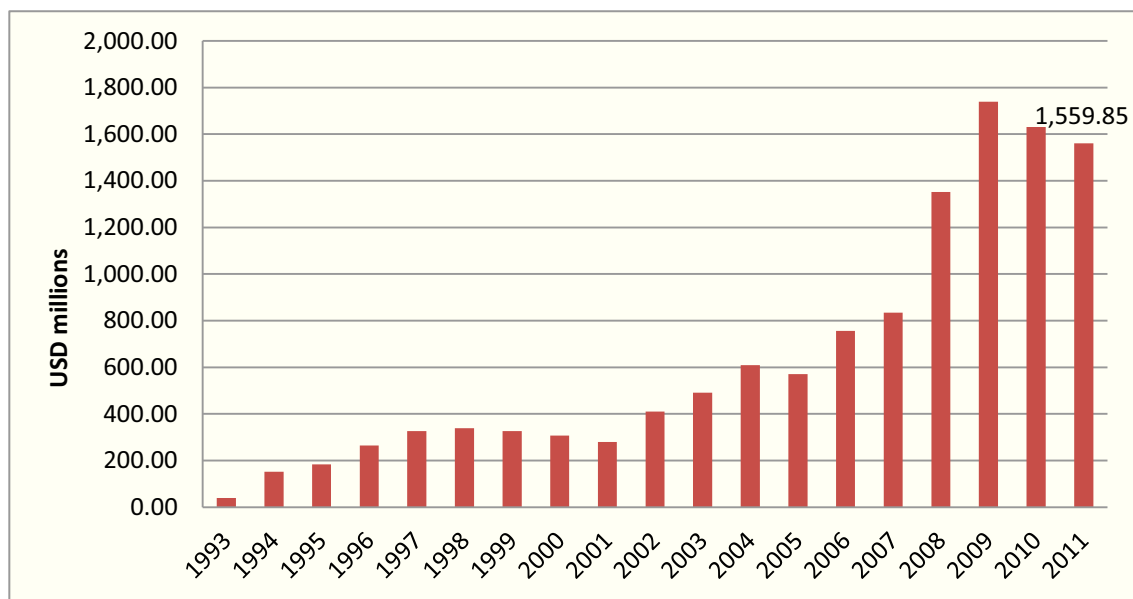
According to data of OECD, the estimated total aids reached about \$2.5 billion at 2010; whereas, the Humanitarian aid reached at \$618 million (Global Humanitarian Assistance GHA), and \$1.156 billion were allocated as direct assistance to the budget of the Palestinian Authority as was stated by the financial statements of the Ministry of Finance.

⁵³ In this research we mean by “Aid Dependency Ratio” as the ratio of assistance to the GDP and calculated by dividing the Aid per-capita by income per-capita (GNI Gross National Income per-capita), even the Aid dependency has many definitions related to the policy and range of objectives; however, a general definition was generated by (Lensink & White, 1999) as “A country is aid dependent if it will not achieve objective X in the absence of aid for the foreseeable future”. In this research we mean by “.

3.4.6.2- The Financial Resources of Foreign Aid

The international aids started to be transferred to the Palestinians for the first time after the Israeli occupation in 1948. Before the peace agreement in 1993, most of the aids were provided by the Arab Countries, while after 1993, the European Commission and the United States had the highest contributions to the total aids provided to Palestinians. However, the value of aids was fluctuating according to the political situation and the financial situation of the donating countries.⁵⁴

Figure 81: The Foreign Aids to Palestine from DAC Countries in Years (1993-2011):



Source: OECD database⁵⁵.

⁵⁴ This kind of aid started from (1993) after the establishment of the Palestinian Authority (PA) under Oslo Peace Agreement, in which the international community committed to enhance the PA.

⁵⁵ The Organization for Economic Co-operation and Development's (OECD), **Development Assistance Committee (DAC)** is a forum for selected OECD member states to discuss issues surrounding aid, development and poverty reduction in developing countries.

Table 56: Foreign Aids to Palestine According to the Commitments and Payments in US Dollar: (1994 – 2008)

The State	Total Commitments	Total Payments	The Ratio of Payments to Commitments
European Commission	3,719,401,847	3,230,002,683	87%
United States	1,203,982,588	1,061,958,817	88%
Saudi Arabia Kingdom	827,755,843	804,228,880	97%
Japan	777,238,751	714,084,293	92%
United Kingdom	693,259,350	537,018,778	77%
Sweden	596,145,732	469,647,898	79%
Norway	500,243,210q	460,583,842	92%
Germany	808,501,952	400,632,219	50%
U.A.E.	370,994,808	368,422,339	99%
Algeria	300,004,624	300,004,624	100%
France	409,204,441	296,412,676	72%
Canada	264,136,825	262,563,216	99%
Kuwait	239,274,673	239,274,673	100%
Italy	286,973,587	236,721,432	82%
Spain	252,553,120	227,479,006	90%
The World Bank	286,560,467	220,242,931	77%
Netherlands	245,695,649	215,613,985	88%
Qatar	149,563,561	149,563,561	100%
Switzerland	128,663,334	116,244,385	90%
Islamic development Bank	123,072,884	99,417,066	80%

Source: Abdel Karim N., 2010, (P. 13)

Table 57: The Donors to Palestine in Average 2010-2011 (US million \$)

Country		Value	Ratio
1	United States	672.90	27.08%
2	EU Institutions	420.44	16.92%
3	UNRWA	321.11	12.92%
4	Germany	115.33	4.64%
5	Norway	110.82	4.46%
6	United Kingdom	109.55	4.41%
7	Spain	80.36	3.23%
8	Japan	76.69	3.09%
9	Canada	71.38	2.87%
10	France	66.31	2.67%
11	Sweden	61.54	2.48%
12	United Arab Emirates	61.54	2.48%
13	Netherlands	54.30	2.18%
14	Australia	44.73	1.80%
15	Belgium	38.30	1.54%
16	Turkey	27.19	1.09%
17	Denmark	26.88	1.08%
18	Switzerland	24.71	0.99%
19	Italy	23.78	0.96%
20	Finland	22.27	0.90%
21	Israel	13.65	0.55%
22	Isl.Dev. Bank	12.97	0.52%
23	Luxembourg	12.12	0.49%
24	Ireland	9.64	0.39%
25	OFID	9.02	0.36%
26	Kuwait	7.73	0.31%
27	Greece	7.68	0.31%
28	WFP	6.10	0.25%
29	Austria	5.89	0.24%
30	Korea	5.46	0.22%
31	UNICEF	5.30	0.21%
32	Arab Fund (AFESD)	4.30	0.17%
33	UNDP	3.86	0.16%
34	UNFPA	3.60	0.14%
35	Czech Republic	2.06	0.08%
36	Global Fund	1.30	0.05%
37	New Zealand	1.28	0.05%
38	Iceland	1.04	0.04%
39	IFAD	0.83	0.03%
40	Poland	0.70	0.03%
41	Estonia	0.54	0.02%
42	Romania	0.33	0.01%
43	Cyprus	0.32	0.01%
44	WHO	0.30	0.01%
45	IAEA	0.28	0.01%
46	Hungary	0.26	0.01%
47	Lithuania	0.18	0.01%
48	Portugal	0.06	0.00%
		0.02	0.00%
Total		2,485.28	100%

Source: The author by OECD database.

We notice that most of the donors are European countries and institutions, United States, and International institutions, which explains the impact of the politics on the flow of the aids. The financial crisis that hit United States and European countries had insignificant one impact on the cash flow of aids to Palestine, since these contributions are very small compared to their budgets.

Table 58: The Foreign Aids in Palestine by Sector as in 2011 (in US million \$)

Sector	Value	Percentage
1 Other social Infrastructure	838.78	44.39%
2 Humanitarian Aid	478.09	25.30%
3 Educational, Health and Population	246.15	13.03%
4 Program Assistance	7.29%	7.29%
5 Multi-sector	88.42	4.68%
6 Economic Infrastructure	87.09	4.61%
7 Production	9.78	0.52%
8 Unspecified	3.48	0.18%

Source: The author by OECD database.

The social infrastructure has the highest ratio of total aids 44.39%, followed by the Humanitarian assistance at 25.3%; whereas, the production has only 0.52% and the economic infrastructure has only 4.61%. These figures reflect clearly the attitude and the policy of these aids as we stated above, for humanitarian and consumption purposes only. While, the production has no significant support, the Israeli occupation put many obstacles to prevent the development of production.

3.4.6.3- The Policies of Foreign Aid and Social Assistance in Palestine

The foreign aids in Palestine originally started after the Israel occupation in 1948 to Palestine, to relief the mass displaced population from poverty and provide food and shelter then developed to provide the basic needs as well. After 1993, the aids were directed to the rehabilitation of the infrastructure and institutional capacity building of the future Palestine State in 10 years, in addition to finance social and economic projects. However, the failure to reach for final agreement changed the rules of the game in 2000, where the second Intifada was started. After then, the political events escalated and foreign aid fluctuated up on these political changes⁵⁶. The results were catastrophic on all aspects of life, particularly the economic situation.

Consequently, due to fluctuated assistance policy towards the Palestinian Authority and the value of aids received, the Palestinian Authority itself lacked of a clear policy and vision to the social assistance programs, where the programs could not reduce the poverty rate. Palestine was classified as the fifth recipient of official humanitarian aid in the world as in 2010, whereas regarding the size of assistance it was in the 11th order (FANACK). However, the main concern is that these high foreign aids did not reduce the figures of poverty; instead, the poverty was increasing even the aids were almost doubled as it is clear in the table down:

Table 59: Schedule of the Poverty Ratio Compared with Per-Capita Foreign Aids in the Years 2004 – 2008

The Year	Poverty Ratio	Per-capita Foreign Aids in \$
2004	25.4%	323.0
2005	25.3%	321.2
2006	24.0%	391.8
2007	31.2%	488.6
2008	26.1%	685.5

Source: Bisan Center for Research & Development.

Since the Second Intifada in 2000, the donors started different policy of aids by allocating the aids more to emergency funds to prevent humanitarian crisis, resulting in a fall in the

⁵⁶ Israel imposed more restrictions on the Palestinian Authority and freedom of goods and persons movement, and Since Hamas entered the political arena and shared in the coalition national government, which was refused by the international community, particularly the donors, where some of them preferred to deal with the NGOs directly rather than the PA.

ratio of development aid to humanitarian aid from (5:1) in 2000 to (1:7) in 2005 (Hever, 2006).

When comparing the allocation of foreign aids according to the data of the Ministry of Planning we notice that the social sector received the highest allocation in the period (1994 – 2005), which reached 40.8% out of the total aids, followed by the public institutions capacity building by 21%. While, the aids to the productive sectors did not exceed 6% of the total aids, distributed as follows: only 1.84% for agriculture, 0.87% for the industrial and 3.8% for other productive sectors, which means that most of the aids were not productive (Hamdan, 2010)⁵⁷.

This allocation priority of foreign aids is similar to that of the Palestinian public budget in the development plan for the years (2008 – 2011). Even the period was called “The Palestinian Reform and Development Plan”; it allocated more than 40% for the social sector and about 30% for the security and Rule of Law, while the other economic sectors did not receive more than 7% of the budget.

Table 60: Sector Distribution of Total Recurrent and Development Budget Resources (2008 – 2010)

Sector/ Year	2008	2009	2010
Infrastructure	5.5%	7.4%	8.5%
Economic	5.9%	6.2%	7.1%
Governance	10.6%	10.4%	9.8%
Security & Rule of Law	33.5%	32.2%	30.7%
Social Sector	44.5%	43.7%	43.9%

Source: The Palestinian Reform and Development Plan 2008 – 2011, Page 97.

Although MoSA runs several programs for various categories, it was found that the proposed aims were not achieved, although the value of the total aids was increased significantly. Moreover, it is recognized that the programs were not distributed fairly to the beneficiaries due to technical problems in database of beneficiaries and irresponsibility of some beneficiaries, given the fact that the programs are run in fragmented manner and poor coordination between the involved parties. Thus, under the pressure of the financial shortage, the PA as well as the donors and other NGOs concluded to the necessity to change their strategies and programs.

⁵⁷Ayat Hamdan, 2010, Foreign Aid and the Molding of the Palestinian Space , Bisan Centre for research and Development.

Indeed, MoSA recently prepared some studies and a strategic plan for the social assistance in order to increase the efficiency of the available resources and aim to help to empower poor, deprived and marginalized individuals and families and enable them to rely on themselves to come out of the poverty cycle. Since most of the programs of social assistance are financed by foreign aids, in addition to the shortage in financial resources to cover the needed assistance, MoSA prepared in 2010 a strategic plan, which enhances cooperation with these NGOs and donors as well as the beneficiaries. It aims to merge its two main cash transfer programs, lead other national cash transfer programs, and mobilize all resources for better addressing of poverty in Palestine. MoSA has determined the targeted poor people to be those who are under the line of extreme poverty as conceptualized and issued by PCBS. It is expected in the first stage to cover about 65,000 families with the available financial resources. However, in order for MoSA to be able to merge several programs, having a unified and accurate database is a prerequisite; so, MoSA has launched the project of “a Centralized National Database”. MoSA also adapted incentives to NGOs to encourage them to share the data and programs with it.

On the other hand, the UNRWA and other international donors still have their own policy, which had been determined separately, given the fact that the international institutions are very sensitive to the transparency and the political situation in Palestine.

3.5- Health-Care Insurance

The health-care insurance is integrated with other components of social security systems in some countries, while most of countries prefer to separate. In the Palestinian case, it is completely separated; however, we find it is useful to have a glance on the health-care insurance and the services provided to be able to evaluate its integration option to other social security components. Further, it gives indication to the improvement of the health of population, particularly old-aged and disabled, since these indications are important for life expectancy and rehabilitation to enable them return to work.

The Ministry of Healthcare (MoH) is the main provider of the health services in Palestine at 41%, followed by private sector, UNRWA, and NGOs at 21.4%, 19.7%, and 12.8%, respectively (PCBS, 2006).

Table 61: The Number Hospitals, Beds and Clinics Working in Palestine by the Provider in 2011

	Public Sector		UNRWA		NGOs		Private		Total
Palestine (total WB&G)									
Hospitals	28	34.6%	1	.2%	32	39.5%	20	24.7%	81
Beds	3,083	56.9%	63	1.2%	1,764	32.6%	504	9.3%	5,414
Clinics	481	58.9%	61	7.5%	206	25.2%	NA	NA	816
West Bank									
Hospitals	12	23.5%	1	2%	20	39.2%	18	35.3%	51
Beds	1,352	42.7%	63	2%	1,272	40.2%	476	15%	3,163
Clinics	420	62.8%	41	6.1%	140	20.9%	NA	NA	669
Gaza Strip									
Hospitals	16	53.3%	0	0%	12	40%	2	6.7%	30
Beds	1,731	76.9	0	0%	492	21.9%	28	1.2%	2,251
Clinics	61		20	13.6%	66	44.9%	NA	NA	147

Source: MoH, the annual health report of 2011, 2012.

These available hospitals and clinics are important for the primary Health-Care services, eliminating the spread of diseases and providing care and follow up to most of the cases. However, most of these hospitals suffer from shortage of medicine, equipment, experienced physicians and developed devices, given that the population for each hospital is 51,467 persons, and 770 for each bed.

PA could achieve improvement in the field of health services; however, it was not able to meet all needs of population due to many reasons. The most important obstacles were the scarcity of financial resources and medical experts and tools (PNIA, 2011).

3.5.1- Types of Health-Care Insurance in Palestine:

Legally, the Palestinian basic law in the article 22 states the responsibility of MoH to regulate the services of Health-care Insurance and work to offer it for all population within available resources. Beside the public insurance, there are other schemes providing the Health-care Insurance: UNRWA, and private sector.

Governmental

Health-care insurance includes all public sector servants and workers in Israel compulsorily, and includes for free the families of Martyrs and prisoners, families registered at the ministry of social affairs, the infected persons with epidemic or chronic diseases, and the children less than 3 years old. It guarantees the medical treatment in all public health establishments in Palestine, or the costs of treatment outside the MoH, that are transferred by the MoH.

The public health-care insurance has five kinds: compulsory, voluntary, workers in Israel, group contracts, and social welfare in addition to that given to the prisoners. The following schedule describes the kinds of the insurance programs, ratio of coverage over the population and contributions values to the system:

Table 62: Public Health-care Insurance Programs by Beneficiaries, Covered Ratio of the Population in West Bank, and Contributions as in 2011

The Health Insurance Scheme	No. of Beneficiaries (Families) **	Covered Ratio*	Contributions in (NIS) (1 \$ = 3.8 NIS)	Ratio of the total Contributions
Compulsory (MoH)	55,006 + (Gaza)	11.21%	55,628,018	61.93%
Voluntary (MoH)	2,412	0.49%	2,156,903	2.40%
Workers in Israel (MoH)	9,163	1.87%	NA	NA
Group/ Contracts (MoH)	24,792	5.05%	16,344,734	18.20%
Social Welfare (MoH)	23,279	4.75%	10,178,010	11.33%
Ministry of Prisoners affairs	9,969	2.03%	5,518,115	6.14%
Free of Charge	8,717	1.78%	0	0
Total	124,621	25.40%	89,825,780	100%

Source: The author by (PCBS) poverty survey, 2003

* The data above refers only to the population of West Bank, since Gaza Strip is exempted and has unclear registration.

** The average family size in West Bank is (5.3 percent), as in 2011.

Compulsory: The public servants, municipalities' employees, and retirees participate compulsorily to the health insurance. Contribution rate is 5% of their basic salaries or pensions, which includes their dependents as well.

Voluntary: The voluntary public health-care insurance is open for all other categories that are not classified to mandatory insurance. The contribution value is 50 NIS for a single, 20 NIS for a single student and 80 NIS for a Family.

Workers in Israel: This is particular for the workers in Israel, according to the agreement with Israeli government, the PA should receive 93 NIS = 25 \$, for each Palestinian worker in Israeli labor market.

Group Contract: MoH can agree with some private companies or any other institutions by deducting 5% of their basic salary to the health-care insurance. It also gives the chance for the self-employed groups, who are affiliated to occupational societies or associations to be covered. They are charged with a discount rate, which is negotiable every year and subject to change.

Social Welfare: Under this system, the Ministry of Social Affairs MoSA, pays 40 NIS for each needed family registered at the ministry's records.

UNRWA

UNRWA provides basic services for all refugees in Palestine. However, the health services of UNRWA are very limited to the primary health-care and clinical services, and do not include the surgical operations. There are no monthly contributions, but some symbolic fees for the treatment or upon receiving some medicine. In addition, the services include the possibility to cover up to 75% of treatment in other hospitals to the cases transferred from their clinics.

The health services of UNRWA are mainly on dental, laboratory tests, and the primary Health-Care treatments and recently initiated the family and children care programs, which has been important to reduce the number of death of children and control of the number of births. They also provide the necessary vaccinations for the children treated at their clinics and schools. Indeed, some of the refugees choose to receive the services at other hospitals and clinics than UNRWA, where some families have public Health-care Insurance or decide to go for private sector.

In the last decade, UNRWA has declined its services for Palestinian refugees due to the financial shortage it has; where the donors reduced their payments to UNRWA. This

reduction in financial support to the UNRWA operations will have serious negative repercussions on all services, living standards and safety of Palestinians in Palestine.

Private Health-care Insurance

Little large corporations or international institutions offer the opportunity to have private insurance through insurance companies, which is normally very expensive, but they enables the insured employees to meet health treatment in the best available private or public hospitals and compensate large part of the medicine expenses. However, the private clinics and hospitals in Palestine offer limited and specialized services, including performing operations specialized in some diseases like; infertility, heart diseases, and births.

The results of the 2005 survey on patients, to estimate “the costs that they are willing to pay for optimal Health-care Insurance” concluded that the contributions to the Health-care Insurance could be in the range from (10 – 140) NIS for an optimal Health-care Insurance, depending on the income and region. The results as viewed in the report of PCBS of 2006 were as follows:

Table 63: The Mean and the Median of Patient’s Willingness to Pay of Monthly Insurance Premiums in (NIS) for Optimal Health-care Insurance by Households Average Monthly Income and Region 2005

Average Monthly Income	Gaza Strip		West Bank		Palestine	
	Median	Mean	Median	Mean	Median	Median
Less than 1,000	0.0	10.8	25	34.9	15	24.9
1,000 – 1,900	10	20.9	40	48.1	30	39.4
2,000 – 2,900	20	34.2	50	80	50	68.8
3,000- 3,900	15	28.3	90	116.4	57	94.8
4,000 and Over	17.5	31.6	100	142.5	100	123
Do not know	0	36.7	30	63.4	20	60.8
Total	5	19.5	50	59.4	30	46.6

Source: The PCBS report (Health-Care Providers and Beneficiaries Survey-2005 – Main Findings), 2006 (1 \$ = 3.8 NIS)

On the other hand, some NGOs have international existence like "Red Crescent", while the other local ones refer to political parties or depend on international support. The PA encourages such services since they can help in providing the health services, creating job opportunities, getting more devices, and tools and reducing the costs of treatment abroad. While, most of NGOs offer services with reduced fees for all population in Palestine, they have limited capacity and services. Usually, they depend on international donors in meeting

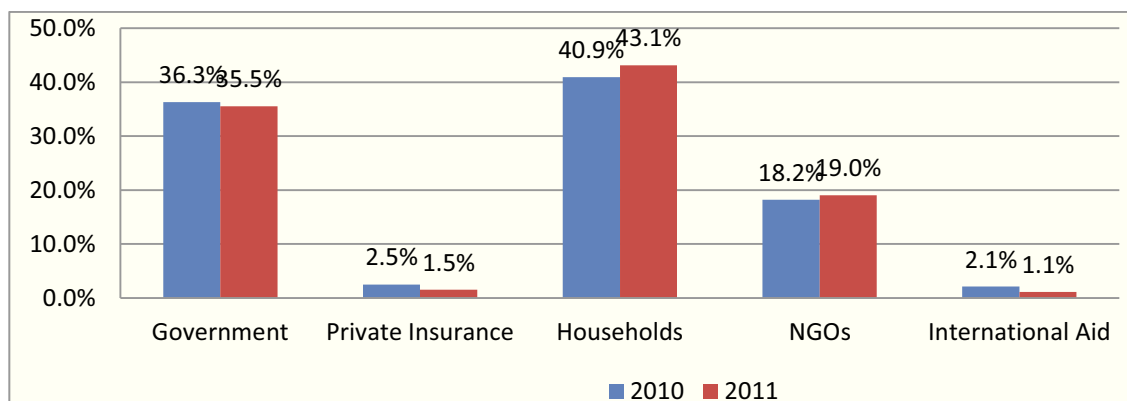
their financial needs, and specialize in some unavailable services, particularly at rehabilitation, where there is no other provider than five NGO associations: three in West Bank and two in Gaza Strip.

Thus, the Health-care Insurance system needs more regulation, to guarantee the equity in coverage over population.

3.5.2- Finance Resources of Health Services

In 2011, the total expenses on Health-care Services in Palestine were estimated at 1,201\$ million US dollar, recording an increase by 11.83% compared with expenses in 2010, where it was at 1,074.7\$ million US dollar. It constitutes about 12.3% out of the GDP, compared to 13.7% in 2010. Meanwhile, the households tolerated the highest rate of the total health expenses at 43.1%, followed by the government expenses at 35.3%. Further, the Households and NGOs witnessed an increase in financing health services in 2011 compared to 2010, while the financing from government, private insurance companies, and international aids were declined (PCBS, 2013).

Figure 82: The Distribution of Financier Resources of Health-care in Palestine as in 2010 and 2011



Source: The author by the PCBS Report (The National Health Accounts – Main Findings, 2011)

These changes in expenses decreases the ability of household to save, which due to the bad health services in state health institutions and austerity measures of the government.

As the public health services are provided for small annual insurance fees and for free in some cases, the finance of the health services depends highly on the international aids, which makes the services quality volatile according to the donors policies and the number of emergency cases due to the political conflict. Meanwhile, there was some development

in the private sector of the health services through the last decade, but they are still expensive and limited.

On the other hand, the available data from the 2005 survey conclude that the average cost of the health services was the highest in the private sector at 189 (NIS) and the least was at UNRWA, where it is for free. In addition, it has low cost of transportation as it has local clinics in each area.

Table 64: Average Cost of Health-care Services by Sector as in 2005 (In NIS)

The sector	Cost Average	Cost Median	Transportations Cost
The public	23.3	3	8.3
UNRWA	0	0	2.2
NGOs	140.5	20	6.1
Private	189	30	7.9

Source: The researcher by The PCBS Report (Health Care Providers and Beneficiaries Survey-2005 – Main Findings, 2006)

Besides, Palestine lives hot political conflict with clashes and regular wars each two or three years. This case creates emergency crises and ambiguity regarding the cost of service quality. Thus, the public health-care system does not have a clear financing mechanism, where there is no clear relation between the contributions and expenses. Otherwise, the expenses depend on the annual allocation to the MoH in the budget regardless the contributions collected and the emergency cases due to political conflict, which makes the services volatile.

Cost of Treatment Abroad:

As health services in Palestine were in bad conditions and do not provide all kinds of treatment, MoH transfers the cases that cannot handle in its institutions to other local or foreign institutions, with which it has an agreement.

The serious cases, like cancer and some other kinds of surgical operations, are almost transferred to Israel, Jordan and Egypt; however, medical transfers take long lasting regulations and exhaust the public budget. According to the data of MoH, the expenses on medical transfers decreased in 2011 by 16.2% compared to the expenses in 2010, where it decreased from \$40.2 million US dollar to \$33.7 million US dollar in 2011 (PCBS, 2011). In 2011, it is noticed that 77% of the total cases of transferred treatments from MoH are transferred to hospitals inside Palestine and only 23% are abroad; however, the costs of the

last one form 46.2% of the total costs. Indeed, it is clear how the transfers of medical treatment outside are very expensive, which necessitate to review the health sector in order to improve the efficiency (MoH, 2012).

Table 65: Distribution of Treatment Cases inside and outside Palestine by Places of Referral, 2011

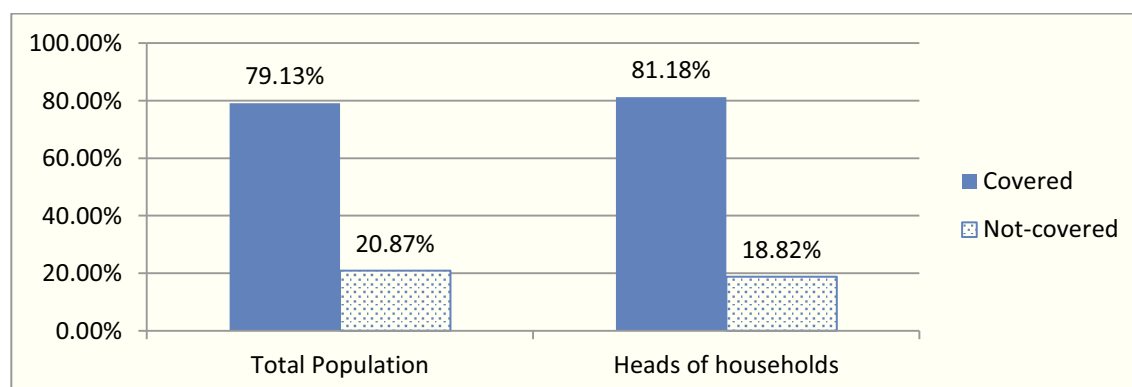
Place of Referral	West Bank		Gaza Strip		Palestine (Total)	
	Number	Cost	Number	Cost	Number	Cost
Inside Palestine	33,108	190,522,985	10,377	63,686,453	43,485	254,209,438
In Gaza Strip	0	0	4,649	11,940,965	4,649	11,940,965
In West Bank	14,668	86,156,800	1,563	15,719,200	16,231	101,876,000
In Jerusalem	18,440	104,366,185	4,165	36,026,288	22,605	140,392,473
Outside Palestine	5,437	127,317,545	7,546	90,929,198	12,983	218,246,743
In Egypt	3	59,000	3,866	17,581,700	3,869	17,640,700
In Jordan	3,769	90,359,365	581	9,463,600	4,350	99,822,965
In Israel	1,665	36,899,180	3,099	63,883,898	4,764	100,783,078
Total	38,545	317,840,530	17,923	154,615,651	56,468	472,456,181

Source: MoH, the Annual Health Report of 2011, 2012. (1 \$ = 3.8 NIS)

3.5.3- Access to Health-care Insurance by Socio-economic characteristics

As we noticed above, there are several health-care insurance programs or services dedicated for different groups of the society in Palestine, which enhanced the coverage to be high. According to the poverty survey of 2003, 79.13% of the total population had health-care insurance; while, among the heads of households, 81.18% had health-care insurance. Further, according to the analyzed data of the 2007 census, 82.84% of the population are covered by health-care insurance compared to 84.90% of the sample of the Consumption and Income survey of 2011. Thus, all the results of the several surveys indicate to high coverage rate of health-care insurance, and this rate increases by time.

Figure 83: Health Insurance Coverage Rate of Total Population Compared to Heads Households as in 2003

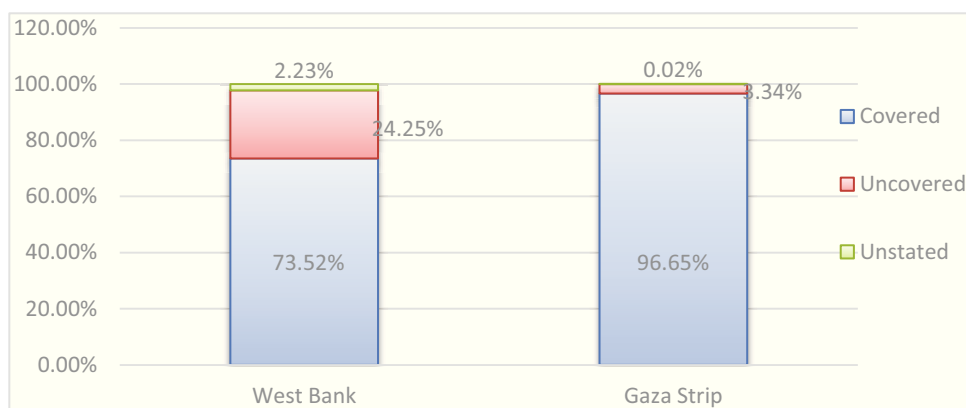


Source: The author by PCBS poverty survey, 2003

By Region

We notice from the data that coverage rate in Gaza Strip was higher than in West Bank; 96.65% in Gaza Strip compared to 73.52% in West Bank as in 2007; while in 2003, the coverage rate was 80.97% in Gaza Strip compared to 70.81% in West Bank. However, even the coverage ratio seems to be improved in the recent years, there is still high ratio that are not covered by any kind of health-care insurance. On the other hand, the workers in Israel in 2007 are from West Bank only, but in 2003 they were from both WB&G, where normally those working legally are covered by the health-care insurance. Therefore, the coverage rate was less in Gaza Strip in 2007 compared to 2003.

Figure 84: Health Insurance Coverage Rate by Region as in 2007



Source: The author by the 2007 census performed by the (PCBS)

In regard to the work sector, according to 2007 survey the coverage rate is higher among households working in public sector than those in private sector at 97.03 compared to 74.06%, respectively. Furthermore, the coverage among public sector households living in Gaza Strip is 98.67% compared to 94.48% in West Bank; while, for private sector households, it is 86.72% in Gaza Strip compared to 69.04% in West Bank.

Table 66: Health Insurance Coverage Rate of Heads of Household by Employment Sector and Region as in 2003

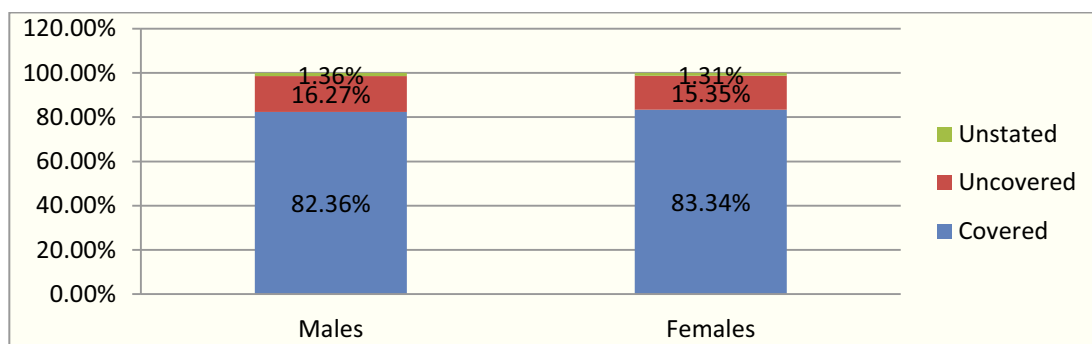
Region	West Bank (60.48%)		Gaza Strip (39.52%)	
	Covered (75.04%)	Not-covered (24.96%)	Covered (90.59%)	Not-covered (9.41%)
Public sector (11.66%)	94.48%	5.52%	98.67%	1.33%
Private sector (14.21%)	69.04%	30.96%	86.72%	13.28%

Source: The author by PCBS poverty survey, 2003

By Gender

According to surveys, even there is no significant difference in medical insurance coverage between males and females; the ratio of coverage of female is still higher. There are 82.36% of males have health-care insurance compared to 83.34% of females according to 2007 survey.

Figure 85: The Health Insurance Coverage Rate by Gender as in 2007



Source: The author by the 2007 census performed by the (PCBS)

By Health Insurance by Refugee Status

It is noticed that in 2003, the health insurance coverage was higher among refugees compared to non-refugees at 93.59% compared to 65.50%, respectively. While in 2011, it was 99.40% for refugees compared to 70.50% for non-refugees. That indicates to the improved health-care insurance from 2003 to 2007 and it is still more among refugees as they have more opportunity to benefit from UNRWA services.

By Health Insurance by Locality type

According to the poverty survey of 2003, the population in urban areas form 51.49% compared to 27.14% and 21.38% for rural areas and refugee camps, respectively. The health-care insurance coverage rate among the total population is the highest among those living in refugee camps at 95.73% followed by population living in urban areas at 77.54%, then in the rural areas at 69.06%.

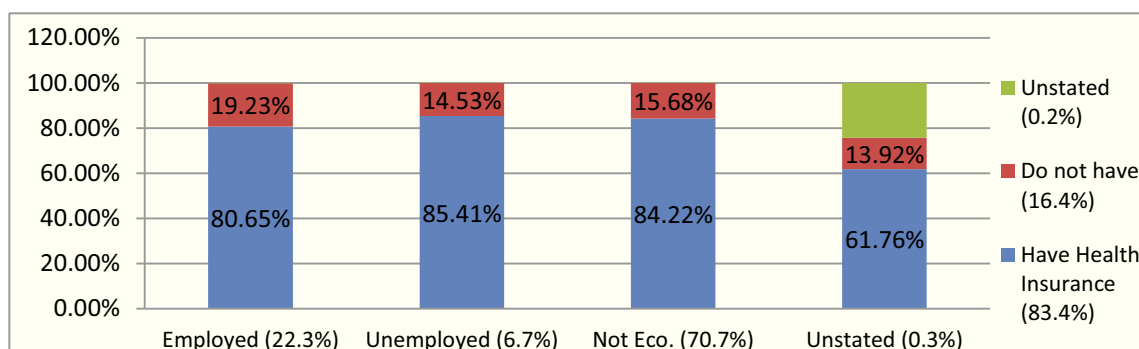
While, among the heads of households, the health-care insurance coverage rate is at 97.13% in the refugee camps, 97.71% in the urban areas, and 71.96% in the rural areas. Likewise, the highest coverage rate according to 2011 survey is in refugee camps at 99.43%, which indicates to the role of service of United Nations of Relief and Works

Agency for Palestinian Refugees (UNRWA) and charity NGOs in providing the health-care assistance to poor people in poor areas.

By Relation to Labor

In regard to the relationship between Health-care Insurance coverage rate and labor, there are 21.58% of the covered population are employed and 6.8% are unemployed, whereas, 71.34% were considered as not economic, and only 0.21% as unstated. This high rate of the category that was considered as “not economic” is due to the high informal sector in Palestine. Moreover, 80.65% of the employed population are covered, while the unemployed and not economic were covered at 85.41% and 84.22%, respectively.

Figure 86: Health-care Insurance Coverage Rate by Labor Status in 2007

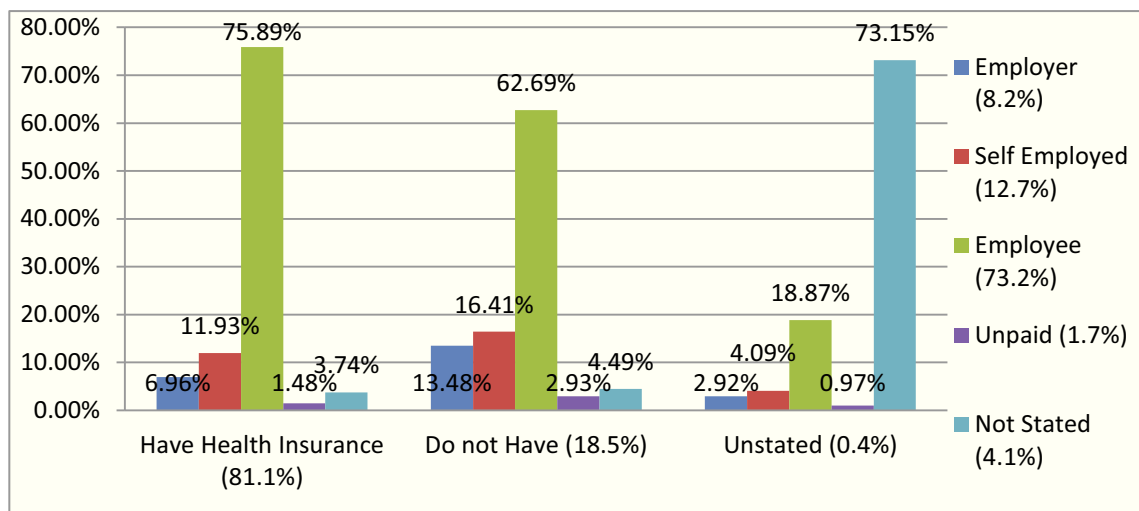


Source: The author by the 2007 census performed by the (PCBS)

By Employment Status

Regarding the employment status, the distribution rates of the employers and self-employed are the highest among those without health insurance, which means more people of the higher income group do not care regarding Health Insurance as the system is not mandatory on these groups and the service quality is not acceptable compared to the private sector. The figure shows that we have a high rate of the “not stated” group, which indicates to high informal sector.

Figure 87: The Health-care Insurance Coverage by Employment Status as in 2007



Source: The author by the 2007 census performed by the (PCBS)

By Educational Attainment

There is no serious difference of the coverage of health insurance among the different educational levels of the sample, acknowledging that the average coverage of medical insurance is 85.26%. The highest rate of coverage is for those who have high diploma at 97.6% followed by master degree at 89.6%, whereas the lowest rate is for those who have secondary and preparatory degrees at 83.43% and 83.02%, respectively.

Figure 88: Health Insurance by the Educational Attainment as in 2011



Source: The author by (PCBS) consumption and income survey, 2011

By Age Group

The population distribution shows that about 63.44% of the population are less than 25 years old and only 4.41% are over 60 years old as in 2007.

Table 67: Health Insurance Coverage Rate by Age Groups as in 2007:

Medical Insurance	0 – 4	5 – 14	15 – 24	25 – 59	60 +	Not Stated
Available	88,578	159,691	118,095	176,518	25,598	450
82.8%	85.3%	85.4%	81.5%	83.3%	84.6%	5.1%
Unavailable	15,189	26,991	26,835	35,141	4,599	195
15.8%	14.6%	14.4%	18.3%	16.6%	15.2%	2.2%
Not Stated	133	21	207	374	65	8,178
1.3%	0.1%	0.1%	0.1%	0.2%	0.2%	92.7%
Total	103,900	186,913	144,836	212,033	30,262	8,823
	100%	100%	100%	100%	100%	100%

Source: The author by the 2007 census performed by the (PCBS)

The covered persons are mostly from the young generations, who are less than 25 years old, where all children normally are covered for free. However, the older is the age, the less free services are available. We notice that the coverage rate in most of age groups is high and almost close to each other at around 83%, while for the uncovered population the rate is about 16%.

By Poverty According to the Equivalence Income⁵⁸

The poverty rate among the total population, according to the equivalence income of households is 25.14% in Palestine as in 2003. The health insurance coverage rate among poor population is 78.73% compared to 79.19% among not-poor population. Thus, the poverty status does not make difference to health insurance as it is offered to most groups of the population and many programs available to support health insurance.

In conclusion, health insurance coverage rate is high and there are no much differences by the socio-economic characteristics of the population. This high rate may refer to the availability of various insurance programs; however, the public health insurance is the most important one as it is offered for all categories of the population in voluntary basis and reduced prices for certain groups. Even the poor families can have support to benefit from

⁵⁸ The poverty rate was calculated according to equivalence income scale of OECD and the poverty line in Palestine as determined by the PCBS at 2,350 NIS for the a family of 2 adults and 3 kinds.

the health insurance through an assistance programs in MoSA. NGOs and charities enhanced the poor family to increase the scale of coverage rate, while the private sector enhanced the health services in some particular fields that could not be available to public insurance.

Still the health services need to enhance the quality of service and improve the technical medical tools and attract the experienced physicians to reduce the cost of health service on the insurance. Moreover, the political issues increase the burden of MoH and health insurance as it increases the expenses of medical treatment.

3.5.4- Main Challenges of Health-care Insurance System in Palestine

Although the health figures reflect good health status in Palestine, delivering the Health-care services still faces enormous challenges. The level of health services affects the insurance coverage as well. The Health-care Insurance system suffers from some of the fundamental problems, which limits the ability of development and growth and increasing the number of members in the system. The following are some of the main problems:

- 1- High unemployment rate in Palestine limits the voluntary subscription.
- 2- The system has the problem of irregularity in the payments of monthly contributions by voluntary members, where they pay only when they need the health treatment.
- 3- Israeli government is not committed to transfer the contributions collected from Palestinian workers, working in the Israeli labor market.
- 4- The public health-care centers in Palestine is not developed enough to offer all the needed health services, in addition to the quality of services is not satisfactory to the clients.
- 5- The political instability and violence of the Israeli occupation expose the Palestinian people to more risks resulting in more casualties that need more health-care services even without health insurance.
- 6- Highly increasing population increases the burden and expenses of health services, as Palestine has large family size and the insurance has large scale of benefit to the dependent people of the insured person.
- 7- Medicine and tool availability and distribution is not efficient that cause shortage in many cases.

3.6- The Measures for Financial Stability by Socio-demographic Characteristics

The individuals who face financial instability try to take some measures to keep the stability and be able to cope with risks of financial shortfall in order to meet their needs. These measures could differ among different individuals upon their social and demographic characteristics as explained in the following analysis.

3.6.1- Refugee Status

Refugee status is one of the main characteristics of the Palestinian society, which almost is accompanied by more poverty rate compared to non-refugee status. The refugees constitute 48.50% of the total population in Palestine. Thus, there are some differences in behavior of some of the measures taken to face the financial stability between refugees and non-refugees, particularly, in borrowing from banks, used work savings at Israeli banks and assistance of friends and relatives at 55.06%, 62.75% and 56.56%, respectively. While, the measurements, which were less among refugees, are: sending family members to work, reducing expenditures and selling durable goods at 41.63%, 43.64% and 40.94%, respectively.

Table 68: Measures Taken by Households for Financial Stability by Refugee Status

The measure taken for financial stability	Rate of Households took the measure	Refugee 48.50%	Not-Refugee 50.5%
Depending on usual income	76.06%	48.82	51.18
Reducing expenditures	36.13%	43.64	56.36
Borrowing from Banks	1.71%	55.06	44.94
Borrowing from individuals	46.17%	48.86	51.14
Using savings	20.51%	46.68	53.32
Used work savings at Israeli Banks	1.47%	62.75	37.25
Selling Jewelries	12.68%	47.82	52.18
Assistance of friends/ relatives	21.81%	56.56	43.44
Selling durable goods	1.22%	40.94	59.06
Postponing paying bills	72.05%	48.08	51.92
Sending family members to work - Students	4.38%	43.91	56.09
Sending family members to work -Others	4.42%	41.63	58.37

Source: The author by (PCBS) poverty survey, 2003

Items Selected to Reduce Expenditures by Refugee Status

Given the fact that 45.60% of the population are refugees, the flexibility in reducing the expenditures is available only in education, while the non-refugees have more flexibility

in the other items. Given the fact that the refugee status is accompanied by poverty, it enhances the argument mentioned above that the poorer the household is, the less flexible and less alternative are available to reduce the expenditures.

Table 69: Kinds of Reduced Expenditures of Households for Financial Stability by Refugee Status

The item reduced as reducing expenditures measure taken for financial stability	The rate of population reduced expenditures	Refugee (45.60%)	Not-Refugee (54.40%)
Food	87.66%	45.66	54.66
clothing	92.61%	45.53	54.47
education	51.85%	47.55	52.45
health	53.09%	43.22	56.78
dwelling	77.19%	43.14	56.86
water	62.15%	41.32	58.68
leisure and culture	65.44%	43.70	56.30
other	9.20%	31.73	68.27

Source: The author by (PCBS) poverty survey, 2003

3.6.2- Locality Type

In this section, the population is classified by the three types of locality: urban, rural and refugee camps. It is supposed that these different types of locality have impact on the characteristics of the population and different behavior in facing financial stability.

It is found that 51.50% of the population is living in urban type of locality, 27.12% in rural areas and 21.38% in refugee camps.

In general the largest measurement taken to face financial stability was depending on usual income at 76.06%, then postponing paying bills at 72.05%, then borrowing from individuals at 46.17% and reducing expenditures at 36.13%. The other measurements were insignificant.

It is noticed that the population in urban types choose more borrowing from banks than population in other types at 72.19%, then sending family members to work at 65.53%, while the population in rural areas choose more to borrow from individuals at 30.17%, reducing expenditures at 32.73% and postponing paying bills. However, the population in refugee camps chooses as a measurement to face financial stability compared to other types more selling durable goods at 28.74% and to have assistance of friends and relatives at 27.46%.

The last figures indicate that these are related to the income and available opportunities to be financed and ability to repay, save or reduce expenditure.

Table 70: Measures Taken by Households for Financial Stability by Locality Type

The measure taken for financial stability	Rate of Households took the measure	Urban 51.50%	Rural 27.12%	Refugee camp 21.38%
Depending on usual income	76.06%	53.76	24.92	21.32
Reducing expenditures	36.13%	48.84	32.73	18.43
Borrowing from Banks	1.71%	72.19	8.99	18.82
Borrowing from individuals	46.17%	49.16	30.17	20.67
Using savings	20.51%	52.99	28.73	20.51
Used work savings at Israeli Banks	1.47%	61.76	25.82	12.42
Selling Jewelries	12.68%	57.30	24	18.70
Assistance of friends/ relatives	21.81%	47.26	25.28	27.46
Selling durable goods	1.22%	57.09	14.17	28.74
Postponing paying bills	72.05%	50.54	28.67	20.79
Sending family members to work -Students	4.38%	65.53	21.41	13.06
Sending family members to work -Others	4.42%	59.02	26.96	14.02

Source: The author by (PCBS) poverty survey, 2003

3.6.3- Region

Upon the sample of the survey, the population in Palestine is distributed as 56.59% in West Bank and 43.41% in Gaza Strip.

The highest difference in behavior was in the measurement of using work savings at Israeli banks, in which 84.31% are from West Bank compared to only 15.69% in Gaza Strip. That refers to the ability of the labor force from West Bank to work in Israel and Israeli settlement in West Bank, where this opportunity is not available to population of Gaza Strip.

The second highest difference by region is reducing expenditures, in which 67.68% are from West Bank compared to 32.32% in Gaza Strip. That could refer to the poverty status, which is higher and deeper in Gaza Strip, and that does not leave a margin to reduce the expenditures.

Thus, we find that borrowing from banks is higher in Gaza Strip at 59.55% compared to only 43.37% are borrowing from individuals. In addition, selling the durable goods was also one of the measures that are higher in Gaza Strip at 60.63%. The relation of the measures taken to face the financial stability by the region is shown in details in the next table:

Table 71: Measures Taken by Households for Financial Stability by Region

The measure taken for financial stability	Rate of Households took the measure	West Bank (56.59%)	Gaza Strip (53.41%)
Depending on usual income	76.06%	55.12%	44.88%
Reducing expenditures	36.13%	67.68%	32.32%
Borrowing from Banks	1.71%	40.45%	59.55%
Borrowing from individuals	46.17%	56.63%	43.37%
Using savings	20.51%	58.21%	41.79%
Used work savings at Israeli Banks	1.47%	84.31%	15.69%
Selling Jewelries	12.68%	53.62%	46.38%
Assistance of friends/ relatives	21.81%	53.25%	46.75%
Selling durable goods	1.22%	39.37%	60.63%
Postponing paying bills	72.05%	58.06%	41.94%
Sending family members to work - Students	4.38%	48.85%	51.15%
Sending family members to work –Others	4.42%	60%	40%

Source: The author by (PCBS) poverty survey, 2003

The Items Selected to Reduce Expenditures by Region

The survey allows us to focus more on the details of the measure of reduced expenditures to face financial stability. In this section, there are eight main items, which were selected as the determinants of reducing expenditures, reviewed by region. The largest item was chosen to reduce the expenditures is clothing at 92.61%, followed by food at 87.66% , the dwelling at 77.19%, then leisure and culture at 65.44% and water at 62.15%. It is noticed that the largest reduction was in basic items, which indicates that the living standards are not high in general and the reduction was in the type of clothing, food and dwelling, rather than stop consumption at all. Thus, the effect of reducing expenditures remains limited in facing financial stability, except in high-income people who consume more in normal days and have more flexibility in reducing expenditures. Given the fact that 59.52% of the population living in West Bank and 40.48% living in Gaza Strip, and reducing expenditures is at 36.13% of the total population, there is no difference in reducing consumption in the items of health, clothing and water between West Bank and Gaza Strip. While, population in West Bank have more flexibility in reducing dwelling, and leisure and culture, the population in Gaza Strip have had to reduce the food and education expenditures.

This case of population in Gaza Strip may due to the assistance received by people as food and scholarship that reduces the sharpness of the financial crises and increases the alternatives.

Table 72: Kinds of Reduced Expenditures of Households for Financial Stability by Region

The item reduced as reducing expenditures measure taken for financial stability	The rate of population reduced expenditures	West Bank 59.52%	Gaza Strip 40.48%
Food	87.66%	57.01	42.99
Clothing	92.61%	59.89	40.11
Education	51.85%	51.23	48.77
Health	53.09%	59.27	40.78
Dwelling	77.19%	62.55	37.45
Water	62.15%	60.70	39.30
leisure and culture	65.44%	62.85	37.15
Other	9.20%	91.02	8.98

Source: The author by (PCBS) poverty survey, 2003

3.6.4- Workforce-Age Status of the Heads of Household

In this section, the heads of household were selected out of the population and were classified by being in working age population or over the age of 60.

It is noticed that 70.31% depended on the usual income as a measurement to face financial stability, and 68.13% choose postponing paying bills. While, 41.96% borrowed from individuals and 34.30% reduced expenditures, while, the other measurements were not significant.

It is noticed that the old aged heads of households represent 23.99% out of the total heads of households, who aged over 15 years old. Further, they could face the financial stability by having assistance of friends and relatives at 34.77%, then about 23.12% of population aged over 60 years choose using savings then, 21.05% reducing expenditures, and 21.01% postponing paying bills.

The rest of the mentioned population constitutes 76.01%, and mostly they borrowed from banks at 90.48% as measurement to face the financial stability. They also chose borrowing from individuals at 82.42% and selling jewelries at 89.94%.

Probably the ability to borrow is higher among population in working age population due to their ability to repay the loan, whereas the old people almost unable. Thus, this difference in behavior almost related to the income and poverty status in addition to the social relations and family structure.

Table 73: Measures Taken by Households for Financial Stability by Workforce-Age Status

The measure taken for financial stability	Rate of Households took the measure	Aged 15-59 76.01%	Aged 60+ 23.99%
Depending on usual income	71.31%	81.34	18.34
Reducing expenditures	34.30%	78.95	21.05
Borrowing from Banks	1.32%	90.48	9.52
Borrowing from individuals	41.96%	82.42	17.58
Using savings	21%	76.88	23.12
Used work savings at Israeli Banks	1.36%	81.40	18.60
Selling Jewelries	11.29%	89.94	10.06
Assistance of friends/ relatives	26.29%	65.23	34.77
Selling durable goods	1.20%	84.21	15.79
Postponing paying bills	68.13%	78.99	21.01
Sending family members to work – Students	3.12%	82.83	17.17
Sending family members to work –Others	3.34%	78.30	21.70

Source: The author by (PCBS) poverty survey, 2003

3.6.5- Receiving Assistance Status

In regard to the relation between receiving assistance and the measures taken for financial stability, the majority of the population who received assistance did not take other measures for financial stability, and those who took other measures almost did not receive assistance. Given that the total population rate received assistance is 34.44% compared to 65.56% did not receive, the following are the indicators of people who received assistance with other measures taken for financial stability.

Among the population, who received assistance in the month before the survey, 74.65% received assistance of friends and relatives to face the financial stability. The second largest measurement that was taken to face the financial stability by the population received assistance, was borrowing from individuals at 41.53%, followed by reducing expenditures at 39.58%, then postponing paying bills at 38.66%. On the other hand, among the population, who did not receive assistance, they choose more to use work savings at Israeli banks at 75.82%, followed by borrowing from banks at 73.03%, then depending on usual income at 72.85% and using savings at 68.90%.

The people who did not receive assistance are supposed to have better income, thus, they could save and borrow from banks, which make them more flexible to face the financial crises.

Table 74: Measures Taken by Households for Financial Stability by Receiving Assistance Status

The measures taken for financial stability	Rate of Households took the measure	Received Assistance (34.44%)	Did not-Received Assistance (65.56%)
Depending on usual income	76.06%	27.15%	72.85%
Reducing expenditures	36.13%	39.58%	60.42%
Borrowing from Banks	1.71%	26.97%	73.03%
Borrowing from individuals	46.17%	41.53%	58.47%
Using savings	20.51%	31.90%	68.90%
Selling Jewelries	12.68%	36.75%	63.25%
Assistance of friends/ relatives	21.81%	74.65%	25.35%
Selling durable goods	1.22%	42.52%	57.52%
Used work savings at Israeli Banks	1.47%	24.18%	75.82%
Postponing paying bills	72.05%	38.66%	61.34%
Sending family members to work - Students	4.38%	35.46%	64.54%
Sending family members to work -Others	4.42%	38.37%	61.63%

Source: The author by (PCBS) poverty survey, 2003

3.6.6- Having Chronic Disease

In the survey, seven chronic diseases (Diabetes, blood pressure, heart diseases, Cancer, Ulcer, asthma and epilepsy) were determined to test rate of population having chronic disease, where the results indicate that the rate of population having chronic diseases is 7.68%.

Table 75: Measures Taken by Households for Financial Stability by Having Chronic Disease Status

The measure taken for financial stability	Rate of Households took the measure	Having chronic Disease (7.68%)	Not-Having chronic disease (92.32%)
Depending on usual income	76.06%	6.44%	93.56%
Reducing expenditures	36.13%	8.46%	91.54%
Borrowing from Banks	1.71%	7.30%	92.70%
Borrowing from individuals	46.17%	7.10%	92.90%
Using savings	20.51%	7.66%	92.34%
Used work savings at Israeli Banks	1.47%	8.50%	91.50%
Selling Jewelries	12.68%	6.98%	93.02%
Assistance of friends/ relatives	21.81%	10.25%	89.75%
Selling durable goods	1.22%	9.45%	90.55%
Postponing paying bills	72.05%	7.57%	92.43%
Sending family members to work - Students	4.38%	7.14%	92.86%
Sending family members to work -Others	4.42%	7.93%	92.07%

Source: The author by (PCBS) poverty survey, 2003

In regard to the age distribution of the population, the highest chronic disease rate was among the population, who are over the age of 60 at 49.07%, followed by population at

working age population at 7.85%, while among the population aged less than 15 years old, it was only at 1.33%.

It is noticed that there is no serious relation between having chronic disease and the measures taken to face the financial stability, given the facts that it is related more to age than the locality or poverty status, in addition to the wide coverage of health insurance. The highest measures were taken to face financial stability are assistance of friends and relatives, selling durable goods and reducing expenditures at 10.25, 9.45 and 8.46%, respectively.

3.6.7- Educational Level

The majority of the heads of household have educational level under the secondary degree at 70.47% of the total heads of household, and that have impact over the measures taken by the households in facing the financial stability.

Table 76: Measures Taken by Households for Financial Stability by Educational Level

The measure taken for financial stability	Rate of Households took the measure	Under secondary (69.57%)	Secondary and over (30.43%)
Depending on usual income	76.06%	66.90%	33.10%
Reducing expenditures	36.13%	74.52%	25.48%
Borrowing from Banks	1.71%	61.75%	38.25%
Borrowing from individuals	46.17%	73.74%	26.26%
Using savings	20.51%	65.55%	34.45%
Used work savings at Israeli Banks	1.47%	72.37%	27.63%
Selling Jewelries	12.68%	72.89%	27.11%
Assistance of friends/ relatives	21.81%	75.77%	24.23%
Selling durable goods	1.22%	77.12%	22.88%
Postponing paying bills	72.05%	73.13%	26.87%
Sending family members to work - Students	4.38%	78.14%	21.86%
Sending family members to work - Others	4.42%	81.53%	18.47%

Source: The author by (PCBS) poverty survey, 2003

While those having less than secondary degree of education, almost send family members to work, sell durable goods, have assistance of friends, borrow from individuals, and reduce expenditures at 81.53%, 77.12%, 75.77%, 73.74% and 74.52%, respectively, the others borrow from banks, use savings or depend on usual income more, at 38.25%, 34.45% and 33.10%, respectively. Since the educational level is related to the income, this difference

in behavior indicates to the relation of the poverty status of the heads of household with the taken measures.

3.6.8- Employment Status of the Heads of Household

In regard of the employment status of heads of household, 95.58% of the employed heads of household depended on the usual income. The second largest measurement taken was postponing paying bills at 67.05%, followed by borrowing from individuals at 41.34% and reducing expenditures at 30.30%.

In regard to the measurements of each type of employment status, the employers almost send the family members to work then using savings. While, the self-employed almost reduce expenditures, use savings and postpone paying bills.

On the other hand, the employed mostly borrow from banks, and then they borrow from individuals, depend on usual income and postpone paying bills as indicated in the following table. The behavior among the different groups is obvious, and related almost to the income level and stability and the ability to save.

Table 77: Measures Taken by Households for Financial Stability by Employment Status

The measure taken for financial stability	Rate of Households took the measure	Employer (12.07%)	Self-employed (16.89%)	family worker (0.43%)	Employed (70.62%)
Depending on usual income	95.58%	11.85%	15.93%	0.93%	71.84%
Reducing expenditures	30.30%	12.09%	18.67%	0.72%	68.51%
Borrowing from Banks	2.17%	7.78%	0%	0%	92.22%
Borrowing from individuals	41.34%	6.76%	15.52%	0.53%	77.19%
Using savings	18.70%	16.39%	22.89%	0.41%	60.32%
Used work savings at Israeli Banks	1.51%	16.76%	8.38%	0%	74.86%
Selling Jewelries	11.63%	13.22%	18.45%	0.51%	67.83%
Assistance of friends/ relatives	13.34%	4.49%	17.41%	0.95%	77.15%
Selling durable goods	1 %	13.45%	16.81%	0%	69.75%
Postponing paying bills	67.05%	9.87%	19.23%	0.48%	70.42%
Sending family members to work -Students	3.69%	19.68%	17.62%	0%	62.70%
Sending family members to work -Others	3.86%	14.88%	10.50%	0%	74.62%

Source: The author by (PCBS) poverty survey, 2003

3.6.9- Disability Status

The disability in Palestine is 2.97% out of the total population. The measures taken are in the same distribution as the above section, in which the largest measurement is depending on usual income at 76.06% followed by postponing paying bills. It is noticed that there is no serious difference in behavior of the population by disability, except in having assistance of friends and relatives at 4.74, sending family members other than students to work at 4.13% and reducing expenditures at 3.47%. There are some associations and NGOs that care of the disabled persons and provide assistance for them, particularly, many cases are related to violence and occupation.

Table 78: Measures Taken by Households for Financial Stability by Disability Status

The measure taken for financial stability	Rate of Households took the measure	Not-Disabled 97.03%	Disabled 2.97%
Depending on usual income	76.06%	97.69	2.31
Reducing expenditures	36.13%	96.53	3.47
Borrowing from Banks	1.71%	97.19	2.81
Borrowing from individuals	46.17%	96.76	3.24
Using savings	20.51%	97.68	2.32
Used work savings at Israeli Banks	1.47%	98.04	1.96
Selling Jewelries	12.68%	97.08	2.92
Assistance of friends/ relatives	21.81%	95.26	4.74
Selling durable goods	1.22%	96.06	3.94
Postponing paying bills	72.05%	96.81	3.19
Sending family members to work - Students	4.38%	97.15	2.85
Sending family members to work -Others	4.42%	95.87	4.13

Source: The author by (PCBS) poverty survey, 2003

3.7- Conclusion

The absence of modern and dynamic social security systems in Palestine has forced the Palestinians to seek alternative solutions for their housing, educational level, healthcare, and retirement future needs. Palestinians have depended on personal savings and family resources to keep their financial stability and meet their needs; however, these kinds of mechanisms make little contribution to capital accumulation for investment and economic growth. The economic growth in Palestine has a variable performance and highly dependent on the international aids and political instability.

The data from the survey indicates that there is high poverty rate in the Palestinian society in Palestine and that poverty is related to some characteristics of the population of region, locality types of residence, educational attainment, working status, and family size. However, the occupation has been one of the main reasons of having the poverty among most of the Palestinians, particularly among the refugees due to the military actions and violence in addition to the restrictions imposed on movement of goods and humans on the borders of Palestine and inside West Bank. The high dependency ratio could be another important reason of poverty. The Palestinian society is young population, where the young population under the 18 years old form about half of the population. Further, it is found that there is positive relation between the family size and poverty. The young population need investment to care of them and provide adequate nutrition system, health services and education; while, the budget and the investment opportunities are not enough in Palestine due to occupation.

The low share of females in labor force is prominent feature of the society in Palestine, where this low share increases the dependency ratio in the society and the violence and reduces the education rate due to early marriage of the females. On the other hand, due to the traditional structure of the Palestinian family, the high unemployment rate increases the dependency ratio, where unemployed poor persons depend on their relatives and friends to meet their needs, and that has negative impact on the overall income adequacy of the households as well as their saving ability.

There are differences in the socio-demographic characteristics among the Palestinians in WB&G; however, the poverty gap is not large and the living standards are close among the majority of the population.

Another main problem in the Palestinian society is the high informal sector, which negatively affects the pension system and health-care insurance system since the people working in the informal sector do not have the opportunity to enjoy neither the pension benefits nor the health-care insurance. At the same time, they would receive social assistance. Moreover, the political instability and occupation are other significant problem, where ending the occupation and independency are essential for any development and stability of the economic growth.

These conditions reduce the government abilities to provide services and make it reliable on the international assistance. It is found also that the social assistance coverage is related to the socio-demographic characteristics, particularly, the coverage of pension benefits and the receiving assistance, while the health-care insurance coverage is high regardless these differences.

The pension system has some problems and faces serious challenges. One of the most important is that the system lacks of some types of benefits like the unemployment insurance, maternity payments, and partly disability. On the other hand, the coverage is limited to public sector and any extending plan needs to include the informal sector and improve the law to be appropriate to private sector.

While, recent reports of the World Bank criticized the system as unsustainable, which requires more analysis and actuarial testing to determine better the parameters, the pension system needs to be improved according to the international standards regarding the benefits, particularly, determining the minimum pension, adequacy of the benefits and affordability of the contributions. Meanwhile, the defined contributions system still inactive and lacks the incentives for any additional savings, and the private sector almost deprived from this benefit since it is voluntarily applied upon the employers' decision, which would move them to poorer category after retirement.

On the other hand, the international assistance is not stable and related strongly on the political development, which makes the growth in GDP fluctuating as well as the income of the poor individuals and the economic cycle, which in turn have negative consequences on the economic performance. Further, the international assistance and the budget allocation are directed more to the urgent needs to solve crises that are created by

occupation and violence; while the investment and development strategy is secondary and almost absent.

On the other hand, the informal assistance plays important role in the Palestinian society through relatives, friends, NGOs and Charities. The informal assistance is mostly provided in type of food products, clothes, and services of health.

In general, it is found that the assistance programs increase the living standards of poor people and help them to survive and in some cases improve conditions. However, these programs suffer from some problems in the sustainability, coverage and adequacy, depending on the kind of assistance, data quality and consolidation, the coordination among administrative institutions and the environmental conditions. Thus, review and reorganization of the fragmented social assistance programs are needed to have better database and provide adequate and sustainable assistance.

Finally, the behavior of the heads of households for financial stability among the different groups is obvious, and almost related to the income level and stability and to saving ability; whereas, the poorer the household is, the less alternatives are available and the less flexibility to choose among them in order to reduce the expenditures.

We believe that any efficient solution needs a social security network that aims to reduce poverty rate, insure old age poverty and unemployed workers, and enhance economic growth within the international standards and principles of the social security.

Chapter Four

“Decision Strategy Choice of Enrollment to a Pension System: Further Reforms to Address Low Coverage Problem”

4.1- Introduction

The low pension coverage problem has been the main challenge to the policy makers to initiate an inclusive and universal social security system to protect all vulnerable population in Palestine. According to the 2014 Labor Force Survey, the total pension benefit coverage rate is estimated at 47.95 percent of the labor force. While, the public pension systems cover only about 12.72 percent of the labor force as in 2014. Besides, there have been some provident funds available for some employees working in non-governmental institutions including public and private ones. These provident funds were initiated by these institutions voluntarily as an advantage for their employees under their pressure, which was without any force or regulation from the government. However, these funds have some problems that make them not reliable, particularly the kind of provided benefits, in addition to the fact that the fund may not be available at the needed time because the institution simply either used them to finance its financial shortage or it invested them in lost assets, leaving the employees with no protection at the end of their service. This situation calls for urgent actions to expand the protection umbrella by introducing an optimal solution that suits the local conditions and meets the personal needs and preferences of individuals as wells.

However, Hilal and El-Malki (1997) (1998), Sayre and Olmsted (2004), Portland Trust (2007) and MAS (2012) in their studies on the Palestinian Pension System in different periods and conditions, could identify some reasons of low pension coverage, which all agree on considering the high informal sector, high poverty rate and low and instable economic growth as the main challenges of extending pension systems. Some of these studies go further by identifying the reasons of the instability of the economic growth and high poverty rate, which would reduce the regularity and ability to save and increase the production costs.

For better understanding how to do an optimal reform of pension system to expand coverage, this study provides a new dimension of analysis that focuses on identifying the personal characteristics rather than analyzing the macro-level socioeconomic conditions only. Following the studies of Sookram, Gasparini and Tornarolli (2009) Watson and Schneider (2009), Arza (2012), Rofman and Laura Oliveri (2012) and Tuesta (2012), we believe that the personal characteristics would better determine the will of individuals in

each region, sector or profession to participate to a pension system, which can be helpful to make the pension system reform more responsive to the needs of the society that enhances the applicability of the system.

Carranza et al. and Tuesta (2012) concluded in their analysis of the factors of extending coverage that the mandatory contribution systems could increase coverage, but their role will be limited where the informal sector is high as the case in Latin American countries. At the same time, they did not ignore the other factors that limit the mandatory system to create incentives to the employees to contribute, such as; the income, macroeconomic conditions, and the structure of the labor market and the capacity of the state to enforce the law. Thus, they recommended to find a mechanisms that can increase the individual saving decision through their working career for the old age benefits. Their argument is to encourage the individuals saving through a voluntary system would be smarter proposal in the informal labor majority by identifying the factors that encourage them to save more for old age.

The studies previously focused on the analysis of macroeconomic conditions to understand the situation and perform the pension reform; however, there has been other trend to understand the problem in the view of personal characteristics, believing that the individual choice is important behind the decision to join a pension system. At the same time, the personal characteristics will help to customize the pension system and to set the suitable strategy of extending coverage.

In the light of the results of the personal characteristics analysis, Tuesta (2014) highlighted the significance of the public intervention to create incentives of saving for old age as a new trend in both studies and policy experience. However, this initiated the argument about the proper tool of increasing the awareness regarding the need to participate to a pension system. In order to learn the factors that determine the participation decision, one approach is the analysis and the measure of the impact of these policy interventions or incentives to participation, which are performed by some surveys or experiments.

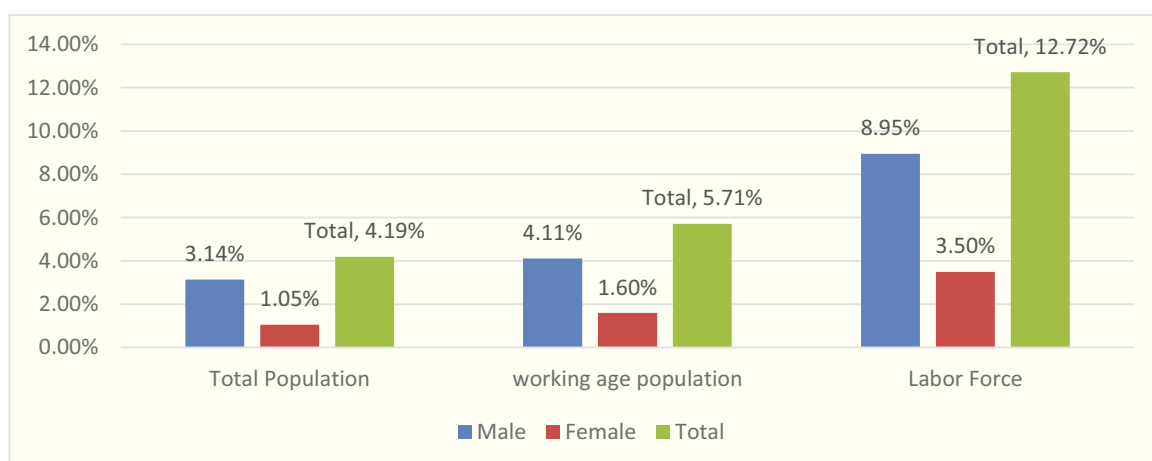
According to Tuesta (2014), the recent national household surveys enabled scientists to analyze these factors in more specific details to explore the information that would provide better understanding, whereas it was limited to theoretical perspective only due to the lack of information.

The individual evaluation to the pension system contribution almost considers the personal utility as a priority; hence, the decision making of individuals is different according to the degree of the utility they estimate to have from their contribution. We aim in this study at determining the factors that increase the probability of individuals to decide to participate to a formal pension system in Palestine. The analysis of household labor force survey will help to know the personal characteristics that have strong relationship with their status of being contributing to any kind of pension system. The significant factors would form the model that can predict the probability of individual decision to contribute to a pension system. This will help to have an optimal pension reform that considers the needs of the society, in order to guarantee the highest coverage rate of the pension system in Palestine. In this chapter we review the low pension participation problem in Palestine. The focus of the discussion is on the internal barriers of the pension system to extend coverage including an analysis of the data of PPA. Then, an extended analysis of the personal characteristics to determine the factors that increase the opportunity of individuals to decide to contribute to pension systems in Palestine. The analysis depends mainly on the data of the annual household Labor Force Survey of 2014, which includes a question about the coverage of pension benefits. The results will provide a helpful guide for policy makers in designing pension systems that be more responsive to the society needs, and in setting the decision strategy choice of enrollment to a pension system, which will have its effect on poverty alleviation in the near future.

4.2- Access to Pension Systems and Financial Sustainability

Until 2005 pension reform, the coverage of the Palestinian public pension system had been legally limited to the public sector employees and was scattered into several systems. By 2014, the contributors of the public pension systems form only 5.7 percent of the total working age population or 12.72 percent of the labor force. Thus, the Palestinian case faces the problem of low pension coverage as other developing countries, which needs urgent solution to protect the large ratio of vulnerable groups. The following analysis will provide explanation for this low coverage problem in Palestine, which remained limited to the public sector only until joining few number of non-governmental institutions by 2011 upon 2005 reform, given that the first public pension system was established in 1959.

Figure 89: Public Pension System Coverage Percentage by Gender Out Of the Population, Working Age Population and Labor Force in Palestine as in 2014

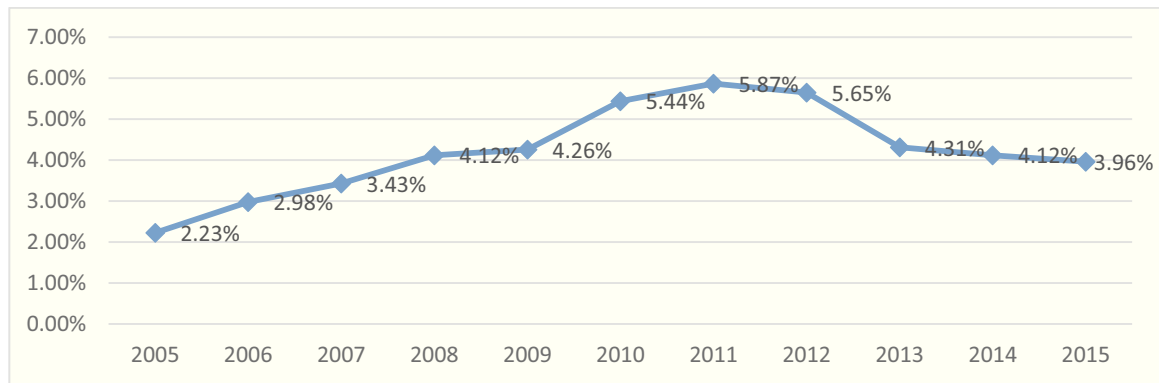


Source: The author by data of PPA and PCBS.

Given the low participation rate of females to labor force, which is only 19.5 percent compared to males at 71.5, the males form the majority of covered employees; however, among working females the coverage rate is higher, which approached 16.81 percent compared to 11.30 for males as in 2014. The reason of this higher coverage rate among females that are participating to labor force, can be explained by the fact that females work more in formal sector. However, the overall picture approved a violation case to the international standards of providing protection equally, which requires urgent actions towards expanding coverage over the population.

Nonetheless, the high public pension expenses threaten the financial sustainability of pension funds, which have been highly increasing through the last decade. In 2014, the benefits formed about 4.1 percent of the GDP for the benefits of the retirees and their survivors, who form about 2.7 percent of the labor force or about 1.24 of the total working age population in Palestine and less than 1 percent of the population.

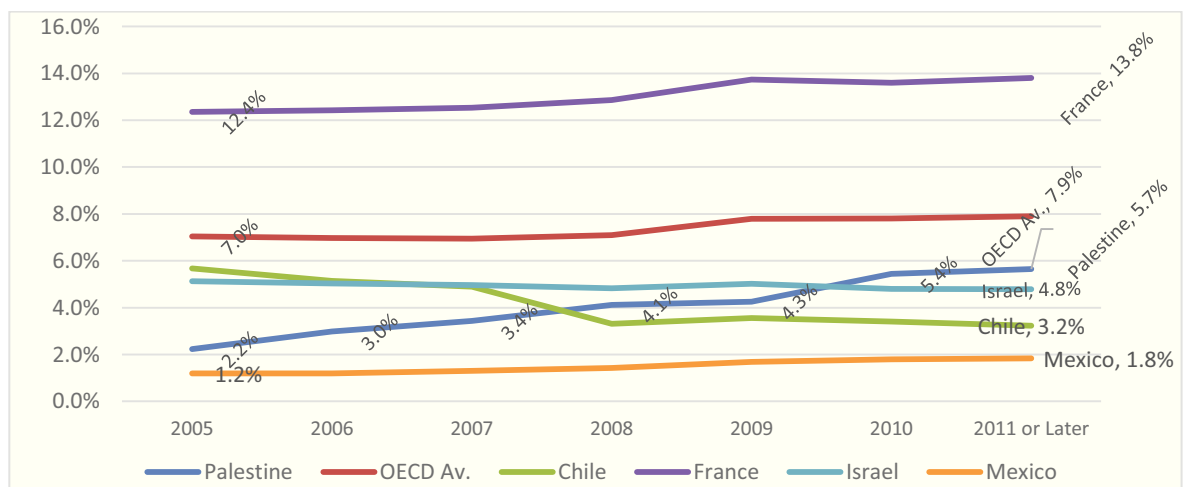
Figure 90: Public Pension Expenses Out of GDP in Palestine through the Period 2005 - 2014



Source: The author by data of PPA and PCBS.

The pension expenses as percentage of GDP in Palestine have raised to reach its peak at 5.87 percent of GDP in 2011; however, this ratio declined after 2011 as a result of the high growth in GDP. While, the pension expenses in countries with high coverage rates, range from about 1.9 to 14 percent at most. Moreover, the growth in Pension expenses in these countries has been very gradual that does not create shocks to the financial balance.

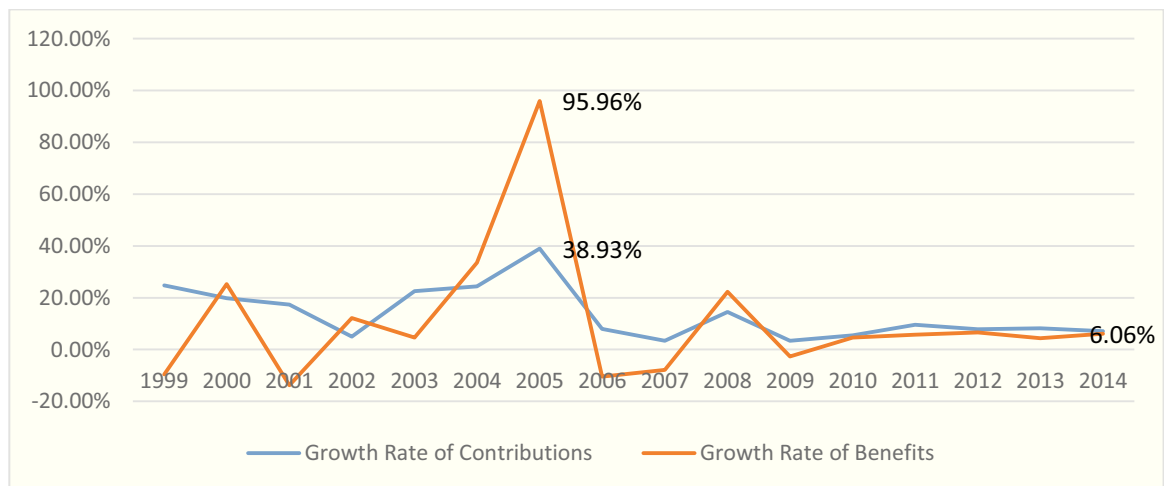
Figure 91: Public Pension Expenditures as Percentage of GDP in Palestine Compared To Other Selective Countries through the Period (2005 - 2012)



Source: The author by Data of PPA and PCBS, OECD, 2016.

Considering the low level of coverage with high expenses in the Palestinian case, it is concluded that the system is very generous and unfair. This problem is often in developing countries. The following figure indicates that a fluctuation was the dominant feature of the expenses of benefits and contributions as well, reflecting the policies of early retirement with generous conditions cases and hiring public servants or increases in wages for active employees. A growth rate of benefits in 2005 at 95.96 percent was unpredictable as it was a result of increasing the public scale of salaries, while its consequences are hard to forecast yet as it would last for generations, which requires a specific study. In this way, another probable shock is expected due to any political reason in the future, which increases the caveats from more pension expenses and less sustainable system.

Figure 92: The Growth Rate of Benefits Compared to the Contributions of the Pension Systems in Palestine through the Period (1999 – 2014)



Source: The author by data of PPA, 2014.

4.3- The 2005 Pension Reform and the Remaining Unachieved Objectives

The need for expanding pension system has pushed the policy makers to launch the pension reform process since the establishment of the Palestinian Authority in 1994. The World Bank and ILO were the main international partners from the early stages of the reform process of the Palestinian Case. Indeed, the deficit of unfunded pension systems as well as all social affairs, including support of old-aged, were funded from the public budget and foreign donors; therefore, the government introduced the 2005 reform for five main goals:

- Introduce a sustainable pension system, which would reduce the pension costs in fair income redistribution policy and affordable contribution rates.
- Extend coverage over the non-governmental organizations, in order to be inclusive.
- Provide inclusive protection against the old-age poverty.
- Unify the scattered systems in order to bring equity among different groups.
- Apply the transparency and accountability principles to guarantee the independency of the system and attract the private sector to be covered (good governance).

The 2005 reform could achieve the unification of the scattered public pension systems under the administration of PPA and introduced transparency and accountability standards; however, it could not accomplish the rest of the mentioned goals that serve the objectives of the pension systems.

In the Palestinian case, where the informal sector and unemployment rates are among the highest rates in the world, the majority of the population are exposed to poverty risk and lack of sustainable health-care system. Therefore, expanding coverage should be priority on the agenda of any pension reform, taking into consideration the international standards and the local conditions. Further, the high informal sector and unemployment rates add new serious challenges to implement any pension system. Thus, the need for an inclusive, affordable, and sustainable pension system and a social security system in Palestine had been urgently inevitable in order to enhance stability and security to the Palestinian society. Since the establishment of the Palestinian Authority (PA) in 1994, there has been some studies and attempts in cooperation with some international institutions to provide protection for the private sector through a sustainable, affordable, and equitable system. However, many obstacles have prevented to have this opportunity at earlier time.

Recently, the long and deep economic and financial crises in Palestine, which caused permanent deficit in the public budget and increased the costs of the social protection, push the Palestinian government to introduce a pension reform in 2005 as a proactive step to prevent the society from breakdown and to stabilize the security of the society. Later on, it took further steps toward reforming the social security system by forming a national committee to introduce a social security reform to the government in order to achieve the predetermined objectives of the social security. Nevertheless, the pension coverage of the private sector has been limited due to external as well as internal obstacles of the pension system itself.

In order to assist the policy makers to find the optimal reform options urgently, we focus in this article on highlighting the internal barriers of the pension system to extend coverage over private sector in the light of the mentioned external variables, and discuss the concerns about poverty of the older population and the proposed solutions in this regard.

4.4- The External Barriers of Applying 2005 Pension Reform to the Private sector

The pension system in Palestine has been limited to the public sector since its establishment before about half a century, which was scattered into several vulnerable schemes that were provided through different institutions. The reform plan started immediately after the establishment of the Palestinian Authority (PA) in 1994. In this regard, the PA cooperated with several international institutions and private sector to perform some studies to develop the pension system through a pension reform, which was not proceeded.

Most of the suggested reforms highlighted three main problems in the Palestinian case; 1) the limited coverage of the existing schemes, 2) the financial deficit of the pension system due to their generosity compared to the living standards and the collected contributions, and 3) the lack of integrity. However, the performed studies recommended several solutions in different political and economic expectations, particularly, regarding the Israeli Palestinian conflict and occupation.

As confirmed by the international institutions supervising development in Palestine, particularly the World Bank and IMF, it has been obvious that the occupation is the main obstacle of any sustainable development, which in its turn effects the pension system sustainability and its financial stability (UNDP, 2013) (UNDP, 2011) (Reichold and Bennett, 2003). In addition, the internal political conflict has weakened the opportunity of the legislation of any major pension reform and even imposing the regulations on private sector. Thus, it is highly expected that these political instability conditions negatively impact all other external barriers of applying any pension reform.

Unfortunately, the recent 2005 reform could not guarantee the coverage for private sector, which is important to protect the citizens in Palestine, particularly the vulnerable old-age, disabled, unemployed, women and youths, which would enhance the security of the Palestinian society as well as promoting the living standards. Indeed, the pension coverage remained limited to the public sector servants, with very limited participation of some non-governmental public institutions since the late 2011. Thus, the reform impact on welfare and economy in Palestine remains very limited; whereas, any serious reform should focus on the private sector coverage, target vulnerable groups, and employ the welfare policies on wide scale of the economy.

The obstacles of implementing the 2005 pension reform over the non-governmental institutions and private sector have internal and external reasons as well. These external reasons are various and related to political, economic, social, and capacity building and Information Technology (IT) reasons. First, the political conflict and instability prevents the progressive and the implementation of laws of almost all aspects of life. The occupation strictly limits the mobility of individuals and goods. While, the internal conflict disables the legislative system and the state of law. Further, the weak concordance with the stakeholders, particularly, the employers created some lobbies that criticized and refused the implementation of the 2005 reform, claiming that the system is not affordable and highly increases the total payroll tax. Second, the economic conditions, represented mainly in the high unemployment and poverty rates and instable growth of GDP with large informal sector, which make the implementation of any pension system so costly and financially unstable. Third, the social aspects are mainly represented in the strong social relations and the low contribution of females in the labor force. Fourth, the capacity building and IT system of the Palestinian Pension Agency (PPA), which is responsible to implement the public pension systems in Palestine, are critical that effect the efficiency and the sustainability of the pension system. Increasing numbers of beneficiaries and better services in accuracy need professional IT system and capacity building of the administration. The World Bank has dealt in responsibility to this issue by allocating a grant for capacity building of PPA including the purchase of E-Archiving and Financial Oracle programs with the required hardware equipment as well as some related training sessions. The following points review the main external obstacles.

4.4.1- Public Budget Deficit

An important obstacle to run a reliable and sustainable pension system in Palestine is the chronic deficit in the general budget. The economic growth in Palestine is variable, and highly dependent on the foreign aids due to “Paris Economic Agreement” that kept the Palestinian economy under Israeli control and its tight restrictions and gave Israel the authority to collect taxes on behalf of PA. Since 2000, a continuous deterioration in the economy and all aspects of life were witnessed, particularly in Gaza Strip. With the political deterioration, Israel imposed tighter restrictions.

Therefore, the public budget and international aids allocations were directed to urgent relief programs instead of sustainable development and creating job programs, which did not exceed 6% of the total aids. As a result, although foreign aids witnessed an increase from 684.5 million USD in 2000 to 2,816.6 in 2009, the poverty rate reached its peak in 2008 in Gaza Strip at 41% as one of the highest rates in the world, compared to 19.5% in West Bank. All these events have reduced the income of the households as well as the public budget and its ability to collect taxes, turning it highly depending on the foreign assistance, which was highly variable to conditions of the donors and the political development. The public budget deficit left serious negative impact on pension fund reserves as they were drained to pay the mandatory expenses and benefits with no regular or balanced transfer of the contributions; besides, the lost investment opportunities of these contributions.

4.4.2- Instable Economic Performance

The GDP growth in Palestine was sharply fluctuating between 12% and (-15%) in the period from 1996 to 2006 only; then, it performed a slow recovery that concentrated in West Bank only. Moreover, the GDP per capita has decreased in Gaza Strip from 1,246 USD in 1994 to 1,061 USD in 2011, compared to an increase in West Bank from 1,366 USD to 1,955 USD through the same period. The total performance of GDP was very sharply fluctuating also between (-18%) and 20%.

The internal political conflict⁵⁹ has caused the suspension of the work of the Palestinian Legislative Council (PLC) and other national institutions, which are important to develop, regulate, and implement the pension laws. Moreover, the loss of PA control over Gaza Strip has weakened PA in West Bank as well as its political status in the international diplomacy and its peace negotiations with Israel. As a result, the commitment to law became very weak, particularly in Gaza Strip. Thus, the collection of taxes sharply decreased creating long and deep financial shortage in the public budget.

⁵⁹ The internal political conflict is mainly between Fatah and Hamas movements, which had different ideology regarding how to end the occupation and their strategic plan in the area. This conflict raised after the Oslo peace agreement and it has reached its peak after the decision of Hamas to enter the legislative elections and being in the legislative council and the government. The dramatic event of conflict resulted into control of Hamas over Gaza Strip in 2007 using its military wing, while the Palestinian Authority remained in West Bank and exiled its agreements with Hamas considering it as a coup movement.

By 2000, the Palestinian economy had lost more than half of the job opportunities of labor force working in Israel, which was estimated at 130,000 constituting more than 20% of the total labor force of the Palestinians in Palestine (Valdivieso, Rosa, et al, 2001). This was followed by other major job losses among the Palestinian labor force as consequence of tight restrictions and siege imposed by Israeli occupation, particularly on Gaza Strip. Nevertheless, this time the job loss was not limited only on these job opportunities in Israel but also in local market and abroad. Moreover, the PA followed austerity measures, which resulted in extreme reduction of hiring new public servants. These shocks of sharp increase in unemployment and reduction in income influenced all aspects of life in Palestine.

The weak and fragile economy reduces job opportunities and government income from taxes. As a result, the commitment to pay contributions to the pension system is definitely declined, leading to fewer investments. Thus, it was very hard to extend coverage, as extending the implementation of the pension reform was conditioned by the availability of cash at the public treasury, particularly, the support of the old age and transition cost of the Defined Contribution system.

Any trend to extend coverage over the private sector or non-governmental institutions faces obstacles from the employers, who demand to reduce the contributions and bearing the contribution bill to the employees. In weak economy and political division, the informal sector is the majority of business; moreover, the commitment of the formal sector to comply and pay the contributions is expected to be very weak.

On the other hand, non-governmental institutions still have caveats of sharing the same fund with public sector beneficiaries, as the government is not committed to transfer all contributions to the fund due to the financial deficit. These caveats let some private corporations to practice pressure on government demanding a new law that regulates a particular system for them in a separate entity from private sector.

4.4.3- The Capacity Building of PPA

Further, the capacity building of PPA was limited to small-scale coverage of public sector employees. Further, it was limited in development with the public procedures, hiring regulations and low scale of salaries. The new law included new concepts of pension system, which needed high level of expertise that was not applied before in the region. The

most challenging concept was the defined contribution (DC) component, followed by the custodian. Moreover, the system was so sophisticated that required a mass of reporting system for many parties regarding contribution collection and investment options.

In regard to the implementation of the Defined Contributions (DC) component of the system, the financial deficit and the existed administrative capacity suspended the launch of applying this component, and also it became optional for non-governmental institutions. The arrears of contributions from the government exceeded one billion US dollar, and most of the existed funds had been under conservation in USA until 2012, which made it difficult to invest all the pension funds. Nevertheless, PPA has achieved serious development in capacity building, particularly in developing the Information Technology (IT), in cooperation with the World Bank (WB) and other international experts.

4.4.4- Weak Local Financial & Insurance Market

The financial market in Palestine is a recent one with small capital and scale of coverage, forming only about 3.4% of the total GDP as in 2013 (PCBS, 2015). The major financial institutions are banks and insurance companies working in Palestine, where most of them emerged after the establishment of PA in 1993.

However, as their activities are related to the economic size and growth, the scale of business is limited to small enterprises with limited number. The Insurance sector is still very limited as the car insurance is the largest product in this sector at 58%, followed by private health insurance at 17.3%.

Al-Sayed (2014) highlights the main challenges of the insurance market in Palestine, The first is the need for professionals and experts in this field with the recent practices in the world (Al-Sayed, 2014). The other challenge is the high risky environment, with political and economic instability and much of restrictions imposed on businesses by Israeli occupation, effects negatively the performance of this sector. Mayadma added that there is problem in the legislative environment that regulate the relation with other sectors.

This weakness in financial market postponed the bid to hire the investment manager and the custodian, as they are prerequisites to apply the new reform. Moreover, the competition among the existing financial institutions was limited to some numbers, as the custodian and the investment manager should be separated entities and the lack of experience of these

institutions was obvious, as it was the first experience in Palestine and even in the region for the custodian.

As the new custodian, the Arab Bank, was supposed to receive contributions from all employers, he had caveats towards some non-governmental institutions due to political reasons since they faced a case in USA regarding providing financial services to Hamas members or institutions.

As the custodian was supposed to be the only provider of all the benefits and expenses of PPA, he faced another problem in providing the cash in some currencies due to Israeli siege and tight restrictions imposed on Gaza Strip.

Finally, there are obstacles in the system itself regarding caveats of the implementation of the pension reform on non-governmental institutions. The new regulations did not take into consideration the problems in the private sector, as the lack of maximum and minimum wages, short working period of the average salary to calculate the pension, and work injuries compensations. It has been the first time to implement the contributory social security system to the non-governmental sector, so the implementation has been so slowly and limited to some public and semi-governmental organizations.

4.5- Internal Barriers of Applying the 2005 Pension Reform to the Private Sector

Even the 2005 reform mentions the private sector employees among the covered groups, we find that the pension system itself still form one of the significant barriers to any expansion of the pension system to the private sector in three respects. First, Caveats towards the sustainability and financial balance of the system. Second, high contribution rates considering the economic situation and the low wages, particularly for low skilled employees. Third, the inconsistency of the current pension system with the private sector conditions and some related international standards.

4.5.1- Caveats Towards the Sustainability and Financial Balance of the System

The World Bank in its report of “Economic Monitoring Report to the Ad Hoc Liaison Committee” clearly accused the public phasing-out pension systems as generous and unbalanced, because they have high benefit accrual rates and early retirement provisions as well as the artificial promotions to some public servants before retirement, given that the replacement rate had been depending on the last salary only until 2005 reform (The World Bank, 22 Sep. 2010). It is worth to mention here that according to Börsch-Supan and Wilke (2006), the high accrual rate and early retirement were the main reasons that made the German PAYG system as one of the most generous in the World in 1972 reform (Börsch-Supan & Wilke, 2006).

Further, upon the estimations of ILO 2014 actuarial study on the Palestinian case, the grandfathering entitled to the retirees and their survivors under these previous systems’ provisions will highly cost the public budget and young generations for more than two decades from now.

The provisions that guaranteed generous entitlements were part of political promises and conciliations starting from Israeli occupation authorities and continued under the Palestinian governments with different considerations. The following are the main law amendments that have negative implications on the pension system in Palestine:

- The decrease of contributions rate of scheme IV⁶⁰ from 7 percent to 2 percent by the Israeli occupation. This reform aimed to increase wages without increasing the total

⁶⁰ Civil public servants in West Bank hired before 2000 under the law no. 34/59, and aged more than 45 at September 2006.

wages bill on the public budget, whereas its implications are very costly nowadays as it has no fund.

- In scheme I⁶¹, increasing the accrual rate from 2 percent per annum to be 2.5 percent.
- Paying lump-sum rewards of 15 percent of the last salary for the service period over 28 years, which has been a result of the previous reform.
- Calculating the pension upon the last salary instead of the average salary of the last two years.
- Introducing the law no. 16/2004 for security forces, with more generous entitlement, where the accrual rate was 2.87 percent per annum, and the pension is increased by 10 percent over the pension, in addition to other generous provisions coincided with higher salaries at security forces service law.
- The pensions are related to the scale of the salaries of the service law of the active members. The last change on the scale of the salaries in 2005 almost has doubled the pensions as shown in figure (91) above.
- The gradual transition period to the 2005 reform's new rules.
- Under the 2005 reform, facilitating the early retirement by the government for public sector servants without reductions.
- The advantageous privileges of females in early retirement, even they have higher life expectancy.

The 2005 pension reform has some provisions that reduce the overall expenses of pension systems by reducing the lump-sum payments conditions, pension eligibility conditions, and extending the average salary to three years instead of the last salary to calculate the pension. Extending the average salary was the only reform applied on the phasing-out previous pension systems to reduce expenses.

However, it seems reducing expenses was not the main aim of the reform, or it was deviated from this aim under political pressure. For illustration; the political pressure prevented a serious reductions in benefits of the 2005 reform as it was first proposed by the World Bank. After the reform was legislated, the World Bank expressed its objection regarding some provisions, particularly the accrual rate per annum, which caused a suspension of funding the transition costs through the donor states. Considering that the World Bank described the new system as a generous one, as it provides 2 percent accrual rate per annum for contribution rate at 16 percent of the salary, compared to 2.5 percent for 22.5

⁶¹ Civil public servants in Gaza Strip under the law no. 8/1964, and aged more than 45 at September 2006.

contribution rate in the previous systems. Acknowledged that, the World Bank recommended an accrual rate of 1.6% for the 16% contribution rate. Furthermore, the 2005 reform could not change the significant parameters of the retirement age, total contribution rates, and the pension index of the living standards.

It also added some provisions that have negative impacts on the financial sustainability, mainly purchasing years of service. It allowed beneficiaries at retirement age to purchase up to six years of service at the retirement age to complete 15 years of paying contributions in order to be eligible to receive pension. It also allowed the new contributors from non-governmental institutions that join PPA to purchase up to 10 actual service years from the period before joining PPA, calculated at the last salary contributions.

Box 1. Estimating the Cost of Purchasing One Year

The ratio of the paid contributions to the cost of pensions is 46% for scheme I and 56% for scheme II.

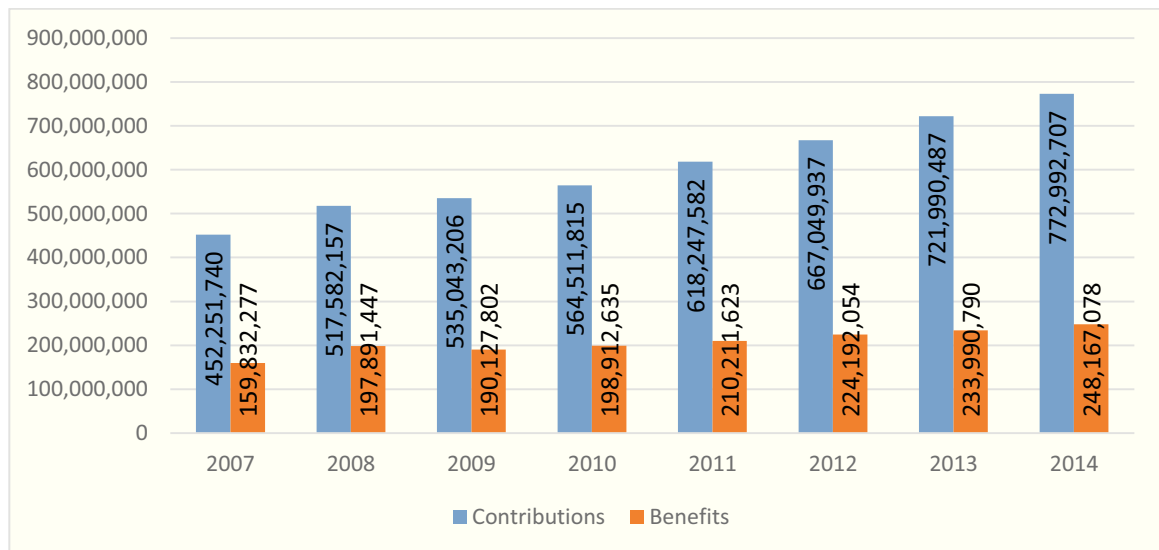
Given that the monthly contribution rates required for the period to purchase at 22.5% and 22% and the accrual rate is 2.5% and 2%, for scheme I and scheme II, respectively. The average life expectancy at retirement is 12 years; while the expected survivorship of survivors is 15 years. Further, the pensioner is expected to receive a pension for 12 years, followed by 15 years to the survivors at 50% of the pension cost. The results indicate that purchasing is costly and would drain the fund on the long-term and on the large scale. Moreover, it is clear that purchasing one year in scheme I is more costly than scheme II.

Source: The author using PPA data and reports.

Further, the structural reform has introduced a new Defined Contributions (DC) system besides the Defined Benefits (DB), which shifted 6 percent of total contributions from the DB system to the DC system. At the same time, the total contributions rate became 22 percent instead of 22.5 percent. This shift and decrease of total contributions rate, besides early retirement of security forces members implies transition costs to the DB pension system that was estimated at about 500 million US Dollar by the World Bank in 2005.

Recently in 2014, the actuarial study of ILO has expected a financial deficit in the new public pension fund of scheme II by 2044, referring that to the sharply increasing costs of benefits. While, a prior study of the World Bank in 2010 expected a financial deficit of public pension system of scheme II by 2021, given that the other three public phasing-out schemes already has been facing a financial deficit in their funds as there are no new active entrants to the system and the majority has been retired. Both the total contributions and benefits of scheme I and scheme II – civil servants have been increasing, but the growth of the total contributions is higher than the total benefits.

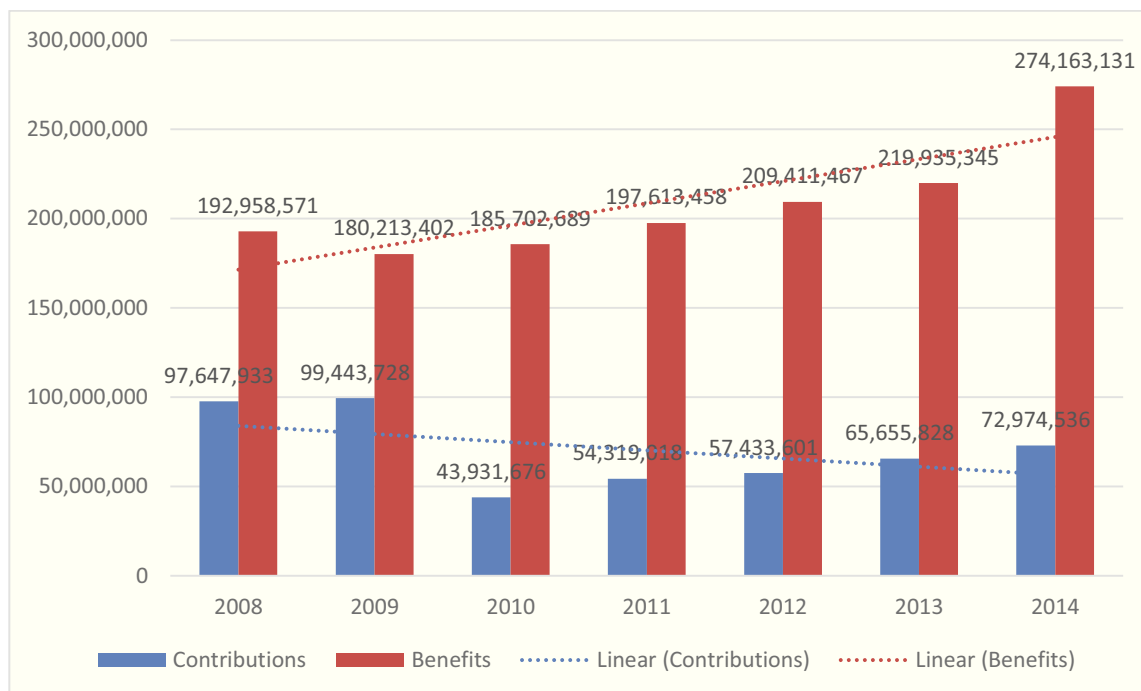
Figure 93: The Annual Total Contributions Compared to Benefits of the Public Civil Servants for both Scheme I and Scheme II through the Period (2007 – 2014) (In NIS, 1 USD = 3.8 NIS)



Source: The author by data of PPA, 2014.

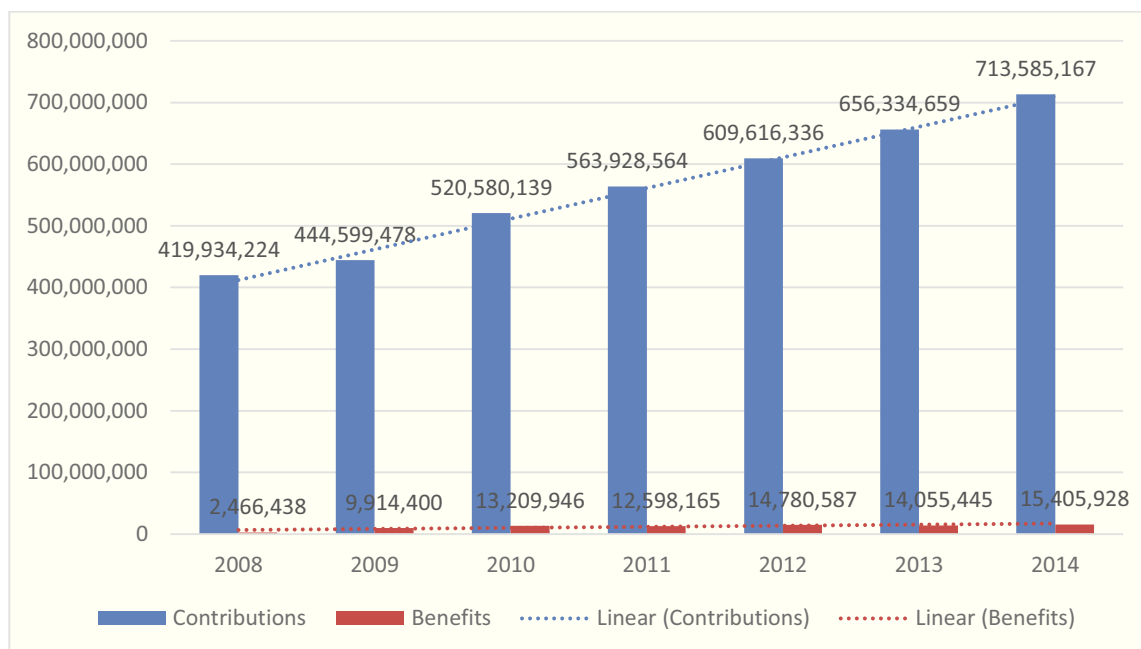
While, the contributions of scheme I are diminishing as the number of contributors is decreasing, compared to the continuously and sharply increasing benefits with the increasing number of retirees and their survivors. On the other hand, the contributions of scheme II – civil servants have been sharply increasing, while its benefits still form very low ratio of the total benefits. As in 2014, the benefits of scheme II reached only about 6.6 percent of the benefits of scheme I.

Figure 94: The Annual Pension Benefits Compared to Contributions of "Scheme I" in Palestine as in 2014



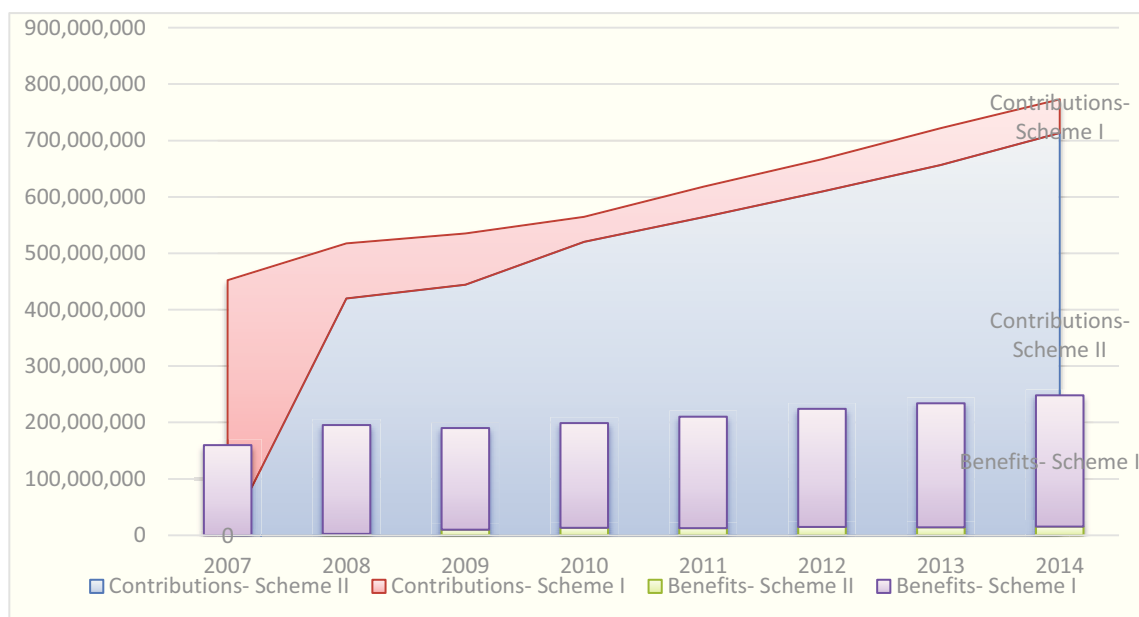
Source: The author by data of PPA, 2014.

Figure 95: The Annual Pension Benefits Compared to Contributions of Scheme II in Palestine as in 2014



Source: The author by data of PPA, 2014.

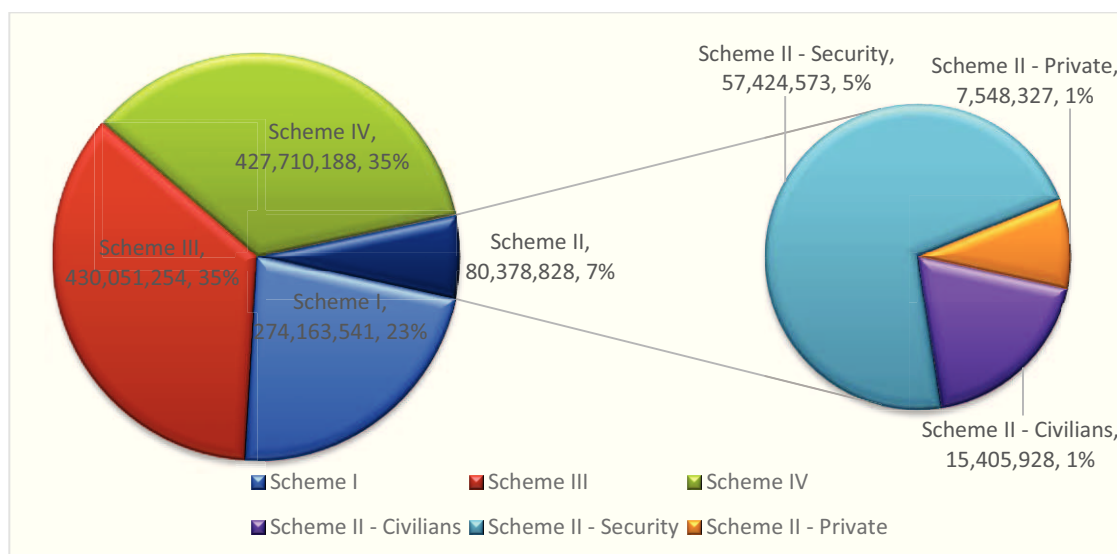
Figure 96: The Annual Total Contributions Compared to Benefits of the Public Civil Servants for Each Scheme I and Scheme II through the period (2007 – 2014) (In NIS, 1 USD = 3.8 NIS)



Source: The author by data of PPA, 2014.

Scheme III of security forces has the largest expenses of the total benefits, followed by scheme IV of the civil servants in West Bank, then scheme I of civil servants in Gaza Strip as shown in the next figure. While, within scheme II, security forces has the largest expenses, followed by public civil servants.

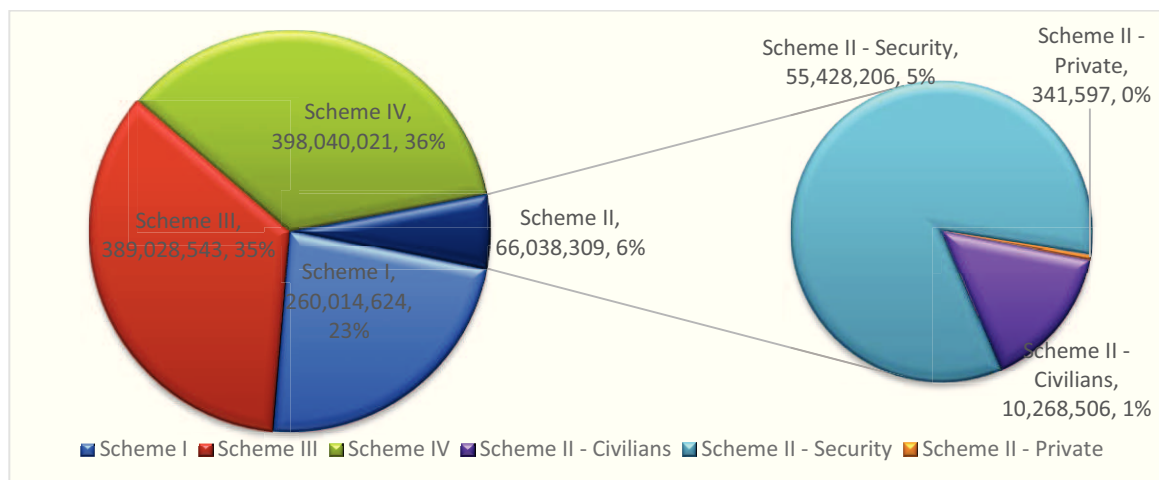
Figure 97: The Total Annual Benefit Expenses Distribution by Scheme of the Public Pension Systems in Palestine as in Dec. 2014, (In NIS, 1 USD = 3.8 NIS)



Source: The author by data of PPA, 2014.

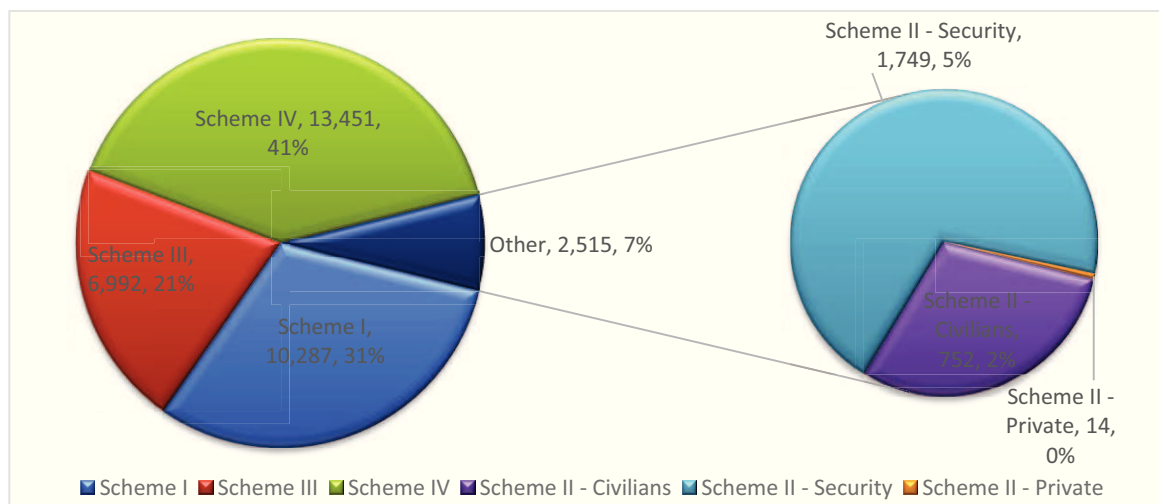
Regarding the pension expenses, scheme IV has the largest expenses, followed by scheme III of security forces. While, in scheme II the non-governmental organizations has the least ratio of expenses due to the fact that the system is a recent one and no old-age benefits have been deserved and most benefits are for disability and survivors cases or early retirement of public sector servants. Even though security forces of scheme II form about 21 percent of the total retirees of the scheme, their pension expenses form 35 percent, which reflect the high pensions they received compared to other categories.

Figure 98: The Total Annual pension Expenses Distribution by Scheme of the Public Pension Systems in Palestine as in Dec. 2014, (In NIS, 1 USD = 3.8 NIS)



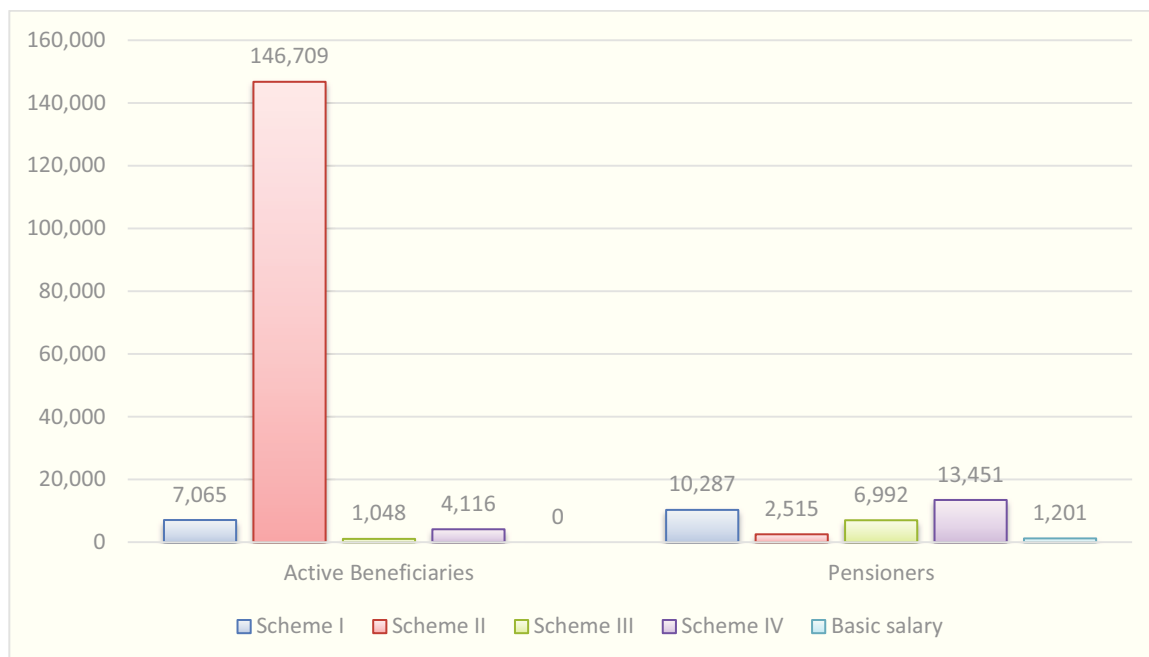
Source: The author by data of PPA, 2014.

Figure 99: The Total Number of Pensioners by Scheme as in Dec. 2014



Source: The author by data of PPA, 2014.

Figure 100: Number of Pensioners Compared to Contributors by Scheme of Public Pension Schemes as in Dec. 2014



Source: The author by data of PPA, 2014.

It is obvious from the figures above that scheme II is the future of the pension system in Palestine as it has the largest number of contributors with large gap compared to other schemes. Moreover, it is expected to expand coverage to other groups of the Palestinian society depending on the political and economic stability in its pace. Even though the number of pensioners still very small compared to the contributors, the wrong policy and improper parameters of the systems could fasten the increase in the number of pensioners compared to contributors, and consequently increase the expenses sharply.

Thus, this section focuses on the main points that raise the caveats towards the financial sustainability of the public pension system.

4.5.1.1- Expensive Slow Transition to the New Rules

The transition period of pension reforms varies across countries according to the reform options and conditions. Some countries have chosen a one shot radical implementation reform for all contributors, as in Poland, while others have chosen a gradual implementation reform, which results in longer transition phase as in Italy. No standard

option for the best choice; however, many variables work as the determinants for the choice in each country.

The coverage eligibility was allowed only for young employees for the 2005 reform

The new parameters of the 2005 reform were valid only for the covered employees aged less than 45 years old at the implementation date of September 2006. This results in a transition period to the new system as the previous pension systems will be phasing-out until the old contributors and their survivors end their eligibility to benefits. Thus, the transfers of contributions in the phasing-out schemes will terminate with the last active beneficiary at most by 2021; while, these systems will continue paying benefits until the last survivors be ineligible or die. In this way, the effect of the reform on the financial balance of pension system is expected to take place slowly on the long-term, which would have negative implications on their sustainability and adequacy.

Besides, since the phasing-out pension systems are financially deficit due to the government incomppliance to transfer the due contributions, the government has the responsibility to meet the obligations of these phasing-out pension systems towards their beneficiaries from the public budget. Correspondingly, the expenditures of the phasing-out pension systems started to form an additional burden on the public budget for longer periods. As a result of shifting these expenses of the previous systems to the government, they still should be financed through either taxes, loans or foreign assistance, which will be by any case on the account of other public expenses.

Accordingly, the transition period is costly in terms of the grandfathered entitlements of the previous pension systems to the beneficiaries and their survivors, as well as in terms of reduced contributions rate under the DB component of the 2005 pension reform from 22.5 to 16 percent and the provided privileges to the employees of Palestine Liberation Organization (PLO) and security forces, given that their scheme is not funded.

Box 2. The public budget deficit and the priority of the social security

The public budget depends mainly on taxes and foreign grants to cover its expenses. Given that the total revenues of the 2014 public budget was 4,431 thousand US dollar, the foreign grants formed about 28.06%, while the social contributions from some local governments formed only 0.06%. The Taxes on payroll and workforce formed only 2.56% of the total taxes. On the other hand, the expenses on social benefits formed 18.32% of the total expenses of the 2014 public budget that reached 4,115.4 thousand US dollar, while the contributions of the social security system formed only 4.64% of the total expenses (MoF, 2015).

The data above indicates that the Palestinian public budget faces a financial deficit that is covered by the foreign grants, given that the budget deficit could increase depending on the Israeli commitment to transfer the collected taxes on the imported goods to West Bank and Gaza Strip according to Paris agreement. Recently in 2015, Israel refused to transfer these taxes to the Palestinian Authority for more than 5 months for political pressure, which increased the total local public loans from the local banks to more than 1.2 billion US dollar. The government continuously tries to increase its revenues by improving the tax collection performance; however, its effect is expected to stay limited and small due to the large informal sector in the Palestinian economy and very weak and fragile economy. Moreover, the foreign grants has been decreasing, where they were about 1.2 billion US dollar in the years 2007 – 2012 covering about 80% of the deficit, then it decreased gradually to reach in 2015 only about 700 million US dollar which covers only 60% of the public deficit.

Moreover, as the social contributions formed only 0.06% of the total revenues, it means that the public policy does not target a redistribution policy of income through social contributions in the general taxing system.

On the other hand, the contributions of social security system of public pension system were not fully paid as it is not a priority to policy makers, given that the social benefits formed 18.32% of the total expenses, which form a high burden on the public budget. Thus, there is a need for a social security system to be able to cover these high expenses through the commitment of the government to transfer the contributions. Reminding that the total arrears of social contributions of the public civil servants due to the Palestinian Pension Agency from the MoF has reached about 1.49 billion US dollar by the end of 2014, which form about 20% of the GDP.

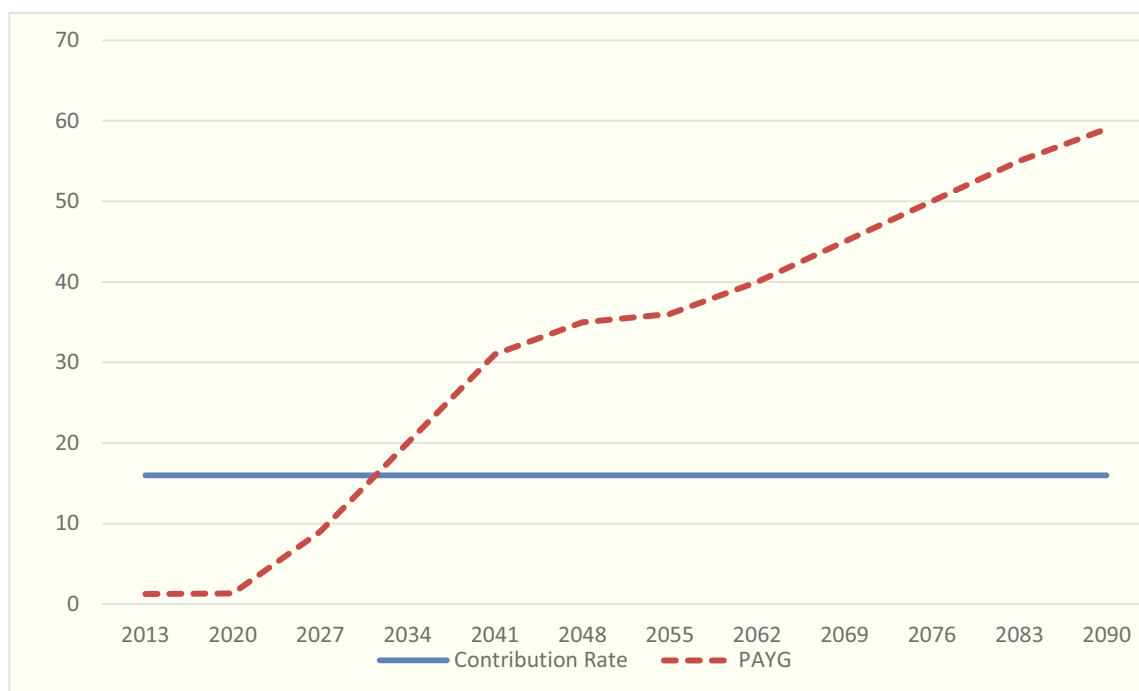
By 2016, PPA succeeded to add the contributions of public servants of the pension systems to the public budget for the first time, even the commitment of the MoF is still very limited to 20 NIS million monthly lump-sum payments through 2016.

Another problem of the transition period of the reform was concerning those beneficiaries, who were under the age of 45 at the implementation date. The law was not clear regarding how to calculate the pension for them as they had service period from the previous systems. However, there were three approaches to deal with these service periods; 1) transfer rights under prior service periods to be calculated under the new rules, 2) calculate the period after the reform according to the new rules of the reform and the previous period according to the former rules, and 3) the calculation of whole service period in accordance with reform rules, but the cost is distributed on two funds, the new pension fund and the former one. Thus, the DC component would be calculated from the date of the reform only. Recently, the choice was done on the third one, where it guarantees the shortest transition period from the available choices. Besides, it was more appropriate since the contribution rates are applied differently in each system and the commitment to pay benefits is different also. Under this approach, the expenses would be less as the accrual rate is 2 instead of 2.5 percent per annum for the service before the reform, and the obligation to pay these benefits would be on the previous fund, where the ministry of finance have the responsibility to cover their expenses. Moreover, the defined contributions component starts with the implementation date only. Thus, the new public system would have less burden from the previous systems.

The choice of this approach was significant in terms of reducing the transition costs and would have significant implications on the sustainability of the new system. Otherwise, the transition period would take longer period and more expensive to pension funds.

While the expenses of both schemes I and II of public pension systems in Palestine form about 2.3 percent of the GDP as in 2012, the ILO actuarial study of the Palestinian pension systems expected that it will remain steady until 2020 before it starts to increase steadily from 2.5 percent in 2025 to reach 4 percent in 2045, in which the accumulated reserves will diminish totally.

Figure 101: Scheme II- Comparison of PAYG and Contribution Rate (2013 - 2093)



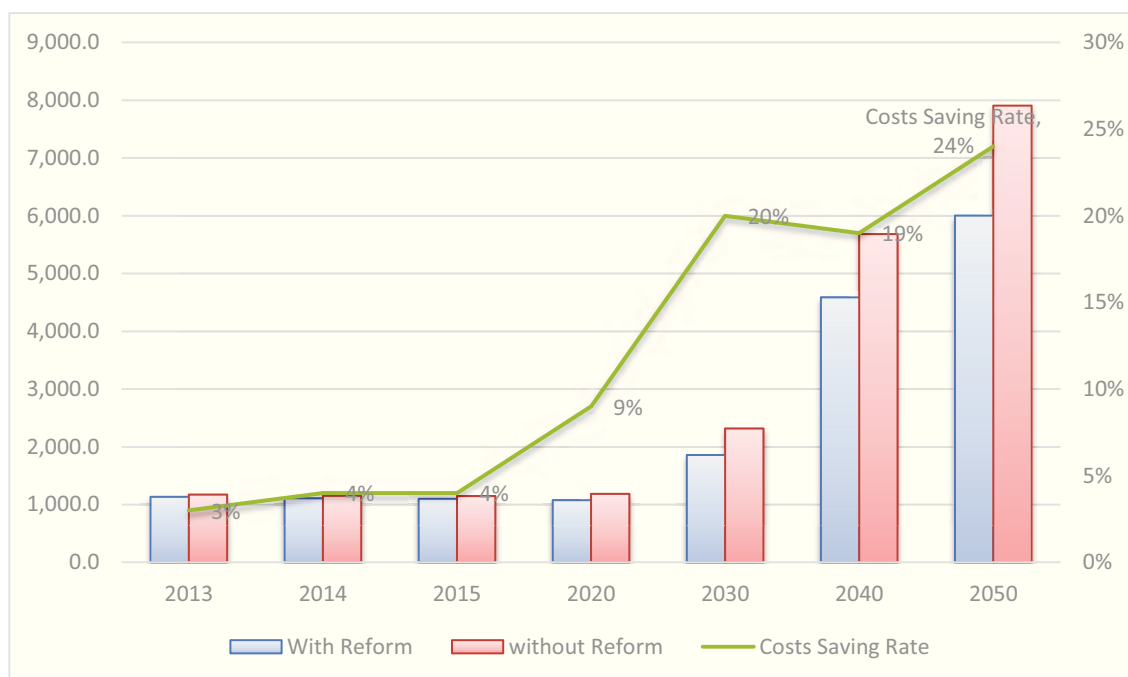
Source: ILO actuarial study of the Palestinian Pension System as in 2012, 2014: P. (40)

According to the same actuarial analysis, scheme II⁶² is accumulating reserves as it is new scheme, and this excess of contributions over the PAYG costs will generate during the next 20 years an estimated reserve of 34,384 million NIS. However, this reserve will be zero only by 2044 due to the sharply increasing costs of the system. The previous figure shows the expected needed contribution rate to meet the expenditures of the system on PAYG basis compared to the imposed constant contribution rate at 16 percent.

According to another pension reform plan proposed in cooperation with the World Bank in 2010 “action plan”, the expected saving rate of the costs will gradually increase to reach 24 percent as in 2050.

⁶² It is composed of the young contributors aged 45 and less as in 01 September 2006.

Figure 102: Expected Total Public Pension Expenditures until 2050, With and Without the Proposed “Pension Reform Action Plan of 2011” By the World Bank and the Expected Cost Savings



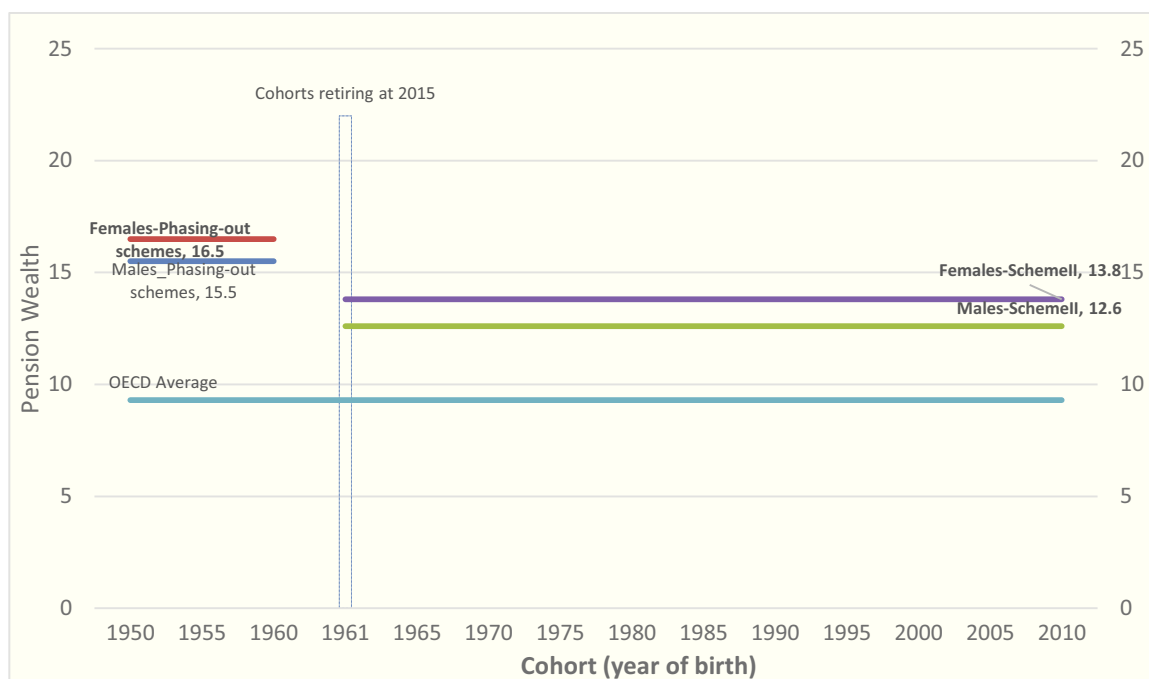
Source: The author by Aide Memoire of the World Bank, (2012).

On the other hand, as the parameters of the systems are different, particularly the pension eligibility age, comparing the system’s generosity can be better illustrated by comparing the Pension Wealth and Benefits/ Cost Ratios (BCR)⁶³ between the phasing-out pension systems and new pension system. In order to calculate them, we assume the working age is 20 years old and the average wage of males is 3,600 NIS compared to 3,450 NIS for females. Given that the minimum retirement age is 40 years old according to the phasing-out schemes and 50 years old according to the new pension system of scheme II; therefore, the average full-career working period is 20 years at the previous systems and 30 years at the new system as we consider the minimum possible age for retirement. While the life expectancy is 71 for males compared to 73 for females.

⁶³ Note: Gross pension wealth and BCRs are calculated for a public civil servant earning the average wage and retiring at the minimum age of pension eligibility. The Benefit/ Cost ratio BCR is the ratio between the pension wealth at retirement and the sum of contributions paid into the system (both expressed in present value terms). Source: Social Security Institutions and OECD calculations.

Thus, the gross pension wealth of the phasing-out pension system is 15.5 times of the annual average earnings for males compared to 16.5 for females. While at the scheme II, it decreased to 12.60 for males compared to 13.8 for females.

Figure 103: Gross Pension Wealth at the Time of Retirement by Gender and Birth of Cohort in Palestine as Multiple of Annual Average Earnings



Source: The author by the data of PPA and OECD, 2014.

While the 2005 pension reform reduces the pension wealth for males and females, the females keep enjoying with higher pension wealth before and after the reform. The decrease is caused mainly by the effect of raising the minimum retirement eligibility age to be at least 50 years old with 25 service years to males and 20 for females. The pension wealth in Palestine is still high compared to even the OECD countries, which have an average at about 9.5. However, the pension systems vary across countries, whereas the pension wealth is more related to the system's structure and type. Given that the wages in Palestine are very low, so the pensions still inadequate.

Another important effect of the 2005 pension reform is to reduce the Benefit/ Cost ratios from 3.8 to 2.1 for males and from 4.2 to 2.3 for females. That reduction would have significant implications on the balance of the system on the short and middle-terms, but

still not enough on the long-term as the required BCR is less than 1.0, indicating that more actions are needed to reach the balance of the system.

In fact, the high pension wealth refers mainly to the low pension eligibility age accompanied with the high life expectancy in Palestine, which is a relative manner. Thus, the most appropriate solution is to increase more the minimum retirement eligibility age or to impose actuarially fair reduction on retirement before the official retirement age.

4.5.1.2- Early Retirement

Even the pension eligibility age under the previous pension systems in Palestine is one of the lowest in the world that requires only 20 years of service, the early retirement cases form about 18 percent of the retirees in scheme I, and the average early retirement age is 54 years with average replacement rate of 63.34 percent for scheme I.

Table 79: The Percentage, Average Age and Replacement Rate of Early Retirement Cases by Public Pension Scheme in Palestine as in 2014

		Scheme I	Scheme II- civil	Scheme II- security	Scheme III
Percentage of Early retirement cases	Total	18	3.60	49.10	55.07
	Males	13.37	1.80	46.96	53.85
	Females	4.63	1.80	2.20	12.05
Average age at early retirement	Total	54.08	45.33	45.35	52.28
	Males	54.13	45.20	45.35	52.30
	Females	53.96	44.50	45.35	51.34
Average replacement rate	Total	63.34	40.31	36.47	54.00
	Males	62.94	43.40	36.60	54.17
	Females	64.61	39.8	32.06	46.37
Percentage of retirees younger than 60	Total	2.91	27.28	50.26	32.64
	Males	2.00	12.95	48.06	31.91
	Females	0.91	14.21	2.20	0.84

Source: The author by the data of the PPA, 2014.

On the other side, the 2005 reform has tightened the old age retirement eligibility conditions⁶⁴, which is expected to raise the average retirement age gradually. However, the percentage of the retirees younger than the retirement age is 27.28 percent in scheme II – civil servants, 50 percent in scheme II – security forces and 32.64 percent in scheme III of old security forces; while, it is only 2.9 percent in scheme I. Further, the majority of young retirees are males except in scheme II – civil, which is related to the male majority in these schemes of security forces.

Hence, the early retirement cases have recorded the highest among security forces members in both scheme II and scheme III, which due to the government policies towards early retirement of public sector, rather than the individual choice. In the time, the data of PPA

⁶⁴ Previously, any employee with 20 years of service could claim retirement regardless their age. However, the 2005 reform has tightened early retirement eligibility conditions to be at least from age 50 with 25 service years for males and 20 for females and some risky jobs, or after the age of 55 with at least 20 years of service for males and 15 years for females, The early retirement for males with 15 years of service is allowed after the age of 55 with an actuarial penalty of 5 percent deduction of the pension that lasts until the age of 60. While, the previous systems, imposes another deduction rules of early retirement on those employees willing to retire at the ages starting from 45 to 58.

show that the main reasons of ending service of young retirees at most refer to disability or ending service by the government. In this regard, some presidential decrees guaranteed a very generous pensions to exceed the 100 percent of the salary in many cases, the largest was the presidential decree no. (1 /2008)⁶⁵.

Unfortunately, the government is expected to continue ending the service of high numbers of public servants through the next three years as part of austerity measures, reform in public servants and for political reasons. Indeed, the early retirement problem originated by the 2005 reform, which has allowed to the government this practice to be without any deductions on pensions for political purposes.

On the other hand, in scheme I about 40 percent of the early retirement cases had 28 service years and more, which guarantee the maximum replacement rate of 70 percent. As a result, the contributors lack the incentives to work more and choose to retire earlier than the age of 60.

Furthermore, in contrary to the reform objective to reduce expenses, under the 2005 reform regulations the deduction penalty of the early retirement lasts until the retirement age (60 years old) only, unlike the previous phasing-out pension systems, in which the deduction lasts permanently on the retirees as well as their survivors. Moreover, as the women are allowed to retire earlier and their life expectancy is longer, they extract higher interest rate on their contributions; while, their pension is inadequate as they have shorter service periods.

Figure (103) compares the difference between early retirement cases in each pension scheme concerning the average replacement rates⁶⁶, the length of service and the average pensions, which have wide gap.

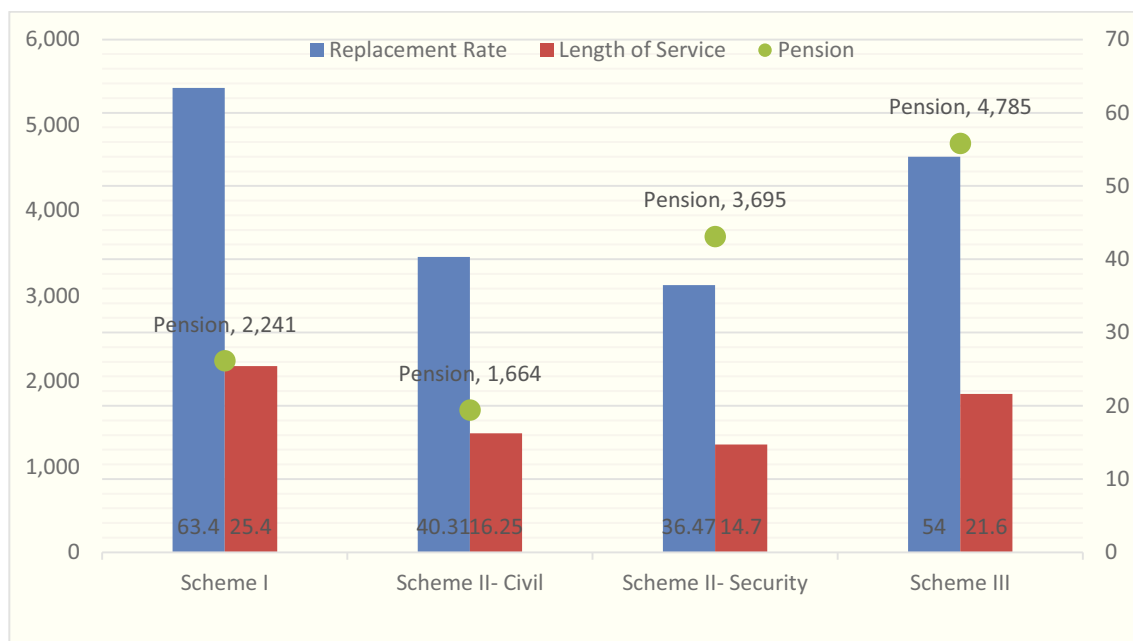
This variability in values depends mainly on the provisions of each scheme and the government policy towards early retirement. In schemes I and III, the high accrual rate per annum facilitate reaching the maximum replacement rate before retirement age, which

⁶⁵ The presidential decree no. (1 /2008) ended the service of about 4,650 personals of security forces and guaranteed them 100% of the salary in addition to some allowances and lump-sum payments for members with long service periods.

⁶⁶ Whitehouse defined "The replacement rate" as "Individual pension entitlement relative to individual earnings when working", the data in figure 16 counted the average of actual replacement rates of the beneficiaries in each scheme separately, (Whitehouse, 2014: P. 4).

encourages to retire earlier. In addition, the generous provisions of security schemes⁶⁷, who also enjoy receiving higher salaries, cause of higher pensions for them even the length of service or the replacement rate is less.

Figure 104: The Average Replacement Rate, Length of Service and Pension salary of Early Retirement Cases Compared by Scheme Type in Palestine as in 2014, (in NIS.)



Source: the author by data of PPA, 2014.

The implications of these large-scale practices of early retirement policy towards the public sector employees is expected to last for generations forwards, which would be catastrophic on the financial balance of the pension system as well as the social and economic balance, which would need very long time to recover. In this regard, the most critical implication is the labor market distortion, where the early retirement provisions push the middle-aged formal sector employees to work in the informal sector after retirement. Their inherited experience and relation net make them more advantageous in labor market compared to the new graduates.

The continuation of allowing for more early retirement cases would mean longer time to end these implications and higher contribution rates for the next generations. Otherwise, more accurate actuarial deduction rates should be applied.

⁶⁷ (scheme II- security & Scheme III compared to scheme II- civil & scheme I, respectively)

4.5.1.3- Large-scale Survivors

Even the family structure in Palestine tends to be more nuclear one, the inherited strong and extended family ties and responsibility towards relatives are the dominant quality of the Palestinian society. Added, the low labor force participation rate of female in Palestine (estimated at about 19%) enhances the need for large-scale of survivors⁶⁸ to benefit from the pension, particularly for female protection. However, the large average of family size in Palestine increases the potential number of eligible survivors.

Given that the 2005 reform did not change the eligibility scale of survivors nor their ratios of pension. Indeed, the reform did not have positive impact on the financial sustainability of the system concerning the survivors, where the large-scale of survivors will continue forming a financial burden on the pension system.

Box 3. Reducing penalty on early retirement under the 2005 reform rules compared to the previous phasing-out pension system increases pension expenses of the survivors

Given that reduction penalty in the previous phasing-out pension systems reduces the replacement rate of the pension permanently by a certain rate (ranges from 20% to 5%) which is determined according to the retirement age (ranges from the minimum retirement age at 45 to 58 years old).

While, according to the 2005 reform, reduction penalty is imposed only on the early cases that have 15 years of service and decide to retire before the age of retirement, starting from the age of 55 years old for males and 56 for females. Moreover, the old age retirement is not allowed before the age of 50 with 25 years of service for males or 20 for females, which has no reduction penalty.

The reduction penalty would be left by the death of the retiree or after reaching the age of 60 years old (mandatory retirement).

This means that all the survivors of early retirement cases under the new reform would receive in average higher replacement rates of pensions compared to the former pension systems, as their pensions would not be reduced after the age of 60.

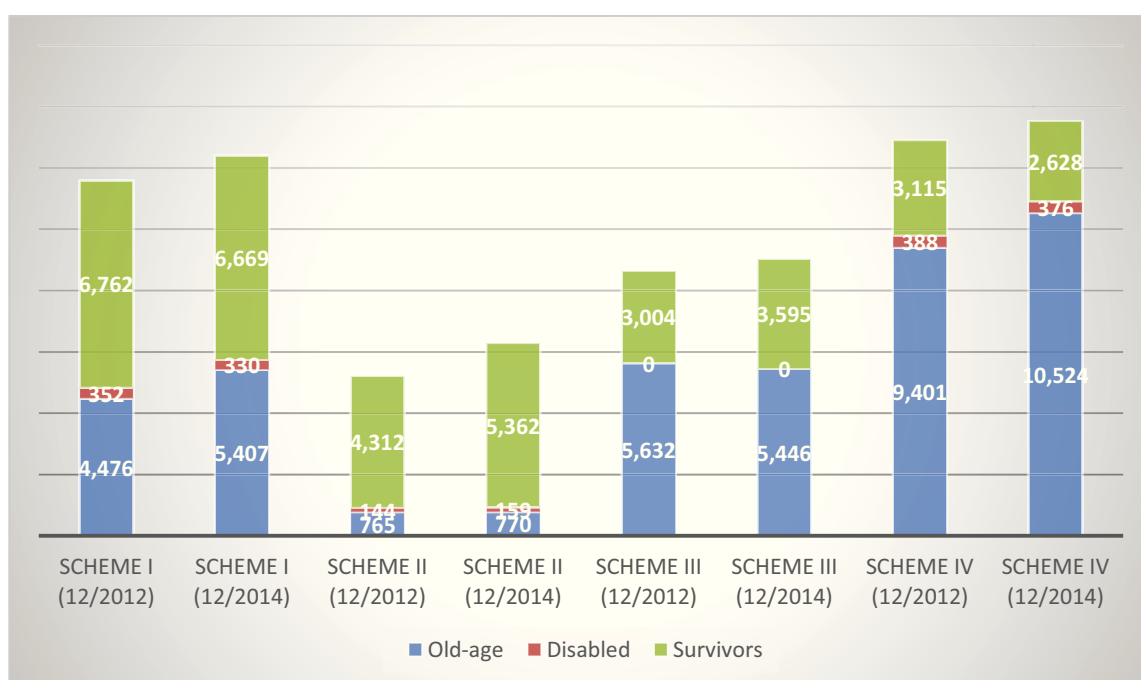
⁶⁸ The survivors that are eligible for pension in Palestine include the widow, sons, daughters, sisters, brothers, and parents with different conditions of eligibility at the time of death of the beneficiary. For eligibility of pension of survivors; females should be single, widow, or divorced marital status, while males benefit until the age 21 or 26 for those continue their high education or being disabled. The pension of survivors would be cut in case they have other source of income higher than their pension.

Further, the 2005 reform introduces another significant change in the reduction penalty on early retirement cases that would negatively impact the financial balance of the system.

Along these lines, any reduction in expenses of the survivors would be related to external variables of the system, such as more female participation to labor force and less disabilities; while, more divorce rate of females and higher education of the male survivors as well as the higher mortality rate of male pensioners will increase expenses of the survivors.

By 2014, the survivors formed about 54 percent of the total beneficiaries in scheme I, compared to 93, 81, and 39 percent in scheme II- Civil, scheme II- Security, and Scheme III, respectively. This large ratio of survivors in most schemes calls for urgent review; otherwise, the pension system would face a serious financial unbalance.

Figure 105: The Number Beneficiaries of Current Public Pension Schemes by Type of Benefit as in 2014 Compared to 2012

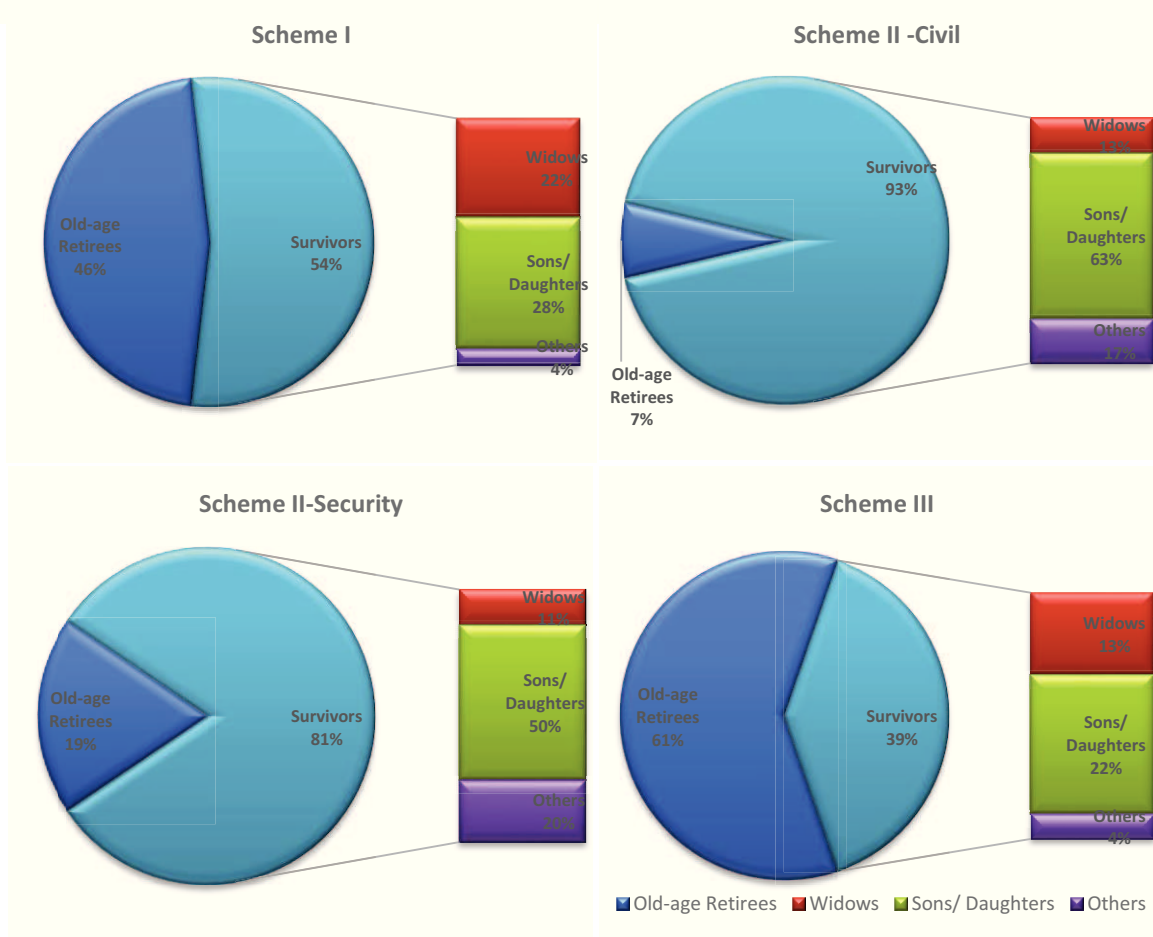


Source: The author by data of PPA.

Moreover, the survivors' ratio in the pension schemes is expected to increase more through the next decade, which refers mainly to two reasons. The first concerns scheme II, in which the high rate is natural as it is new system and the reasons to end service of beneficiaries

have been due to death or disability in majority. The second concerns the other previous schemes, which are phasing-out and would keep the increasing ratio of survivors along with the increasing mortality rate of the present retirees in these schemes.

Figure 106: The Ratios of Survivors to the Total Beneficiaries Compared by Scheme



Source: The author by the data of PPA, 2014.

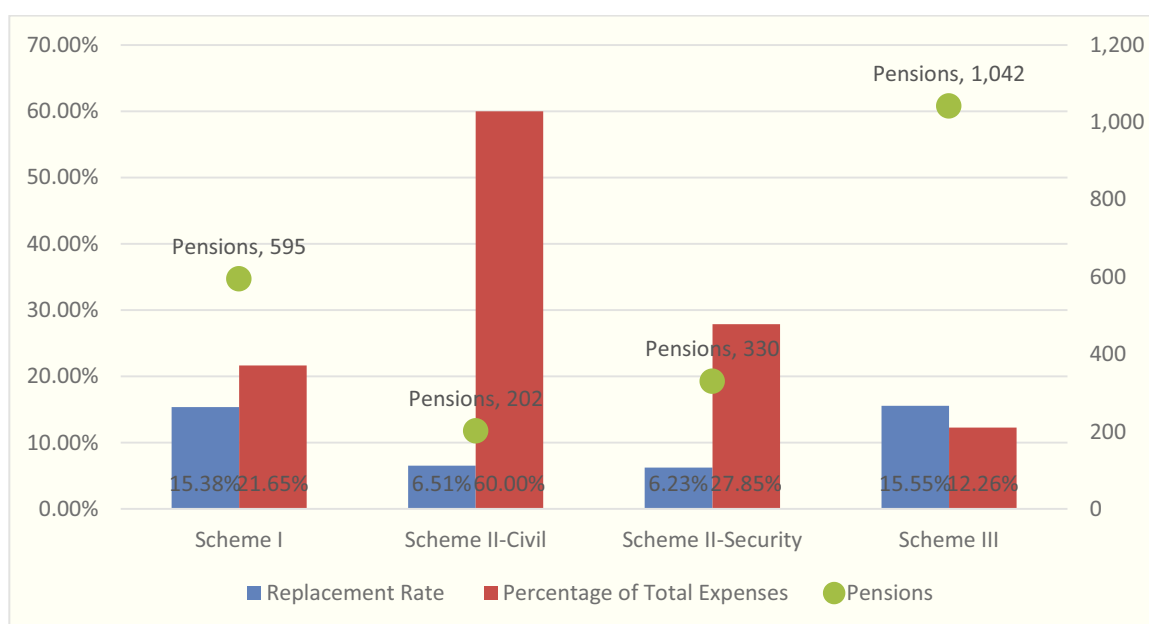
Another notice on survivors is that the sons and daughters form the majority of the total survivors in all schemes, which is more dangerous to the financial balance of the system as the eligibility and benefit conditions are different, particularly the daughters⁶⁹.

⁶⁹ Daughters are comparatively younger and expected to survive for longer years and receive pension than widows, sons and parents, given that they are eligible to pension as they are unemployed, single, disabled, divorced or widowed. The daughters can also claim a pension in case she become a widow or divorced in ten years from the death date of the retiree.

On the other hand, in the phasing-out schemes (scheme I and scheme III) the ratio of survivors out of the total beneficiaries is less, while the sons and daughters compose less ratio of the total survivors. However, scheme II is expected to gradually take similar trend of the previous schemes as the scheme is being matured in the near future.

In this regard, the expenses of survivors formed about 21.65 percent of the total pension expenses of scheme I, compared to 12.26 and 27.85 percent of scheme III and scheme II-security, while it reached 60 percent in scheme II- civil.

Figure 107: The Percentage of Survivors' Benefits of the Total Expenses and Average Replacement Rate and Pension of Survivors of Public Pension Schemes in Palestine as in 2014

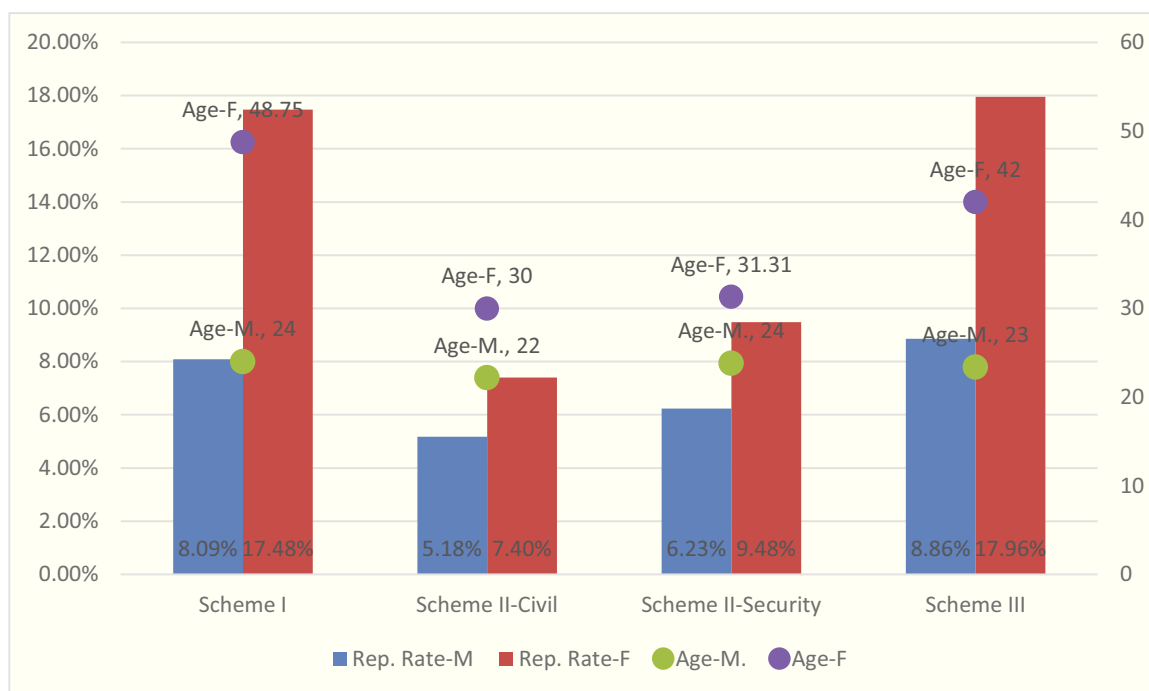


Source: The author by the PPA data, 2014.

On the other hand, even though the replacement rate of civil servants is close to that of security forces, their pensions are about half of that of security forces. That has certain indication for the higher salaries of security forces and that the provisions of the law are in favor of them.

The average age of female survivors, as well as the higher rates of the average replacement rate in all schemes refer mainly to the eligibility conditions, as the males are illegible to pension until the age 21, with exception to those who complete their higher education until age 26. Further, females include more widows and parents than males as they have more advantageous eligibility conditions to pension and have higher life expectancy.

Figure 108: The Average Replacement Rate and Age by Gender of the Survivors of Public Pension Schemes in Palestine as in 2014.



Source: The author by the PPA data, 2014.

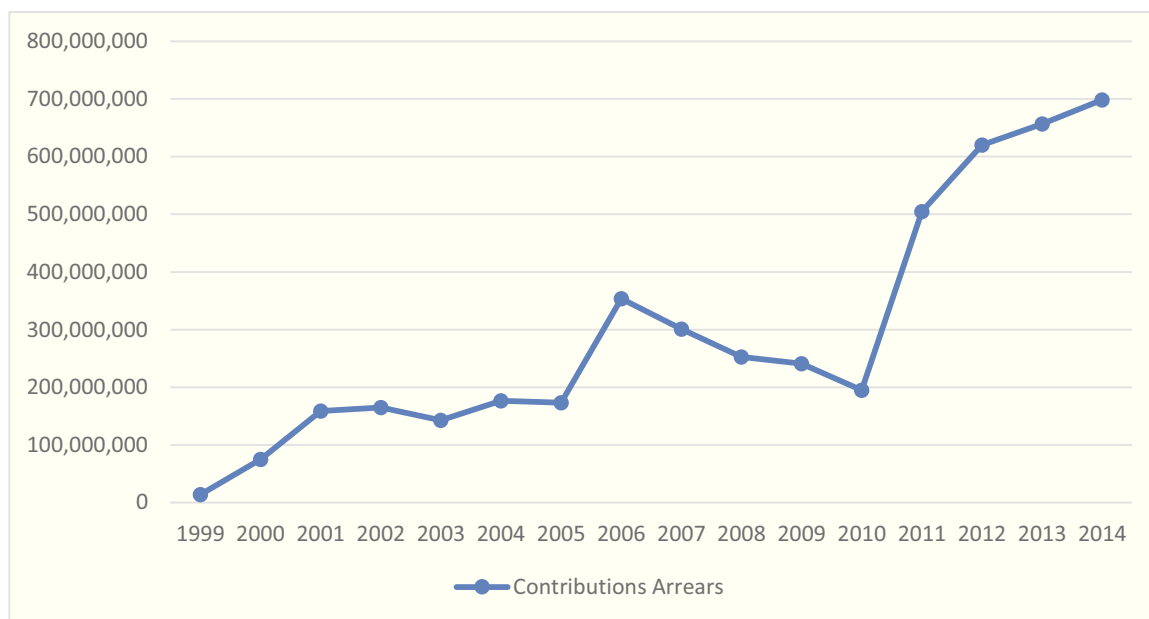
4.5.1.4- Government Incapacity towards Public Employees' Contributions

As the pension systems in Palestine are limited to the public sector employees, the private sector still have caveats from the government financial deficits that would have a significant impact on the financial balance of pension funds as the Ministry of Finance (MoF) does not transfer the monthly contributions regularly. These caveats are enhanced by the accumulation of high arrears of the contributions due from MoF to pension funds that are estimated at about two billion US. Dollar by the end of 2014.

Thus, the public pension funds have been suffering from a shortage in the financial flow as the government is not committed to pay the contributions to PPA. According to records of PPA, the total arrears due from the MoF, regarding only scheme I and civil servant in scheme II, reached 5,663,931,950.43 NIS (equals to about 1,490,508,408 US Dollar⁷⁰) by the end of 2014; including the accumulated monthly contributions and other due payments of 4,783,187,016.08, in addition to their estimated interests at 880,744,934.4 NIS, as the arrears are supposed to be turned into loans.

⁷⁰ On average (1 US dollar = 3.8 NIS).

Figure 109: Annual Contributions Arrears of Scheme I and Scheme II of Public Civil Servants, from (1999 – 2014)



Source: the author by data of PPA, 2014.

Even though the public pension law allowed the non-governmental institutions to join pension system since 2005, they have started to join the pension system by 2011. The number of non-governmental contributors is only 3,513 contributors by the end of 2014, forming about 2.4 percent of the total contributors of the public pension law.

The incapacity of the MoF to pay contributions of public servants to the pension funds has an opportunity cost on the pension funds, as they miss the investment opportunity. This case strengthens the argument that PPA would use the contributions of non-governmental employees to pay the benefits of the public sector retirees in any financial deficit in the future. This argument is strongly used against expanding coverage over the private sector by the interest groups of the business owners and some unions to lose trust in public pension funds. They call for the establishment of a separate pension institution to run the non-governmental pension system.

Counter to this argument, PPA separated the accounts of the public and non-governmental institutions and their administrative divisions as well as their records of contribution and investment returns.

At the same time, PPA tries to press on MoF to schedule the payment of the arrears with the interest rate as set in the law and guarantee the regular transfers of the monthly contributions.

In fact, as long the interest rate imposed on the arrears is competitive to the interest rates realized in the markets, which is considered as a guarantee for the sustainability of the system, the lost opportunity cost will be minimized. Besides, the government is committed to cover any deficit of the pension funds to pay the benefits of the retirees. However, the government did not recognize the interest rate as in the law and it is up to bargaining, besides the government committed itself only with transferring part of the monthly contributions to PPA.

Indeed, this argument still is not strong as the problem is originated in the trust of the government itself and does not answer how the government would pay the benefits in case of deficit in PPA, while the government itself suffers from deep financial shortage.

4.5.2- The High Contribution Rate and Compliance

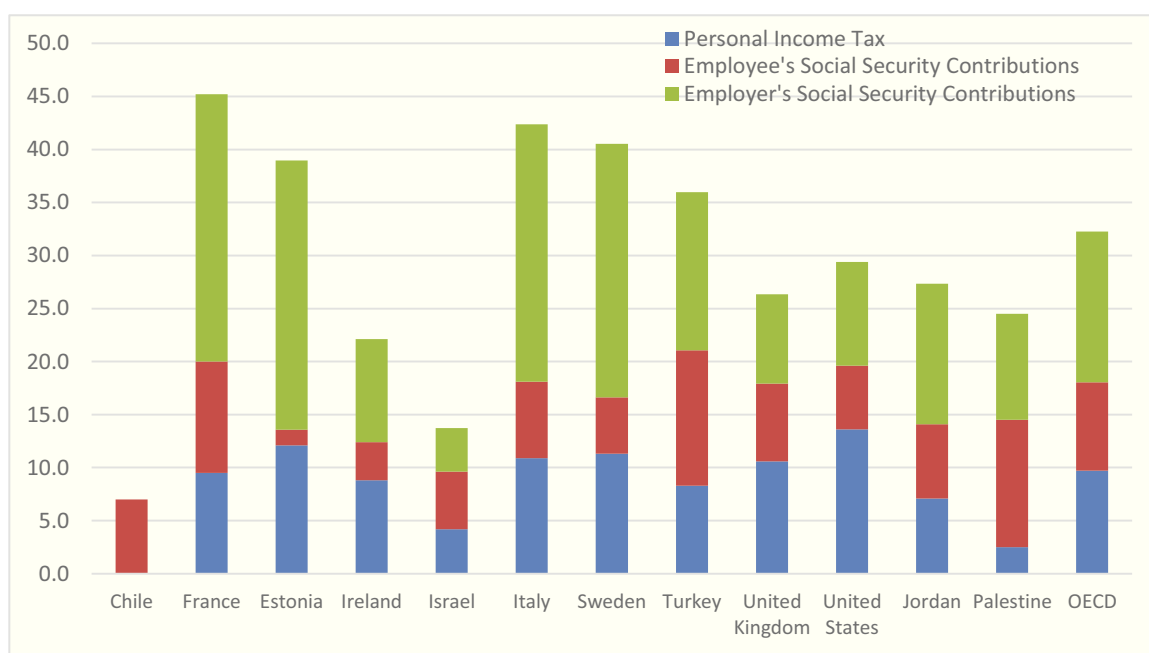
The variability of economic performance in Palestine with the high unemployment rates impact the formal labor market negatively, considering the job opportunities in the formal sector are limited. Recent study has estimated the Palestinian shadow economy through the period of (2008-2012) between (57-88%) of the GDP (Sabra & others, 2014). Thus, the majority of the labor force work is at the informal sector; while, others seek for more stable markets in Israel and abroad. Just little lucky of labor force work in the formal sector including; the public servants, UNRWA, and large corporations that are mostly in the sectors of finance, communication, and education.

However, only the public servants enjoy the privileges of the public pension system. Additionally, they are rewarded by the government by early retirement policy at early ages, which encourages them seeking for another job in the informal sector. At the same time they receive pension that is tax exempted. Such a policy causes inequality of income distribution and creates a gap of wealth.

Furthermore, the total contribution rate at public pension system in Palestine is 22 percent, compared to 22.5 percent at the phasing-out systems, except scheme IV that is 2 percent. Given the low level of income in Palestine with the high poverty rate, the 22 percent

contribution rate remains high⁷¹, which discourages both the employees and employers to work in the formal sector. While, the recommended contribution rate for the emerging economies by the World Bank is about 10 percent of the taxed salary. According to Whitehouse and Brook (2006) linked between the high cost of labor in the formal sector and high informal sector. Thus, they concluded that higher cost of low-skilled labor above its marginal productivity rate forces the firms to hire them informally (Whitehouse and Brook, 2006).

Figure 110: Average Tax Wedges on Labor, International Comparison as Percent of Gross Labor Costs, 2014



1. For a single individual without children at the income level of 67% of the average production worker, or estimated wage level of the average production worker.
2. Weighted average using 2000 GDP and PPP.

Source: Data of OECD - Taxing Wages, 2014, data of PPA, 2014.

In this regard, even the minimum wage is at about half of the poverty line, the gap between the minimum wage and low skilled labor wages is still large enough to discourage the employers from hiring the low-skilled labor into the formal sector⁷².

⁷¹ The contribution rate to the public pension system is 22 percent divided into two schemes Defined Benefits (DB) and Defined Contributions (DC) at 16 percent and 6 percent, respectively. Concerning the DB system, 7 percent is deducted from the employees and 9 percent is deducted from employers; besides, 3 percent is deducted from each of the employees and employers for the DC system.

⁷² The minimum wage is 1,450 NIS (Equals to 380 US Dollar), while the poverty line is 2,350 NIS (Equals to 620 US Dollar), given that the wages of low-skilled labor in the private informal sector ranges from 100 US Dollar and 500 US Dollar at most.

In order to reduce the costs of joining the public pension system for the non-governmental institutions, the DC component became optional, in step to facilitate expanding coverage. Thus, the remaining mandatory contribution rate is that of DB component at only 16 percent. However, the lower contribution rate would have two trading-offs; first, the financial sustainability is threatened, and second, the pensions would become inadequate. Unfortunately, the actuarial studies of both ILO and World Bank predicted that the current contribution rates of DB component would not be enough in the future for pension scheme II of the public sector. In a measurement of the cost of the scheme using the General Average Premium (GAP), which is necessary to finance all benefits over a period of 80 years, it is estimated at 39 percent of insurable earnings compared to the current contribution rate of 16 percent. The contribution rate that would be necessary to finance the current annual expenditures in the absence of reserve funds is less than 2 percent, which starts increasing rapidly by 2020 to reach 34.7 in 2050 and 58.1 in 2090. Similar figure would be estimated for the private sector as the population is getting aging and the system would be matured.

Given the political and economic instability, weak state of law, low income, and low level of human capital and productivity would cause low compliance rate and variable commitment to pay contributions. Moreover, any increase in contributions would have regressive effect on compliance as it highly increases costs on the employers.

More reduction in the contribution rates is preferable to extend coverage and enlarge the base of contributors. At the early stage of the system the decrease in contributions would not imply high transition costs, as the expenses are still very low. Currently, the private sector does not contribute to any welfare system, except some provident funds that are managed by the corporation itself; while, the government is the main responsible towards the old-aged and other vulnerable groups from all categories through MoSA programs.

While cutting off the contribution rate policy is needed, another trend to keep the financial balance of the system is to increase the age of retirement, which would increase the contribution period and decrease the retirement period. Unless, increasing retirement age faces the problem of the limited capacity of job opportunities. At the same time, this contradicts with the will of business management that prefer to replace the older employees

with younger ones due to their lower salary, higher expected performance, fresh education, less resistant to administrative changes, and more able to deal with the new technology. Therefore, any additional contribution period through raising the age of retirement will enhance the pension system and the redistribution of income. Imposing actuarially fair deductions on early retirement years, and taxing the high income pensioners are very recommended trends to achieve equity and fair income redistribution mechanisms. Besides, longer service period after the retirement age should be encouraged by an actuarial increase in pensions or lump-sum payments.

Considering the international trends, it is important to keep the contribution rates stable in order to avoid more labor market distortions and attract investments. While, any increase in total taxes including the pension contribution rates would discourage the compliance of paying contributions and moving from informal to formal labor. Besides, keeping the contribution rate as low as possible in emerging economies is also very important to encourage the employees moving to formal sector and allow the voluntary contribution for self-employed and other categories of the society.

4.5.3- Inconsistency of the Current Pension System with the Private Sector Conditions and the International Standards

Any coverage expansion strategy over the private sector should take in consideration the obstacles in the public pension system that contradict with the international standards and objectives of the pension system.

According to the international standards, which were set up to serve the objectives of the pension systems, in order to encourage the private sector to join the pension system, the system should respond to the needs of the society. Moreover, the pension benefits are human right according to the international conventions and guaranteed by the local law, so it should have some obligatory form that guarantees the minimum protection in accordance with the international standards for all citizens in the society. Some critics to the 2005 reform of the public pension system claimed that it fits more to the public sector conditions than the private sector, which discourages private sector from joining it. However, the argument is still in the debate as it is an inclusive system for the first time and introduced new structural reform.

4.5.3.1- Adequacy of Pension for Old-aged and Survivors

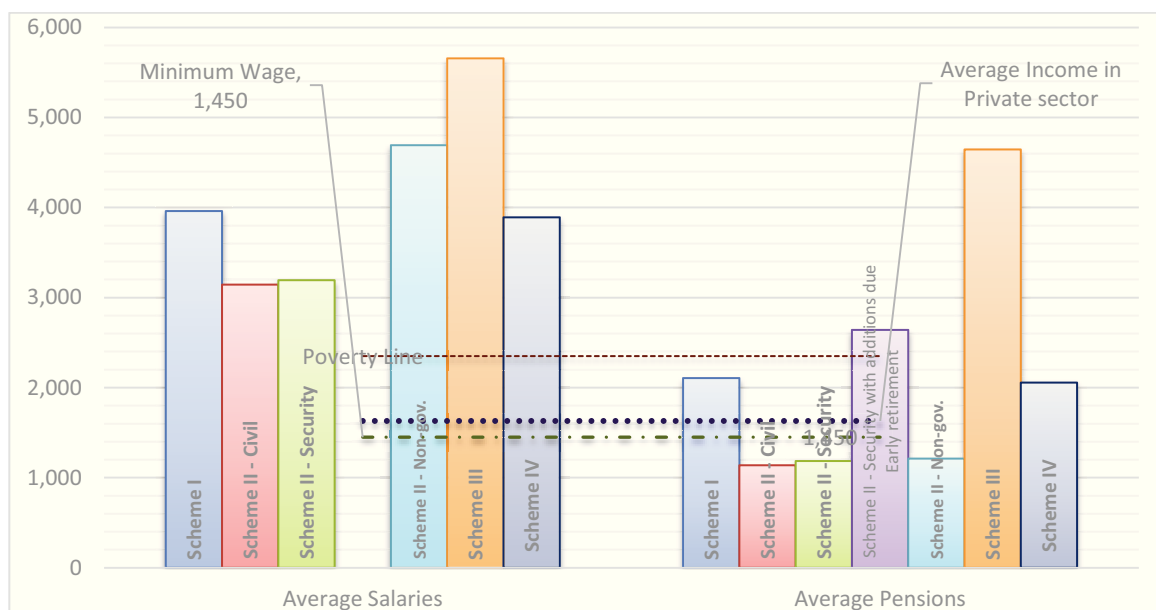
Since the legislation of the public pension law of 2005 reform, there has been caveats towards the adequacy of the pension at old-age, disability and for survivors. The source of these caveats is the reduction of the accrual rate of the defined benefits (DB) system from 2.5% to be 2% compared to previous phasing-out schemes, which leads to less replacement rate of income. However, since the accrual rate reduction was accompanied by a decrease in the contribution rate, it seems fair. Thus, the real caveats regarding adequacy refer mainly to the unstable and short working careers due to the variable economic growth and high unemployment rates. As a result, another reason is the lack of a minimum pension replacement rate, which could be less than 10% of the income in some cases of disability and survivors.

These caveats are enhanced by the low income, instability in jobs, high unemployment rate and variable currency exchange rates as various currencies are accepted for paying contributions and benefits⁷³. Thus, employees in private sector would not be guaranteed an adequate income, as they are expected to work less period with low salary and variable currency value, which violates the adequacy principle as defined by Holzmann and Hinz (2005)⁷⁴.

⁷³ The currencies used in Palestine are mainly the Israeli Shekel, US Dollar, and Jordanian Dinar. The shekel is used most of the daily consumption commodities, while Dollar and Dinar are used for specific expensive commodities and for savings. As the income could in the three currencies, PPA accepted these currencies to pay contributions to be similar kind of the salary.

⁷⁴ According to Holzmann and Hinz (2005: P.55)., *“Adequacy refers to both the absolute level (preventing old-age poverty) as well as the relative level (replacing sufficient lifetime earnings) of retirement income that the pension system will provide.”*

Figure 111: Average Salaries and Pensions Compared by Pension Schemes in Palestine as at December 2014



Source: The author by data of PCBS and PPA, 2014.

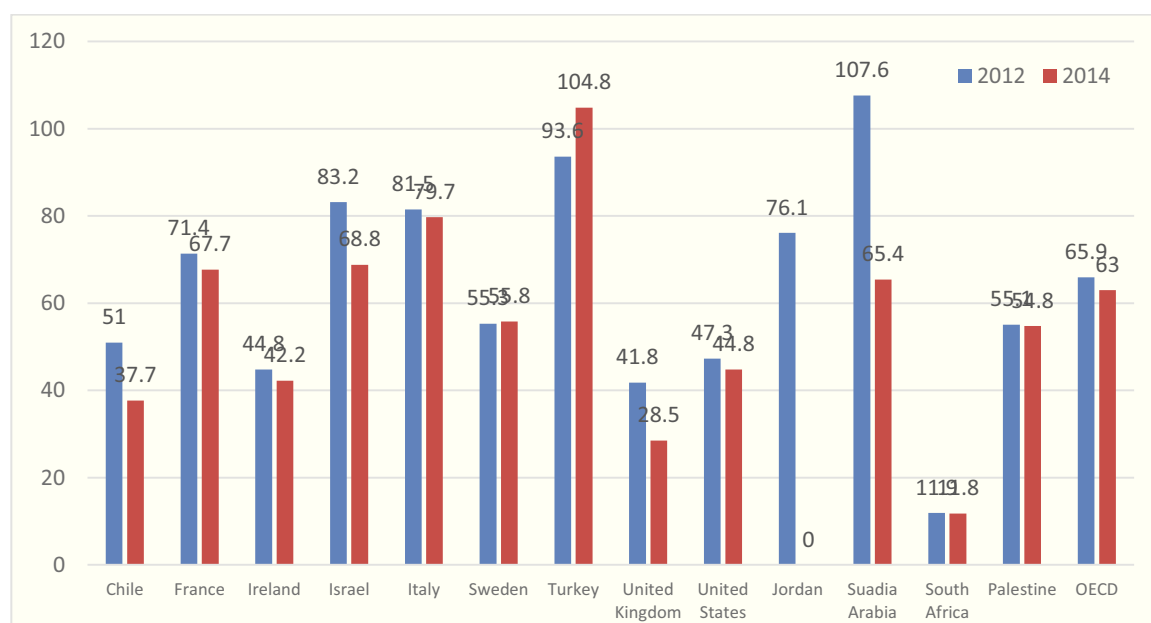
The data indicates to a strong relation between the average pension and the salaries for each scheme; in the time, the World Bank and ILO described the public pension schemes in Palestine as generous. However, if we compare the pension value to the average income in Palestine and the poverty threshold, the matter would be different.

The pension system could not guarantee an average pension above the poverty line, except the schemes of security forces, in which many members were guaranteed 100 percent replacement rate through early retirement policy to some cases. In scheme II, both the salaries and the pensions are low as the members are younger and ending service caused by disability or the death of the contributors, while the pensions are not expected to raise much as the accrual rate is 2 percent per annum and the average length of service is short, given that all the previous pension reforms recommended to reduce it more.

The actual average replacement rate in Palestine is about 55.1 percent, which is less than other developing countries and in average with other developed countries. In addition, the replacement rate of typical full career employee in Palestine is 70 percent in phasing-out schemes and could be more in scheme II of public pension law as there is no limit to a maximum replacement rate.

Indeed, the replacement rate for average income in OECD countries and some major economies as in 2014 ranges between 8.3 percent for high-income earners in South Africa and 103.2 percent for low-income earners in Denmark, while the average of 34 OECD countries is 63 percent for median earner. For most of the EU and OECD countries, the replacement rate for low-income earners was higher than high-income earners, which reflect the redistribution policy to realize justice. Meanwhile, in countries like Saudi Arabia and Russia the replacement rate did not change by income level. In some countries, the low replacement rate of public pension system, compose only the basic part of social protection as they depend more on private provident funds to provide complementary benefits in order to encourage savings and guarantee a fair income redistribution policy. According to Whitehouse (2007) the replacement rate size of mandatory pensions reflects the balance of voluntary versus mandatory provision in each country (Whitehouse, 2007).

Figure 112: Average Men Net Replacement Rate of Public Pension Systems of Selected Countries as in 2012 Compared to 2014



Source: The author by, OECD data (2016), the PPA data (2014), and Jordanian Social Security Corporation (JSS), (2013).

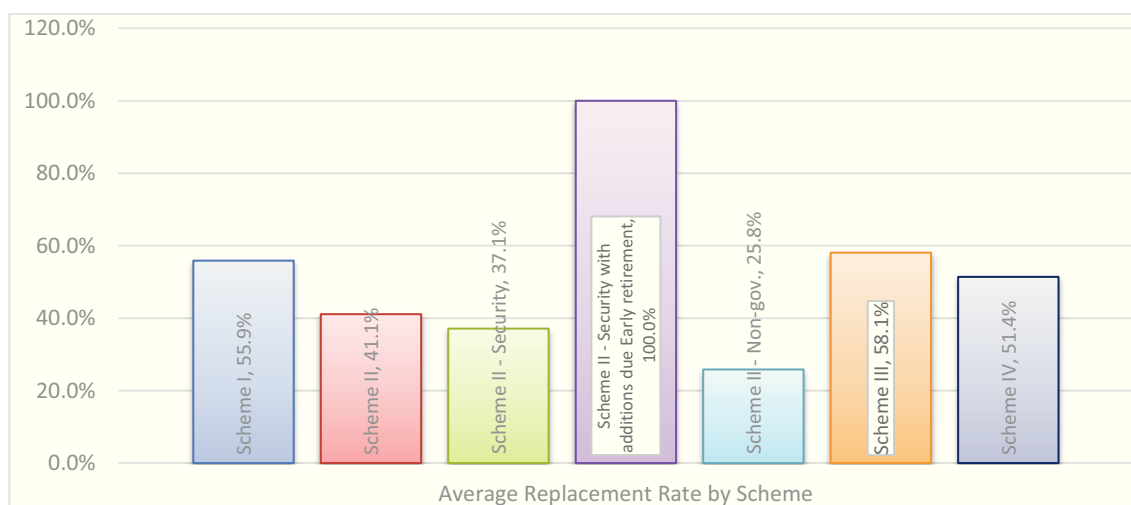
Therefore, OECD highlighted that to compare the replacement rate, the total income sources and type of the system should be taken in consideration. (OECD, Pensions at Glance 2013)

Even though there is an international trend to reduce replacement rate to reach the financial sustainability, its implications on low income retirees are highly negative. Thus, in Palestine it is hard to reduce the replacement rate more, where the average salary is low and the working career in average is short, due to high unemployment rate and large informal sector. Furthermore, the high informal sector and variable economic growth excludes the option to increase contributions rate as its implications on the macro-economy and labor market would be highly negative.

Moreover, even the large-scale survivors' eligibility is considered as advantageous for the beneficiaries, its trading-off is less ratio for each survivor, which negatively impacts the adequacy of the pension. Adequacy problem could also be a result of early retirement decision for those with short service periods, as they will have low replacement rates.

Considering these factors is inevitable in any pension reform; therefore, setting a minimum pension or a replacement rate as a base benefit is highly recommended with any proposed reductions in the accrual rate.

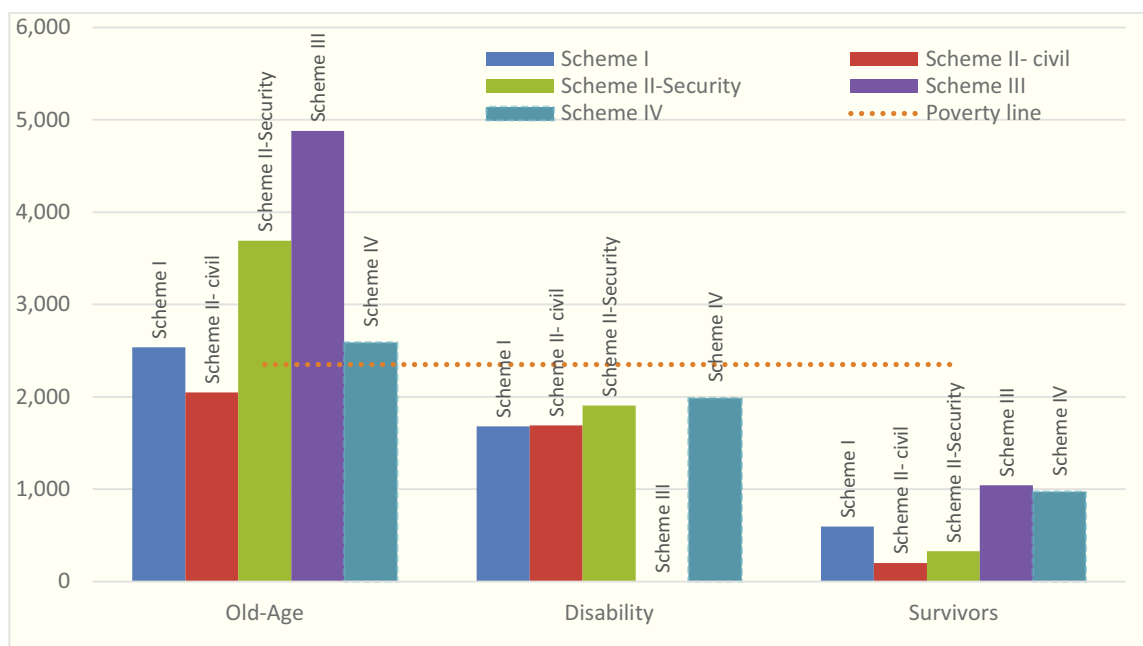
Figure 113: The Average Replacement Rate in Palestine by Scheme as in 2014



Source: The author by data of PPA, 2014.

There is a gap in the average replacement rate between previous phasing-out pension schemes and scheme II in Palestine. Further, the low replacement rate resulted in low pensions, which are mostly less than the poverty line. The average pensions among disabled retirees and survivors are lower than poverty line, while old-age pensions are close to poverty line, which indicate that pensions are inadequate.

Figure 114: Average Pensions by Scheme and Type of Benefits in Palestine as at Dec 2014



Source: The author by data of PPA, 2014.

Creative solutions should be presented that target the old-aged and vulnerable groups, including guarantying minimum income for old-aged, taxing high pensions for fair redistribution of income, indexing the pension to inflation rate, and valorization of the salaries over career. Thus, further reductions in the replacement rate would be accepted with the minimum limits, in order to guarantee the vulnerable groups. At the same time, other regulations and measures should be taken regarding the compliance with the minimum wages and paying contributions in order to protect the employees in the private sector. Some programs could encourage workers in the informal sector to join the pension system, such as tax exemption for low-income salaries and allowing voluntary contributions, targeting the self-employed and non-working women. In the case of China that introduced in 2009 and 2011 two old age schemes for rural population and urban residents on voluntary basis. The coverage ratio has increased from about only 25% of the population before 2009 to be about 75% at the end of 2013 (ILO, 2014). However, Dorfman and others (2013) highlighted the problem of insufficient benefits to provide adequate financial protection in old age for large number of beneficiaries there, although the introduction of these schemes has broaden coverage (Dorfman and others, 2013).

4.5.3.2- Unemployment Insurance:

The unemployment rates in Palestine have been incredibly increasing, particularly in Gaza Strip, which registered one of the highest records in the world by hitting the 43.9 percent⁷⁵. While, the unemployment rate in Palestine is 26.9% and it is expected to continue increasing along with the political instability. Moreover, as the unemployment is the highest among youth population, it would have long-term implication on the labor market. The unemployment rate also higher among females and those with low level of education. Formally, the declared rates are less than the actual rates, due to the long-term nature of the problem, so according to the international standards many are not counted. Given the low female contribution rate to the labor force, any increase in female participation rate would cause an increase in unemployment rate. On the other hand, many income resources are from informal job or work, which are not counted as well, which harden the measurement of accurate unemployment rate, but it does not change the fact of the existing of high unemployment problem.

The figures of high unemployment rate in Palestine requires a protection mechanism for the citizens as priority; however, the expected high costs with the lack of sustainable development program discourage the policy makers to initiate an unemployment insurance as part of pension system. Moreover, the reasons of this high unemployment problem have partially a political nature, as the occupation caused misplacement and the loss of properties of more than 50% of the population in one shot in 1948, which was followed with other negative shocks that left high rate of the population as refugees living in poverty conditions. Furthermore, it controlled most of the daily life aspects, including imposing very tight conditions on mobility of individuals and goods, and investment opportunities, which created a case of continuous negative shocks that prevent any sustainable development plan.

These political reasons of causing high unemployment rate needed some political solutions and requires an intervention from the international community to do its duties to stop this catastrophic disaster of humanity by some urgent relief programs alongside with development programs. Any pension system will not be able to solve this long-term high

⁷⁵ According to ILO definition, while according to the relaxed definition it is 46.2%.

unemployment problem without external support and creative solutions to enhance the economic growth and protect development programs.

In order to ease pressure on the public budgets in downturns conditions, ILO recommended an advanced funding of unemployment benefits in reasonable proportions and within a well-governed framework (ILO, 2014). However, the problem of long-term crisis has effects even on all countries with advanced-funding approaches, as they depend on the reserve funds accumulated under unemployment insurance schemes. These funds started to run out as the 2008 crisis last beyond 2010, where increasing contribution rates was inevitable solution. At the same time, a recent study on the United States argued that the reduced unemployment benefits caused higher poverty rates (ILO, 2014).

In the lack of a pension system coverage to the unemployment insurance in Palestine, the policy makers had to solve the unemployment problem through some employment relief programs run through the ministry of labor and UNRWA in cooperation with the foreign donors, mainly the World Bank and European Union. However, a recent study concluded that these employment programs need to be more organized and directed to be more productive through sustainable development programs (Al-Astal, 2014). The unemployment solutions were more relief directed programs, and hiring into the public sector, which even had extremely negative implications on poverty and the increasing financial burden on the public budget. Recently, some funds offered lending opportunities to create small businesses or having a house, however, these programs also unsustainable as they impose very high interest rates and serve very small ratio.

In the light of these facts, the proposed unemployment insurance should be in two dimensions or methods, where each deals with the cause of the problem of the unemployment and covers part of the population with a more proper conditions. One method is contributory that depends on monthly deductions from income to a specified fund, which would be gradually extended to have wider coverage scope and more benefits. While, the other will be as unemployment relief program with more organized arrangements to ensure fair coverage.

Thus, unemployment insurance has been adopted in most of the pension systems in the world, even it is applied differently. Thus, introducing the unemployment insurance would enhance the compliance with international standards of social security. At the same time,

it will provide a protection to part of the population, which in turn would protect the economic growth from labor market distortions and enhance stability.

4.5.3.3- Mandatory Defined Contribution (DC) Component

Most of previous literature review of the Palestinian pension systems proposed private accounts funded DC scheme, to share the private sector in administering the pension funds on competitive basis to have better performance and generate higher rates of return. The authors tried to transfer the experience of Singapore and Chile and even Sweden to Palestine. However, they did not take in consideration the conditions on the ground in Palestine, or were over-optimistic regarding ending the occupation and conflict.

The aim of DC scheme is to have funded scheme with individual accounts that is supposed to be invested to generate the highest return. Hence, even there would be diversity in income at old age, and have a flexible scope of choice upon individual heterogeneity, part of the risk is transferred to the beneficiaries. However, in practice in Palestine, none of these targets is achieved due to the lack of accumulated fund in the public sector. Further, DC component is voluntary for the non-governmental contributors, in which the employer almost chooses not to contribute to release of additional costs of 3 percent contributions to the DC scheme.

Moreover, the investment of the accumulated funds of DC component is not allocated to individual accounts; thus, it is difficult to assign the return for private accounts, which needs more administrative regulations and more cooperation with the custodian and the investment managers.

Introducing the DC scheme to the countries has been clearly one of the objectives of the World Bank, but there are some caveats of the target of this objective, and whom it serves more, as the beneficiaries are exposed to risks of low income or losing their savings. Besides, the effects of these funds on the national savings and consumption as well, in addition to the availability of liquidity and cash for loans, should be upon clear policy.

According to the ILO report (ILO, 2014) on the actuarial valuation of the pension system as in 2012, it recommended to review the DC component of the public pension law, and proposed to redirect its contributions to the DB component. Further, the last proposed

reform options of the World Bank in 2011 included a shift from DC to NDC system. Later, some opinions from the World Bank experts agreed with that recommendation of ILO regarding the DC system in the Palestinian case.

This argument raised mainly due to the lack of the funds of the DC component in the individual accounts, because of the incapacity of the government, as the main employer of the current contributors, to pay the total monthly contributions and other arrears since 1999, the lack of local investment opportunities of the accumulated funds, the weak local financial and insurance markets, and other problems related to capacity building of IT system.

In practice, PPA could not pay back the contributions of the DC component to the new retirees according to the new system until 2015 because of three respects. First, the law was not clear concerning how to calculate the service prior to the 2005 reform. Second, the contributions were not physically transferred to their accounts at PPA. Finally, the PPA could not build-up a recording system that separate in details the individual accounts of the contributors in synchronized manner with the independent custodian, provide the contributor with an investment opportunities to choose out of them, and provide quarterly reports of the performance of their investments. Moreover, when PPA started to pay back these contributions by 2015 to the retirees, the option to convert them to a pension was disabled, and they were paid back as they were cut from the salary, which means that neither interest was added to these contributions, nor a valorization to the value of these contributions was performed.

Upon Palmer (2006), the World Bank approach and economists recommend the DC system to encourage savings on the micro level and boost the economic growth on the macro level, which was introduced as a solution for the demographic shrinking problem in what is known as aging populations. Under the DC system, each cohort tolerates the risks of the future, so the cohorts have to save more to increase their future income.

However and in contrary to the above mentioned reasons, the economic growth in Palestine is variable and discourages investment. On the other hand, the low income leaves very low margin to additional savings for cohorts. In addition, the DC component needs the contributors to learn about investment opportunities and be able to choose the investment

portfolio according to enough information and ability to deal with market mechanisms; otherwise, they will be exposed to high risks to lose high rate of their savings.

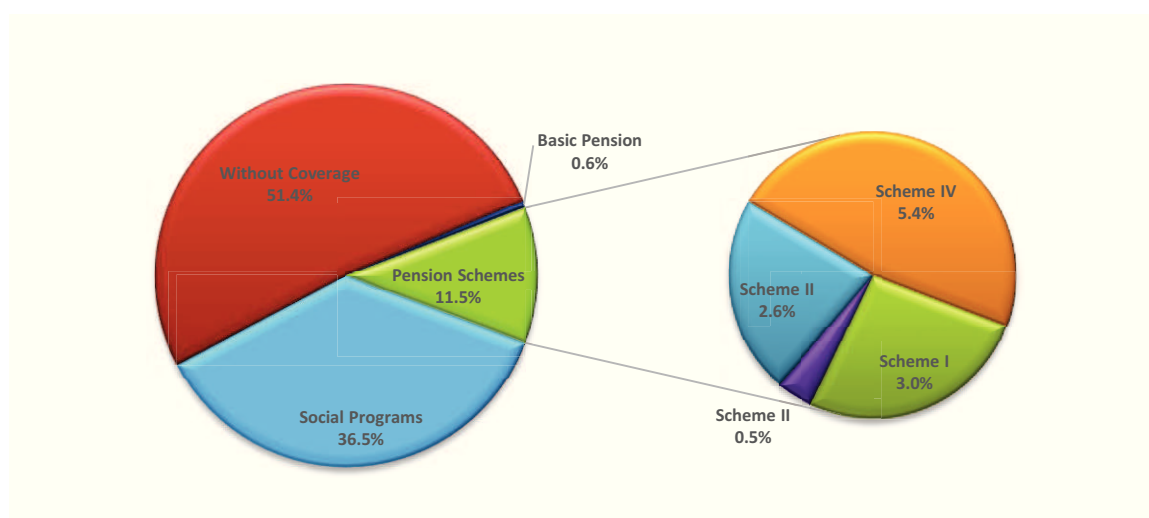
Moreover, the insurance market is very weak in Palestine, which is not able to provide the annuity pensions for the accumulated funds. Besides, it lacks experts and regulations in financial and legal framework of this field that should provide valorization of the contributions and currency exchange rates. Thus, it does not guarantee a fair compensation of the career contributions leading to inadequacy in income or financial instability of the pension fund. At the same time, the foreign markets have constraints, while the local savings in Palestine do not have investment options as they are limited only to stocks and real estate sectors that work in very risky environment, with the lack of public bonds to issue. Finally, the demographic structure of the Palestinian population is a pyramid one with young majority, which is more advantageous for PAYG system.

These obstacles besides the failure in applying the DC scheme to the public sector have raised the caveats of the private sector to join public pension system, particularly the DC component. Moreover, the policy makers gave up from adopting this component to the Palestinian case, which turned to be optional to the private sector and non-governmental institutions under their pressure. Alternatively, they started to think of how to switch to NDC or get back to fully DB PAYG scheme. In this respect, the introduction of the DC scheme as mandatory would be considered as a strategic mistake, as its experience of the public sector was considered as one of the barriers of expanding public pension system to the private sector. In the Palestinian case, introducing the DC component could be on voluntary basis in order to increase the experience in this field gradually with less risks.

4.6- Taken Measures to Protect Old-age Population from Poverty in Palestine

The pension system is simply supposed to cover all the population in Palestine to provide them protection of poverty risks equally, given that any deficit in the public pension system is guaranteed by the government that is financed by taxes or public loans. However, large ratio of the old-age population in Palestine are vulnerable to poverty, even the old-age population over the age of 60 form only 4.4% of the total population as in 2014. Unfortunately, the public pension system covers only about 12.24% of the labor force, 5.61% of the working age population, or only 4.32% of the total population in 2015, given that it is directed only to those working in Public sector and some non-governmental organizations. As a matter of fact, the large informal sector, high unemployment rates, low female participation rate to labor force, and limited coverage to the public pension system deprives many citizens from the privileges granted by the public pension system. As the public pension system was limited to public servants, the pensionable retirees that are almost from public servants constitute about 11.5% of the total old-aged (60+) population, who were estimated at 211 thousand as in 2015. Further, according to public pension law 0.6% of the old-age population, who are public servant retirees and ineligible for pension with no other source of income, receive basic pension, which is financed by the public budget.

Figure 115: Source of Pension Income for People Aged 60+ in Palestine as in 2015



Source: The author by data of PCBS (Labor Force Survey, 2014) and data of PPA, 2015

While, about 36.5 percent benefit from social assistance programs. The remaining 51.4% percent of the old-age population do not have any formal income or protection. The rate of old age population, who do not receive any pension is close to the results of the labor force survey of 2014, in which the population do not benefits from any pension form about 52.05%.

The formal old-age assistance programs and means are available mainly through the Ministry of Social Affairs (MoSA), UNRWA programs and some charities, which are funded mainly by European Union and the World Bank through the projects like; “Social Safety Net Reform Project and Cash Transfer Program” and “Targeting Assessment of the Cash Transfer Program”. However, their assistance programs are limited and depend totally on foreign donors, which cannot guarantee neither a regular income nor the sustainability of the payments.

Indeed, only the public servants and their survivors have been covered by the public pension system and are guaranteed a regular income at old age or other eligibility conditions. While, the others almost depend on their relatives, informal charities and some social assistance programs to meet their needs, few others depend on their savings accumulated through their work career or an inherited wealth.

The majority of cohorts in Palestine face serious problems regarding income adequacy and even the lack of income at old age. The main reasons of the inadequate income at old age could be the high unemployment rate, which shortens the period of contribution into the system as well as accumulating savings opportunity at old age, which result in less income at old age. The other reason is the temporarily immigration or seeking for job opportunities abroad or in Israel, which depletes the population from young, productive and educated working age population. Added, those who immigrate at young age seeking a job, almost return back at old age without pension coverage or sufficient savings to survive, then, they find themselves need for social assistance.

According to the data analysis of the 2003 poverty survey, it is noticed that the old-aged heads of household aged over 60 years represent 23.99 percent out of the heads of household of the population over the age of 15 years old. They could face the financial instability depending mainly on usual monthly income and postponing paying bills at 61 and 63.7 percent, respectively. Then, borrowing from individuals at 33 percent, receiving

assistance of friends and relatives at 31.29 percent, and reducing their expenditures at 31. Then, about 21.88 percent choose to using savings, then 21.05 percent reducing expenditures. Further, 12 percent work in agriculture, while, only 1 percent could borrow from banks (PCBS, 2003).

The 2005 pension reform was supposed to provide a means-tested basic pension salary for all old-age population; however, due to financial deficit at the public budget and under political pressure, it was paid only for public servant retirees, who are ineligible for pension. The monthly basic pension salary is equivalent to 700 NIS (equals to about 190 US Dollar), which is less than half of the minimum wage and about 29 percent of the poverty line. While, the allocated basic pension salary for other than public servants, who have no income, is 100\$ US Dollar⁷⁶, which is about 17 percent of the poverty line in Palestine. Thus, considering the average low wages and high prices in Palestine, the basic pension salary is inadequate to the average living standards.

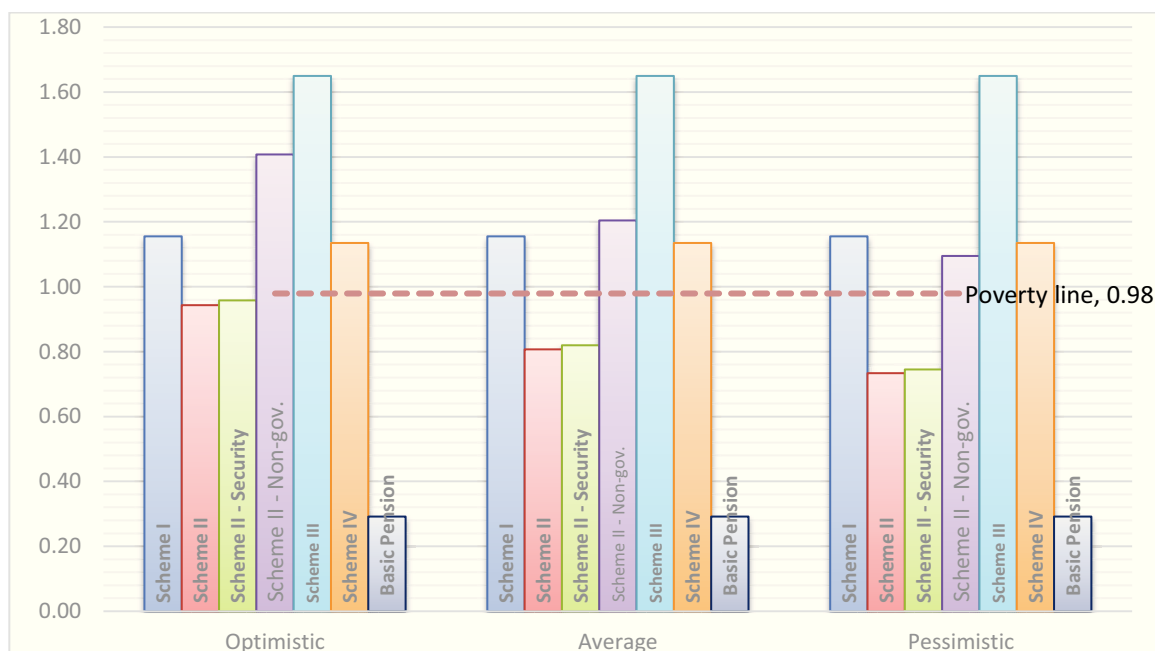
According to OECD as concluded in “Pensions at Glance 2015”, the high unemployment rates among employees at working age period will result in less pensions at retirement that almost would be inadequate and under poverty line, as the work is the only way to contribute to the pension system. It recommends for some countries to re-assess their safety nets for pensioners who have not contributed enough for a minimum pension, in order to guarantee a minimum adequate income at old age. Even in some OECD countries, the available safety net exposes the old-aged to poverty as it is inadequate such as Chile, Korea, Turkey, Mexico and the United States (OECD, 2015).

In order to estimate the typical pension in Palestine according the available pension schemes, we supposed that the cohort starts working at age of 20 considering the education years are 14 years; given that the officially accepted age for pension contribution at public pension systems is 18. The maximum working years until the retirement age of 60 would be 40 years. The estimation for the pension level compared to the economy-wide income is done on three scenarios; the optimistic, average and pessimistic depending on the unemployment level, which is set at 10, 23 and 30 percent, respectively. Holding other

⁷⁶ The basic pension of 100\$ for non-governmental public servant is not activated.

variables unchanged, the employment years are deducted from the working age period to have the average typical years of service.

Figure 116: Typical Pension Size as % of Average Economy-Wide Earnings upon Three Scenarios; Optimistic, Average and Pessimistic



Source: The author by data of PPA and PCBS, 2014.

The poverty line is very close to the economy-wide income, which indicates that the average income is very low for particular groups. Thus, the used salary for the estimation of pensions is the average salary for each scheme⁷⁷.

The previous phasing-out schemes (scheme I, III and IV) almost did not change with unemployment rate as they easily reach the maximum replacement rate of 70 percent because the accrual rate is at 2.5 percent. While, it is not the case of the new public pension system of scheme II, where the accrual rate is 2 percent. Thus, the higher unemployment rate would have tangible negative effect on years of service and so on the replacement rate. At the same time, the lower accrual rate enables the system to be more responsive to the labor market changes. However, the challenge is how to keep the pension adequate as the

⁷⁷ Given that the economy-wide income is about 2,400 NIS and the poverty line is 2,350 NIS, while the average salary of the scheme I, scheme II- civil servants, scheme II- Security forces and scheme III are 3,961, 3,144, 3,193 and 4,692 respectively.

wages are low. In this regard, scheme II guarantees a pension higher than the poverty only at unemployment rate of 10% or less.

In conclusion, there should be a minimum pension and higher basic pension salary that would guarantee an adequate pension for low income labor and vulnerable groups, without violation to the contributions compliance. In order to avoid the violation to the contribution compliance, the Chile's experience is worth to take in consideration to set a basic salary. It proposes a minimum pension salary for the contributory system for those with minimum contribution years, while it grants a non-contributory basic salary that is tax-financed for those who could not have the minimum years of contribution. Normally, the first should be higher to encourage contributions and not encourage evasion of contributions (The Portland Trust, 2007).

4.7- Pension Reform Proposals and Trends in Palestine

Even the social security system in Palestine is comparatively old and has experienced a reform in cooperation and consultation of the World Bank and ILO; yet it suffers from a number of serious problems, which are related mainly to coverage scale, sustainability, and adequacy.

Through the last two decades, the Palestinian Authority has achieved important steps towards building the Palestinian State. This included the institutional building and comprehensive reforms. The social security reform has been one of the top priorities on the agenda of policy makers in Palestine, which is essential for the government to be able to protect its people from available risks, alleviate poverty and develop the welfare within the available resources. However, the economic and political challenges were very hard to avoid. Hence, the pension system in Palestine faces limited coverage, unsustainability and inadequacy problems, which are related mainly to large informal sector and high unemployment, in addition to the long-term changes in demographic and economic figures. The literature review of social security on the Palestinian case indicates that there has been increasing interest of studying this field after the establishment of the Palestinian Authority. However, the available studies are still very few and had shortage of data; besides, they had different legal status of pension system.

So far, the main problem in studying the Palestinian case has been having radically changing environment of living conditions because of instability of political conditions. Accordingly, Sayre and Olmsted (2004) alerted decision makers to be careful when discussing the Palestinian social security policies, to be sure that they realize the objectives and have them compliance with the principles, considering the privacy of the Palestinian economic vulnerability that needs some kind of flexibility (Sayre and Olmsted, 2004).

Among the studies that concerned with social security in Palestine, there are some academic studies and others provide technical analysis. Each study discusses the subject from different side, economic, financial, political, and/ or legal side. *Freeman et al. (1994)*, *Hilal et al. (1998)*, *Loewe (2000)*, *Sayre and Olmsted (2004)*, *The Portland Trust, (2007)*, *International Organization of Pension supervisors (IOPS) (2011)*, and *Helou (2013)* are the main studies, which concluded with some important results. It will be important to review their works and compare them with the results of this analysis.

4.7.1- Proposal of Provident Fund DC System in 1994

Freeman et al. (1994) suggested a pension system reform proposal that is centralized public control, full funding through work-based individual accounts, inclusive, and provides coverage for risks of old age and work-related disability. Benefits depend on the accumulated contributions and their interest earnings realized in the financial markets. The proposal does not determine the contribution rates; rather it suggested low contribution rates at first, to keep the economic stability due to the expected decrease in consumption. The proposal was designed on a very optimistic view because of the settlement of Palestinian-Israeli conflict by signing Oslo peace agreement at that time, which would have promised high growth rates in income. The authors were so optimistic to recommend the establishment of a Palestinian “provident fund” as exists in Singapore; while the contribution rates applied in Singapore are of 20 percent paid by employees and another 16 percent paid by the employers, which are considered very high rates.

Further, proposed transferring the contributions of Palestinian workers collected from Israeli employers. The authors go further by proposing provisions that allowing for qualified deductions of the accumulated contributions, such as paying for college tuition and residential housing.

In short, the realities on the ground were so far from the theory, the proposed system would expose the beneficiaries for the risk of financial markets; hence, it exposes them to low income in old age or disability. Given that the financial market in Palestine is a very small and volatile market, in which the capital market is limited with 49 companies in the stock market with total capital of 1,614,200,000 US Dollar, and bonds with the value of 10 million US Dollar as in 2013 (Palestinian Stock Market). In Palestine, the active financial and insurance enterprises were 48, of which 38 were financial institutions and 10 were insurance enterprises, with a contribution to the GDP of 3.2% during 2013 (PCBS, 2013). In addition, the system did not suggest solutions for the high rate of unemployment and poverty and low participation rate of females.

4.7.2- Proposal of Comprehensive Funded Scheme DC. System in 1998

Hilal et al. (1998) suggested another proposal after four years of the peace agreement implementation, which suggests also a mandatory fully funded private pension scheme as part of comprehensive social security system that includes also health insurance, disability insurance, and social assistance programs for poor households. Thus, the risk of old age and accidents are covered under a separate insurance fund.

The proposed scheme mandated employers to offer several pension options to workers; at the time, the decentralization of the proposed scheme allows for co-existence between the government program and the current pension plans offered by private employers and NGOs. The benefits depend on the accumulated contributions at work period and the interest rate realized in the financial markets, while the system allows penalizing for early withdrawal. Unlike Freeman, Hilal et al. (1998) did not suggest additional provisions for funding other spending. The proposed contribution rates are at 10 percent and 12.5 percent, paid by the employees and employers, respectively, which are the same of the existed public pension scheme in Gaza. Moreover, the compliance is encouraged through tax incentives for contributions.

By privatizing the pension system into provident funds, more risks face the contributors because of the fluctuation of the markets and the lack of knowledge and weak financial and insurance sector in Palestine. This proposal also was to some degree optimistic; so, it did not consider the unemployment and financing mechanism of transition costs and the other schemes of health-care and insurance, which almost would be financed by taxes. These contributions together with taxes is expected to exceed the 50 percent of gross pay, which will encourage informal sector employment, increase the total cost of production, and decrease consumption, resulting contraction of economic growth.

4.7.3- Public and Private Multi-pillar System in 2000

Loewe (2000) suggested the third proposal of Palestinian pension scheme that includes both fully funded and PAYG components, where the PAYG provides universal coverage that guarantees benefits at the old age and the private funds provide earnings-related benefits. The public would still responsible for administering the PAYG; the private sector

would administer the funded portion of the system. The suggested contribution rates are of 11 to 13 percent of earnings for those earning more than \$650 dollar per year, divided to 9 percent for private funded portion and 2 to 4 percent for PAYG portion.

Loewe (2000) suggested his proposal before the critical Second Intifada by one year, which resulted in dramatic deterioration of the political and economic situation. Thus, the Intifada negatively affected his consideration to implementation. Even this proposal was comparatively more realistic than the preceding proposals; it still misses many risks to insure. The unemployment and disability were totally absent from this proposal, in addition to the financing mechanism of old systems in the transition period. The same critic of the preceding proposals in the risk transfer to the beneficiaries due to the privately administered funded scheme, where the financial and insurance sectors are weak and the suggested low contribution rate would lead to the poverty of beneficiaries at old age with the inadequate pensions.

Moreover, both proposals of Loewe (2000) and Hilal et al. (1998) did not concern or suggest any option regarding the rights or accumulated contributions of the Palestinian workers in Israel, while Freeman et al. (1994) suggested transferring their contributions to general fund or private funds in the name of workers.

4.7.4- Mandatory Multi-pillar System in 2004

After the Second Intifada, Sayre and Olmsted (2004) suggested a fourth pension system proposal that considered the deteriorating economic conditions and depended on analysis of the available risks. According to the analysis, the main uncovered risks by the available social safety net are old age, disability, and unemployment. However, the proposed system provides retirement, survivor and disability benefits, but excludes the unemployment coverage. Instead, they suggested covering the unemployment benefits by social assistance programs that are financed by the international community, since the high unemployment rate in Palestine is a function of political situation and the volatility of labor markets.

The proposed pension system is mandatory with both universal and earnings-related coverage. The universal coverage provides minimum income for all population aged over 65 years and is financed by payroll taxes. While, the earnings-related scheme is financed by contributions of employees and employers at 4 percent for each side; besides, self-

employed beneficiaries are mandated to pay 8-10 percent. Additional voluntary contributions are encouraged for employees by allowing the contributions to be tax deductible and by allowing earnings to be tax deferred. At the retirement age of 60, the benefits can be administered as an annuity or as a transfer of the account to the beneficiary and survivors, while the system encourages to extend the retirement age up to 65 for those willing high pensions or not eligible for pensions.

The proposal suggests an independent agency that will provide the regulatory framework in cooperation with other involved governmental institutions, but the individual accounts will be administered by private provident funds under the supervision of the agency. Further, the proposal suggests a plan to cover the informal workers through NGOs and trade unions.

Thus, this proposal mainly highlights the new problems of large informal sector and low labor-participation of female (17.3 percent as in 2012) as they lack protection; however, the suggested solutions seem to be insufficient and could be more efficient. The universal coverage of PAYG system would provide salary to the rich households as well, while the target is the poor households. Another important concern is the suggested low contribution rate, which would not secure adequate pensions that provide the minimum needs at retirement age; neither would it exceed the poverty line of the World Bank as concluded in the scenarios projected in the research upon the available data. Hence, supposing the universal salary would be at the poverty line of the World Bank, the question is; would the mandatory earnings-related scheme provide benefits more than the basic universal salary? Moreover, the average years of working career was assumed at 44 years, which is longer than the reality, while the average period of working career is about 40 years, if we consider the minimum employment age is 18 and retirement age is 60, and taking into consideration that the educated population finishes education at 22 years old. Further, the system depends on the financial market performance, which would give volatile income under the annuity insurance system with very low income at old age.

In regard to unemployment risk, Sayre and Olmsted (2004) referred the responsibility of unemployment in Palestine to political reasons; however, we should consider the natural unemployment rate as well that exist in any society. Therefore, this leads us to consider two kinds of unemployment coverage; the first depends on previous working period, where

the benefit would be related to contributions, while the other would be related to poverty status and provided through assistance and unemployment programs.

4.7.5- The 2005 Reform of Public Pension System

One of the most important works on pension reform in Palestine was the proposed pension reform of 2005, represented by the Public Pension Law No. 7/2005 and its amendments of the Presidential Decree No. 5/2007. The 2005 reform is the result of continuous efforts of the government in cooperation with the World Bank through the preceding decade. The need for reform was to unify the scattered available pension systems and extend coverage of social security, which were only limited for the public sector employees and were suffering from financial hardship.

However, the Legislative Council approved a modified version of pension reform of the submitted draft. Then, presidential decree determined the new date of implementation of the system, in September 2006, and introduced some amendments. Although the presidential degree modified the type of coverage of non-governmental entities to be mandatory, the law covered only the public sector employees until 2010, where the government approved the related bylaw that organizes the coverage of non-governmental organizations. Extending coverage has been slowly and very limited to some universities and municipalities, as there has been caveats regarding the financial sustainability and appropriateness of the system to private sector.

The public pension system of 2005 is a public mandatory multi-pillar system that is composed of three pillars. It has a universal scheme that guarantees a minimum monthly income of 700 NIS (about \$ 190) for public employees, who are not eligible for a pension salary, and \$100 dollar for the other old age population financed by the general budget of the government. The second pillar is a DB PAYG system, which is very similar to the previous system of the public employees of Gaza Strip, with parametric changes. On one hand, while the contribution rate in the previous system was 22.5 percent, distributed as 10 and 12.5 percent on the employee and the employer respectively, the new DB system has a contribution rate at 16 percent, distributed as 7 and 9 percent on the employee and employer, respectively. On the other hand, the benefits of the DB system of previous

schemes depend on the accrual rate⁷⁸ of 2.5 percent of the last salary per year of paid contributions of service period; while, the new DB system provides accrual rate of 2 percent per service year of paid contributions of the average salary of the last three years. Further, the **replacement rate** was limited at maximum of 70 percent of the last salary, while upon the new system no limit was mentioned. The DB system provides additional benefits against disability and death risks to the beneficiaries and their survivors as the previous systems, but it reduced some benefits by changing the calculation methods and abolished the 50 percent extra compensations acquired in the case of accident caused by the job. At the time, it kept the personal allowance of 300 NIS (equals to \$85) to all beneficiaries and their survivors who are eligible to a pension.

The third pillar is a **DC system** that depends on contributions of 6 percent of income transferred to private accounts of the beneficiaries, and paid by both the employees and the employers equally. The DC scheme is mandatory on the public sector employees, but it has been modified to be voluntary to non-governmental participants. Further, additional voluntary contribution is possible by the employee. The DC component is newly introduced in Palestine, which depends on annuity market at the end of service. Even the contributions are divided into two components in the registrations, but the DC component was not activated into individual accounts with options to invest the accumulated funds.

The 2005 reform keeps some privileges to the female. Unlike the male, the female survivor receives pensions as long as she did not marry or have another higher source of income, further, the female contributors can claim retirement at earlier age by 5 years than males without deductions.

For accountability and transparency purposes, the custodian institution was introduced for the first time in the region, which is responsible for all cash transfers and accounts transactions, as they should be through the custodian. The Custodian also is responsible to evaluate the performance of investment managers and financial status, in addition to the claims of contributions from employers.

As the retirement-age is one of the hardest to increase in DB systems, the 2005 reform did not increase the retirement-age; however, it restricted the early retirement conditions. By

⁷⁸ The accrual rate: used to determine the replacement rate as a percentage of the salary per service year, and calculated by multiplying it with the years of services then, by the salary.

the 2005 reform, it is not possible to demand a pension before the age of 50 for old age pension, while the contributor with 50 years old should have at least 25 years of service for males and 20 years for female and some categories working at risky works.

The new pension system was criticized, particularly from the World Bank and faced many problems in implementation. The World Bank considered the changes made by the Legislative Council in the parameters of benefits and contributions as violent to the financial balance of the scheme, which threat the sustainability of system. According to the World Bank report, public pension system is so generous compared to the local GDP and compared to the average pensions of the region, claiming to reduce the **accrual rate** from 2 percent to be 1.6 per service years.

At the same time, the World Bank recently recommended some parametric and structural reform, in which it asks to cancel the privileges of female regarding the retirement age, and to increase the early retirement penalty. Further, the World Bank called to change the **indexation** of pensions to be related with the Consumer Price Index (CPI), instead of the increase in wages of active employees, which violates the relationship between contributions and benefits, even it guarantees the living standards of the retirees compared to their counterparts of active employees.

The World Bank also recommended the government to increase the retirement-age on two stages; first to 62, then to 65. Later, ILO also recently in 2014 has recommended increasing it gradually to 65.

While, the local criticisms of unions focused on the decrease in the insurance benefits in the DB scheme as well as the decrease of the accrual rate from 2.5 percent to 2 percent, compared to the previous law, ignoring the additional benefits guaranteed by DC scheme and other advantages of the system. In addition, there is a lack in the investment knowledge of the households as well as absence of a vision or clear program of the Palestinian Pension Agency concerning managing the private accounts under the DC scheme. Further, the Public Pension System does not have insurance against partial disabilities and injuries in work, which is part of any pension system of the private sector. Therefore, I believe that the local criticisms reflect the lack of awareness of the social security systems and its financial situation.

4.7.6- World Bank Multi-pillar with NDC System in 2013

The proposed reform of 2013 is almost the same as 2005 reform with some parametric and structural changes. The new reform is also a multi-pillar system with basic salary scheme and Defined Benefits (DB) scheme, but proposes Notional Defined Contributions (NDC) scheme instead of the Defined Contributions (DC) scheme as structural reform. It also proposes some parametric reforms:

- Increase the retirement age from 60 to 62,
- Elimination of early retirement.
- Indexing the pensions to consumer price index as published by PCBS instead of wages,
- Increase the years of average contributions to calculate the pension from the last 3 years to 5 years and change the base salary to calculate the lump-sum payment from the last salary to the last 5 years,
- Limiting buying additional years of contributions, and
- Consider extending coverage to the private sector employees.

In addition, the reform proposes administrative reforms as enhancing tool to apply the pension system properly, which includes providing some IT operating systems and the needed infrastructure and hardware.

- Consolidating administration of all schemes in one entity: Palestinian Pension Authority (PPA).
- Information and Communication Technologies (ICT) Project to support Pension Reform; currently the PPA has been installing the following:
 - Enhanced, State-of-the-art and reliable computing & telecommunications Infrastructure.
 - Modern Electronic Archiving and Document Management System.
 - Web-Enabled Beneficiaries & Contributions Management Information System.
 - Integrated Financial Management Information System.
- Enhancing the investments strategies and guidelines

The administrative part of the reform has been implemented by the fund of the World Bank; however, the parametric and structural reform was approved by the government but failed to have the president approval.

4.7.7- ILO Proposal of Public PAYG System 2014

Recently in 2014, ILO performed an actuarial study for the private and public sectors separately for the National Tripartite Social Security Committee⁷⁹.

The proposed system is a mandatory earnings-related (PAYG) and partially funded DB system for all private sector employees that would be administered by independent institution and financed through contributions of employees and employers, of which the government is the ultimate guarantor. The suggested contributions rate is at 18.1 percent of the gross income, divided to three groups of benefits. The first is old age, invalidity, and survivors' pensions financed by the employer and the employee at 8.5 and 7.5 percent, respectively. The second is maternity cash benefit financed by the employer and the employee at 0.3 and 0.2 percent, respectively. The third is employment injury benefits financed by the employer at 1.6 percent. In the time, the proposed system suggests a ceiling on earnings of five times of minimum wage. The benefits could be claimed at retirement age of 60 with at least 15 years of contribution. Further, the accrual rate of pensions is 1.5 percent per year of paid contributions, multiplied by indexed career-average salary, at a maximum of 70 percent. For early retirement, suggested is actuarial adjustment of pensions by a reduction of 6 percent per year before normal retirement age. However, the proposed system introduces maternity benefits for females and the compensation benefits to the disabled beneficiaries or to the survivors in case of death, taking into consideration partial disability and providing rehabilitation services.

Thus, even the proposed system was discussed in several levels of the Palestinian society; it strongly reflects the attitude of ILO and actuaries in the social security systems. Contrary to the trends of World Bank and economists to have private saving accounts and to link the benefits to contributions, the new proposed system is completely based on the DB concept.

⁷⁹ Given that, the Prime Minister established the Committee in 2012 to have a comprehensive national social security system under the supervision of the ministry of social affairs (MoSA).

Further, ILO work of the proposed private sector pension system depended on four major policy considerations; extending coverage, affordable system, proper administration mechanisms including regular contribution collection, and income support against the risks of old age, disability, death, employment injury and maternity.

The Actuarial Figures of ILO Study to the Current Pension System

As the Public Pension Law requires performing an actuarial study regularly, recently in 2014, ILO has released the results of the last actuarial study of the public pension systems in Palestine using the data of 2012. The preceding actuarial study was performed in 2000 with more than a decade ago, in which major changes has occurred on the pension system in Palestine leaving the comparison with new actuarial study insignificant. Besides, there are some studies and reports of the World Bank through the period using PROST model to support their analysis and policy recommendations.

Even there are notices on some taken assumptions and interpretations of the law provisions; the recent results are the best to reflect the financial balance of the current public pension systems and the effect of the proposed parametric reforms on the existing system.

The Methodology of the ILO Actuarial Analysis

The study performed a projection over 80 years to estimate the long-term cost of the schemes. The study started by reviewing the financial situation of the schemes in order to determine the future reserves and the available investments of the schemes. Some models were used, in order to perform the demographic and financial projections. These models include a population model, an economic model, a labor force model, a wage model, and a pension model. Then, some specific projection factors specifically related to the schemes are determined and used in combination with the demographic and economic framework. The database of the analysis include the insured population in the public sector that are classified by age and gender as of the valuation date. Moreover, scheme-specific assumptions are determined with reference to the scheme provisions and views about the future evolution of retirement behavior.

The pension projections are performed following a year-by-year cohort methodology, in which generations are replaced annually according to the demographic and coverage

assumptions. While, the projection of insurable earnings and benefit expenditures are performed according to the economic assumptions and the scheme's provisions.

The rate of return assumption on the investments is formulated on the basis of the nature of the scheme's assets, the past performance of the fund, the scheme's investment policy and assumptions on future economic growth and wages development.

The Main Assumptions of the Study

The study focused only on scheme II as it is the future scheme, while the other three schemes are phasing-out of the active contributors by 2021.

Recently, PPA has allowed some institutions to join the public pension system including some universities, municipalities and other public institutions according. However, the report limited the study to the public sector only, assuming that the private sector will not join PPA. Thus, the demographic and economic assumptions have taken into consideration the general demographic and economic figures but in the public sector parameters.

Moreover, the study excluded the Defined Contributions (DC) component from the analysis, as there is a shortage in contributions transfers from the Ministry of Finance, in order to debt the private accounts of the beneficiaries and there is no private accounts to the contributors. Besides, PPA needs accurate historical data of the security forces since at least September 2006, which is not complete yet. It recommended to redirect the (DC) component to the Defined Benefits (DB) component to strengthen the financial situation of the scheme.

In Regard to security forces members of scheme II, the MoF transfers the value of the bill of benefits monthly as calculated by PPA, where the study assumes this practice to end, which will be limited to schemes III and IV only.

The Results of ILO Actuarial Analysis

The study concluded that the system would not reach a financial equilibrium in the medium and long terms under the current parameters of contributions and benefits. The study proposed some parametric reform modifications to scheme II aimed at reducing the expected increase of costs and would keep the financial balance and sustainability of the system, then it tested the effect of each and all the proposed measures on the system. The proposed measures are:

- Gradual increase of the retirement age,
- Less attractive early retirement conditions,
- Pensions based on career average earnings instead of final earnings,
- Indexing of pensions based on CPI instead of wages,
- Reduction of accrual rate of pensions from 2.0 percent to 1.5 percent per year,
- Increase of contribution rates.

The results show that the taken measures would keep the financial balance on the long-term. However, the most challenging issues are how to keep the adequacy of the income and make these measures acceptable as the accrual rate is proposed to decrease gradually, while the contributions rate will increase.

The cost of schemes is measured by the general average premium (GAP), which represents the constant contribution rate necessary to finance all benefits over the projection period (80 years). GAP was estimated at 39 percent of insurable earnings for scheme 2, which is disaggregated to civilians and security forces at 33.3 and 45.6 percent, respectively.

As scheme 2 is a new scheme, the ratio of contributors to pensioners is at 22.8, which is comparatively high; however, this ratio is expected to decrease rapidly to be at 6.2 in 2025 and 1 at 2090. This will in turn increase the cost of the system by increasing the needed contribution rate from each beneficiary to cover the pensions from less than 2 percent to 34.7 percent in 2050 and 58.1 in 2090.

In comparing the contributions to the benefits expenses of scheme 2, it was found that the contributions would exceed the benefits costs for the next 20 years, which allows an estimated reserve of about 36.384 million NIS as in 2034. However, with the sharp increasing costs, the contributions rate of 16 percent will not be sufficient after 20 years, which will transform the scheme to be financially unsustainable and consume the accumulated reserves by 2044.

Regarding the total schemes projections, the cost will begin increasing by 2022 from 2.3 percent of GDP to stabilize at 4 percent by 2045. Thus, the accumulated reserves of all schemes is expected to vanish after 2040.

The study also estimated the actuarial liabilities⁸⁰ of the schemes on a closed-group basis, as the law requires administering the schemes in separated accounts. The measure aims just to give an indication to the current situation of the system.

Table 80: Actuarial Liabilities and Unfunded liabilities of the Schemes Administered by the PPA as at 31 December 2012 (million NIS)

Actuarial liabilities	Scheme 1	Scheme 2	Scheme 3	Scheme 4
Related to pensions in payment	4,009	1,771	9,695	7,786
Related to active insured persons	4,191	59,600	1,190	4,235
Total actuarial liabilities	8,201	61,371	10,885	12,021
Estimated reserves	2,684	2,806	0	0
Unfunded liabilities	5,517	58,565	10,885	12,021

Source: The actuarial study P. 43

The total reserves are very low compared to the liabilities, which result in very high amount of unfunded liabilities that are estimated at 86,988 million NIS for all schemes. That due mainly to the fact that scheme 2 has in majority young members, while schemes 3 and 4 have no reserves.

Moreover, the sensitivity tests were performed on scheme 2 projections with alternative assumptions regarding the rate of return on investments of PPA and the salary growth rate. The financial impact of higher rate of return (from 4 to 6 percent) would be significant that would reduce the GAP from 39 to 32 percent, while it has no impact on PAYG cost in 2090, as its measure is not related to the value of reserve funds. On the other hand, the salary growth (assumed at 5 percent per year) would increase the GAP from 39 percent to 41 percent, while it almost has no impact on PAYG cost, since the salary increase cause an increase in future pension.

The study also highlighted the problem of the contribution arrears due by Ministry of Finance to PPA. It concluded with a set of recommendations to perform an urgent parametric reform to the pension system as mentioned above. However, these classical reform measures on PAYG system have a political resistance as experienced in most of the

⁸⁰ The actuarial liability refers to the present value, as of the valuation date, of future payments related to pensions in payment and to the accrued rights of the present insured persons.

countries. Moreover, the proposed measures would expose the public sector employees to poverty and inadequacy, given that the active public servants suffer from inadequacy of salaries. At the same time, the proposed reform does not guarantee sustainability of the financial balance, but it postpones the crisis.

The study did not consider to the analysis the shocks of contribution collection problem and the early retirement policies; besides, the suspension of recruitment to the public sector. Soon, the ILO is expected to release the results of another analysis on private sector, but it will be on PAYG pillar only and limited to employees at large corporations.

4.7.8- Social Security Law (SSL) of 2016 for Private Sector

The new social security law of 2016 has been published after the failure of the Public Pension Law to cover more contributors of the population from private sector to contribute and guarantee a pension system at the end of service for any reason upon the international standards. The failure of the public pension law refers to internal and external barriers of the system itself. However, there are always other important lobbies that impact the policy makers beside the will and attitude of the policy maker from the beginning to have a comprehensive social security system in Palestine. This belief started by the earlier efforts to prepare the 2005 reform of the public pension law, but after its failure the government established the National Committee for Social Security, which initiated the idea of applying the concept of social security in Palestine for the first time. The role of ILO was clear in preparing the guidelines and performing the technical support by performing the actuarial and strategic studies. Moreover, the committee included many parties of the society that consisted of representatives of the government, employers, union of labor, and academic experts. Thus, SSL of 2016 is a new version of ILO reform proposal of 2014 with some parametric changes and added some provisions as a result of the National Social Security Committee works and agreement of the government and unions. Sharing other parties in the final version would guarantee the harmony in compliance and affordability.

The committee worked continuously for about four years to conclude with the first draft of social security law; however, after many protests organized by the unions of labor and other professions the government had to respond to their demands to agree on the final version

of the law in September 2016 that is supposed to be in action through the next two years of the publication.

SSL is a mandatory Multi-pillar system. The main pillars are old-age, work injuries and disability, maternity schemes, while each scheme that has an independent fund that is based on Defined Benefits (DB) partially funded PAYG system. The law introduces other benefits of health-care and unemployment, but the implementation would be gradually according to re-evaluation procedures. It kept the contribution rate of old-age fund at 2% that is similar to the public pension law of 2005, in additions to two new kinds of contributions 1.3% (paid by the employer) for work injuries and 0.5 (0.2 of the employee and 0.3 of the employer) for maternity fund. Besides, there is a voluntary Defined Contributions (DC) scheme for employees with high salaries, in which they can contribute for their individual accounts the part of the salary that exceeds 8 times of minimum wage. Moreover, it considers the minimum wage in accepting contributions. The accrual rate is 2% per annum as in the public pension law. However, the disability and work injuries has new calculations that guarantee a minimum income and encouraging more years of work after the retirement age that would be included in the salary. The law did not include a basic pension to all old-age population that would be non-contributory as that in public pension law.

The most remarkable issue is coverage scope over population, where it allows the self-employed, employers, and those in informal labor to contribute voluntarily as they are committed to pay the total contributions according to a determined salary scale.

Significance of the new Social Security Law of 2016:

Here are the most significant issues that have been introduced through the 2016 reform:

By reviewing the provisions of SSL of 2016 reform, the most important introduced issue is its being mandatory for all formal businesses in private sector and all other non-governmental organizations, local municipalities and councils, and public institutions. Also, it allows for other categories of the society to join the system voluntarily, including those working abroad and in Israel.

Further, it guarantees a protection for poor and vulnerable old aged and females that are vulnerable in the Palestinian society. This is an important issue if we know that poor old

age population form about 4.5% of the total old aged population, and about 10% live alone. Hence, the expected changes in population structure and the family structure in Palestine imply the probability of an increase in the percentage of old aged. This increase is expected to be accompanied with less family care towards them as the family structure is getting more nuclear that cares only with itself, inadequate income, and more females participation rate to labor force that have important role to perform care of old aged. However, the problem here is the more privileges given to female, which indicates to inequality, given that the females have higher life expectancy. This can be argued by that females in Palestine are vulnerable as they have very low participation rate to labor force, in addition to the social norms that imply the home works to females makes them more squeezed in formal and informal works at home as well; so that these privileges could be justified to encourage females to participate more in the labor force and to justify them by the privileges of early retirement.

SSL of 2016 reform introduces new concepts to the existing Palestinian social security system to increase benefit kinds. The 2016 reform agrees more with the international standards regarding social security. The maternity, unemployment insurance, and work disability and injuries insurance are among the new benefits that were introduced to benefit of the contributed employees. These new benefits contribute to increase the female participation rate to labor force as they were deprived form paid maternity, which reduces the desire to work or reduces the female opportunity in high level of administrative and professional positions.

SSL of 2016 reform provides also a protection for employees from their employers in Palestinian labor market and abroad; whereas, low wages in Palestine and high employment rate push the labor force to accept a job with low wage or in informal sector, which exposes them to poverty without any kind of insurance against old age, work injuries, disabilities, or death. Furthermore, others seek a job abroad and in Israel. Almost those work in Israel are low skilled workers in constructing sector, while those Arab countries are professionals of middle income professions as teaching and engineering, who almost terminate their jobs because of termination of contract due to dispense or at old age. However, at the end of their services they return without any protection by a pension system and be exposed with their families to poverty at old age or disabled status.

Thus, there is an urgent need for the protection of the Palestinian labor force both in Palestine and abroad through a trusted system that opens the enrollment to the contribution to the system voluntarily or through an agreement with the hosting country. In addition, there should be a campaign to extend coverage to include as much as possible of the population in Palestine in formal sector and provide some incentives for those in informal sector.

On the other hand, the impact of the SSL of 2016 reform on the economy may be hard to apply as it seems as extra costs on the employers and institutions, which may be considered as a negative shock at the beginning. However, it is essential for an organized and stable relation between the employees and employers and grants the stability in work and income with a minimum wage. These conditions of labor are reflected in turn on the performance of employees and stability in the consumption rate. Thus, the market avoids the sharp fluctuations in consumption, given that the Palestinian market has instability in economic and political conditions. Further, the pension system leverages the income as well as the purchasing power of the vulnerable groups and poor people, which increases the consumption and enhances the economic activities.

In addition, the saving system and regular monthly contributions impact on the ability to invest in new sectors and in needed projects both inside and abroad. Local investments would increase the job opportunities in vital sectors and enhances the local economy as well; while, the overseas investments offers new opportunities to benefits from available opportunities in stable environments with higher returns.

Finally, one of the success reasons could be sharing other parties in preparing SSL as well as the supervising roll on the administration of the social security institutions through sharing chairs of the Board of Directors (BoD) for representatives of employers, employees, financial experts, one academic expert, and the government. BoD will have wide range of authorities on the administration and the investment unit, which could be advantageous for the performance and transparency, but on the other hand some caveats are available regarding investing the accumulated funds and the guarantee of rights of beneficiaries against any bankruptcy, besides, the expected high costs of administration.

The Main Critics on SSL:

The problem of any reform or introduction to a new pension system is to compare it with other previously applied pension systems, which are almost generous systems or need some reforms. Thus, it is hard to politically pass a new law with the same structure to reduce benefits or with less benefits than the previously existed systems for other groups of the population.

There were some demands by the labor union and other organizations to modify the law to achieve protection to the employees with equity compared to other groups. Hence, they succeeded in doing these modifications, which would make the system more generous. Unlike the recommendations of the ILO actuarial study, the parameters and some other determinants of the benefits were increased. While, the changes on contributions were on the distribution between the employees and employers, keeping the total contributions rate the same as suggested by the ILO study. This of course, would imbalance the financial stability of the system on the long-term, but makes the system more politically accepted and increases the success opportunity on the short-term, as the adequacy would be higher. On the other hand, it would be harder to reduce the accrual rate for the other public pension system. Further, there is no universal scheme under the new system, which is essential for the social protection for ineligible and vulnerable groups; particularly, there are high unemployment rate, low female participation rate to the labor force, which definitely will leave many unprotected, unless there are other social affairs programs for them.

Given that the new SSL of 2016 for private sector has not been applied in Palestine, there are some caveats regarding administrative costs and experience, compliance, and affordability of the targeted groups as the political and economic instability is the dominant scene in Palestine. Moreover, there are many employees of the non-governmental institutions, who have joined the public pension law, will shift to the SSL of 2016, because it provides more benefits. However, until the establishment of the new institution and they decide to shift, they will accumulate large contributions for longer years and many will be retired upon the public pension law, which will cause troubles to public pension system as well regarding its commitment to pay their rights. Further, the mechanism of transferring the contribution periods or rights from the public pension system to the new SSL of 2016 is not clear yet, which needs to be in consideration.

Table 81: Comparative Key Features Summary of the Proposed Pension Reforms for Palestine

The System	Funding	Contribution rate	Eligibility	Types of Risks covered	Calculation of Benefits
Provident Fund (1994)	Fully funded	Low at first then increase gradually.	Work-based but some separate social assistance needs to be established	Low income in old age. Work related accidents.	The accumulated funds in private accounts are related into annuities. Qualified deductions for college tuitions and housing.
Comprehensive Funded Scheme in 1998	Fully funded	10% - Employees 12.5% - Employers	Work-based but emphasis is put on further development of social assistance	Old age. Work accidents and health-care are covered under a separate insurance.	The accumulated funds in private accounts are transferred into annuities. Minimum pension is guaranteed.
Public and Private Multi-pillar system in 2000	Fully funded and PAYG	11% - 13% for those earning more than 650\$ per year. 9% for DB scheme	Universal and Work-based. Current elderly immediately benefit from PAYG system.	Old age.	Basic pension is guaranteed on PAYG plus DC system.
Mandatory Multi-pillar system in 2004	Fully funded and PAYG	Universal: tax 8% from both Employees and Employers. Additional voluntary contributions that is tax deductible	Universal and work-based.	Old age, survivors, and disability.	Change in DB benefits. 8% tax of earnings to DB, and accumulated voluntary deductible tax DC scheme.
The Multi-pillar 2005 Reform	Fully funded and PAYG	PAYG (16%): 7% – employees + 9% - Employers. DC. (6%): 3%+3% from both Employees and Employers.	Universal and work-based. Elderly and public sector employees are guaranteed minimum income.	Old age, survivors, and disability.	DB system of 2% accrual rate per service year with basic pension for old age, and annuity or lump sums of DC.
The Multi-pillar with NDC scheme in 2013	PAYG and Notional Accounts	PAYG (16%): 7% – employees + 9% - Employers. NDC. (6%): 3%+3% from both Employees and Employers.	Universal and work-based.	Old age, survivors, and disability.	DB system of 2% accrual rate per service year with basic pension for old age plus NDC component.
The ILO's PAYG System in 2014	PAYG	18%	Universal and work-based PAYG.	Old age, survivors, disability, maternity, and unemployment.	PAYG system of 1.7% accrual rate per service year with a basic pension is guaranteed for old age.
SSL of 2016: The Multi-pillar with PAYG schemes of SSL, and Voluntary DC for high income employees	Partially-PAYG	18.1% for all funds Old age fund: 16% (7% by employees + 9% by employers). Work Injures fund: 1.6% by employers. Maternity fund: 0.5% (0.3% by employer + 0.2% by employee).	Mandatory and work-based contributory. No universal non-contributory scheme Disability or death for not insured contributors with certain contributions.	Old age, survivors, disability, maternity, and work injuries, Other not activated schemes as unemployment and health-care.	The pension is based on 2% annual accrual rate. Besides, Lump-sum payment for ineligible contributors. Besides, voluntary DC component in individual accounts

Source: the author by data of PPA.

4.8- Decision Strategy Choice of Enrollment to Pension Systems in Palestine

Expanding pension coverage in developing countries still one of the main challenges of social security systems, where it ranges between 5 and 60 percent of the population. The countries with very low participation rate to pension systems have serious problems in poverty alongside economic and political instability. As experience indicates that the social security programs have significant impact on poverty alleviation, the International Labor Organization has put expanding pension coverage programs as the first priority of its agenda on social security programs for developing countries. Almost, the developing countries cannot control the large informal sector, where the economy is fragile and the law enforcement is weak; besides, the shortage of resources or bad distribution of the national resources create gaps between the individuals of the societies. Thus, introducing a protection mechanism for poverty alleviation is priority policy for each government that should try to initiate. There have been many successful experiences in this regard, where the government intervention could extend pension coverage over population. However, the tools to create incentives where different for each experience.

In informal economy, where the state is unable to obligate individuals and employers to participate in mandatory pension systems, expanding pension coverage almost depends on the personal characteristics and the needs of individuals. In this regard, Dorfman and others (2013) in their study to china's new schemes for rural and urban residents that was introduced voluntarily concluded with the significance of the incentives to individuals for sustained participation in order to have universal pension coverage. Besides, the regulations should be flexible to allow for portability, integrate pension programs across schemes and across space, and pool risk (Dorfman and others, 2013).

Thus, we should first know these personal characteristics and the needs of individuals. This would facilitate the choice of the proper tool that should be used as incentive for individuals. The recent development in household surveys could provide important data on individuals and labor force in relation to their pension coverage status. This specific important data gives indications on the behavior of individuals according to their characteristics and conditions. Moreover, the policy makers can test their policies from time to time to know the impact of these policies. This will be very helpful in the pension reform process to target precisely the vulnerable groups and alleviate poverty.

4.8.1- Data and Basic Individual Characteristics

Fortunately, the national household surveys have been developed to collect specified data of the individuals from a representative sample of the population. This rich source of data can provide the researchers and policy makers the information they need to interpret a phenomenon or test a policy or a theory. Recently, they have been used in the pension systems studies to determine the socioeconomic conditions that affect the individual decisions to participate to the pension system.

In our case, we used the annual results of the 2014 Labor Force Survey (LFS) that was conducted by the Palestinian Central Bureau of Statistics (PCBS) to provide an analysis of the Palestinian labor decision strategy choice to participate in a formal pension system, through identifying the factors that affect the probability of participation. The sample was chosen from the census population of 2007 distributed on all geographical areas to represent the Palestinian population in West Bank and Gaza Strip (WB&G).

The analysis aims to explore the personal characteristics that effect the contribution to a pension system over population for the main job in Palestine. Given that, the pension benefits include whether there is any regular contributions made by the employer or the employee to any pension fund in public or private sector to receive a pension or lump-sum payments at the end of service.

The results were derived from the answers to the questions of the survey, where we identified the question of *“Do you benefit from any of the following: Contributions to the pension fund / Lump sum payment at end of service”*⁸¹ as the dependent variable. While, the independent variables are demographic, socio-economic, and regional variables that we believed have a strong relationship with the dependent variable. The independent variables are explanatory ones that provide information of the members of the household including the personal, labor and regional information. The reached model that best describes this relationship, can predict the probability of pension coverage of each cohort according to the individual characteristics.

⁸¹ It is a question from the questionnaire of the LFS of 2014, which is taken as the dependent variable in the model, with binary answers of yes or no.

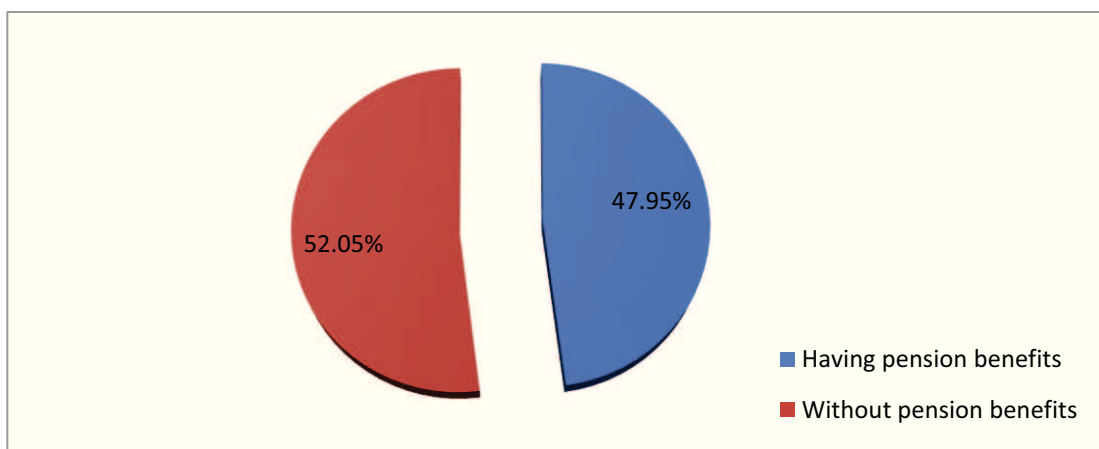
This section provides an analysis of the pension system coverage in Palestine in the light of different personal characteristics. The figures in this section reflect the rates out of the labor force employees, who only could be able to contribute to a pension system.

The survey indicates that a significant fraction of the population are employed without being able to contribute to any pension system. Therefore, the figures here may differ from other surveys that describes the total population. However, their significance to this research is to measure the ability of individuals employed in the active labor market to contribute to a pension system upon their characteristics.

The Pension Participation of Pension Benefits in Palestine upon Socio-economic Characteristics

According to the data of LFS of 2014, the rate of the total labor force employees, who benefit from contribution to the pension fund for the main job, is 47.95 percent, compared to 52.05 percent do not have any pension benefit.

Figure 117: The Labor Force in Palestine by Coverage Rate of Pension Benefits



Source: The author by data of Labor Force Survey (PCBS), 2014.

This pension coverage rate is on the average rate or less with the developing countries, while it is less than the developed ones. The pension coverage in Kingdom of Jordan for example, has reached in 2015 about 71 percent of the labor force, while in some Latin American countries such as Colombia, Mexico and Peru it is less than 40 percent (Rawabda, 2015). However, in some other Latin developing countries that have experienced reforms such as Chile and Brazil, the pension coverage is higher at about 60 and 55 percent, respectively (Tuesta, 2014).

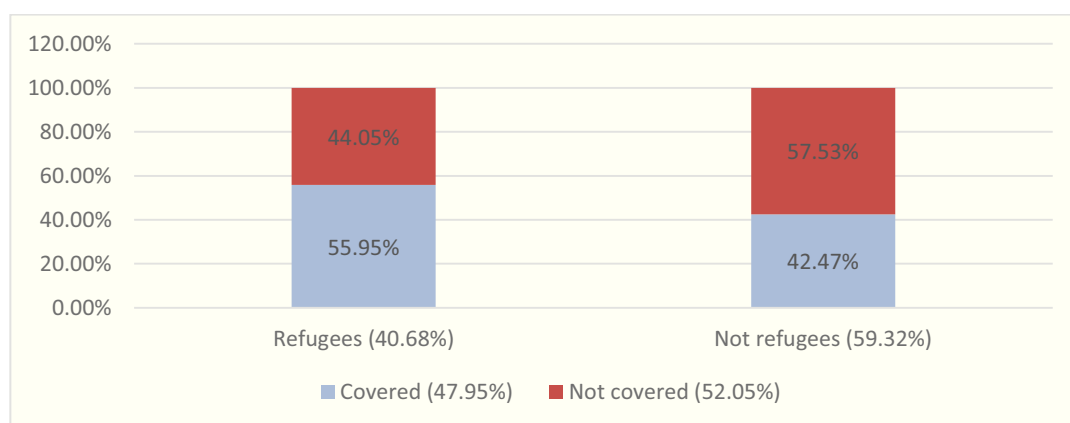
On the other hand, the benefits provided upon the contribution to a pension system are widely variant between countries depending on the committed standards in the system and financial availability. However, we have to compare the pension coverage rate to any pension system regardless the type of benefits provided.

The following section will provide an analysis for the personal characteristics of those having pension coverage in Palestine depending on the LFS of 2014. The significance of this analysis refers to setting the priorities of any future pension reform according to personal characteristics of the society members to reflect their needs and help extending coverage in efficient and effective manner.

4.8.1.1- Refugee Status

The Palestinian population has high rate of refugees as a result of instability and major population displacement from their homes and cities in 1948 and 1967. We find that the refugees form 40.68 percent of the labor force in Palestine compared to 59.32 of non-refugees. The LFS results indicate that the refugees have a little bit higher opportunity to benefit from pension coverage, which reaches 55.95 percent compared to only 42.47 percent among non-refugees.

Figure 118: Benefiting from a Pension System by Refugee Status



Source: The author by data of Labor Force Survey (PCBS), 2014.

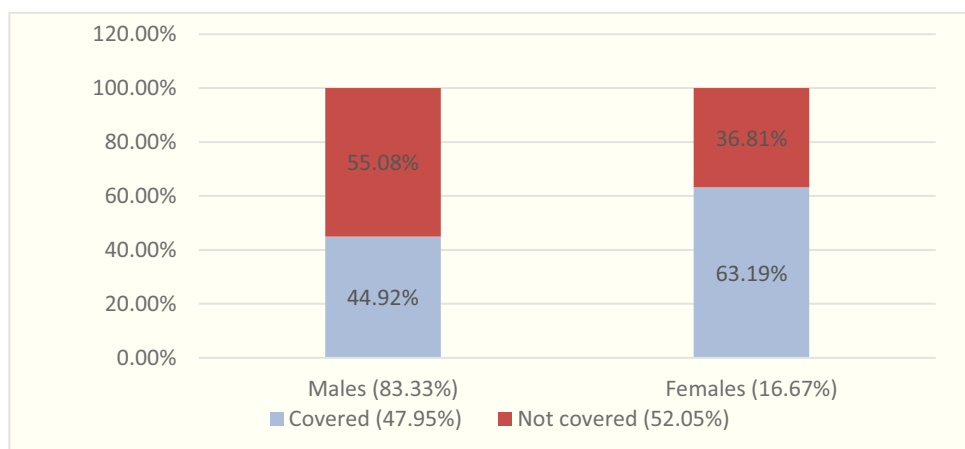
Since the first major population displacement in 1948, the refugee status in Palestine had been related to high poverty rates; however the gap between refugees and non-refugees has been tightening by time. This difference among population upon refugee status could be understood if we know that refugees have higher opportunity to work at formal sector,

which normally provides pension benefits. UNRWA aims to provide job opportunities and services to refugees, which include primary and secondary education and health-care services. The good education and health-care services provided by UNRWA increase their competitiveness to work in other formal sector job opportunities as well. On the other hand, large group of non-refugees work at informal sector as agricultural jobs or their own businesses, in which they are self-employed or employers.

4.8.1.2- Gender

The female vulnerability in developing countries has been one of the main concerns in the social security issues. In the Palestinian case, in spite of the measures has been taken by the government to improve the female participation to the labor force through the last two decades, their share remains very low at about 16.67 percent according to the 2014 LFS compared to only 14 percent in Jordan. While, the men constitute the majority among the labor force in Palestine at 83.33 percent. The females in Palestine constitute only about 21.88 percent of the total covered labor force compared to 27 percent in Jordan, while the females in all Latin American countries have lower participation rate than males (Tuesta, 2014). However, the female labor force employees in Palestine have greater coverage of pension system at 63.19 percent, compared to only 44.92 percent among males. That difference almost refers to the low participation of females to labor force, particularly the informal sector; at the same time, the share of females in public sector is almost equal to males as a result of the measures of public policy towards gender equal opportunities. Thus, the ratio of formal female labor force to the total female labor force is higher than that of males. Moreover, the females who choose to work almost attained higher education levels.

Figure 119: Benefiting from a Pension System by Gender



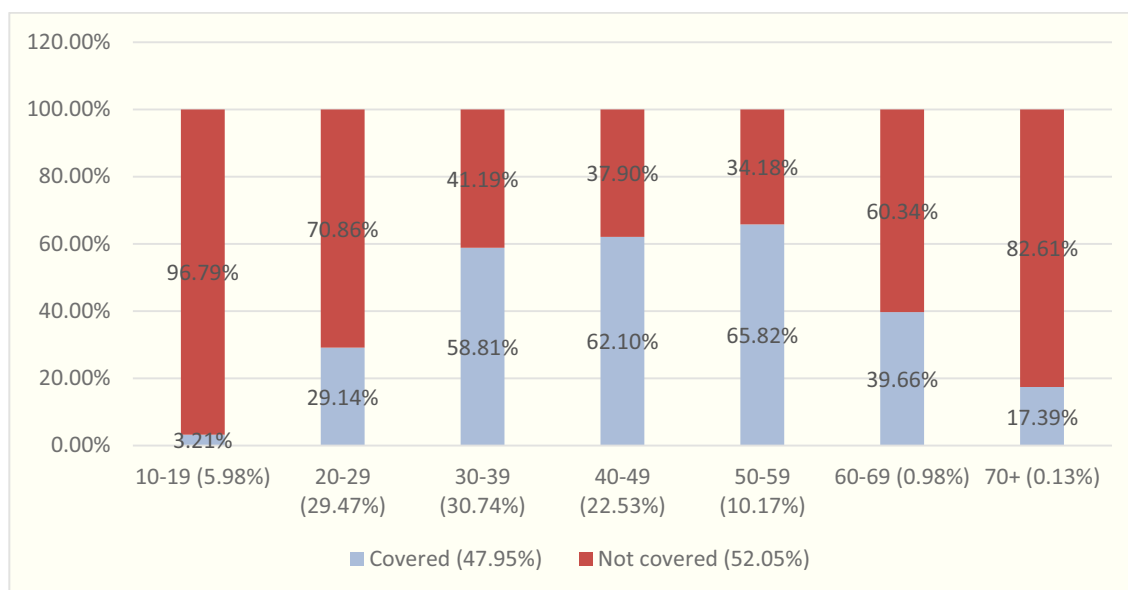
Source: The author by data of Labor Force Survey (PCBS), 2014.

The female participation to the formal labor force is expected to increase, as the family type in Palestine is getting more nuclear one, the education attainment is getting higher, and the living costs are getting higher. Furthermore, the participation of female labor force is expected to reduce the cost of pension expenses as females have more extended relations of survivorship eligibility to benefit from the pension system, which means that the eligible survivors of females will be less as they are in the labor force and pay participations.

4.8.1.3- Age

The age of population of the survey in the labor force were divided into seven groups, starting from 10 years old. The results indicate that the pension participation rate increases with the age until the age of 60, after then it starts to decrease again. The highest rate was for those at the ages of 50 to 59 years old. This relation is similar in other countries, which is related to the personal work career. After the age of 30 the cohorts start to have more regular and formal jobs than at younger ages. Further, the opportunity to have education attainment is higher at older ages for a certain degree.

Figure 120: Benefiting from a Pension System According to Age



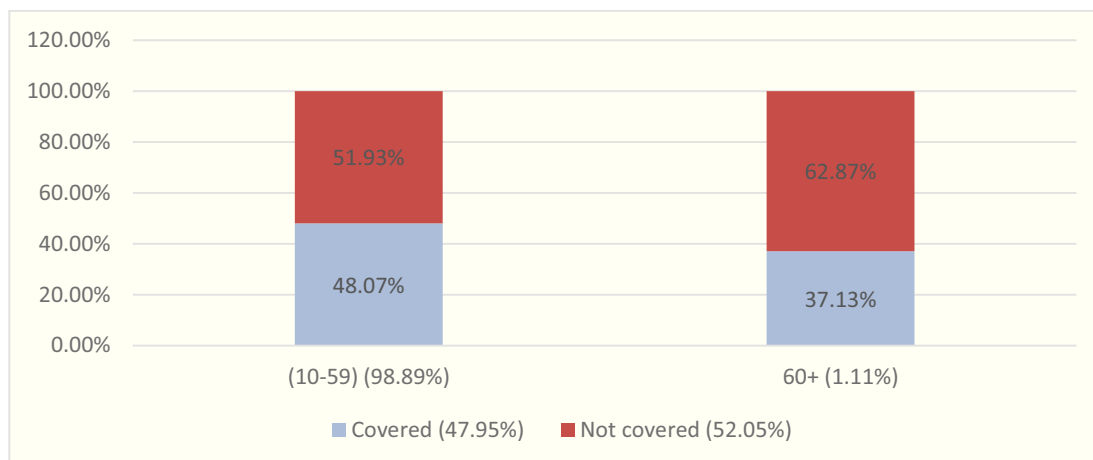
Source: The author by data of Labor Force Survey (PCBS), 2014.

Moreover, the wages of the labor force cohorts at older age normally increase, so that they can choose to save more compared to younger ones. Thus, it may be more important to target labor force from younger ages upon their income and other personal characteristics. At the same time, the figure shows that older cohorts over the age of 60 have low pension participation rate, which may expose high ratio of them to poverty.

The figures also tell that the labor force in Palestine cannot have pension participation at young ages, which reduces the years of participation at the retirement age, while those at old age at the present time could not have the pension participation coverage at earlier time, so they remained totally unprotected. In conclusion, most of the old aged cohorts lack of pension participation coverage, while the future covered cohorts are expected to have low income.

In other review of pension participation rate by the retirement age of 60, we find that those under the age of 60 enjoy more the pension coverage advantage than those over the age of 60. That enhances our conclusion of the above figure that the older age cohorts need more protection by some specified benefits.

Figure 121: Benefiting from a Pension System by the Age of Labor Force

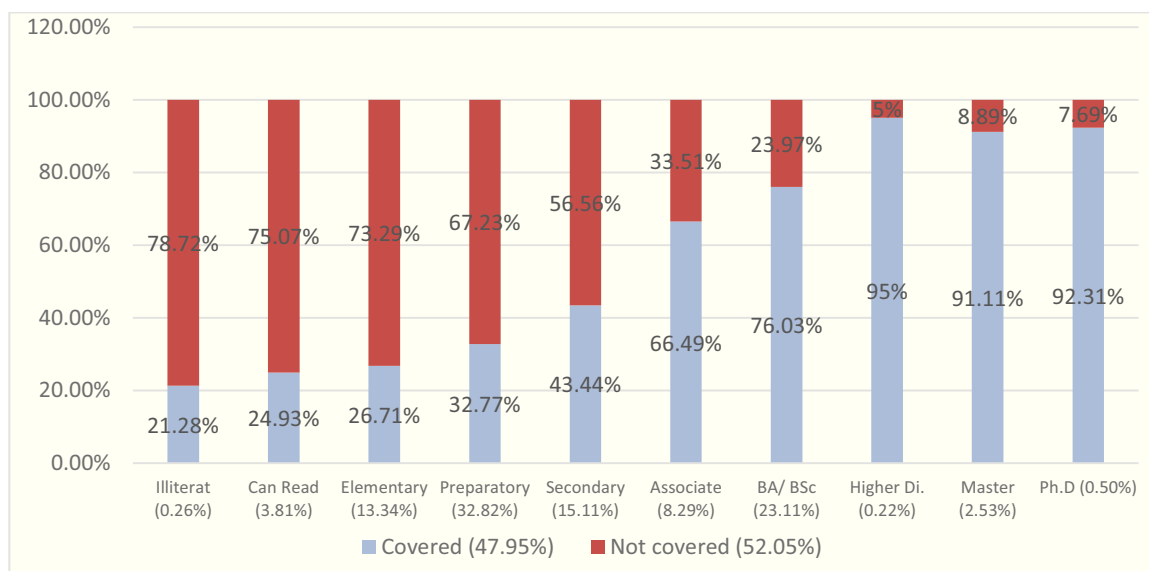


Source: The author by data of Labor Force Survey (PCBS), 2014.

4.8.1.4- Educational Attainment and Attending School

The available data show that there is a positive relation between pension participation and educational attainment; whereas, the more the educational attainment the more pension participation rate is available among the employees.

Figure 122: Benefiting from a Pension System According to Educational Attainment



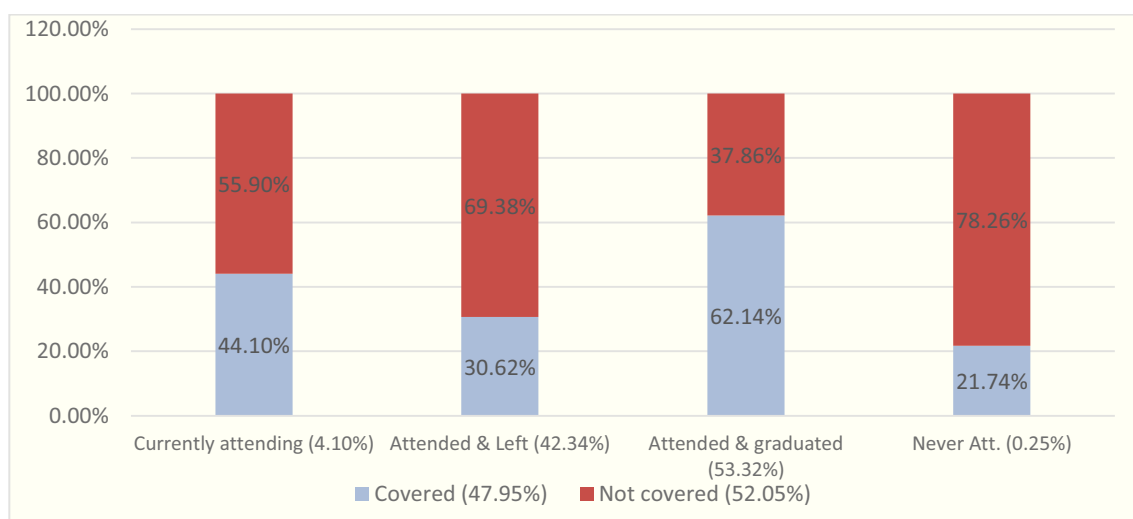
Source: The author by data of Labor Force Survey (PCBS), 2014.

The largest group among the labor force is of those obtained preparatory degree at 32.82 percent followed by those obtained Bachelor degree at 23.11 percent, then secondary degree at 15.11 percent and Elementary degree at 13.34 percent. However, the pension

coverage rate was the highest among the labor force employees attained higher Diploma, PhD. and Master Degrees at 95 percent, 92.31 and 91.11 percent, respectively. While, the employees obtained Bachelor Degree have coverage at 76.03 percent, followed by Associate Degree at 66.49 percent and Secondary Degree at 43.44 percent, we find the lowest pension coverage rate is among the illiterate employees at 21.28 percent. As a result, the low ratio of higher degree educational attainment lead to limited impact on the overall trend of the pension coverage.

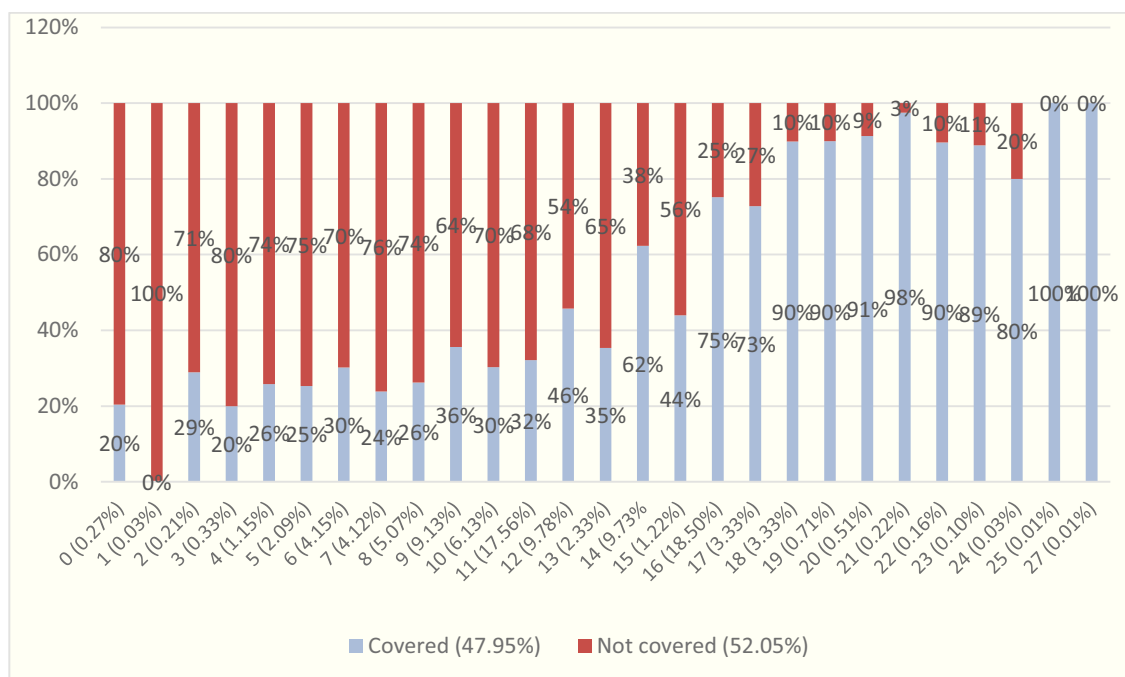
At the same attitude to the above results, the figures also indicate that those who attended school and graduated have the highest pension participation rate compared to others at 62.14 percent, followed by those who are currently attending school at 44.10 percent, and those who attended and left at 30.62 percent. Similarly, the lowest participation rate was among the labor force, who never attended school at only 21.74 percent.

Figure 123: Benefiting from a Pension System by Attending School



Source: The author by data of Labor Force Survey (PCBS), 2014.

Figure 124: Benefiting from a Pension System by Years of Schooling



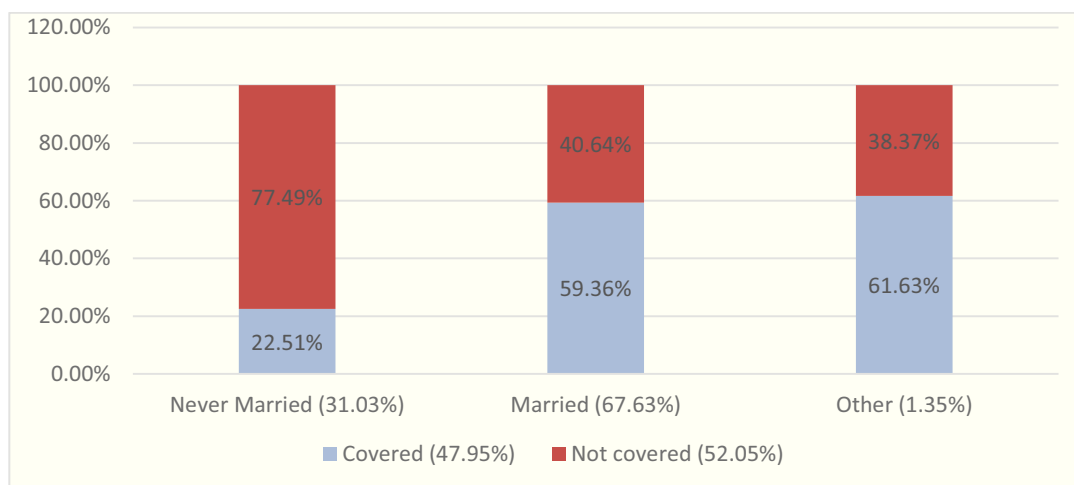
Source: The author by data of Labor Force Survey (PCBS), 2014.

According to the data, the years of schooling would increase the pension participation opportunity. The largest group was those with 16 years of schooling forming about 18 percent of the labor force with a pension coverage of 75 percent; while the lowest pension coverage rates are among those with less than 10 years of schooling, which range from 0 and 35 percent. In conclusion, graduation from school increases the opportunity to work in the formal sector and work in more professional jobs with regular wages and longer time.

4.8.1.5- Marital Status

There is a clear difference in pension coverage upon marriage status, whereas it is noticeably low among those, who are “never married” compared to “married” ones and others. Almost this is related to the age of cohorts and graduation from school, as the people who are “never married” still at younger age and did not graduate from school.

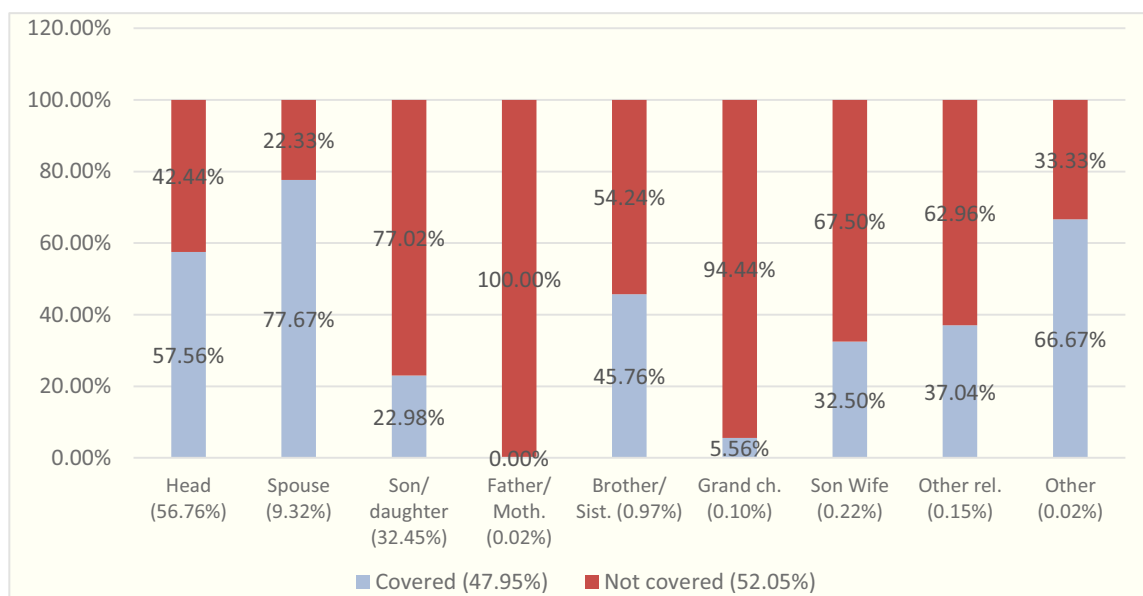
Figure 125: Benefiting from a Pension System by Marital Status



Source: The author by data of Labor Force Survey (PCBS), 2014.

The head of the household is the main breadwinner in Palestine so, they form 56.76 percent of the total labor force, followed by sons or daughters at 32.45 percent, while spouses form 9.3 percent. It is not surprising to find that spouses have the largest pension coverage ratio as they almost are females, who work more in formal sector, while sons and daughters have comparatively low pension coverage rate as they are almost at younger ages and almost did not graduate from school and work in informal sector.

Figure 126: Benefiting from a Pension System According to the Relation to Head of Household



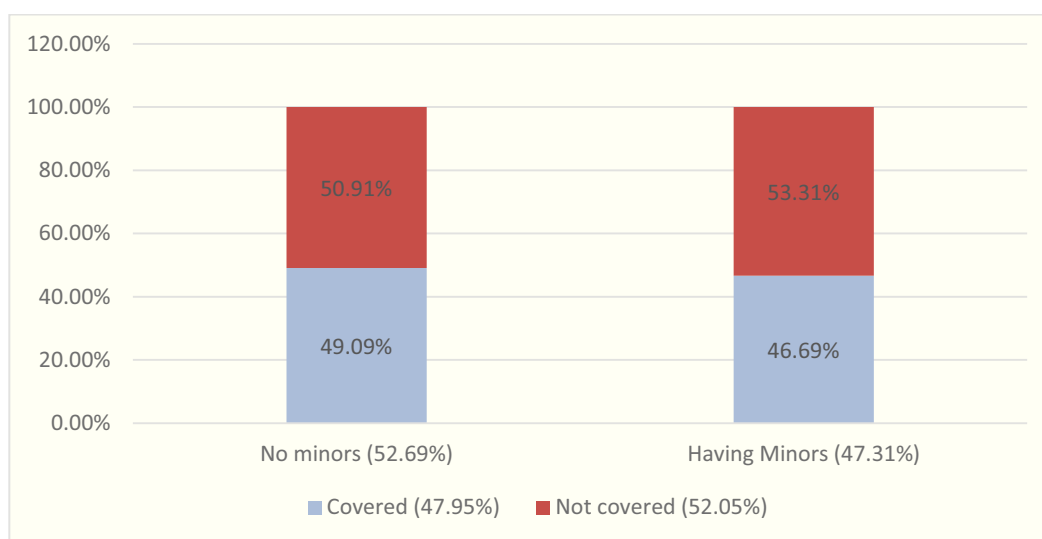
Source: The author by data of Labor Force Survey (PCBS), 2014.

We find the lowest pension coverage rate among fathers and mothers of the heads of household, which refers almost to being at old age, which form an important indication to the vulnerability to poverty and lack of protection of the old-age population.

4.8.1.6- Having Minor(s) in the Household

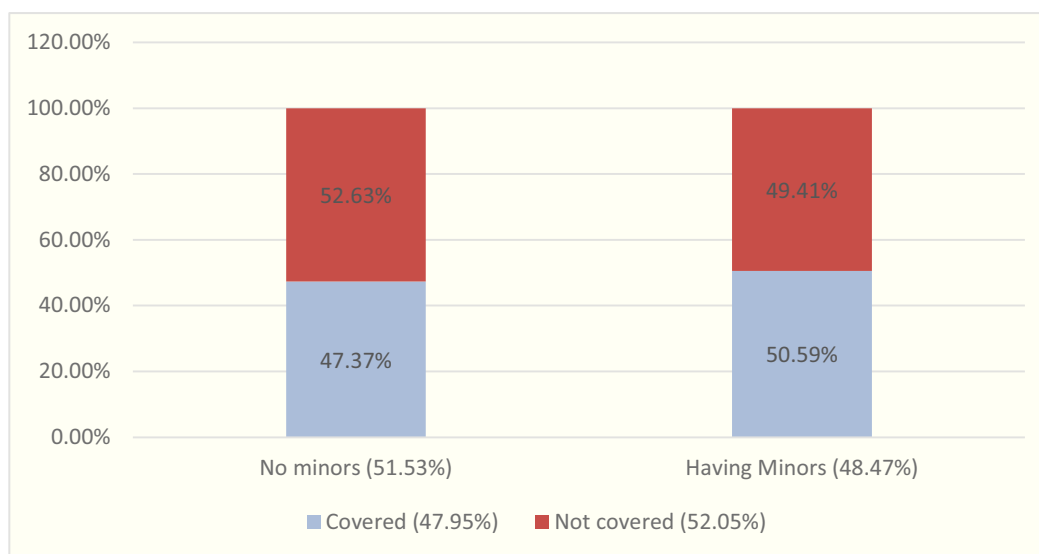
Having minor(s) in the household is related more to the structure of the family and to measure the degree of available protection of the minors. The labor force in household with minor(s) under 14 years old, form 47.31 percent compared to 52.95 percent for those without minors. However, it is surprising to find the labor force in household with minors have less pension participation rate at 46.69 percent compared to 49.09 percent for those without minors. The rate of pension participation rate in households that have minors increases if we reduce the age of minors to 10 years old. Moreover, it also increases if we consider only heads of household out of the labor force with minors to be 58.57 percent.

Figure 127: Benefiting from a Pension System by Having Minor(S) Less than 15 Years Old in the Household



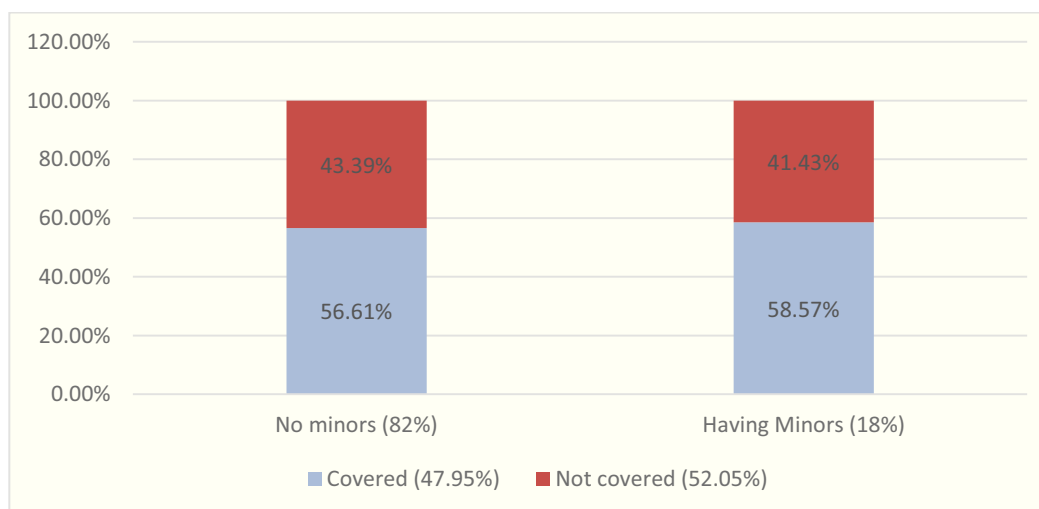
Source: The author by data of Labor Force Survey (PCBS), 2014.

Figure 128: Benefiting from a Pension System by Having Minor(S) Less than 10 Years Old in the Household



Source: The author by data of Labor Force Survey (PCBS), 2014.

Figure 129: Benefiting from a Pension System by Having Minor(s) in the Household by the Head of Household



Source: The author by data of Labor Force Survey (PCBS), 2014.

The figures above indicate that the large informal sector and higher unemployment rates negatively affect the minors in the household. Moreover, the extended family structure leads to overestimate those do not have pension coverage as we count each member of the household that participates in the labor force as having minor(s) and does not have pension coverage more than those are covered. Thus, if we count only the heads of the households, the rate of pension coverage among the labor force with minors is higher than those without

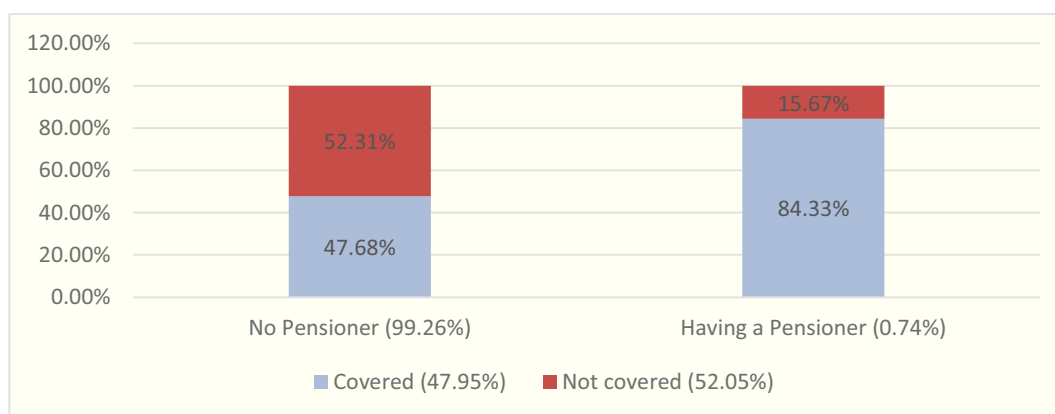
minors. As a conclusion, large size of family and extended type of households reduced the equivalent income of the members of the household, particularly the minors; therefore, there is high rate of minors that are exposed to poverty and need urgent protection mechanism.

4.8.1.7- Having Pensioner (s) in the Household

The data indicates that the labor force cohorts in a household with a pensioner(s) or any other members, who are benefiting from pension systems, have more opportunity to participate to pension systems than those without at 84.33 percent compared to 47.68 percent, respectively.

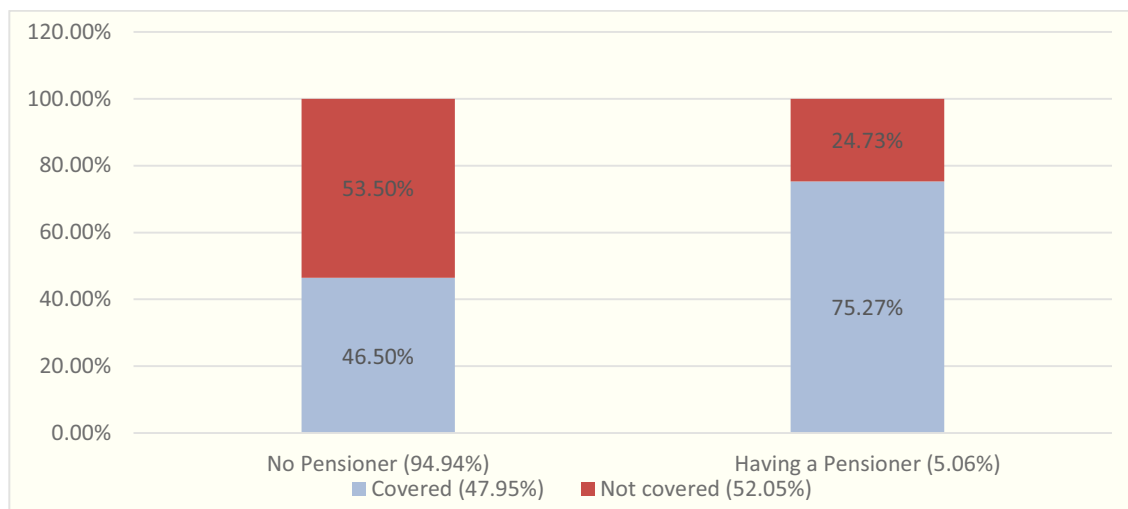
This figure may be related to the education or/ and income level of the head of the household. If there is a person in the household that have a pension, it means that person has worked in formal sector with regular income, so he/ she could provide education and care for the other family members. Thus, the opportunity of the other family members to work in formal sector also increases to participate in a pension system.

Figure 130: Benefiting from a Pension System According to Status of having Pensioner(s) in Household over the Age of 60



Source: The author by data of Labor Force Survey (PCBS), 2014.

Figure 131: Benefiting from a Pension System According to having Pensioner(s) in a Household over the Age of 55

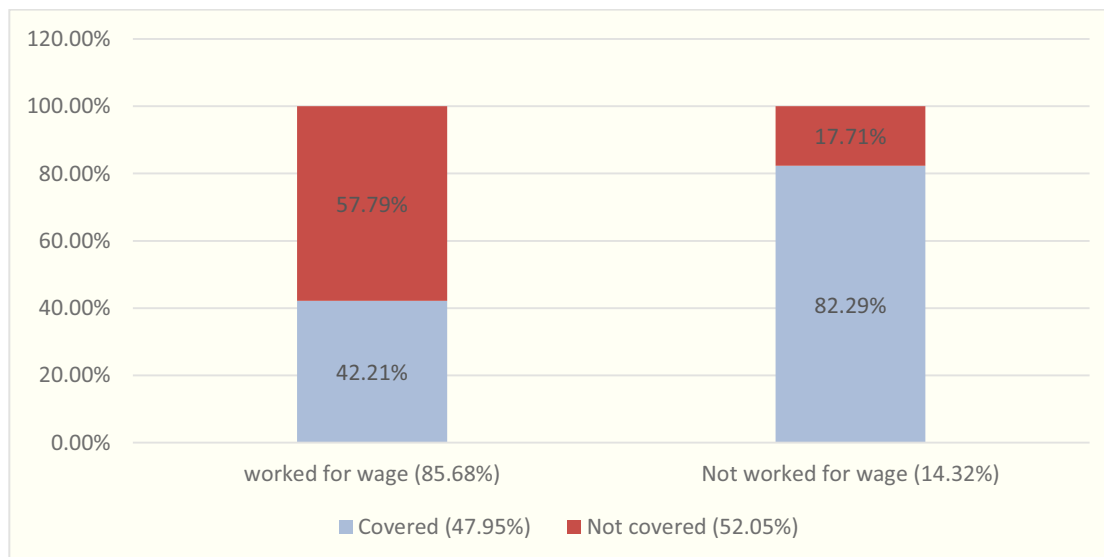


Source: The author by data of Labor Force Survey (PCBS), 2014.

4.8.1.8- Working for Wage Status

The rate of labor force working for wage is 85.68 percent compared to only 14.32 percent working without wage. Among the labor working for wage, 42.21 percent are covered by a pension scheme, while among the labor working without wage, 82.29 percent are covered.

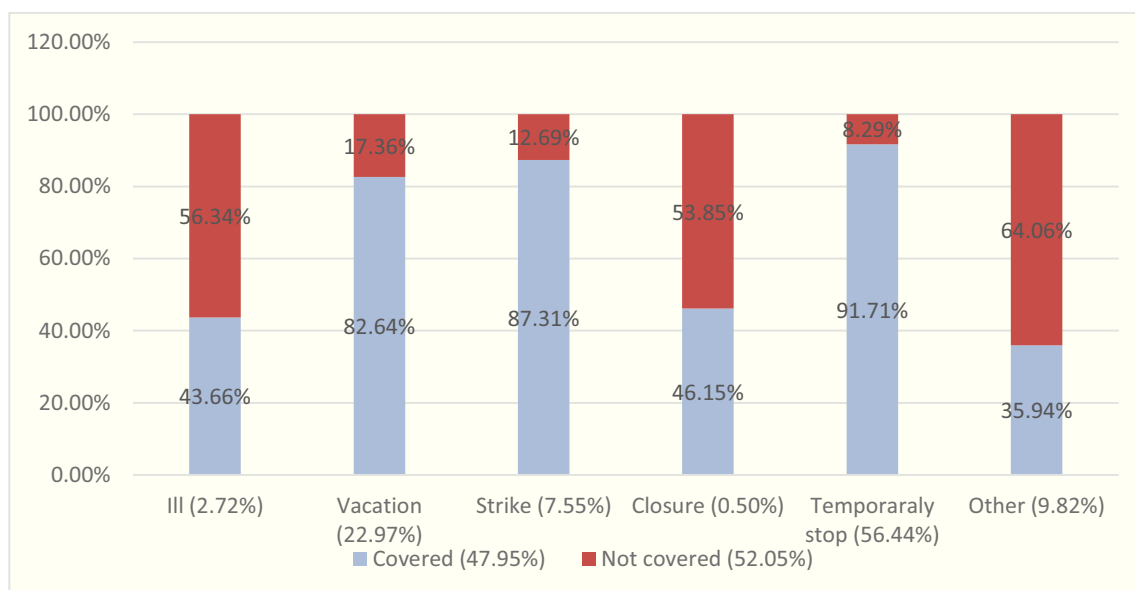
Figure 132: Benefiting from a Pension System by Working for Wage Status



Source: The Author by Data of Labor Force Survey (PCBS), 2014.

The higher ratio of pension coverage among workers, who work without wage, is explained by the fact that the workers, who work without wage and have pension coverage, have work for which they were absent last week of the survey, and they also were absent last week for temporary reasons including; illness, vacation, strike, closure, or temporarily stop as shown in the next figure.

Figure 133: Why was absent from Job Last Week by Pension Coverage



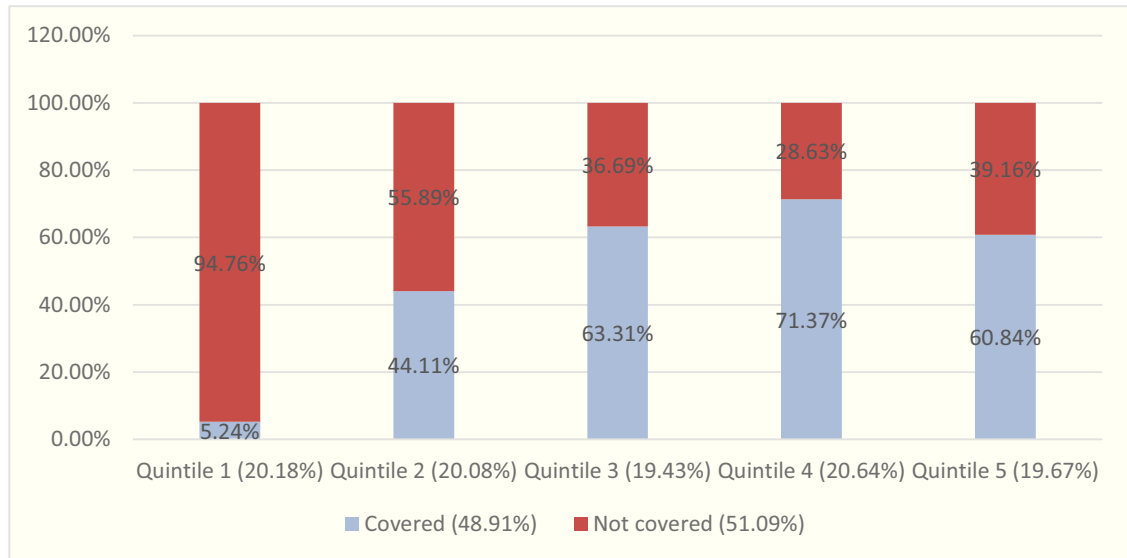
Source: The author by data of Labor Force Survey (PCBS), 2014.

On the other hand, the cohorts in the labor force were divided into five groups upon their monthly income level and daily wages level. The figures indicate that the pension contribution coverage is related to the income level, either by monthly income or by daily wage⁸². The lowest income level has the lowest pension participation rate at 5.24 percent for monthly income and 6.79 percent for daily wage. The highest pension coverage level is the fourth income level at 71.37 percent for monthly income and 80.63 percent for daily wage income. While, the highest income level has the third highest pension coverage level for monthly income and fourth level for daily wage income. Thus, the cohorts with higher income can afford for more savings and almost work in more formal sector; while, cohorts with the highest income quintile almost depend on several sources of income and may be

⁸² The daily wage is given in the survey, while the monthly income was calculated depending on the daily wage and the number of days worked at the last month of the survey.

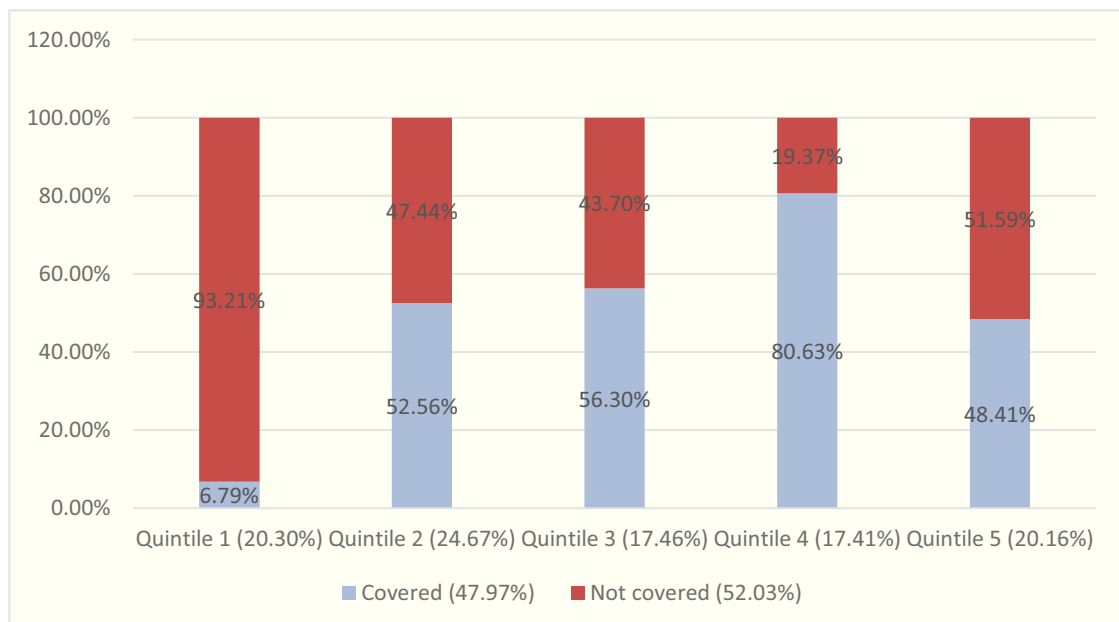
self-employed or employer, which is not covered by public pension systems yet, but limited to some provident funds of the enterprises.

Figure 134: Benefiting from a Pension System According to the Last Monthly Income Quintiles



Source: The author by data of Labor Force Survey (PCBS), 2014.

Figure 135: Benefiting from a Pension System According to Daily Wage Income Quintiles

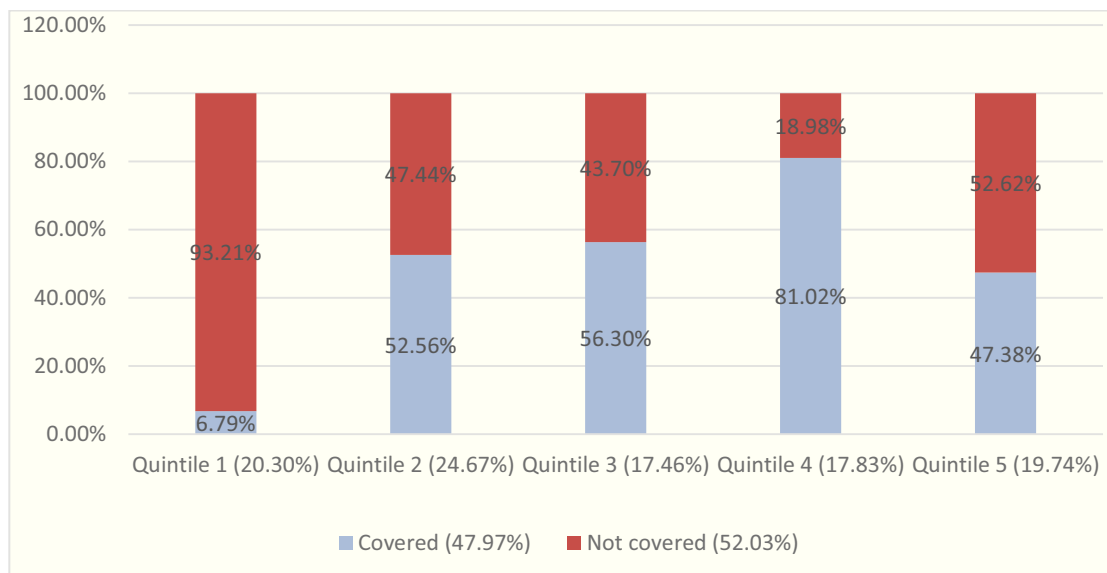


Source: The author by data of Labor Force Survey (PCBS), 2014.

Moreover, the young cohorts almost start their working career without contract and with comparatively lower income, which leave them with no pension coverage as they work in

informal sector. Further, the labor force with low income almost work in informal sector and have less educational attainment.

Figure 136: Benefiting from a Pension System According To Standard (26 Days) Monthly Wage Income Quintiles

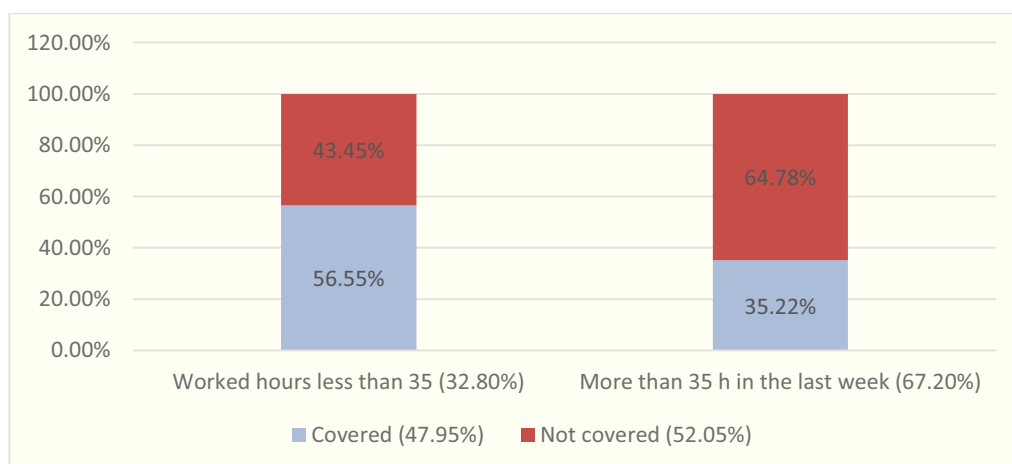


Source: The author by data of Labor Force Survey (PCBS), 2014.

4.8.1.9- Working Hours

In regard of working hours in the week, it is surprising to find that those with 35 working hours or less in the last week, have more pension coverage rate at 56.55 percent compared to 35.22 percent for those worked for more than 35 hours in the last week.

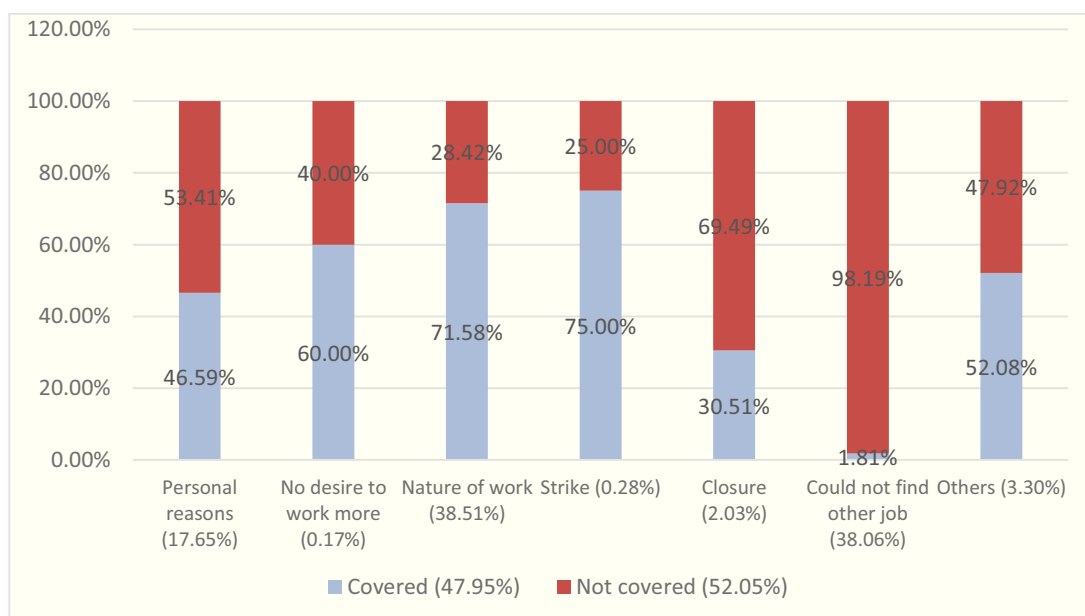
Figure 137: Benefiting from a Pension System by Working Hours in a Week



Source: The author by data of Labor Force Survey (PCBS), 2014.

However, given that the rate of the labor force with 35 hours or less form only 32.80 percent and the official working hours are 35 hours a week, we can better understand the higher pension coverage rate among them. Besides, among the labor force, who worked less than 35 in the last week, only 38.51 percent were due to the nature of work; while the others due to personal reasons, desire not to work more, strike, closure, or other reasons at the rates specified in the following figure. The figures indicate that the working hours in the last week has a relation for type of the job, where being in formal sector has more chance to have a pension coverage.

Figure 138: Benefiting from a Pension System by the Reason of the Number of Hours Worked Last Week Less than 35 Hours

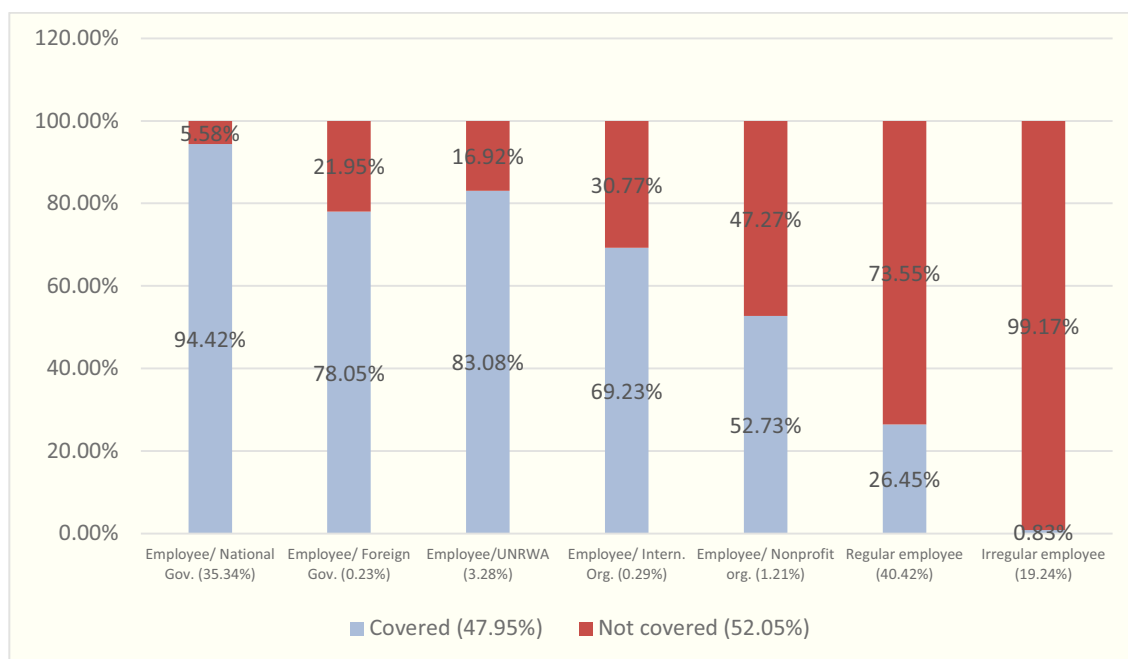


Source: The author by data of Labor Force Survey (PCBS), 2014.

4.8.1.10- Status of Employment

The pension coverage is strongly related to the status of employment. The data of the survey shows that some jobs has very high pension coverage, while others have very low coverage or stay without coverage. The public sector employees have the highest pension coverage rate at 94.42 percent followed by employees of UNRWA and foreign governments at 83.08 and 78.05 percent, respectively. On the other side, the lowest pension coverage rate was among irregular employees at only 0.83 percent, compared to regular employees at 26.45 percent.

Figure 139: Benefiting from a Pension System by the Status of Employment



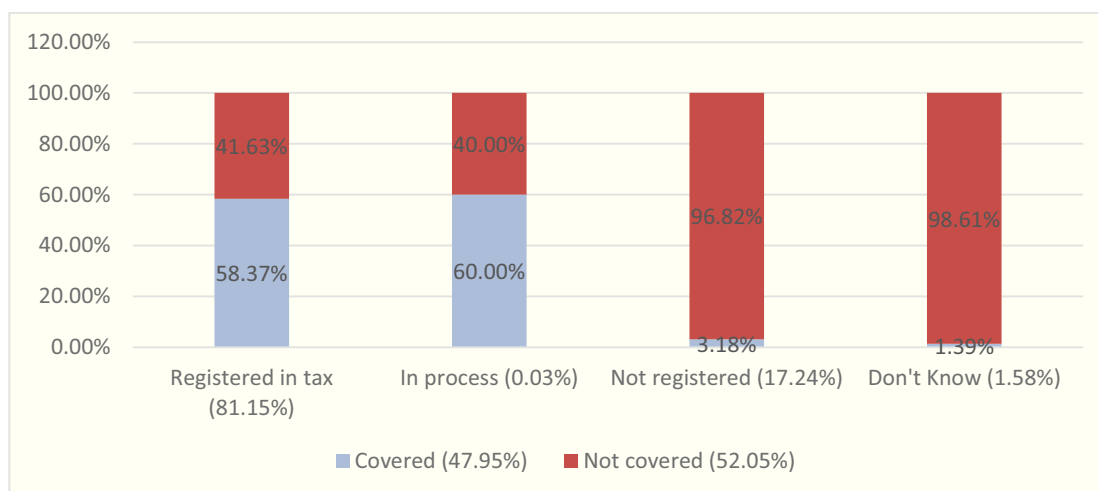
Source: The author by data of Labor Force Survey (PCBS), 2014.

These wide gaps in coverage between employment groups due mainly to the formality of jobs and the regulatory laws of pension system in Palestine, which guarantee the pension coverage for only public sector employees, besides the weak enforcement of law in Palestine, where the authority unable to enforce the pension coverage mandatorily on employers due political and economic instability.

On the other hand, we find that 81.15 percent of businesses are registered for tax department, and 58.37 percent of their employees have pension contribution coverage, compared to 17.24 are not registered with only 3.18 percent employees that have a kind of pension contribution coverage.

The figures of the tax registration of the enterprise enhances the above argument regarding the formality of the job, whereas the unregistered businesses work in informal sector. Moreover, the tax registered enterprises are almost committed to apply other labor and end of service provisions of the related laws, including pension contributions.

Figure 140: Benefiting from a Pension System by Tax Registration of the Enterprise

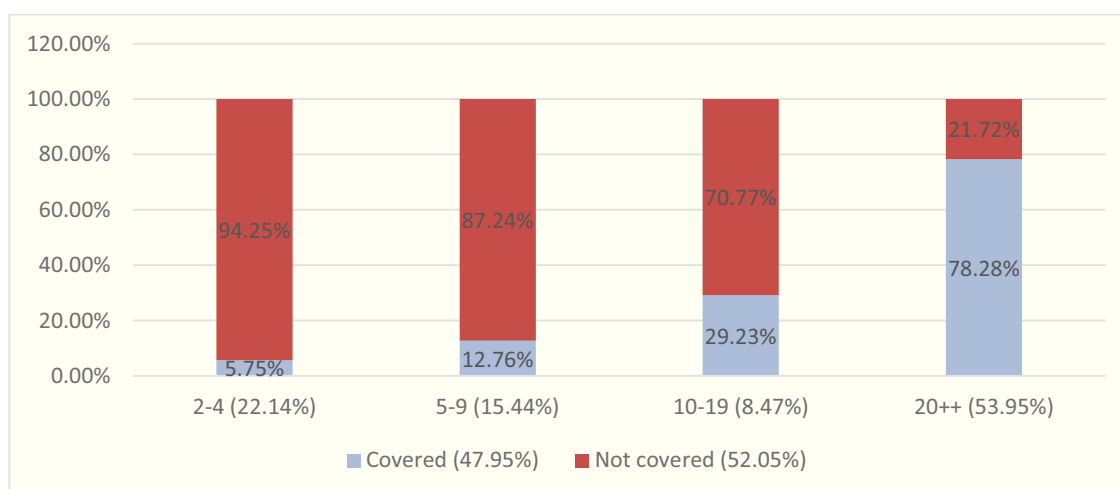


Source: The author by data of Labor Force Survey (PCBS), 2014.

4.8.1.11- Number of the Employees in the Enterprise

The number of employees gives indication regarding the size of the enterprise and the formality of its business. Given that, the large firms and businesses have many employees and almost work in formal sector and in production. While, the small businesses normally are in the informal sector. We find that 53.95 percent of the employees are in enterprises with more than 20 employees with 78.28 percent that have pension coverage, while the least pension coverage was among those working in small businesses that have only 2-4 employees.

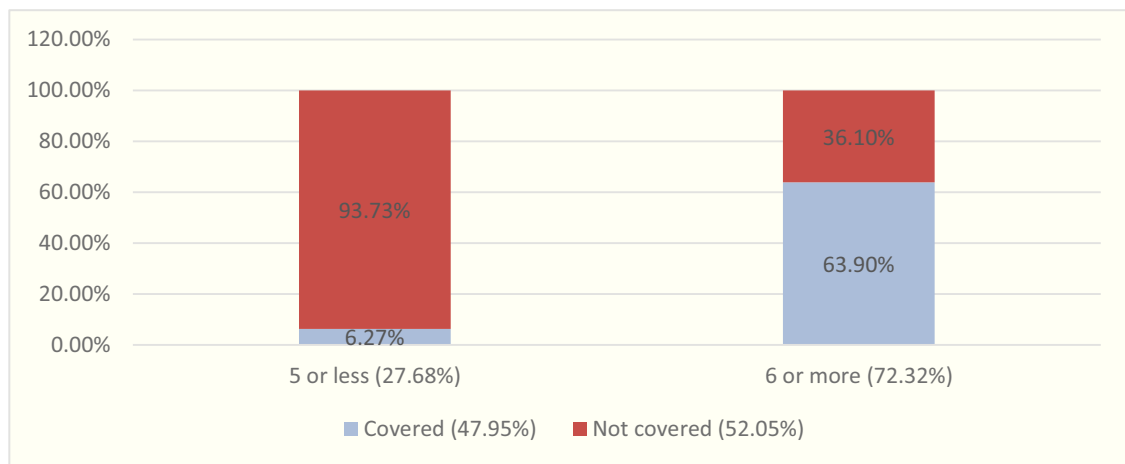
Figure 141: Benefiting from a Pension System According to the Number of Employees the Enterprise



Source: The author by data of Labor Force Survey (PCBS), 2014.

Likewise, the number of the paid workers in the enterprise has indication to its size and to the type of business. While, the family and small enterprises depend highly on the family members in running the business instead of hiring employees, the large enterprises hire employees and need more professional jobs. However, many economy support programs pay directly for the employees instead of the employers. While, many new graduates, who are not paid, choose to work voluntarily to have training, seek a job opportunity, or to have experience. Thus we find that the labor force in enterprises with 5 or less paid employees form 27.68 percent, and only 6.27 percent of these paid employees have pension contribution coverage, compared to 63.90 percent among those working in enterprises with more than 5 paid employees.

Figure 142: Benefiting from a Pension System According to the Number of Paid Employees in the Enterprise

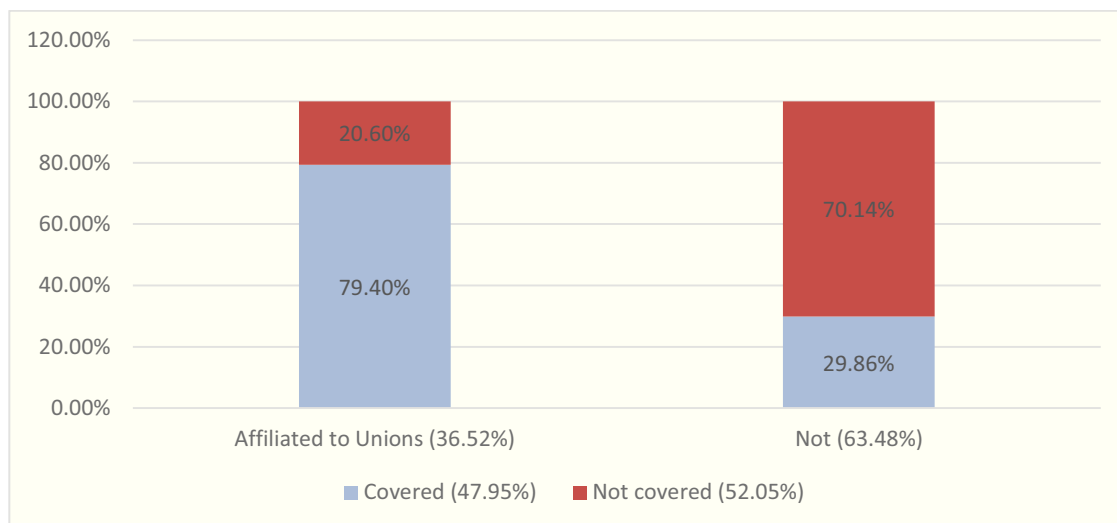


Source: The author by data of Labor Force Survey (PCBS), 2014.

4.8.1.12- Being affiliated to Unions

The employees affiliated to unions form 36.52 percent of the labor force; while, the pension coverage among them is 79.40 percent, compared to 29.86 percent for those who are not affiliated to unions.

Figure 143: Benefiting from a Pension System by Being Affiliated to Unions



Source: The author by data of Labor Force Survey (PCBS), 2014.

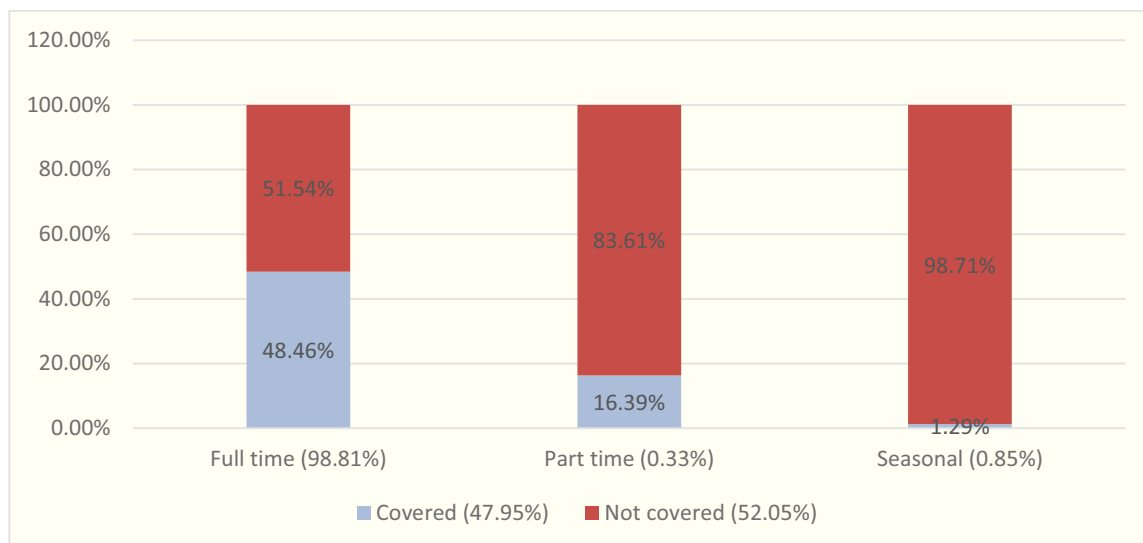
This indicates to the importance of unions in protecting employees; besides, the people who are affiliated to unions, almost are high skilled professionals and work in formal sector and more organized large enterprises. In Palestine, most of unions are representatives of high degree professions as; medicine, engineers, and accountants, or representatives of employees of large institutions or organizations as employees of UNRWA, universities, and civil servants. Thus, these groups of employees almost have high educational attainment, work in formal sector, and have higher income.

4.8.1.13- Type of Work

The type of work has a significant effect on the pension coverage. Given that the full-time works form 98.81 percent, compared to only 0.33 percent for the part-time and 0.85 percent for the seasonal jobs; while, the pension coverage rate is 48.46 percent for full-time jobs, 16.39 percent for the part-time jobs, and only 1.29 percent for the seasonal jobs.

As the full-time works almost constitute of most of the labor force, their pension coverage rate is similar to that of the average labor force. In this regard, this large ratio of full-time works refers to the limited available jobs to work part-time; besides, large part of them works in public sector, UNRWA, NGOs, Israel, family businesses, or large enterprises as regular employees, which almost are full-time works.

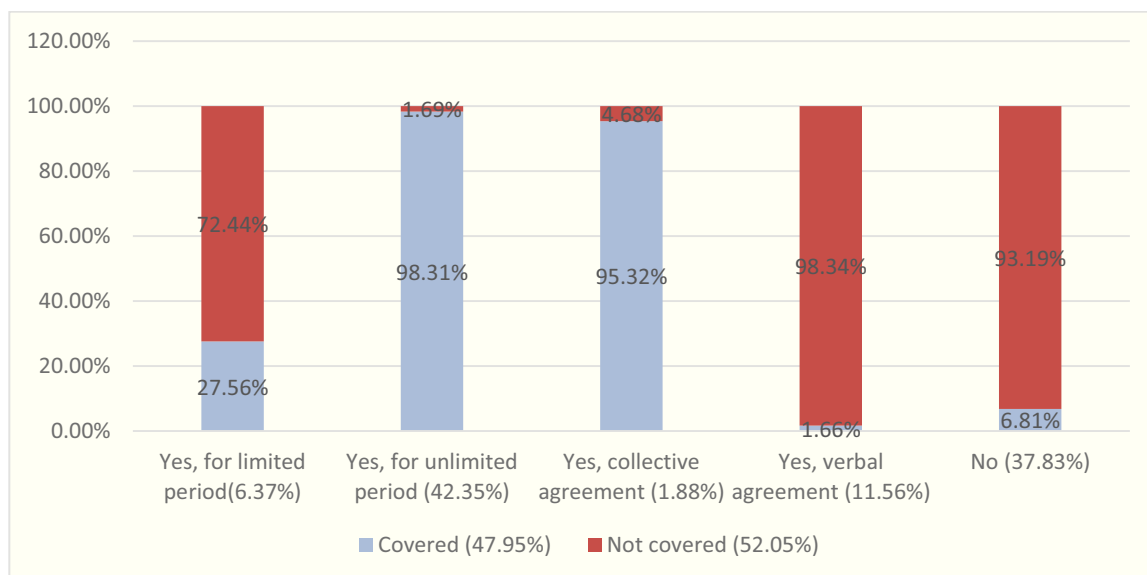
Figure 144: Benefiting from a Pension System by the Type of Work



Source: The author by data of Labor Force Survey (PCBS), 2014.

Having contract of the job is important in identifying the work as formal or not, and to determine the type of the job. Indeed, it is an indication to the degree of protection offered for employees and a guarantee for their labor rights.

Figure 145: Benefiting from a Pension System by having Contract



Source: The author by data of Labor Force Survey (PCBS), 2014.

Thus, we notice from the data that there are several types of contracts, which form in total 62.17 percent, compared to those without contracts. The largest contract type is that for unlimited period forming 42.35 percent and have pension coverage at 98.31 percent, which

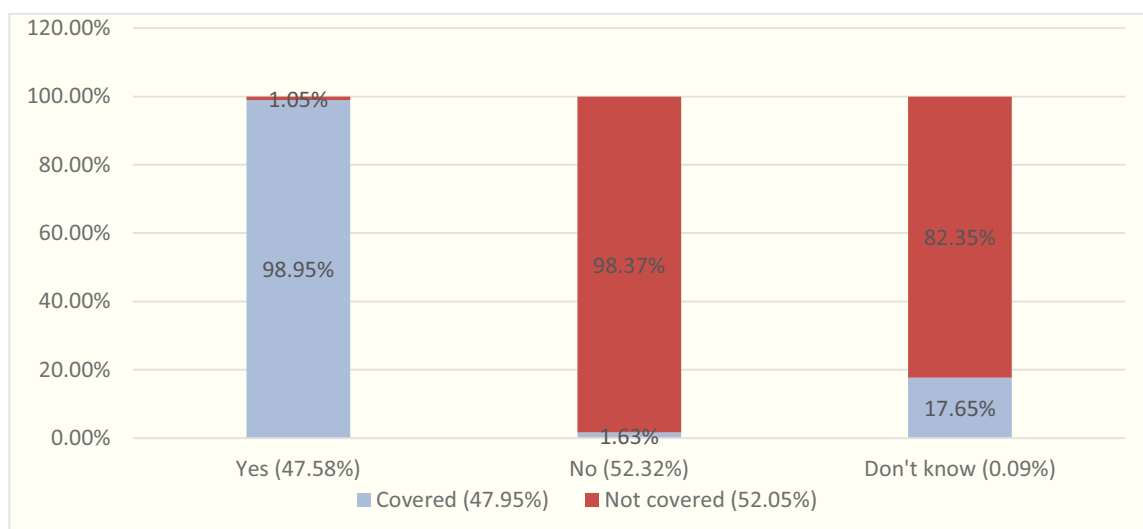
indicates that most of them are from public employees or UNRWA or other stable and regular type of jobs. Other group that has high pension coverage rate is that with collective agreement; however, they form only 1.88 percent.

4.8.1.14- Being Benefited from Other Social Security Benefits

The other social security benefits that were asked are benefits of annual paid leave or compensation, paid sick leave, and paid vacation for birth of a child. The figures show the ratio of labor force that have these benefits are 47.58, 46.77 and 58.07 percent, respectively. Further, the pension coverage rates among the employees are 98.95 percent for those with paid leave or compensation, 98.26 percent for those with paid sick leave, and 98.75 percent for those with paid vacation of a child birth.

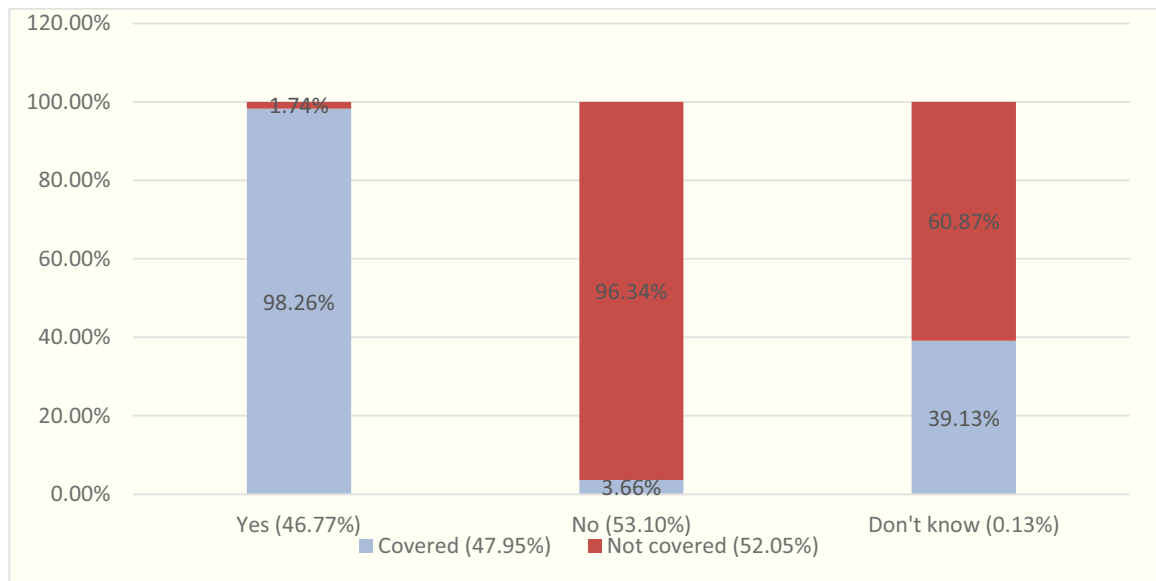
This strong relation of social security benefits with pension coverage indicates that there is a regulatory status of these benefits, which governs them by the law. The child benefit is the least applied compared to the other benefits, which are almost identical. That means maternity benefit needs more protection in order to encourage female participation to labor force and be able to take care of healthy children. As the family structure has been changing to be more nuclear one, taking care of children has been a raising problem and could be costly for the working women.

Figure 146: Benefiting from a Pension System by Being Benefited from Annual Paid Leave or Compensation



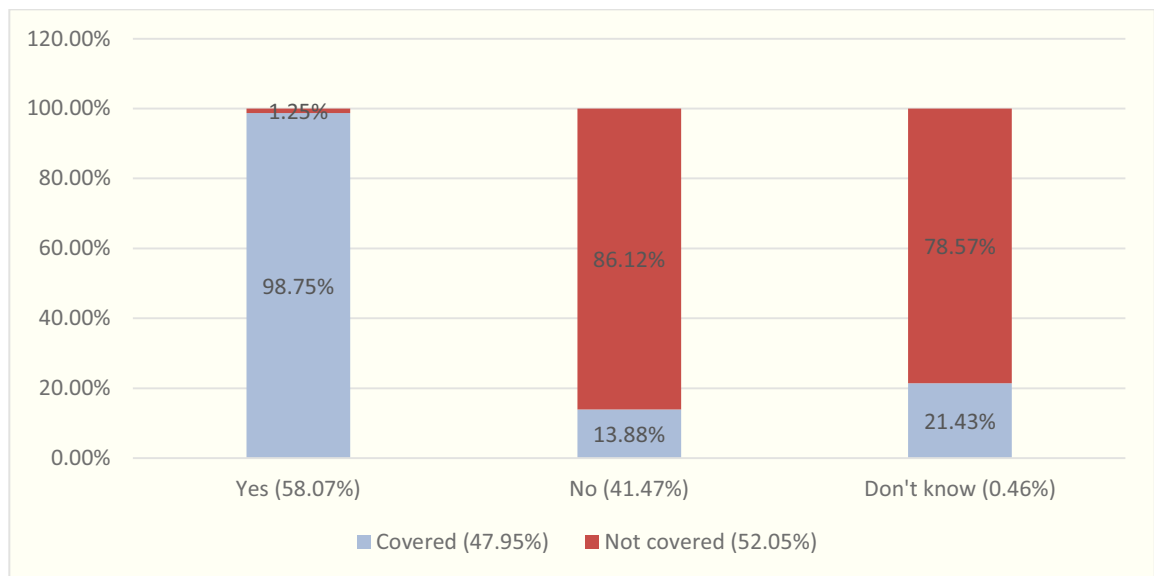
Source: The author by data of Labor Force Survey (PCBS), 2014.

Figure 147: Benefiting from a Pension System by Being Benefited from Paid Sick Leave



Source: The author by data of Labor Force Survey (PCBS), 2014.

Figure 148: Benefiting from a Pension System by Being Benefited from Opportunity In Case Of Birth of a Child



Source: The author by data of Labor Force Survey (PCBS), 2014.

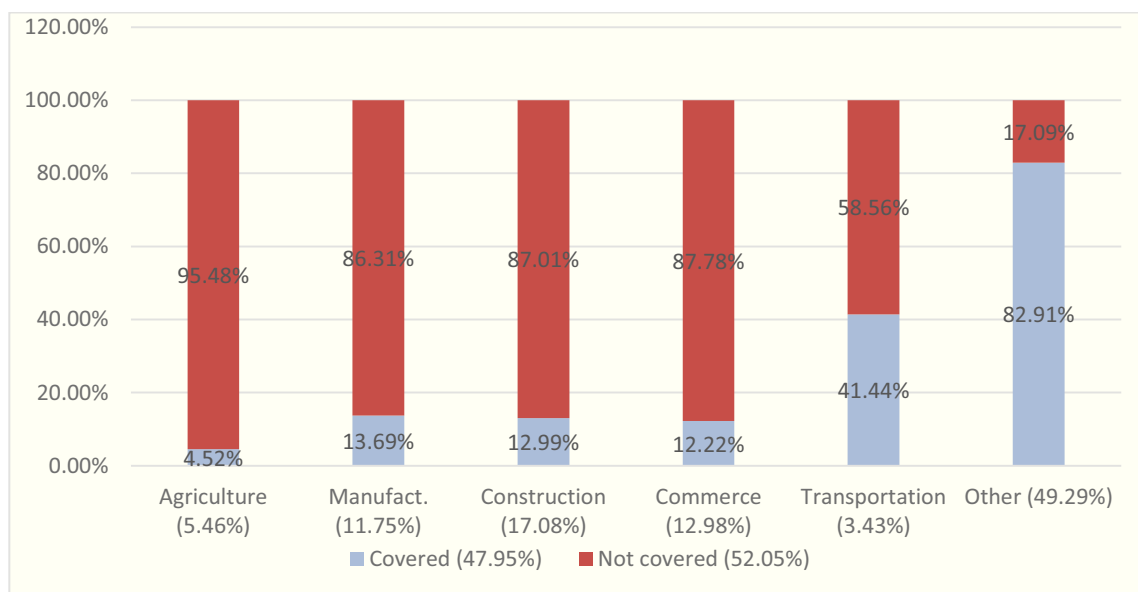
4.8.1.15- Industry Group

The data indicate for differences between industry groups regarding pension coverage. The transportation and agriculture are the least groups and both are considered as informal sectors; however, the transportation sector has higher pension coverage at 41.44 percent

compared to only 4.52 for agriculture. The transportation industry has several groups, whereas some are represented by unions. In contrary, the agriculture almost has less educational attainment and are not affiliated to unions. Likewise, the commerce, construction, and manufacturing industries have low coverage rates as they work in informal sector, in which the employees have less education attainment; besides, the businesses are almost family type and are small ones.

The largest pension coverage rate is among employees in other jobs, which include public sector and some large enterprises that work more in formal sector.

Figure 149: Benefiting from a Pension System According to Industry Group

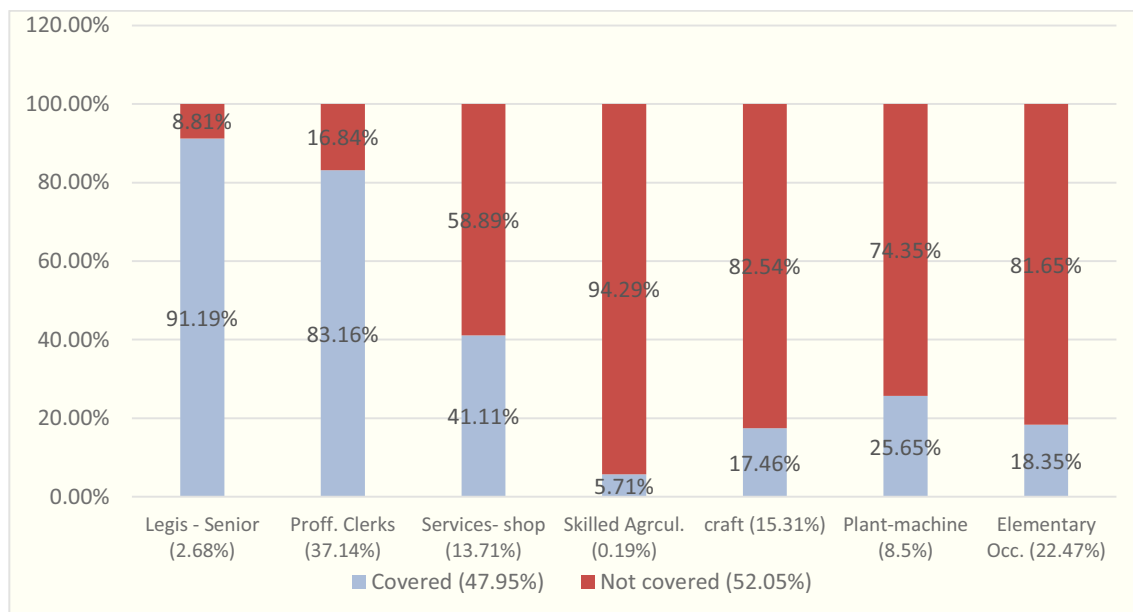


Source: The author by data of Labor Force Survey (PCBS), 2014.

4.8.1.16- Occupation Group

The data indicate that the labor force working in legislative senior jobs have the highest pension coverage rate at 91.19 percent, followed by professional clerks at 37.14 percent. While, the lowest pension coverage rate was among skilled agricultural professions. The largest group was the professional clerks, which constitutes 37.14 percent, followed by elementary occupations at 22.47 percent.

Figure 150: Benefiting from a Pension System According To Occupation Group



Source: The author by data of Labor Force Survey (PCBS), 2014.

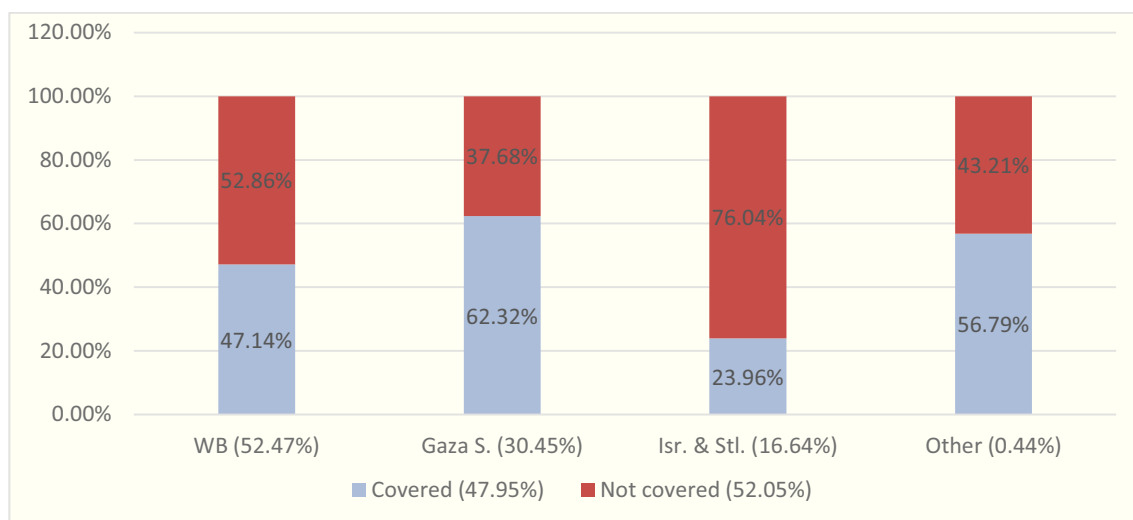
The occupation groups are almost related to the educational attainment, where the senior jobs and professional jobs need higher educational attainment than those of crafts and agricultural jobs. Thus, we find the labor force employees in professional jobs have higher pension contribution coverage than those in jobs that require less educational attainment.

4.8.1.17- Work Place and Region

The geographic distribution of labor force and jobs may have importance on the pension coverage, which helps to know where the job opportunities are available, given that each place may have different social, political, and economic conditions.

The work place of the labor force in Palestine was categorized in the survey into four main places; West Bank at 52.47 percent, Gaza Strip at 30.45 percent, Israel and settlements at 16.64 percent, and other at only 0.44 percent. The highest pension coverage rate was among those working in Gaza Strip at 62.32, compared to the lowest coverage rate that was among those working in Israel and the settlements.

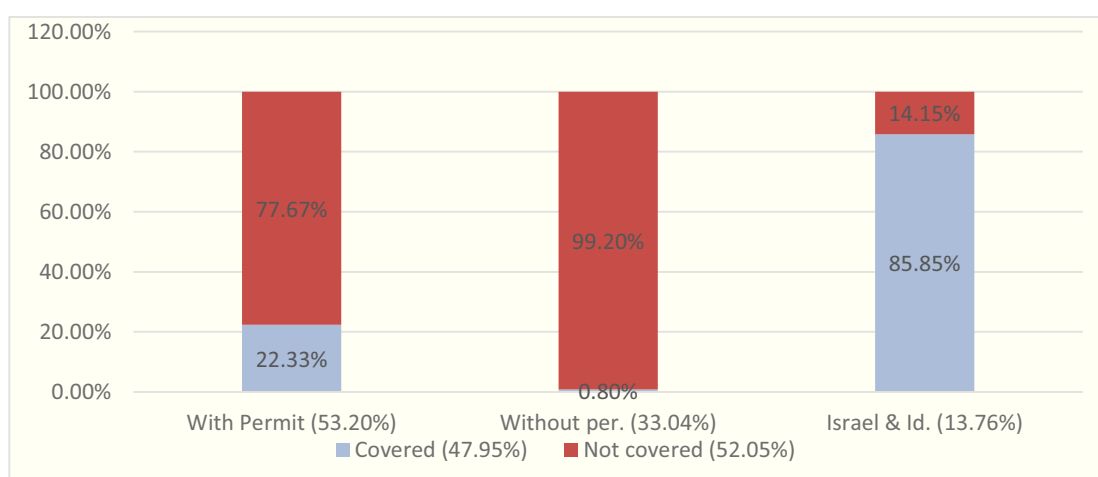
Figure 151: Benefiting from a Pension System According to Work Place



Source: The author by data of Labor Force Survey (PCBS), 2014.

Thus, the Palestinian employees working in Israel need more social protection and more organization for their hiring in Israel. Given that 33.04 percent of them are working without permission due to tight conditions from the Israeli occupation to issue entry permissions to Israel. With the high unemployment rate in Palestine and higher wage in Israel, some employees from West Bank enter Israel illegally and work informally, while employees from Gaza Strip cannot enter as the imposed closure is more restricted. Moreover, those who work formally in Israel with permissions, lack to some social security privileges that are given to Israeli employees. Thus, only 22.33 percent of them have pension contribution coverage.

Figure 152: Benefiting from a Pension System According to Working with Permit to Israel & Sett.

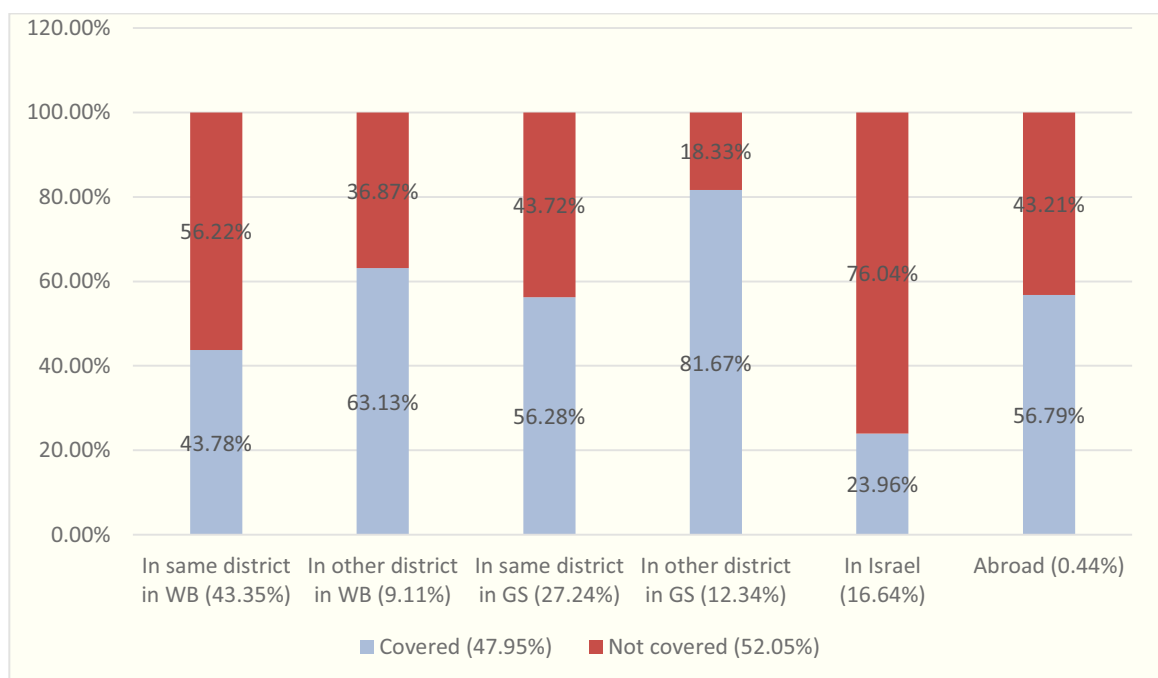


Source: The author by data of Labor Force Survey (PCBS), 2014.

Furthermore, the following figure shows that the employees in both Gaza Strip and West Bank, who work in the other district have higher pension coverage compared to those working in the same district.

We also notice that the difference in pension coverage of the employees, who work in the same district compared to other district is higher in Gaza Strip, compared to those in West Bank. That may refer to the difficulties in movement between cities in West Bank more than in Gaza Strip due to the existence of occupation check points on the highways and in cities in West Bank. Further, the businesses are concentrated in some cities in Gaza than the others, so the people need more to work in other district inside Gaza Strip. At the same time, the employee in West Bank have the opportunity to work in Israel as other district but high rate of them work illegally.

Figure 153: Benefiting from a Pension System by the Work Place in the Current or Previous Job

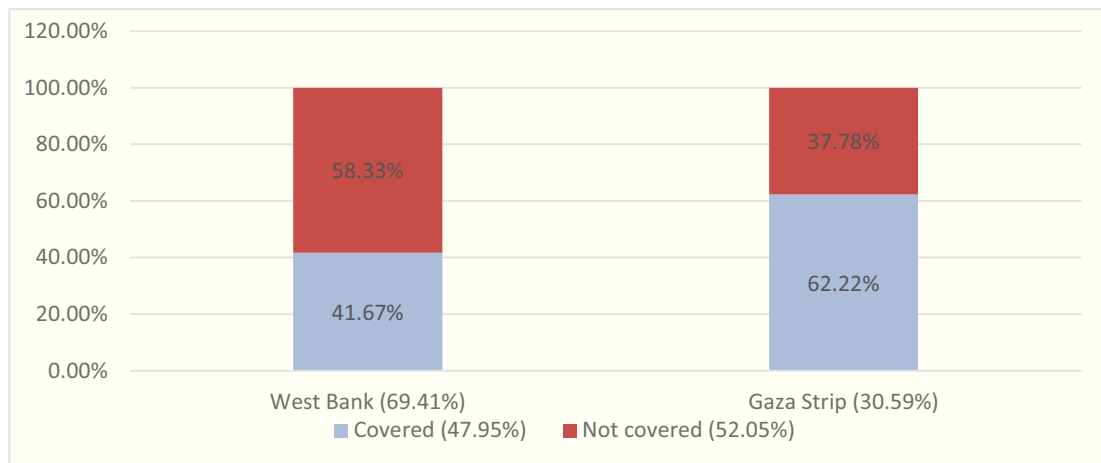


Source: The author by data of Labor Force Survey (PCBS), 2014.

The regions of West Bank and Gaza Strip remarkably have different figures in social, economic and political matters, which due to different conditions imposed on each region. So, the Palestinian population in the two regions have different characteristics. The literature review indicated to differences in poverty rate, unemployment rate, labor force participation rate, GDP per capita, and average family size.

Further, the data of the survey indicate that the differences are also applicable on the pension coverage, which is higher in Gaza Strip at 62.22 percent compared to 41.67 percent in West Bank. The differences may refer to the large working labor force in Israel from only West Bank, who lack social security privileges. Besides, the population in Gaza Strip have more refugee status, and more ratio of the population in Gaza work in public sector, which have more pension coverage.

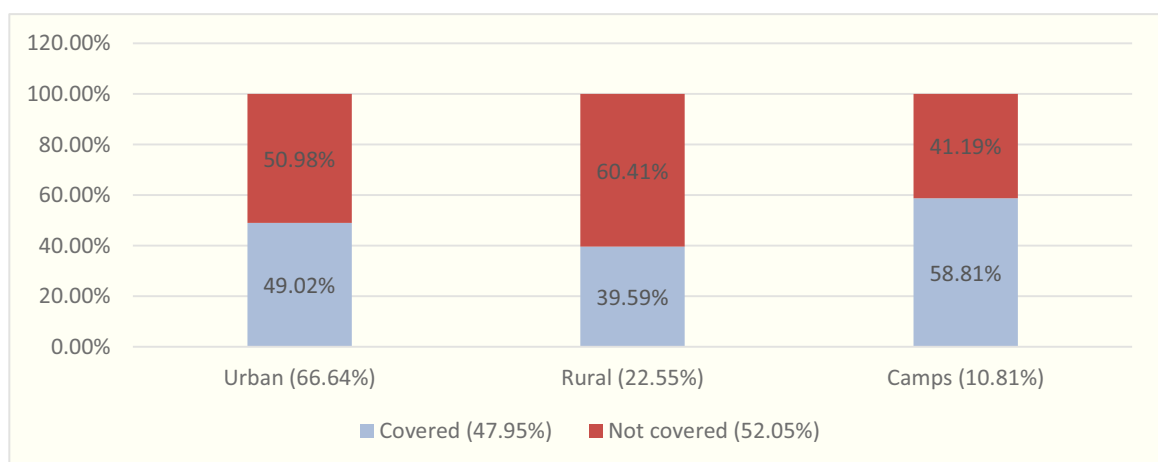
Figure 154: Benefiting from a Pension System by Region



Source: The author by data of Labor Force Survey (PCBS), 2014.

In related issue to the regions, we find that Gaza community is more urban and living in camps compared to West Bank community that has more villages. The labor force in Gaza forms 77.74 and 18.09 percent out of the population living in urban and camps regions, respectively, compared to 61.75 and 7.60 percent of those in West Bank, respectively.

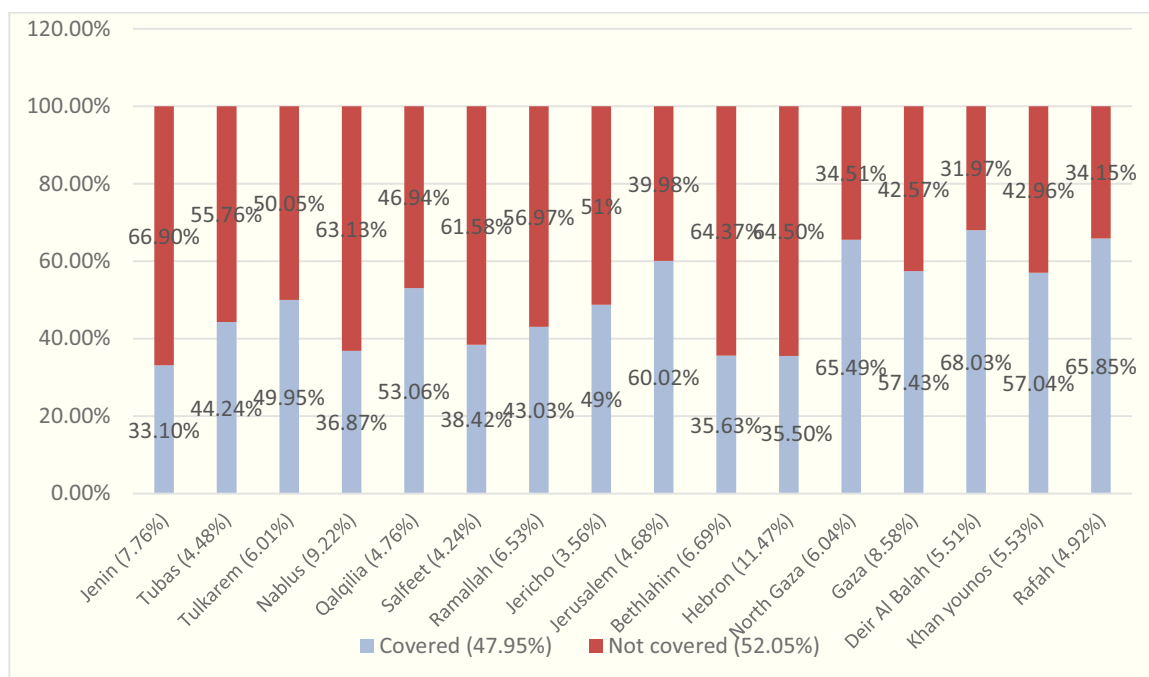
Figure 155: Benefiting from a Pension System by Locality Type



Source: The author by data of Labor Force Survey (PCBS), 2014.

The pension coverage rate is the highest among population living in camps of refugees at 58.81 percent, compared to urban and rural areas at 49.02 and 39.59 percent, respectively.

Figure 156: Benefiting from a Pension System According to District



Source: The author by data of Labor Force Survey (PCBS), 2014.

Indeed, the jobs in urban areas almost have more formal type and be in large firms, while in rural areas the jobs are more in agricultural and craft professions. Moreover, the educational attainment is more in urban areas and camps of refugees than in rural areas, which raises the chance to have more professional jobs with higher income. Thus, employees in urban areas and refugee camps can save and participate to a pension system. At the same time, the pension coverage rate varies among districts between 33.10 percent and up to 65.85 percent. The districts in Gaza have higher coverage rate compared to those in West Bank. In large cities like Hebron, Gaza, and Nablus, even they have the largest rates of labor force the contribution rate is less than other districts in the same region, which may refer to the large commercial jobs in these cities, which are not covered by the public pension system. Moreover, some districts contain higher ratio of refugee population compared to large cities, which indicates also to higher educational attainment and more formal sector in these districts.

4.8.2- Methodology

Our analysis aims to learn the characteristics of individuals in the Palestinian society that impact their will of choice of participation to a pension system. This analysis provides more specific details about the behavior of cohorts upon their characteristics beside the macro-level conditions. Fortunately, the household surveys in Palestine have recently developed to match the international level and trend to provide specific individual data in many fields. The household 2014 LFS⁸³ that we used provides the personal data of 100,745 observations of individuals from 7,616 households that represent the total Palestinian population in Palestine during the fourth quarter of 2014. However, only 6,387 households were accepted and weights were modified to account for non-response rate. The survey is performed by PCBS in repeated manner quarterly. The data included social, labor and regional details of the individuals, which would give indications on the individual characteristics and the other factors that impact their decision making of participation to a pension system. Other variables were generated using the data from the survey as family size, equivalence scale income and the related poverty line⁸⁴.

These data were compared with the results of earlier years of the same survey. I found some problems with the codes, which were corrected by the PCBS. Then, I prepared the needed discrete variables to a binary format. Moreover, I dropped the observations of public sector employees from the data sample of the survey before performing the probit regression on STATA, because they have mandatory pension system and do not have the option to choose to participate or not to a pension system. The number of observations dropped is 6,957, and the remaining is 93,788.

As this empirical specification would model the participation of individuals over the age of 18, prediction of the individual participation decision would be facilitated for many pension options and economic policies. Thus, the results would be handful to build a decision making strategy of participation to a pension system and make the proper

⁸³ The Labor Force Survey collected data through a questionnaire as the main tool to collect data, which was designed according to the ILO recommendations and includes four parts: Identification data, Quality control, Household roster, and Employment part.

⁸⁴ In this section, the poverty line was determined at the threshold of 60% of the median equivalent income of the population. The equivalent scale of income calculated using the related OECD standard of 1 for the head of the household, 0.5 for additional adult member, and 0.3 for each child under the age of 14.

parametric and structural pension reform that guarantee extending coverage at a maximum level of a sustainable pension system.

The probit analysis is a type of regression used to analyze binomial response variables, which can be analyzed by regression either through least squares or maximum likelihood as we used in this study.

For our case of analysis, the probit model as an empirical and discrete model is proper for the econometric analysis of the dichotomous choice data, which depends on the individual utility function of the choice to participate or not to a pension system, given that the utility function is determined by specific individual characteristics.

However, the utility of an individual from participating to a pension system can never be measured precisely, rather the probability of the participation decision could be derived from the individual characteristics as determinants to this utility.

Thus, the participation decision of an individual depends on unobservable utility index that is determined by the explanatory variables in such a way that the larger the value of the index, the greater the probability of the individual to have the decision. Given that the value of the probability ranges between 0 and 1.

Indeed, the person i behavior in choosing an alternative a aims to maximize the obtained benefit or utility (U_{ai}), so the choice method of an alternative of the highest return or utility is designated by dummy variables, y_{ai} for each alternative:

$$y_{ai} = \begin{cases} 1, & \text{if } U_{ai} > U_{ji}, \quad j \neq a, \\ 0, & \text{otherwise} \end{cases}$$

Thus, the probability of taking the decision is:

$$P(y_i = 1) = F(\beta S_n),$$

Where $F()$ is cumulative distribution function of standard normal.

In this context, the hypothetical utility of the probable pension participation i ($i = 1, \dots, N$) can be defined as:

$$U_i = \beta' X_{ij} + \varepsilon_{ij}$$

Given that there may be many variables that are unobservable and depend on stochastic components ε_{ij} that explains all these variables that impact the final decision.

In our case study, there are number j variables of individual characteristics affecting the final decision of each individual to contribute or not to a pension system. Each variable has a coefficient β . While, the remaining unobservable latent variables depend on the stochastic components of ε_{ij} , representing all the unobservable factors that affect the final decision. Besides, the choice of probit model in this case is based on the assumption that the ε_{ij} is jointly normally distributed.

The dependent variable of the participation to pension system is a binary response that takes the value of 1 if the person participates to a pension system and 0 if not. Thus, the proposed model suggests that the decision to save to pension contributions depends on a latent variable y^* , which is determined by a set of exogenous variables, included in the vector x' , so that:

$$y_{ai}^* = X'_{i}\beta_j + u_i$$

$$y_{ai} = 1 \text{ if } y_{ai}^* > 0; y_{ai} = 0 \text{ if } y_{ai}^* \leq 0$$

Where i represents individuals y , vector β represents the parameters of the model and u is a normal distribution error term of average 0 and variance 1.

A critical threshold is assumed, based on which, if y_i^* is over y_i , then an individual saves for retirement. This threshold y_i^* , similarly to y_i , is not observable; however, if it is assumed that it is distributed normally with the same average and variance, it is possible to estimate the regression parameters and thus obtain information on y_i .

$$P_i = P y_i = 1 | x' = P y_i \leq y_i^* = P Z_i \leq \beta x'_i = F(\beta x'_i)$$

Where Z is a standard normal variable, $Z \sim N(0, \sigma^2)$ and $F = \frac{1}{2\pi} \int_{-\infty}^{\beta x'_i} e^{-z^2/2} dz$, is the cumulative normal distribution function.

The model is estimated for maximum likelihood as a series of probit models for the individuals, using the information in the household LFS of 2014, particularly the question of pension participation to any kind of pension systems. Explaining the results depends on the coefficients of the variables that represent the change in the probability of participation to a pension system. The marginal effect of each variable in the model is interpreted similarly to that obtained in the linear regression models.

The explanatory variables were grouped in three categories to identify the most significant variables to understand the decision of participation to a pension system. The groups were the social and personal variables, labor market variables and the regional ones, where each

group was added to the model in cumulative manner, ending up with the complete model of all related and statistically significant variables.

The results are compared mainly to that of the comparative study on Latin American countries that was performed by Tuesta in 2014⁸⁵. The study also depended on the household surveys in five Latin American countries that contains a question on the status of benefiting from or contributing to a pension system, given that the advantage to compare is that these countries almost share the main problems of high informal sector and the low pension coverage⁸⁶.

4.8.3- Conditions Impacting the Probability of Participating to a Pension System

Given the low participation rate to pension systems in Palestine with the high informal sector, the traditional reform options alone are not enough to increase the pension coverage over population, simply because the informal sector is not recognized by the state. Thus, any reform option to pension system should consider this large informal sector and open the opportunity for the employees there to participate in one of the available pension systems. In this context, the traditional pension reform analysis focused on the macroeconomic issues to understand the problem and provide solutions, in which almost the GDP, GDP per-capita, interest rate and inflation figures were the main indicators for the policy actions. However, the cases of large informal sector and weak enforcement of law let us think of the problem in other way beside the macroeconomic analysis. In addition, the trend of the pension system reforms are to be customized to individual choice particularly in retirement age, saving options and investing options. The need to understand the individual conditions has been a priority before any reform option to know the needs of the individuals and their response to the new policies in the pension system. We believed that the new approach of micro-level analysis would be significant at this stage of the

⁸⁵ David Tuesta is Chief Economist of the Financial Inclusion Unit. Previously, he was Chief Economist for BBVA Pensions Unit in Madrid, Chief Economist of the Global Trends Unit of BBVA in Madrid, Peru- Chief Economist for BBVA Continental in Lima, and he occupied many positions in several international organizations as World Bank and Inter-American Development Bank. He obtained his PhD in Catholic University of Peru. He is the author, editor and contributor to books published by prestigious publishing houses and has several publications in scientific journals.

⁸⁶ The Latin American countries in his recent study on pension coverage include Brazil, Chile, Colombia, Mexico and Peru.

pension system development beside the macroeconomic analysis. The analysis highlights the socioeconomic conditioners that impact on the individual decision to participate to a pension system or not in Palestine. Meanwhile, the macroeconomic conditions have a significant role in explaining some results or a particular behavior.

The participation to a pension system means more costs on the personal budget or employers', which have an opportunity cost with other expenses. Thus, that would be related to the level of income and their ability to save at present time to receive a benefit in the future. To understand the total utility from the decision to participate to a pension system, analyzing specific social, labor and regional conditions of individuals would better explain their decision making process, as these factors may affect consumption and savings over time.

The following probit analysis would consider these variables as explanatory independent variables in relation with the dependent variable that determines the participation status to a pension system using a binary data. The independent variables are classified into three groups; personal, labor and regional conditions; whereas, the analysis performed first on the first group of variables, then the second group was added, then the third group in a cumulative manner. This would explain the effect of each group of variables as each one has its own explanation and different reacting policy. The results would be compared with the results of other similar comparative study on Latin American countries. We followed the stepwise backward selection method by STATA program to select among the related variables that are statistically significant at P-value less than 0.05, where this process was repeated after adding each group separately. The complete model takes in consideration adding all significant variables and removing all other insignificant ones, to be explained in the stochastic residual variables.

4.8.4- The Results

The analysis of the individual characteristics using probit model aims to reveal the significant personal conditioners of the decision of participation to a pension system that should be in consideration in any future pension reform in order to create incentives for participation. The results of the probit regression show the parameters of the related independent explanatory variables in three models that explain the dependent variable, which determines the probability of participation to a pension system. According to the results, the relevance of the first model that is limited to the social variables is measured by an adjusted R^2 of 33.78%, which increases by adding the labor and regional variables to 66.13% and 67.68%, respectively.

Among the social factors group of the first model, the age increases the probability of participation to a pension system by 1.7% for each year in the model of social variables only; while, its p-value increases in the other two models to be removed. In Latin American countries, the age impact was not the same, where in Brazil older age has negative impact on the probability to participate to pension systems; while in each of Chile, Colombia, Mexico and Peru, it increases the probability to participate to a pension system (Tuesta, 2104). This difference may refer to the pension rules and labor force in each country. In Palestine, the age may be related to some degree to the high unemployment problem, where the person finds a regular job at later ages. Thus, the impact of age on participation to a pension system is not significant or a direct determinant, but it seems as a result of other factors.

The gender of males decreases the probability to participate to a pension system compared to females by 76.5% in the first model of social variables and by 22.7% in the second model after adding the labor variables, which is different than all Latin American countries. This refers to the low participation rate of females in labor market and the limited work opportunities of the females in some formal jobs as civil servants and some NGOs, which normally require higher skills and education level. While, the informal sector in the Palestinian economy is very high, in which we find the largest sectors are services, whole and retail trade and some handicrafts and small businesses, which do not need high skills and depend mainly on males. While, in public pension systems, the females enjoy the

higher participation rate to pension systems compared to males. Therefore, the variable of gender is not included in the complete model as it was dropped as its p-value increases above 0.05. This may refer to the fact that the pension coverage is small and limited to some groups of the population. Thus, the impact of gender is less significant on the probability to participate to a pension system after adding the regional variables in the complete model.

In the first model of social variables, lower educational attainment reduces the probability of participation to a pension system by 32.1% for primary education level and by 35.6% for the secondary and BA/BSc level compared to those with high educational attainment; which is similar to the results of the analysis of the five Latin American countries that was performed by Tuesta (2014).

However, when the labor and regional variables are added to the model, the educational attainment variables are dropped from the complete model as their p-values increase above 0.05. This may refer to the fact that the pension coverage among the private sector is limited mainly to the employees of some NGOs and formal labor working in Israel. This explanation is enhanced by the fact that these groups have the majority of low educational attainment, where about 79% of the formal employees working in Israel have less than secondary educational attainment.

Similar to all Latin American countries, years of schooling variable increases the probability of participation to a pension system in the first model of social variables only by 11.1%. However, the surprising result was dropping this variable from the second and complete models, where the labor and regional variables were added, respectively. This can be explained by the high rate of covered employees, who have low educational attainment as explained above. In other words, the employees with longer than 16 years of schooling form only 8.4 percent of the total labor force, which indicates to lower impact on the overall model. Hence, we believe that encouraging higher education and creating job opportunities for them would improve the pension participation. In this regard, recently the universities were among the first public institutions that have joined the public pension system as the regulations allowed and the more educated employees were the highest

category among those who chose to participate to a pension system, which confirms the relation between years of schooling and pension coverage.

On the other hand, the refugee status decreases the probability of participation to a pension system, according to the second model of the social and labor variables, by 12.6% compared to non-refugees. While, it was dropped from the first and complete models due to its low impact on the decision to participate⁸⁷.

This change in the relation may due to the weak differences between the refugees and non-refugees as the gap between them has been diminishing by time. The refugees receive through UNRWA quality family health-care, sanitation and education services, besides the unemployment programs and social assistance for poor families to be able to get out of the poverty cycle. Previously, UNRWA specified the refugees in the employment opportunities in its institutions, but this is no longer applies.

While, the non-refugees in Palestine have more opportunities in informal jobs as agriculture and family enterprises, besides they have equal job opportunities in all other fields. Thus, the differences are diminishing to the degree to not be considered as a determinant to the decision of participation to a pension system.

Given that in all Latin American countries except Chile, the marriage status increases the probability of participating to a pension system, STATA dropped the marriage status from the three models because its p-value increases above 0.05. Thus, this does not mean that it should be ignored at all, because the statistical data indicate that there is a strong relation with the pension coverage, but its impact on the probability to participate to a pension system in the model is not direct or insignificant. The average marriage age⁸⁸ in Palestine is relatively earlier than in the Latin American or developed countries and even many developing countries. Even there is trend of younger generation to late the marriage due to

⁸⁷ Reminding that the refugee status is a result of displacement to part of the population from their home towns and villages to gather in a number of refugee camps in West Bank and Gaza Strip and 3 neighbor Arab countries. The refugees in West Bank and Gaza Strip form about 41 percent of the population there. Moreover, they receive some health and educational services from UNRWA and have some conditions that remained the majority of them in poverty. While, some of them could have education opportunity and get out of the cycle of poverty.

⁸⁸ The average age at first marriage in Palestine is 20.1 years for females and 24.6 years for males as in 2012. While, it was about 18.6-18.9 percent sin 1990s. On the other hand, about 21.9 percent of total marriage contracts of females were under the age of 18, while the females under age of 18 composed about 9.7 percent of total divorce case in 2012. (PCBS, 2014).

cost and higher educational attainment; however, the social norms still force the persons to marry as early as possible. Further, normally the persons, who find a regular job are encouraged to marry; while, the unemployed married persons are encouraged to find any job even in the informal sector to support his family. Moreover, the working females have more opportunity to marry than the singles. This fact reduces the impact of the marital status to the decision of participating. Considering the above argument, we conclude that marriage almost occurs after working in a regular job, which weakens the relation of marriage status to the probability of participation in a pension system. While, the counter argument is that the people, who have a family look for a protection mechanism to the survivorship of the family, which means a more desire to participate to a pension system, even in a voluntary scheme.

It is worth to notice that the social variables of family size, living in rural or urban locality type compared to refugee camps, being under the poverty line, being son, daughter or their spouses in the household reduce the probability of participation to a pension system. Likewise, the family size in Mexico, Colombia and Peru also reduces the probability to participate in a pension system, while it is not the case in Brazil and Chile.

In Palestine, the low income with larger family size means less ability to save for a pension system at 1.52% for each person, because the priority of expenses of the limited income is allocated for the basic needs only. Thus, the policies of family support are critical to income redistribution and allocating the expenses. According to PCBS, the average family size in Palestine is 6 persons, while according to the labor force survey the household size is 9, which is considered very high compared to Latin American countries. However, the large family size with the trend of having nuclear family type, consumes the income of the household when kids are young. At the same time, later it could reduce the informal support between family members when the kids marry and separate from the household leaving old-aged members without care or financial support.

Moreover, high unemployment rate and low female participation to labor force reduce the chance of employment of other members of the household to share in the labor market. Thus, being other member in the household has less probability to participate in a pension system compared to the head of the household, where being a son or daughter reduces the probability to participate by 38.3%, while the son wife/ daughter husband in the household

reduce the probability to participate by 85.9%. On the other hand, the variable of spending on the household in Peru increases the probability to participate to a pension system, given that the person spending on the household is almost the head of the household.

The income was considered on the daily wage basis of the members of the household. The results are the indication of income impact on the decision to participate to a pension system compared to the lowest quintile. As in Latin American countries, the higher income increases the probability of participation to a pension system. The results indicate that being in the fifth quintile has the highest impact to increase the probability to participate to a pension system by 124.7% compared to the first quintile. While, being in the second quintile increases the probability of participation to a pension system by 57.2%, followed by the third by 85.8%, then the fourth by 113.5%.

For those in the first quintile, almost they are unable to save from their income to participate in a pension system because their income is inadequate. Moreover, the work of low income employee is almost in informal sector or irregular. While, those with the highest income may think in further savings in a pension system to guarantee their future because they can afford for and feel instability in their income. Further, without the existence of a ceiling on contributions, those with very high income may be afraid from paying high contributions as a percentage of their high income. It is important to determine the ceiling of the contributions and to define the groups that should be targeted by providing incentives.

In this regard, the ILO social security report of 2014 indicates to the relation between income level and coverage across countries. The results show that the old age pension coverage rate in the high income economies averages at 90.8 percent, compared to 50.7 in upper middle income economies, 15.2 percent in lower income economies and only 5.7 percent in low-income economies. It concluded that the informality in labor market highly impacts the low pension coverage rate. Further, the majority in lower-income countries work informally, have low compliance to law and paying contributions. These figures enhance the relation of country's income level with pension coverage (ILO, 2014).

These results of income quintiles are enhanced by the results of poverty status, where those being over the poverty line increase the probability of participation by 42.6% compared to those under the poverty line.

Living in a household that have at least one pensioner increases the probability of participation to a pension system by 67.2% in the first model of social variables, 52.9% in the second model, and 47.45% in the complete model. These results are consistent with the statistical data analysis, where there was a positive relation between the pension participation and living in a household with at least one pensioner. This relation can be explained by the pensioner status as they had to participate in earlier time to be a pensioner, which indicates to having comparatively higher income level, having regular and formal type of job, and probably higher educational attainment. This means that the employees had higher probability to receive quality education and health care at their childhood, which increases the probability to get out from the poverty cycle.

In Latin American countries, living with pensioners in Brazil and Chile decreases the probability of participation, while in Mexico it increases. This may refer to the regulations of the country and indicate to higher expenses of the pensioners in Brazil and Chile compared to Palestine and Mexico (Tuesta, 2104).

Regarding the variable of having one minor in the household, dropping it from the model was surprising in the Palestinian case. In contrary, in the Latin American countries living with minors increases the probability of participation to a pension system.

Moreover, living in rural or urban locality type decreases the probability of participation to a pension system in the first model of social variables by 63.9% and 27%, respectively, compared to refugee camps. While, the urban locality was dropped from the complete model as its P-value is more than 0.05, while the rural locality decreases the probability of participation by 16.9% in the complete model. Similarly, living in rural locality compared to urban locality in Latin American countries decreases the probability of participation to a pension system, except in Peru, where living in rural locality type increases the probability of participation to a pension system (Tuesta, 2104).

Regarding the labor variables, the explanatory power R^2 of the model increases significantly from 33.78% to be 66.13%. The variable of employees with contract increases the probability of participation to a pension system with the highest rate by 209.4% compared to those who do not have a contract. It is an expected result as it indicates to the type of work that is more formal and regular. Likewise, in Latin American countries having

a contract increases the probability of participating to a pension system with the highest rates (Tuesta, 2104).

The second highest impact on the decision of participation to a pension system among labor variables comes from the variable of irregular employees in private sector, which decreases the probability of participation by 146.8% compared to the employees in foreign government. The next highest impact on the participation decision comes from the variable of being affiliated to a union that increases the opportunity of participation by 90.3%. In Palestine, the strong unions are those for public sector employees, UNRWA employees, and the high skilled professions including lawyers, engineers, accountants, physicians, and nurses. These groups of employees and professions normally work in regular conditions and earn high income compared to other types of employees. Even the unions press to gain more benefits, they play an important role in developing the labor and social security law and can cooperate to cover informal sector.

The size of enterprises is the next significant labor variable, where the variable of working in enterprises with 20 employees and more, increases the probability of participation to a pension system by 43.8% compared to those with (10-19) employees, as the enterprises with 20 employees and more are almost formal businesses. Given that the small businesses in Palestine are the majority of businesses, which depend on self-employed or family type businesses, the pension coverage in Palestinian private sector is limited to some employees in large enterprises.

Moreover, the workers working in enterprises with more than 6 paid employees have more probability of participation to a pension system by 31.3% compared to those working in enterprises with less than 6 paid employees. As the family type enterprises are common in Palestine, the variable of the number of paid employees is significant to define the formal employees. In larger enterprises, more professional employees are hired formally as they are needed to run the work. Moreover, the paid employees are expected to be able to decide to save and participate to a pension system, unlike those who are not paid.

In Latin American countries, being unpaid workers in Brazil and working in family enterprises in both Chile and Mexico decrease the probability of participation to a pension system. Likewise, working in micro-enterprise in each of Chile, Colombia, Mexico and Peru decreases the probability to participate. While, working in a small company increases

the probability to participate in Chile, which may refer to the high coverage rate in Chile that include more categories of the population, given that the voluntary participation is available for all population (Tuesta, 2104).

Similarly, working in enterprise that is registered in tax administration has an important impact on increasing the probability of participation by 44.9% compared to those working in enterprises that are not registered in tax administration, because the first almost means working in the formal sector. Considering the fragile and unstable economic conditions and weak law enforcement by the state, it is easier to understand the low rate of enterprises that are registered in tax administration.

On the other hand, the variable of worked months of an employee may indicate to the regularity of his/ her job. Thus, the longer worked period increases the probability of participation by 0.23% for each month. This is enhanced by the high impact of the variable of irregular employment status in private sector as indicated above.

While, the variable of the worked hours in the last month was available only in the second model of social and labor variables and decreases the probability of participation to a pension system by 20.1%. However, it was dropped from the complete model after adding the regional variables as it is not significant on the decision of participation because the worked hours each month is up to many conditions that may not be related to labor regularity or informality only, but to vacation, illness, and strikes reasons.

On the contrary, working in nonprofit organization and in UNRWA increases the probability of participation by 42.5% and 32.9%, respectively, compared to working in Foreign Government. Both have more regular employment conditions that guarantee a pension coverage to their employees.

The same argument is applicable in Latin American countries, where the variables of retail sector, primary sector, informal sector and unpaid workers, decrease the probability of contribution in all countries; given that these variable indicate to the informal or irregular work (Tuesta, 2104).

Among the significant industries that explains the probability of participation to a pension system are commerce and hotels industry that increases the participation by 18.1% and services and other industries by 16.5%. Regarding the distribution of employees to the sectors, the LFS data of 2014 of PCBS indicate that the highest was in the industry of

services and others at 36.1%, followed by commerce and hotels at 20.2% and Construction at 15.3%, then the manufacturing industry at 12.6%. These industries are the largest and the most formal industries, which could have high impact on the participation rate. In regard of services sector in Palestine, it includes many jobs that include some small businesses and informal jobs, besides large formal enterprises as financial and insurance services.

However, the service sector in Latin American countries decreases the probability of participation except in Colombia, which may refer to the high rate of informal sector that was estimated by ILO to be between 57 and 70% (ILO, 2014). At the same time, the voluntary coverage has been open for larger groups with some incentives that probably let part of the informal sector to participate to the pension system (Tuesta, 2104).

Finally, the regional variables also indicate for tangible difference due to the region of living and work place as well. The model shows that working in Israel increases the probability of participation to a pension system by 47.1% compared to West Bank, while the model could not find a difference in the probability of participation from working in Gaza Strip. However, the probability of living in West Bank increases the probability of participation by 104.3% compared to Gaza Strip.

These results may refer to the fact that work conditions in Israel are different than in Palestine, where the state has the ability to mandate the employers to cover the formal employees. Moreover, the legal framework is different also where in Israel the social security has been applied on private sector from earlier time compared to Palestine, which has been occupied by Israel. However, many of these workers have to work without permission, which deprive them from their rights. Thus, Palestinian labor working in Israel, forms important rate of the Palestinian labor force that should be protected by the Palestinian laws as well, because when the employees end working in Israel, they find difficulties in claiming their rights as they cannot get permission to enter Israel after the termination of the permission to work.

On the other hand, the difference between Gaza Strip and West Bank may refer mainly to the fact that there is no easy movement between the two regions. Besides, the political results of controlling Hamas on government in Gaza Strip that was followed by imposing

a very tight blockage on Gaza, led to widening the gap of the economic and demographic figures between the two regions. At the same time, living in West Bank increases the probability of participation, but work place does make difference as the employees cannot mobile between the two regions.

The economic and social figures in Gaza Strip show different indications than West Bank. In Gaza Strip the GDP per capita, participation rate to national GDP, women participation to labor force and freedom to mobile are less than those in West Bank. Besides, the family size is larger, the poverty rate, population density, youth population and fertility are higher. Thus, we find that living in West Bank increases the probability of participation to a pension system compared to Gaza Strip. At the same time, the vulnerability to poverty is higher in Gaza Strip compared to West Bank, and there is an urgent need to stabilize the figures there. In contrary, the statistical data show that the coverage rate among Palestinians in Gaza Strip is higher than those in West Bank. This different indication between regression analysis and statistical data may refer to the more opportunities of population in West Bank to work in Israel and the larger population in West Bank, so their impact on the regression results is higher.

In Latin American countries, the probability of participation was also determined upon some conditions of the regions such as the availability of industry or economic activity in the region as in southern Brazil and Colombia. In Colombia, the regional distribution depended also on the poverty level. While, in both Mexico and Peru the regional distribution depended on the level of marginalization, where higher marginalization reduces the probability of saving to pension compared to low marginalization. However, the Chilean case did not show significance to the geographical location, which may refer to the population size and the policy of decentralization and integration between regions with ease of communications. In addition to the wide coverage rate across the country may reduce the gabs between regions as well (Tuesta, 2104).

Table 82: Probit Estimates for the Determinants of Pension Contribution in Palestine According to 2014 LFS

VARIABLES	(1)		(2)		(3)		Reference variable
	pension	Standard errors	pension	Standard errors	pension	Standard errors	
Males	-0.765***	(0.0495)	-0.227**	(0.0708)			Females
Refugee Status			-0.126*	(0.0504)			Non-Refugees
Having pensioner (s)	0.672***	(0.0756)	0.529***	(0.101)	0.472***	(0.101)	Without pensioners
Being over Poverty Line	0.606***	(0.0583)	0.511***	(0.0864)	0.426***	(0.0884)	Being Under poverty line
Son\daughter of the Head of HH	-0.383***	(0.0557)	-0.229***	(0.0569)	-0.255***	(0.0578)	Head of the Household
Son Wife/ Daughter Husband	-0.859*	(0.344)	-0.902*	(0.404)			Head of the Household
Quintile 2 wages	0.968***	(0.0632)	0.757***	(0.0853)	0.572***	(0.0864)	Quintile 1 wage
Quintile 3 wages	1.023***	(0.0692)	1.102***	(0.0979)	0.858***	(0.0981)	Quintile 1 wage
Quintile 4 wages	1.699***	(0.0690)	1.401***	(0.0960)	1.135***	(0.0976)	Quintile 1 wage
Quintile 5 wages	1.515***	(0.0656)	1.690***	(0.0923)	1.247***	(0.101)	Quintile 1 wage
Employee no. (+20)			0.350***	(0.0560)	0.438***	(0.0575)	Employment No. (10-19)
Paid employee no. (+6)			0.331***	(0.0680)	0.313***	(0.0697)	Paid Employ. No. (5 or less)
Worked Months			0.00213***	(0.000269)	0.00232***	(0.000268)	
Having Contract			2.014***	(0.0611)	2.094***	(0.0678)	Not having a contract
Affiliated to Unions			0.792***	(0.0499)	0.903***	(0.0512)	NOT Affiliated to Unions
Working in enterprise registered in Tax adm.			0.337***	(0.0786)	0.449***	(0.0820)	Not registered
Work Hours			0.201**	(0.0611)			
Occupation – Proff- Clerks			-0.307***	(0.0667)	-0.145*	(0.0665)	Occupation - Legis- Senior
Industry – Commerce-Hotel			0.166*	(0.0645)	0.181**	(0.0696)	Industry - Agriculture
Empl. status – Employee in Nonprofit Org.			0.447***	(0.134)	0.425**	(0.135)	Empl. Status- Foreign Gov.
Empl. status - Irregular Employee in private			-1.465***	(0.102)	-1.468***	(0.103)	Empl. Status- Foreign Gov.
Age	0.0170***	(0.00214)					
Years of schooling	0.111***	(0.00842)					
Ed. Attain. Primary	-0.321*	(0.140)					Ed. Attain. High Education
Ed. Attain. Secondary & BA/ BSc	-0.356**	(0.121)					Ed. Attain. High Education
Family Size	-0.0152***	(0.00430)					
Locality type – Urban	-0.270***	(0.0567)					Locality type – Camps
Locality type – Rural	-0.639***	(0.0631)			-0.169**	(0.0553)	Locality type – Camps
Brother\ Sister of the Household	-0.372*	(0.181)					Head of the Household
Worked Days					0.0179**	(0.00585)	
Industry– Services & Other					0.165*	(0.0738)	Industry - Agriculture
Empl. status – UNRWA					0.329**	(0.104)	Empl. Status- Foreign Gov.
Work place – Israel					0.471***	(0.0789)	Work place – West Bank
Region – West Bank					1.043***	(0.0845)	Region – Gaza Strip
Constant	-2.737***	(0.238)	-3.809***	(0.150)	-5.275***	(0.212)	
Joint significance test	Wald Chi2 (17)= 4186.68		Chi2 (21)= 7646.02		Chi2 (23)= 8204.86		
	Prob > Chi2= 0.0000		Prob > Chi2= 0.0000		Prob > Chi2= 0.0000		
R ²	0.3378		0.6613		0.6768		
Observations	11,650		11,026		11,232		

Standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.5

Source: The author from LFS 2014 using Stata program, PCBS

Table 83: Characteristics of the Variables of the Complete Model No. (3)

Variables	Coef.	Std. Err.	Z	P > Z	[95% Conf. Interval]	
Having Pensioner(s)	0.4721701	0.1006302	4.69	0.000	0.2749385	0.6694016
Being over the Poverty Line	0.4264205	0.0884414	4.82	0.000	0.2530786	0.5997624
Locality type - Rural	-0.1685575	0.0553443	-3.05	0.002	-0.2770304	-0.0600847
Son\daughter of the Head of HH	-0.2553215	0.0578161	-4.42	0.000	-0.3686391	-0.1420039
P_Q_Dwage2	0.5721423	0.0864219	6.62	0.000	0.4027585	0.741526
P_Q_Dwage3	0.8583133	0.0981282	8.75	0.000	0.6659856	1.050641
P_Q_Dwage4	1.135437	0.0975887	11.63	0.000	0.9441668	1.326707
P_Q_Dwage5	1.246997	0.1008616	12.36	0.000	1.049311	1.444682
Worked Days	0.0178962	0.0058463	3.06	0.002	0.0064377	0.0293547
Working in enterprise registered in Tax adm.	0.44893	0.0819741	5.48	0.000	0.288263	0.6095964
Employee no. (+20)	0.4378106	0.0574902	7.62	0.000	0.3251318	0.5504894
Paid employee no. (+6)	0.3130509	0.0696554	4.49	0.000	0.1765288	0.4495729
Affiliated to Unions	0.9033062	0.051179	17.65	0.000	0.802753	1.003371
Having Contract	2.09401	0.0677853	30.89	0.000	1.961153	2.226867
Worked Months	0.0023178	0.0002684	8.64	0.000	0.0017918	0.0028438
Industry – Commerce-Hotel	0.180779	0.0696194	2.60	0.009	0.0443275	0.3172306
Industry– Services & Other	0.1647128	0.0738403	2.23	0.026	0.0199885	0.3094372
Occupation – Proff-Clerks	-0.1449762	0.0665099	-2.18	0.029	-0.2753332	-0.0146192
Empl. Status – employee in UNRWA	0.3294782	0.1042278	3.16	0.002	0.1251954	0.533761
Empl. status – Employee in Nonprofit Org.	0.4251088	0.1350062	3.15	0.002	0.1605015	0.6897162
Empl. status - Irregular Employee in private	-1.467707	0.102664	-14.30	0.000	-1.668925	-1.266489
Work place – Israel	0.4711801	0.0789362	5.97	0.000	0.316468	0.6258923
Region - West Bank	1.042978	0.084525	12.34	0.000	0.8773122	1.2086644
_cons	-5.274751	0.2120584	-24.87	0.000	-5.690378	-4.859124
Joint significance test	Wald Chi2 (23)= 8204.86					
	Prob > Chi2= 0.0000					
R2	0.6768	Log likelihood = -1959.117			No. of obs. = 11232	

Source: The author from LFS 2014 using Stata program, PCBS

4.9- Conclusions

The early attempts of pension reforms since the establishment of PA in 1994 have not succeeded to improve the pension coverage in Palestine, where it has been limited to the public sector yet with very modest coverage to some public non-governmental institutions.

Few previous studies have revealed some macro-factors that explain the pension problems and proposed several scenarios of pension reform; however, none of them was applicable and could solve the existed challenges.

In our study we emphasized on the results of the previous studies as we reviewed the social, economic and political conditions as well as the literature review including the analysis of the applied pension systems in Palestine compared to other experiences. Then, we revealed the challenges and both the external and internal barriers to extend coverage and applying the 2005 reform that was supposed to cover private sector with one unified new multi-pillar system. In this framework, the focus was on discussing the optimal pension options through the statistical analysis of the current data and figures using the proper tools as PROST model and probit model.

Given the low participation rate of females to labor force and the high rate of unemployment, the females and old-age population are the most vulnerable groups in the society and highly exposed to poverty. Moreover, there always have been caveats towards the sustainability of the public pension system due to expected high expenses, and early retirement regulations, large-scale survivors, and incapacity of the government to transfer monthly contributions. Further, the comparatively high contribution rate also has been considered as one of the main internal barriers of the system to extend coverage over the weak private sector in fragile economy. Besides, other barriers caused the pension systems inconsistent with the international social security standards. These barriers are adequacy of pension for old-aged and survivors' benefits, lack to the unemployment insurance and mandatory defined contributions, which is not well applicable.

Through the analysis of micro-data of household 2014 LFS, we addressed new problems and highlighted the personal attitudes through revealing their characteristics and desires that increase the probability of participation to a pension system. This kind of analysis adds

another dimension to the explanation of low coverage problem and how to override upon the individual level, beside the macro-level figures.

In order to perform the analysis using probit model, the relevant variables in the LFS have been included in the model in three groups. The first group refers to the social variables as gender, age, marital status, educational attainment, locality type, income level, having minor(s) or pensioner(s), family size and refugee status. While, the second refers to the labor variables as work hours in the last week, working months in the last job, having contract, number of employees, affiliated to unions, type of employment, industry and employment status. The third group is for regional indications.

The results revealed the relations of the significant variables with the probability of participation to a pension system. The educational attainment was removed in the complete model after adding all variables, even the statistical data show the relevance of the higher educational attainment and years of schooling with the pension coverage. While, the regression of the first model of social variables show positive relation with the probability to participate, which turns to be negative after adding the labor variables. These different indications and sensitivity of the educational attainment to the other variables were explained by the change in the number of the observations, besides the majority of low educational attainment among the labor force, which means that there should be some action towards improving the high education and the job opportunities in the labor market for higher educational attainment.

The interesting result was that being female increases the probability of participation to a pension system, which due to the fact that most of the females participating to labor force are highly educated and almost work in formal sector. However, more actions are needed to increase the very low female participation to the labor force, particularly in the private sector, through introducing maternity insurance, some labor regulating provisions. Even there is an increasing trend to more participation of female in labor force, it is still very slow. Even the marital status and refugee status had statistically significant relationship with pension coverage, being a refugee and being married in the first model of social variables increase the probability of participation; however, the regression of the final

model shows insignificant relation of them with the probability of participation to a pension system.

Each of the variables of age, being a head of the household, living in a household with minor(s) and/ or pensioner(s) and being over the poverty line increases the probability of participation to a pension system, which should be taken in consideration.

Further, the higher income quintiles normally increase the probability of participation.

The labor variables significantly increase the explanatory power R^2 of the model. The variables indicate that the employees with contract, affiliated to unions, working in full-time compared to part-time jobs, working in enterprises that are registered in tax administration, working in large size enterprises, working for longer time in the last job and/ or working in specific sectors and in some jobs increase the probability of participation to a pension system.

In general, from the above work conditions we conclude that being in formal sector, regularity of the job, more professional jobs and the jobs of high skills have more opportunity and increases the decision probability of participation to a pension system. Given that some jobs are deprived from the pension coverage because of the regulations or the will of the employers, there should be some role of the state to protect these vulnerable groups and allow the voluntary participation.

Finally, the regional variables indicate that being in West Bank and working in Israel increases the probability of participation to a pension system. These differences may refer to the occupation conditions that impose tight closure and restricted the movement of people and goods from and to the Palestinian areas and even between the Palestinian cities. These practices reduce the economic activities and enforce the unemployed worker to seek working in Israel with no permission that deprives them from pension and labor rights.

In conclusion, there is need for urgent measures to protect these vulnerable groups from poverty, particularly, old-aged and females. The proposed measures should also take in consideration the problem of the Palestinian labor market including the problem of large informal sector and high rate of unemployment that decreases wages in the informal sector and increases the dependency on the Israeli labor market as well as work opportunities abroad, particularly in Arab countries. These conditions would cause large ratio of old age

population with no coverage by any pension system leaving them exposed to poverty and dependency on the informal social assistance means to support them.

Moreover, the large families with low income are more exposed to poverty, particularly the old-aged and children as they cannot work and need special care. Normally, in Palestine the extended family type do this assistance informally, but the trend towards nuclear family structure together with the more female participation to labor force would leave the old-aged and partially the children without care and support of the family. Therefore, the formal assistant programs should take these issues in consideration. Fortunately, the expected cost of old-aged assistance programs at present time will be the least compared to the future as the old age population is very small and it will be increasing steadily. Thus, running the programs at earlier time would alleviate poverty earlier and avoid extra expenses in the future.

The proposed solutions have both short-term and long-term dimension mechanisms that target to maximize the participation rate to the pension system as inevitable solution to alleviate poverty and enhance the living standards. Thus, to extend the pension coverage and have financial sustainability as priority policies, there should be some parametric and structural reforms in the pension systems in Palestine that take in consideration the mentioned challenges and barriers in the light of the international experiences. Further, organizing and supporting the unions of employees are recommended as they increase the participation probability to pension systems. While, the Ministry of Labor is supposed to organize and control having contracts of employees and the minimum wages. On the other hand, the proposed system should

Moreover, also there should be urgent relief and employment programs in the short term to protect these people from poverty at their old age or disability and their survivors as well. However, for transparency and equity purposes the centralized database is needed and cooperation with other charities and international and local NGOs should be involved. Moreover, sustainable development programs are needed as well to guarantee economic growth and stability, and afford more and equal participation opportunities of labor force in the formal sector.

Chapter Five

“The Palestinian Pension System Analysis: the Current Figures and an Alternative Pension Reform”

5.1- The Introduction

Most of the literature of pension systems raise the issue of aging as the main problem facing the pension systems around the world; however, the problem in Palestine has different dimensions than aging. The Palestinian population is a youth one compared to other nations in the world and even Middle East region, in which the fertility rate is 4.17 percent, the median age is about 19 years, and the average life expectancy is 73 years old. The old age population over 65 is still at 3.7% of the total population as in 2015 compared to 4.4% for those over the age of 60 as in 2014.

The dominant family structure type in Palestine has been the extended family type; nevertheless, the nuclear type is increasingly spreading. This means that the old age have the potential risk to live alone, which in turn means they will need other means of care and support.

At the same time, the demographic figures indicate that even aging is a potential problem in the future of the pension system in Palestine that should not be ignored, it still not the main problem as in the developed countries. Therefore, it is important to highlight the main obstacles of having sustainable, adequate and comprehensive pension system in Palestine. The demographic structure with high young dependency ratio is one of the challenges as they need more expenses and reduce saving ability; however main challenges for sustainable pension system were high rate of informal sector, high rate of unemployment, low labor participation rate of women, high dependency of the economy on foreign aids, the economy dependency on Israel upon Paris-agreement, and the lack of sustainable development and stability in Palestine.

The study proposes guidelines of an optimal pension system for the Palestinian case that depends on the previously discussed literature review taking into consideration the real needs for a pension reform, currently applied pension systems, international experience, and the trends of pension systems reform.

5.2- Guidelines for An Optimal Alternative Pension System in Palestine

5.2.1- Insured Risks

Banerji (2013) stated that *“Establishing robust, equitable, and effective social protection is essential to reducing poverty and boosting prosperity at all levels of development”* (Banerji and others, 2013, P. xi). Thus, the social security system is instant tool for poverty alleviation in all societies. Further, any comprehensive social security system should cover risks that lead to poverty. While, the main benefits that cover these risks are the health insurance, maternity leave, disability, retirement, insurance of survivors, and unemployment insurance. Sayre and Olmsted (2004) indicated that in Palestine the labor law of 2001 covers the maternity, sick vacation, and hajj leaves; in addition to the available broad public health-care program that provides a comprehensive health insurance benefits. Therefore, the remaining uncovered risks in Palestine are old age, disability, and unemployment. However, the mentioned benefits do not have funds or contributions, which means that any expenses would be further burden on the fragile private sector. Thus, many employers do not comply with the provisions of the labor law due to the political and economic instability and weak enforcement of law. Further, large ratio of labor force are in informal sector, which do not benefit from labor law or any other formal work-based pension system.

In this perspective, the poverty rate among old-age households is considerably high and has an increasing trend, where it increased from 34.1 percent in 2006 to about 41.2 percent as in 2011 upon consumption and income survey. The high poverty rate among old-age population implies that there should be protection measures to protect these people from poverty under the principles of equity and solidarity.

As concluded from the literature review, there are several types of risks threatening the Palestinians in Palestine, which expose the majority to poverty. Therefore, any taken measures to design a formal pension system should take in consideration the privacy of the Palestinian case as discussed in chapter one, where there is highly vulnerable and fragile economy, high level of informal sector (57-88%), low labor participation of females (19%), high young-age dependency ratio (72.78), high rates of poverty (25.8%), high possibility of immigration in both directions, and high unemployment rate (25.9%).

We believe that any efficient solution needs a social security network that aims to reduce poverty rate, insure old-age population and population in labor force from poverty, and enhance economic growth within the international standards and principles of the social security. Consequently, the proposed pension system should provide a safety net for the most vulnerable groups, particularly, women, old-age population, informal labor, and unemployed. At the same time, it should be explicitly flexible to deal with the variety of objectives, vulnerability of conditions, and respond to the heterogeneity of individuals. Moreover, it is recommended to present the proposed system as a new package with the optimal parameters; otherwise; it would be politically hard to modify the parameters of the current PAYG public pension system.

5.2.2- Why should it be a sMulti-pillar Structure?

As there is no standard understanding for the multi-pillar systems, each country chooses and develops its system and the way in organizing it that fits better and reflects the political, social, and economic privacy. In this regard, many approaches have been developed that adopted different structures, depending on the funding, scheme types of being defined benefits or defined contributions, and governance of the system. The main models of the multi-pillar system are the OECD Model, Chile's Pension Saving Account and the Notional Account System. The Approach of the World Bank was one of the first to explain, classify and develop this kind of models. Then, other approaches emerged including Esping-Andersen (1990), Holzmann and Hinz (2005), Lindbeck (2006), and Bovenberg and Van Ewijk (2011) as well as the World Bank new approach. The data of ILO report as in 2014 indicates that 166 out of 178 countries provide pension often through a combination of different types of contributory and non-contributory schemes, which provide complementary benefits depending on the needs and the available resources. As stated by Holzmann and Hinz (2005) that the recent experience of pension systems in dealing with challenges and needs of the society demonstrated that the multi-pillar design is better able to deal with the multiple objectives of pension systems.

The case of Palestine has various risks that threat the stability of income and various problem to deal with, which require the system to face this diversity of risks and problems by having different kinds of schemes that are financed by different mechanisms and

provide benefits under different conditions. Thus, the system would serve the policy makers better in achieving their goals.

Portland trust (2007) recommended in its assessment research of the Palestinian Pension reform a comprehensive multi-pillar pension reform in the long-term, outlining the priority to create mandatory earnings-related pillar.

Thus, the proposed system is composed of three pillars and aims through the first and second schemes to reduce the poverty among seniors and reduce the income inequalities as priority; while, the third scheme enhances the local investments and maintains the level of living standards through encouraging savings.

5.2.3- Governance: Public Control

According to Schwarz and Demir-guc Kunt (1999), the PAYG, partly funded, and private accounts can be managed publicly as well as privately. Through the last three decades, the private sector has been increasingly playing active role in running pension systems with different types of pensions systems. Many Latin American countries have involved the private sector in running the mandatory schemes as the case in Chile, Mexico, Peru and El Salvador. Further, most of OECD and Caribbean countries have involved the private sector as partial and complementary scheme to the public one. While, none of the MENA countries have introduced any private pension scheme (Whitehouse, 2007).

However, by reviewing the Chile experience, Krasnokutskaya and others (2009) found that the absence of regulation would make the industry offer very risky set of products, which create large variation in the consumer balances, and government obligations (Krasnokutskaya and others, 2009). On the other hand, the world social protection report 2014/2015 of ILO highlighted the new trend of some countries to revise renationalizing their old-age pension systems that was privatized in 1980s and 1990s such as Argentina, Chile, Kazakhstan, Hungary and State of Bolivia. As the taken measures in these countries to adjust the fiscal balance had reduced the adequacy of pensions by shifting large part of the economic risks to individuals, the individuals have been exposed to poverty (ILO, 2014). Thus, we conclude that state should have its responsibility to guarantee income security in old-age and provide protection measures from economic risks in both publicly and privately managed pension systems.

Concerning the Palestinian case, where the private financial sector is very small and weak, it needs more regulations and control by the state. On the other hand, the local investment opportunities are very weak and risky, and the international investment opportunities also have some political risks as well as the restrictions imposed by the Israeli occupation on many aspects, particularly the regulations and movement of assets and persons. Further, we cannot ignore the high dependency on foreign aids to finance some old-age poverty programs and some employment programs in Palestine as long as Palestine is under occupation.

In such environment, the role of the state to regulate and guarantee the pension system is essential to encourage both employees and employers to contribute to the system and regulate all assistance programs. Even the state currently may not enforce mandatory pension system to all population, but it should play its role of protecting the population from poverty through supervising and regulating the relief programs and the pension system. It is the state responsibility to bring proper regulations that guarantee extending coverage of pension system, whether it is privately or publicly managed. The private sector could have a limited role at the present time to manage some funds of any proposed private accounts DC system or voluntary contributions to some kind of private contributory programs as well as the accumulated funds in DB component, but under the supervisory of the public pension institution. The control of the state over these funds or investment managers should be very high according to clear regulations to protect the contributors.

5.2.4- The Scope of Coverage

As discussed earlier in chapter two, the social security is a right that should be guaranteed for all citizens equally under the international conventions of human rights as well as under the national constitutions in most of countries. The most important legal instruments are the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights. These conventions and legal instruments focus on the rights of old-age population, females, children and disabled persons to have adequate living standard. However, the main challenge remains in the limited scope of coverage in most of the developing countries, which leaves the majority of vulnerable groups exposed to poverty and without formal protection mechanism and without health-care coverage. In

this regard, El Mekkaoui (2013) had introduced three important policy recommendations in a case study on Morocco. The first was social protection coverage for all workers in formal and informal labor. The second was a comprehensive pension reform, and the third was gaining a better understanding of the effectiveness of pension and health systems by collecting disaggregated data.

In order to protect high rates of vulnerable groups of the population, the proposed scheme should guarantee benefits to all eligible citizens under universal component, which provides benefits to old-age citizens, who meet specific eligibility criteria. While, work-based component will be only for those who pay contributions into the system through payroll taxes or individual accounts. The universal component is essential to guarantee the minimum consumption level for the target groups; nevertheless, the work-based component is more efficient and encourages formal sector as the benefits are more related to contributions. Therefore, the minimum pension salary should be higher than the universal basic salary to encourage contributions as in Chile's experience.

In addition, allowing the voluntary contribution is highly recommended for self-employed, employees in informal sector, employees working abroad, and non-working females by committing themselves to contribute monthly to the system. The contributions of this voluntary DB scheme are supposed to be set according to a particular salary scale that starts with the minimum wage and have a ceiling to determine the maximum salary. Likewise, there should be special regulations for the employees working in Israel and abroad. These regulations can be by voluntary participation of the employee directly, or by bilateral agreements with the hosting countries starting with Israel and Arab countries, where the majority of Palestinian employees are available.

5.2.5- Female Protection

The most distinct problem of females in Palestine is the low participation rate to formal labor force. At the same time, the Palestinian female have high responsibilities in household works and taking care of children and old people, in which they spend long hours that may reach up to 60 hours according to one of the time-use studies (Heiburg and Ovensen, 1993). On the other side, even females have higher life expectancy at 74.9 compared to 71 for males, the current pension laws are in favor of females by permitting

early retirement in earlier ages than males. The proposed pension system should take in consideration these facts, and mandates the spouse of non-working females to pay a low contribution rate to guarantee a pension at old age. Further, the maternity insurance would encourage hiring more female by private sector, as well as the females would be more able to participate to the labor force. In addition, the system should allow for voluntary contribution, which gives chance for non-working females and employees in informal sector to benefit with their families from the pension system. Meanwhile, the system should adjust the parameters of retirement and benefits of females to be equal to men, in order to minimize the gender bias and to have more actuarially balanced system.

5.3- The Alternative Proposed Pension System

Upon the previous reviews, discussions, and the given data, we believe that the most proper pension system for the Palestinian case is a centralized public control that is administered by an independent institution. Further, the most proper proposed pension system would be mandatory multi-pillar system, and inclusive, which provides coverage against the risks of old age, death, disability, maternity, work injuries, and unemployment. Most of the literature review, including ILO, Bar (2006), Hauff (2002), Holzmann and Hinz (2005), and Kulu and Reiljan, (2004), share the principles of having financially balanced, affordable, flexible pension system that provides adequate income and protect from the available risks of poverty by fair redistributive means. Thus, the future proposed pension system should respond to the privacy of the Palestinian case and needs; considering the outlined principles.

According to priority order of Brown (2008), the priority objectives of the Palestinian case are the mitigation and alleviation of poverty among the elderly population, then to help citizens maintain acceptable living standards after retirement. The next priority is the solidarity followed by the guarantee of significant minimum benefits. In accordance, ILO outlines three main interlinked challenges for social security in all nation contexts: 1) to cover all in need, 2) to provide benefits adequate in both social and economic terms, and 3) to secure sustainable financing. Thus, these should be the priority objectives for any future Palestinian System.

Meanwhile, ILO suggested “the Integrative approach” strategy as the starting point for the low-income countries, in which the available social assistance and benefits in the country have to be coordinated with other supportive measures in order to enhance the capabilities of poor people and reduce poverty over the long term. Then, the other priorities of social security would be classified upon “the social security staircase” metaphor as a strategy of extending social security that fits to all countries in all stages of development as discussed in the literature review.

In this framework, the following proposed schemes of a multi-pillar system describe the main parameters of the comprehensive social security system that regulate the benefits, and financing sources, in order to achieve the objectives in priority order as mentioned above:

5.3.1- The First Pillar: Mandatory Universal Coverage

According to Whitehouse (2007), various forms of safety nets that aim to prevent poverty among older people have been applied nearly in all countries, which are known mostly as first-tier or redistributive schemes. These four types are basic pension schemes, separate targeted retirement-income programs, minimum pensions within earnings-related plans, and social assistance programs, which are all mandatory and provided by the public sector. Most of OECD and Latin American countries provide targeted public first-tier scheme, which could be accompanied with other basic or minimum pension scheme. Most Eastern European countries and central Asia have shifted from basic pension to a minimum pension through fundamental reform to NDC system. All Arab countries in Middle East and Northern African (MENA) region provide only minimum pension for contributors of DB system, which are almost limited to public servants. However, the percentage of the minimum pension is highly diversified among countries. In the OECD countries, the average minimum pension is 31 percent of average earnings, compared to two thirds in Islamic republic of Iran, above 40 percent in Luxembourg and Portugal, and only 7 percent in Egypt (Whitehouse, 2007).

In the proposed pension system, the first pillar should be universal, which offers a basic salary for those over the retirement age and do not have any income resources that exceed the basic salary. The reason for choosing the basic salary for those ineligible for a pension is the low coverage rate of participating to a formal pension system due to high informal sector, low participation of females, and high unemployment rate, in addition to the high poverty rate. While, the cost of the scheme is expected to be low as the number of needy old aged population currently is comparatively small. In addition to the basic salary, there would be a minimum pension for those eligible to pension, which means that contributors of old-age scheme only will benefit from the minimum pension in cases of old age, disability, and death (for their survivors).

The proposed finance source of this scheme of the universal scheme is payroll taxes of employees in formal sector in addition to the charity grants. As mentioned above, the expected cost of this proposed universal scheme is low, given that the rate of old-aged over 60 year old out of the total population is only about 4.4 percent as in 2014, which has been decreasing since 1997 from 5.1 percent, but it is expected to start increasing gradually from

2020's according to the UN projections. Further, part of old-aged are already beneficiaries of public pension system that are guaranteed by the minimum pension. While, others are expected not to apply as they are ineligible, especially, the social norms in Palestine generally do not accept receiving social assistance unless the person is poor.

Moreover, there exists a number of social assistance programs that support old-aged that are organized by several institutions and NGOs. The largest are that of the Ministry of Social Affairs (MoSA) and UNRWA, which are supposed to be unified under the universal scheme. In any case, the benefits of this scheme should not equal to or be higher than the pension provided for beneficiaries of public pension systems or the minimum pension to keep the incentives of contribution to the system. Moreover, the survivors of the beneficiaries of this scheme are not legitimized to have a salary after the death of the beneficiaries. Given that the basic salary is legitimized after the retirement age only. In order to encourage people working more after the official age of retirement to increase their pension or to be eligible for a pension, the estimated age for basic salary eligibility under current conditions is 65, after which the person would not be able to work and it comes later than the eligibility age for a pension⁸⁹.

In fact, considering the social security as a human right as emphasized by Piron (2004) and Spicker (2013) as well as its introduction in the international conventions and resolutions, particularly, articles 22 and 25 of the "Universal Declaration for Human Rights" in 1949, force the governments to organize a social security system that guarantees the minimum benefits. Moreover, many researchers like Piron (2004), Sholkamy and Hallez (2010), Bouget (2003), and Robert Zoellick (the World Bank's former president) called for the international support and solidarity for poor countries and in special cases of disasters.

In the Palestinian case, where the financial market is very fragile, in which the performance would be very hard to control and guarantee, some type of universal coverage based upon PAYG system is essential in order to protect the vulnerable groups. As argued by Sayre and Olmsted (2004), the high level of informal labor will lead to exclude about 30 to 50 percent of workers from coverage in any fully funded plan, which decreases the effectiveness of that system. This rate of informal labor is expected to be higher now.

⁸⁹ The retirement age currently is 60, while in this proposed pension system it is 62 until 2025, then it is supposed to be increased to the age of 65 years old.

Moreover, the very low participation rate of females in labor force in Palestine will decrease the coverage rate and expose old women for poverty as well.

5.3.2- The Second Pillar: Mandatory PAYG Defined-Benefits

The second scheme is recommended to be earnings-related PAYG scheme with an actuarially based benefit reduction factor for early retirement, as well as providing incentives for continuing contributions after the age of retirement. This scheme of PAYG should meet the international standards by ensuring extending coverage in two dimensions with adequacy. The proposed schemes are old age scheme of old-age, survivors, and disability benefits, maternity scheme, and temporary unemployment scheme for contributors.

The demographic structure advantage in Palestine is important and suitable for PAYG systems as it has very large rate of youth population compared to very small rate of old age population, which means it has high demographic dividends. The retirement age is supposed to increase from 60 to be at least 62, then to be increased to 65 in 2025, as the life expectancy has an increasing trend in Palestine and to correspond to the international trend in this regard. The gradual increase in retirement age is recommended to reduce the impact shock on labor market that has already high unemployment. At the same time, the system should be corresponding to the individual heterogeneity to some degree regarding the retirement age taking into consideration the actuarial reduction for earlier retirement ages or incentives for surviving working careers at higher ages.

Concerning the benefits, the accrual rate should be determined more by demographic and economic factors as developed by the French and German PAYG systems, even if in a more simplified form. In this regard, Brown (2008) outlined that the system should be outcome focused, in which the benefit/ contribution structure should not encourage workers to evade participating, and/ or leave workforce early. Thus, the contributions rate should not be high in general to avoid any distortion in labor market or economic figures and to encourage participation of private sector; particularly, there is a high informal sector and fragile economy.

In accordance with the international attitude towards stabilizing the contribution rate in short- to medium-term, it is important to stabilize the contribution rate in the Palestinian

case as well. While, the value of benefits will depend on the environmental changes; particularly, the economic performance and demographic changes. In order to do this in an accepted and fair way, the accrual rate should compose a ratio determined by an equation built on an actuarial basis.

In this PROST analysis, I propose an accrual rate at 2% per annum that is assumed to be 1.8% in 2025, which are determined according to the given factors and compared to the existing public pension systems as well as the recently published social security system of 2016 for private sector. The total replacement rate should not exceed 80% with a minimum rate at 30% of the average salary or 700-800 NIS that equals to about 48-55% of the minimum wage, whichever is higher. While, the minimum replacement rate would be 27% in 2025 as the accrual rate would be reduced to 1.8%. The suggested accrual rate cannot be less than that of the existing systems to be politically accepted. At the same time, the suggested accrual rate at 2% is the accepted one of the related parties in the national social security committee that lasted long and difficult negotiations and discussions to agree on. Finally, it would be better to have similar accrual rate to the existing pension systems to be more comparable and to adjust the proper contribution rates.

On the other hand, the accrual rate is up to periodical change in the future that is supposed to be re-adjusted according to a new actuarial analysis to the system taking into consideration the benefits adequacy and economic and demographic changes.

At the same time, there should be a minimum and a maximum contribution rates, a minimum pension salary, and a maximum replacement rate for retirees, disabled, and survivors. In this regard, Whitehouse (2007) argues that having a ceiling for the pensionable salary that would be close to the average salary would prevent those with high income from having very high pensions compared to other contributors. Therefore, they will be encouraged to save more in voluntary DC system to increase their income.

According the World Bank study as mentioned by the literature review, the proposed contribution rate for the developing countries was between 10-15 percent. However, this is not applicable to the Palestinian case, where the wages are already low and the contributions and benefits are comparatively high. Even the employers and the fragile economic situation prefer the World Bank's proposal of low contribution rate; the international standards of social security impose increasing the contributions to meet

adequate benefits for the retirees and their survivors in a financially sustainable system. Even the maternity is mentioned in the labor law; deducting a contribution rate insures this benefit through a third party, which would be trusted and paying contributions would be compulsory to the employer.

In order to control the changes in salaries and protect the contributors as well as the system from the gaps of changes in salary through the working career, the career average of salary used to calculate the pension should be at least 10 years, while the recommended is 15 – 20 years with adjusting the value of salaries according to the inflation (Valorization) as determined by the Consumer Price Index (CPI), given that currently it is 3 years for public sector pension systems.

Longer career of average salary to calculate the pension has advantage of supporting the old-age employment, part-time working, and vulnerability in some jobs at late age. This will reduce the caveats of the employee regarding the low wage effects on his pension, particularly if this is accompanied with an actuarially decreasing replacement rate. On the other hand, valorization and linking pensions to CPI are important to keep the purchasing power of the pensions, which would protect the beneficiaries from changes in living standards after retirement. Thus, we propose the average salary of the last 10 years to calculate the pension that is supposed also to be increased to 15 years in 2018 and 20 years in 2025.

On the other hand, the data analysis of the labor force showed that there is a gap in income among the employees upon their personal socio-economic characteristics. In order to cover these gaps in income and to finance the new programs of the first-tier or unemployment programs, there should be a fair redistribution policy to realize the harmony in income and support the vulnerable groups. Currently, the personal allowance of 300 NIS (equals to about 79 US dollar) in the public pension schemes is paid to all beneficiaries regardless the pension level. In this regards, I propose to limit the payment of the personal allowance to be only for beneficiaries receiving income less than the poverty line in all schemes.

The Unemployment Scheme

As the occupation is the main reason of high poverty and fragile economy in Palestine, the international community has a responsibility to relief the Palestinians from poverty and

provide work opportunities for the vulnerable Palestinians until the end of the last standing occupation in the world, and that was the purpose of creating the UNRWA in 1948. This agrees strongly with Sayre and Olmsted (2004) in arguing that the unemployment in Palestine is difficult to implement by the state, since it is a function of the political situation, rather than a function of decisions by individual employers or industries. In this framework, I believe that a proper implementation for an unemployment insurance in Palestine has two ways. The first one is regular assistance programs through the ministries of social affairs and labor and UNRWA that are directed to long-term unemployment and new entrants of labor force. These programs are supposed to be financed by the payroll taxes and donor states through the general budget and UNRWA. Meanwhile, the second way is through an insurance program for the employed labor force that would cover them for short-term unemployment periods through the PAYG component of the proposed pension system. The expected beneficiaries of the unemployment insurance are those in the formal sector as they are required to pay contributions. However, introducing unemployment insurance could be an incentive to extend coverage over the population as it is important for most of the employees in Palestine because of the economic instability.

5.3.3- The Third Pillar: Voluntary Defined Contributions (DC)

The third scheme is recommended to be a voluntary DC system at a minimum rate of 3% that is paid by the employee; while the government is supposed to contribute by 1% for those with less than the poverty line. The DC contributions are transferred and accumulated to private accounts to be invested by professional investment managers in portfolios that have access to the international markets until the retirement age, where these contributions would be claimed anytime upon request and would be received in the next fiscal year of claiming.

Any additional voluntary contributions should be encouraged by tax incentives until a maximum amount, then any further additional voluntary contributions would not benefit from the tax incentives. Additional incentives from the government should be given by matching contributions for those with low income under the poverty line to encourage the participation of labor working informally and enhance poverty alleviation efforts. The scheme aims to maintain the standards of living at retirement, which is also supposed to

provide additional benefits by using the accumulated funds, like loans for house and education of children. These accumulated contributions can be received as lump-sum any time upon request or as annuities at the end of service at retirement age, death, or disability.

5.3.4- Funding

As the proposed system is a multi-pillar system, a diversified source of funding is necessary. In this regard, Brown (2008) called to diversify the sources by a combination of taxes, contributions, and investment income, in order to have affordable and sustainable total cost of the system as a principle for the social security systems.

Therefore, the universal component is supposed to be financed from the payroll taxes on the PAYG basis, which is more acceptable to workers, as it is seen closely related to a benefit that they may receive later. While, the work-based component will be financed through monthly contributions from both the employees and employers as a percentage of income. According to recommendations of the World Bank to the developing countries, the contributions should not be high to avoid any distortion on labor market and the purchasing power, particularly, with high level of informal labor and low labor force participation among some groups of the population as females. Moreover, as long as there are high risk and instable environment in Palestine, low taxes and contribution rate are recommended to attract investments in local market and keep stable economic growth and labor supply.

Taking into consideration the existing systems and the regional pension systems, the suggested contribution rate to finance this component should not exceed 18%. The suggested contributions rates are almost similar to those introduced by the new Social Security Law of 2016 as they were set by the related parties after long negotiations. Furthermore, the total contribution rate goes alongside the global average of contributions rates. As the contribution rate is one of the most important parameters of the pension system that determines the decision to participate to a pension system, I would test different contribution rates in different unemployment scenarios to know their impact on the sustainability of the system and adequacy of the income of pensions. Therefore, I propose to determine the contribution rate of the employers at 9-11% and determine the contribution rate of the employees later upon the analysis. This does not prevent the policy makers from

changing the distribution of contribution rate between employers and employees, but we focus here to explore the total contribution rate that is necessary for the optimal pension system.

In principle, the proposed contributions rate include 15-19% (6-8% from the employee and 9-11% from the employer)⁹⁰ for old-age scheme, 0.2 from the employee and 0.3% from the employer to finance the benefits of maternity, and 0.3% from the employee and 1.6% from the employers to finance the benefits of work injuries including rehabilitation expenses and wage compensation during injury period caused by jobs.

In order to participate in financing the minimum income complement of pensioners at old-age scheme the government is supposed to contribute at 0.5% for those with salaries under the deep poverty line, while the retirees with high income could participate with low contribution rate at 1% of the part of their pensions that exceed certain limit. The threshold of the pensions that is subject to deduction of 1% would be depending on periodical evaluation to the average income and the status of the fund.

Furthermore, to encourage extending coverage over the informal sector, and encourage the small enterprises, some reduction of contributions should be made for those with income less than poverty line including self-employed, who could be exempted from the employee's portion until a certain level.

Concerning the unemployment coverage, the high rate of unemployment in Palestine has been a long problem since it had been occupied in 1948. The conditions under occupation are not natural, which decrease investment opportunities and sustainable development. Further, Palestinian economy has been exposed to negative shocks continuously, which definitely increase the unemployment opportunities to labor force. The unemployment insurance cannot work properly and on large scale of population in such high risky conditions. Thus, I believe that the most proper way to introduce the unemployment insurance is that to be limited to contributory insurance and would be applied on formal

⁹⁰ Further, the contribution rate could be varied upon salary level, for those less than the poverty line (2,300 NIS), the contribution will be 5.5% from the employee, 9% from the employer, and 0.5% from the government. For higher salaries until the average salary the contributions rate will be 6-8% from the employee, 8.5% from the employer, and 0.5 from the government. While, those with higher salaries will contribute 6-8% from the employee and 9-11% from the employer. This may encourage to have higher salaries than the deep poverty line or poverty line.

sector, while the benefit would last for a limited period of the unemployment as it could last for longer periods in Palestine. While, employment programs can be introduced to those with long-term unemployment and new graduates under relief and assistance programs.

Thus, I propose for the earnings-related unemployment insurance 1% contribution rate from the employee, in which the benefit is provided to the contributors for a period determined upon their contribution period and amount. The second way is universal and provided through unemployment programs that target creating job opportunities in private sector and projects that support the production and economic growth in Palestine. These programs could target some employees in the enterprises that are committed to pay contributions regularly. These programs are supposed to be financed by payroll taxes and donors for the reasons explained earlier, particularly the political reasons. Moreover, any creation of job opportunities outside the Palestinian labor market is preferred to contribute to the Palestinian pension system through bilateral agreements with hosting countries, particularly Arab countries and Israel. In this regard, we have the Jordanian successful experience. Otherwise, the DB scheme could be open voluntarily for any Palestinian to commit him-/ herself to participate according to a particular schedule of salaries to determine contributions with a minimum wage.

Off course, this type of flexibility of contributions with easier movement inter-schemes needs longer working career period to have the average salary to calculate the pension.

In addition, I suggest adding the family allowances of the legitimate survivors to the components of the pensionable salary, as they are legitimate to receive benefits at the death of the beneficiary, and the pensioners would receive family allowance also.

The other way of family allowance, I suppose adding a mandatory low contribution rate on the employees of 0.06% for each legitimate survivor, including spouse, kids, dependent sisters and parents. The first two children are recommended to be exempted. This would balance part of the expenses of large scale survivors, given that the public pension schemes are committed to pay family allowances as in the civil service law and they also pay benefits for eligible survivors without including these family allowances to the components of the pensionable salary. This method could be better than including the family allowance to the total salary. According to this method, the low income employees would pay less

than those with higher income, given that this percentage was set to be equal to the deducted contributions that would be imposed on the family allowances for the average income. Further, the employers would not tolerate more contributions for the family allowance.

Table 84: Summary of the Assumed Parameters of the DB PAYG Scheme

<i>Scheme</i>	<i>Employee</i>	<i>Employer</i>	<i>Gov.</i>	<i>Pensioners</i>	<i>Total</i>
<i>Universal</i>	The sources of financing this scheme are payroll taxes, donors, and the charities.				
<i>Old-age</i>	6 - 8%	9 - 11%	0.5%*	1%**	15 - 19%
<i>Maternity</i>	0.2%	0.3%	0	0	0.5%
<i>Work Injuries</i>	0.3%	1.6%	0	0	1.9%
<i>Unemployment</i>	1%	0	0	0	1%
<i>Total</i>	5.5 – 9.5%	10.9 - 12.9%	0.5%	1%	18.4 - 22.4%

The author.

Notes:

* The proposed government contribution rate is only for those with income under the deep poverty line that is estimated at 1,800 NIS, in order to finance the minimum income complement at old-age DB scheme.

** 1% of the pension that exceed certain limit is supposed to be deducted from pensioners that have high pensions, in order to support the minimum income complement at old-age DB scheme.

- Some reduction of contributions should be made for those with income less than poverty line.
- Adding the family allowances of the legitimate survivors to the components of the pensionable salary, or adding a fixed contribution rate at 0.06% for each legitimate dependent after the second child.

On the other hand, for those with salaries higher than the maximum limit of contributions at DB system⁹¹, they have to contribute for that part of the salary in private account Defined Contribution system. Any additional voluntary contributions should be encouraged in a private account Defined Contribution (DC.) system, which would be open for all citizens. The participation is voluntarily and is preferred to be tax deductible to encourage the largest groups to contribute and register for tax administration as well.

In addition, I suggest establishing a National Welfare Reserve Fund that is financed mainly by Zakat⁹² and other individual donations as charities, grants, and charities. The

⁹¹ The maximum limit monthly salary for DB PAYG scheme is set at 5,000 NIS (equals to \$1,315 USD) as they represent about 97.5% of females and 83.4% of males according to the data of LFS of 2015.

⁹² Given that in Islam, Zakat is proposed on Muslims annually on saved wealth and income of harvest and other categories of commerce at 2.5 percent, which could generate a

establishment of a National Welfare Reserve Fund is expected to contribute significantly to finance some benefits of the system, particularly the old age and the development of other programs. At the same time, given that the Palestinian society has many charity associations and large informal assistance activities, a plan to unify these programs in order to redistribute these funds more efficiently according to priorities and clear policy would finance a very high ratio of the social security programs, particularly the old-age population. Recently, the Ministry of Social Affairs (MoSA) has launched a step towards unifying the assistance by establishing a national poverty database that is shared between all NGOs and public institutions in order to integrate data, determine priorities, and guarantee fair distribution of assistance. However, an independent institution such as a pension agency could be more trusted to administer these programs in integrated manner with other social security programs in cooperation with MoSA.

great amount of funds resources. Even Zakat is voluntary, encouraging it through such a way has other dimension that is to control the charities distribution efficiently and in transparent way.

5.4- The Pension System Analysis Using PROST Model of 2015

This section aims to test and assess the overall financial balance of the proposed pension system for private sector with different economic scenarios and some options of parametric reform of contribution rates. The results would provide an indication from technical side for the sustainability, affordability, and adequacy of the system; besides, it assesses the impact of the possible reform options to achieve these goals. The researcher used Pension Reform Options Simulation Toolkit (PROST) model of the World Bank depending mainly on the data of Labor Force Survey (LFS) of 2015 annual results. PROST model has been widely used in more than 90 countries that have cooperation with the World Bank to support World Bank pension policy dialogue in these countries and to support the countries to perform technical studies to assess their pension system more frequently⁹³. Further, it provides the possibility to model a single year cohorts and to track them down over time. The most remarkable advantage in PROST is the ability to look at pension system through it as a whole as well as at individuals over a long-timeframe.

5.4.1- The Methodology of PROST Analysis

As mentioned above, PROST projects the overall data of the pension schemes as well as individual profiles, depending on the individual data of the cohorts at the base year through a year-by-year cohort methodology. This methodology depends on replacing generations annually according to demographic and coverage rate assumptions. PROST processes data in terms of single-year age cohorts, where the starting age is age 0 for infants younger than 1 year old, and the maximum age is usually set in the interval between 75 and 100 years. Also, the macro-economic assumptions and schemes' provisions and parameters are among the determinants of future expenditures and benefits. Besides, the rate of return assumption on the investments depended on the past performance, the economic figures, and the investment assumptions on future economic growth and wages development. PROST model allows the user to test different structures of pension systems and gives many reform options that make the model easier and flexible for usage to meet the changes

⁹³ Another PROST analysis would be performed to the public sector by the supervision of experts from the World Bank in cooperation with the team of PPA, which is provided as part of an assistance program for the Palestinian Authority.

of the systems over time and to be used in most of countries. It is also possible to test a pension system that is applied over total population scale, public servants scale, or closed group scale. This flexibility is offered through the variety of options, whereas each option uses specific formulae that form models for calculating each of; Population Projection, Demographic Structure of Contributors and Beneficiaries of the System, Finances of Mono-pillar PAYG, Finances of Multi-pillar System, and Individual Retirement Accounts that may require different data. As the study focuses on testing the DB scheme only as explained in the assumptions for the study purposes, the first three groups of models were in use by PROST analysis, while the two others were excluded.

For example, Population Projection model has four main models that used to determine the population projection and pyramids, life table, life expectancy changes, and summary of population projections.

In the first model, the input $P(a, t_{base\ year}, g)$ is the population at the beginning of simulation, $m\%(a, t, g)$ is probability of dying, $f\%(a, t)$ is fertility rate, and $im(a, t, g)$ is net immigration.

While, the outcome of population projection is matrix $P(a, t, g)$, where a particular element stands for population of age a and gender g in year t , given that non-infant population ($a > 0$) at time t is the sum of (a) the population surviving from the last year and (b) the net immigration.

$$P(a, t, g) = [1 - m\%(a - 1, t - 1, g)]P(a - 1, t - 1, g) + im(a, t, g), \text{ for } 0 < a < a_{max}$$

If the probability of dying at the last age $a = a_{max}$ is not 100%, then PROST will overwrite to be 100%. Then, the population at age 0 is calculated in two steps using other models; the first for total number of newborns, followed by calculating the gender ratio.

Likewise, each group of models mentioned above has sub-models to calculate the specific data in PROST model⁹⁴.

⁹⁴ For more information on the used mathematical formulae of the PROST model, please review the calculus for PROST index.

Thus, we find PROST is a complicated model with many mathematical formulae that make the model more sensitive to the data entry, particularly on the long-term. Besides, PROST is under continuous development upon the needs of users and to be more adaptive to various pension systems that enables it to be applicable to most cases of pension systems. For example, the earlier versions did not deal with lump-sum payments in details; while, now it is possible with options to convert to annuity.

The base year is the starting date of the analysis, at which the data should be determined to have the results at the end year. For this study we prefer to use the most recent available data for the base year as at the end of 2015, while the end year is 2080, given that the change in data between the base year and end year will be applied linearly to determine the value at each year. More years can be added in between the base year and end year, if it is necessary to give some indications or changes in data. This assessment aims to learn the financial situation of the proposed pension system for private sector in Palestine over the long-term and on total population scale.

Regarding the data, the used data are that of LFS of 2015 and the needed demographic and economic data as acquired from United Nations (UN) and PCBS. Fortunately, PCBS has a recent and reliable database that could provide the most recent economic framework and figures. Besides, the demographic data and projections were available at the UN database, which were reviewed and compared with the previously used data in previous studies. Further, we depended on some assumptions and projection factors as determined by actuarial study of ILO of 2014 for the harmony of the results and to be comparable with. LFS of 2015 provides raw data of the labor force of representative sample of the total population as at the end of 2015. In this regard, the LFS data is analyzed and classified to have the needed details of the labor force and their socio-economic characteristics as required for PROST model.

5.4.2- The Main Assumptions of the Analysis

Publishing SSL of 2016 recently has separated the private sector and non-governmental organizations from scheme II of public pension system, which remained to public sector employees only with limited number of NGOs that had already joined the system before publishing SSL. This study focused on a pension scheme that would include the private

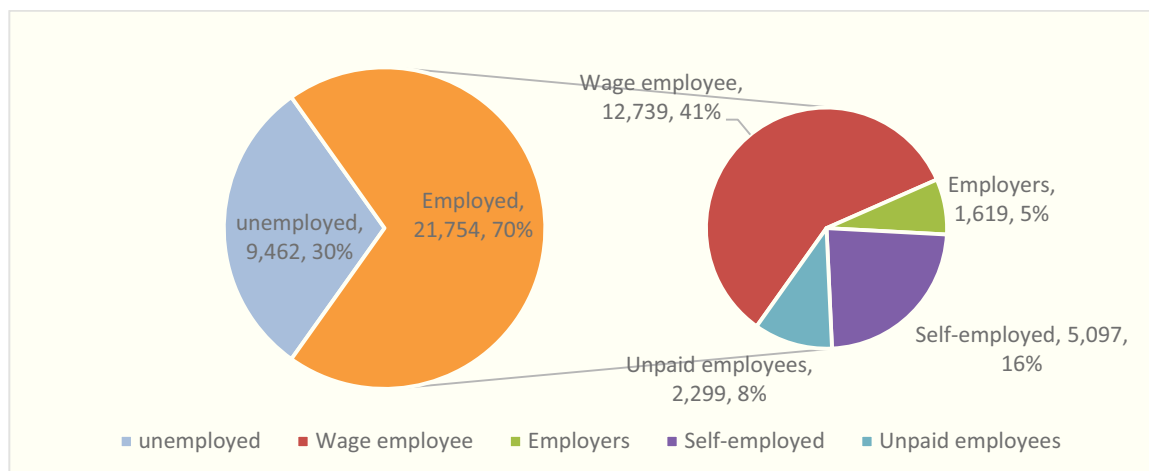
sector as it is the majority of the population. However, the problem in studying any pension system of private sector in Palestine is the lack of previous data as it would be applied for the first time yet. While, the population of non-governmental organizations that have joined the public pension system recently was limited to some universities and municipalities since 2011 only, which does not represent the rest of the private sector population. Therefore, only the data of the current retired beneficiaries can be considered as an indication for pensions in the model.

Annual data of LFS of 2015 is the most recent available data that represents the Palestinian private sector at the time of the study. Therefore, we assume that the information and statistics in the LFS would be good source of data to estimate the wages and pensions of the future contributors in SSL or any other proposed pension system for private sector. Further, the demographic and economic assumptions are considered the national demographic and economic figures of the whole population.

Although the supposed system is a multi-pillar system, the study focuses on testing DB PAYG scheme only. Thus, the system is considered as mono-pillar in PROST model. On the other hand, this analysis also excluded the Defined Contributions (DC) component from the analysis because it is proposed for higher income contributors as voluntary for part of the salaries that exceeds certain limit. Further, the private accounts would not affect the financial balance of DB system, rather the individual wealth.

Regarding the contributors, we assume the population of the study is the labor force in private sector and in non-governmental institutions, where the public sector employees were excluded as they have their mandatory public pension system. After dropping observations of public employees from the survey, the remaining observations are 93,044 out of 98,864, where 33.55% of them are in labor force forming 31,216 observations. Unemployed labor force form 30.31% of those in labor force, 27% for males and 44% for females. Thus, the employed labor force of non-governmental sector is 21,754 observations, 58.56% of them are wage employees, 7.44% are employers, 23.43% are self-employed, and 10.57% are unpaid family members. On the other hand, 15.05% of the employees are working in Israel and Settlements, and only 0.54% are working abroad.

Figure 157: Summary of Labor Force Observations by Employment Status as in 2015 LFS



The author by data of LFS of 2015.

In this study, only the labor force with regular wage are considered as the formal sector that would join the system, while others are considered as informal sector that are not able to participate to a pension system. Further, we excluded also observations that lack wage data as they would corrupt the indications. Thus, the remaining labor force in the formal labor that are included in the study and have wages are 12,354 observations, which represent about 56.79% of the employed labor force.

Upon the statistics of the LFS, we will consider the informal labor is at least 43.21% of the labor force as this percent represents the employed labor force without wages, given that others could be active in shadow economy and considered out of labor force, which would increase the percentage of informal labor of the labor force. The contributors' numbers are represented by the labor force with wage in the LFS of 2015 that was multiplied with a factor to get their estimated numbers out of the population.

The pension fund balance is estimated with a minimum amount at 250 million USD, which includes the contributions of Palestinian employees in large enterprises, given that a study in 2006 estimated the savings of these employees at about 160 million USD. However, if we consider the labor working in Israel and abroad, the fund balance would be much higher, given the facts that their salaries are comparatively higher and some of them have accumulated contributions for more than 20 years. For the study purposes, we suppose that contributions collection rate is 100%.

Regarding the wages, the assumed minimum wage was set at 700 NIS, which is about the half of the official minimum wage as it reflects reality of the data⁹⁵, given that large ratio of employers are not committed with the minimum wage. Further, the salaries were calculated by gender from the daily wages of the labor force as standard monthly income of 26 days, in order to avoid the impact of vacations in the month of the survey. Further, contributors were classified according to the level of income, given that the average annual salary is 32,643 NIS (\$ 8,590 US Dollar), compared to 34,177 NIS (\$ 8,993 US Dollar) for males and 23,458 NIS (\$ 6,173 US Dollar) for females.

Regarding the macro-economic assumptions, as the performance of GDP in Palestinian is highly fluctuating and hard to expect on the long-term because of the sensitivity to political instability, we considered the GDP to remain positive depending on the historical data. Thus, we expect it to continue fluctuating with an average of 3%, which would decrease to 2.5% in 2020, then to increase gradually to 3.5% in 2050 and 3% in 2080. While, the inflation rate is set at 2.5% that is close to the world's inflation rate as described in chapter one. Thus, the impact of GDP and inflation on the long-term are reduced to the minimum. In the light of these facts and as the proposed system is universal, we assume that all mentioned formal labor force aged between 18 and 62 years old will participate to the pension system mandatorily or voluntarily. The length of service at retirement was calculated as standard periods depending on the average employment years, which start from the age of 18 to the retirement age of 62 then 65 from 2025. Then, we subtract the unemployment rate as percentage of the average working career, which is calculated as the unemployment rate multiplied with the years of service. Thus, the unemployment rate impacts the replacement rate as it determines the total service period.

In this study as the unemployment is almost high and highly fluctuates alongside the political and economic changes, we assume the future unemployment rate as in 2080 in three scenarios; optimistic, average, and pessimistic. We will try to reveal the impact of different unemployment and contribution rates on the adequacy of the pensions of beneficiaries as well as the general financial balance of the system. In this framework, the optimistic scenario implies an average unemployment rate at 10%, compared to 20% and

⁹⁵ The employees with a monthly wage less than 700 NIS form about 18.9% of males and 23.9% of females, while those with less than 1,450 NIS form about 27.5% of males and 48.3% of females.

30% in the average and pessimistic scenarios, respectively. However, the unemployment rate of females was much higher than males, which was taken in consideration. Although the indications of Gaza Strip and West Bank are different currently, they were ignored and the study has taken the average of whole population by gender, given that the gap between Gaza Strip and West Bank is not permanent and is more related to the imposed restrictions on Gaza Strip and the political conditions that would be changed in anytime. Further, people in West Bank or abroad can move to live in Gaza Strip and vice versa.

At the same time, we also test four cases of contribution rates for each scenario of unemployment that would be in the first three cases 4%, 6%, or 8% from the employees and 9% from the employers, while it would be 8% from the employees and 11% from the employers in the fourth case. The results would be helpful to see the impact of different contribution rates and labor market conditions on the income level and the sustainability of the pension system.

Table 85: Assumptions Summary of the PROST Analysis

	The assumptions	Explanation
1	Population of the study	Waged private sector and NGOs employees as in LFS of 2015, excluding public sector employees. 12,354 observation (56.79% of the employed labor force)
2	The System Type	Focuses on testing DB PAYG, excluding DC and universal schemes
3	Pension Fund Balance	250 million USD, the contributions of Palestinian employees in large enterprises as they represent the formal sector at first stage.
4	Contributions collection rate.	100%
5	The minimum wage	700 NIS, which is about half of the official minimum wage, but it reflects more the reality of salaries as in the survey.
6	The Maximum monthly wage	5000 NIS, as they represent about 97.5% of females and 83.4% of males according to the data of LFS of 2015.
7	Salaries	Were calculated by gender from the daily wages, considering the monthly working days are 26 as standard for all.
8	Data of study	LFS of 2015 for contributors' personal socio-economic data, UN demographic data for population data, and the national demographic and economic statistics as in PCBS for demographic and economic assumptions, respectively.
9	GDP	The assumed GDP is 3% with some changes between 2.5 and 3.5%, as the expected performance in expected to continue fluctuating with as average of 3%. Thus, we reduce its impact to the minimum.
10	Inflation Rate	It is assumed to be close to the world's inflation rate at 2.5%.
11	Working ages	It is assumed to be between ages 18 and 62 until 2025, then the retirement age is assumed to be raised to 65 from 2025.
12	Unemployment rate	The assumed are 3 scenarios of unemployment rate; (optimistic at 10%, average at 20%, and pessimistic at 30%).
13	Contributions rates	The assumed contributions rates are in four scenarios; (4+9%, 6+9%, 8+9, and 8+11%).

The author as assumed.

5.4.3- The Results of the PROST Analysis

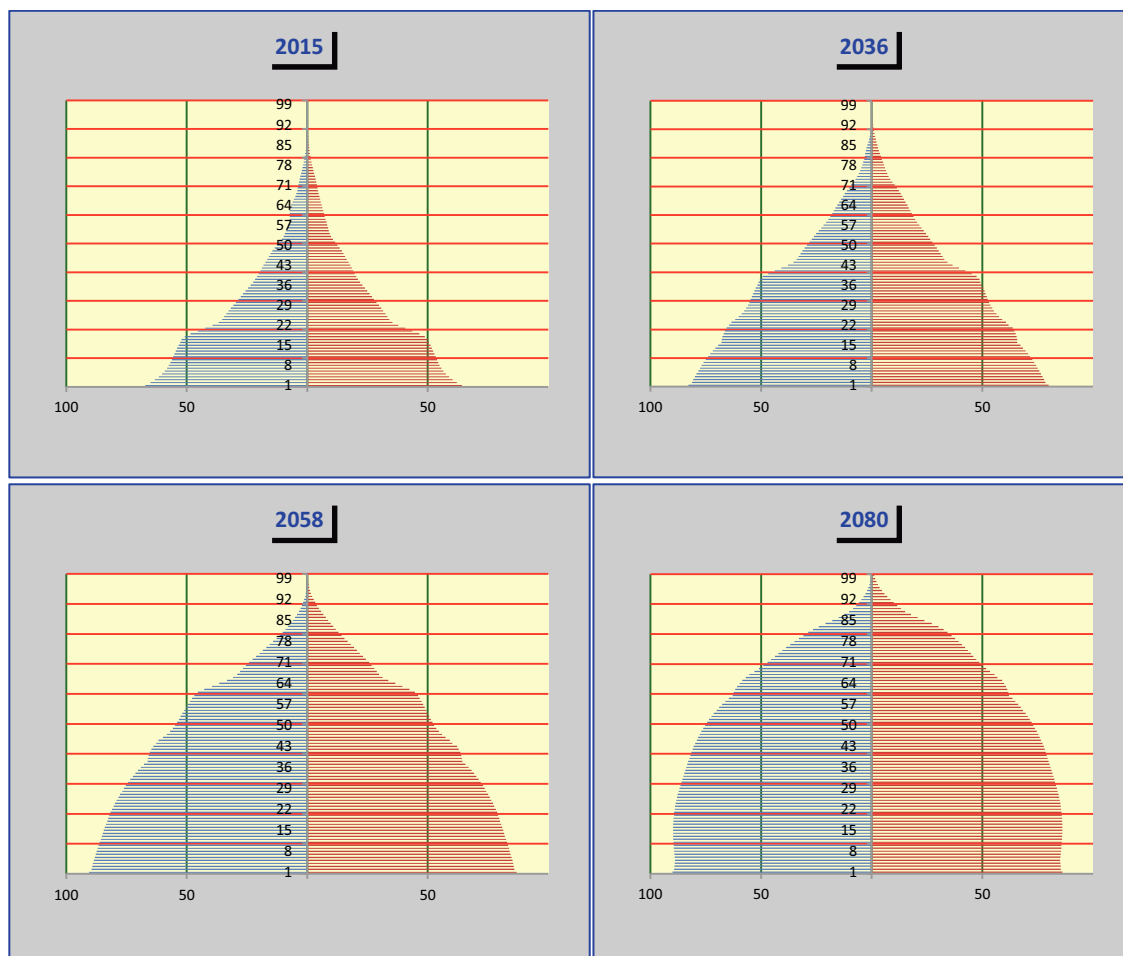
Under the given the demographic and economic figures and projections, we will explain here how different are the results of our analysis of the proposed pension system in three different economic conditions and four different contribution rates.

As high unemployment rate and low labor participation rate to formal labor are the most economic problems in Palestine, we decided to check the impact of the unemployment rate on the sustainability of the pension system and the level of income of the beneficiaries. It is important to understand the impact of each factor and how to react in order to protect beneficiaries from poverty and secure an adequate regular income. However, the factors that impact the pension systems are several and change by time, therefore we assumed the other factors are fixed unless it is mentioned in the assumptions above.

5.4.3.1- Demographic Projections

First of all, the demographic change in the population structure is clear towards flatter pyramidal shape, which indicates to older population. As described earlier in chapter one, the current Palestinian population structure is advantageous regarding the demographic dividends as the majority are young population, which means high productive population in the near future. However, this high demographic dividends would not last forever, but after a certain point of population growth the fertility rate would decrease, which would result in less young population ratio and the ages of productive population would be older. Further, the available and new generations of labor force need new job opportunities through more local investments and ability to work abroad. Therefore, it is important to evaluate the next phase and prepare the right conditions for the Palestinians to be able to be developed; otherwise, the majority would be in deep poverty with no job opportunity or social protection mechanism.

Figure 158: The Projected Palestinian Demographic Structure from 2015 to 2080 upon UN Estimations.



The author by data of UN as in 2015 using PROST model.

The projected demographic figures indicate to essential changes that would impact the population structure. Given that the population growth would decrease from 2.9% in 2015 to only 0.8% in 2080 and the life expectancy at birth through the same period would increase from 72 to 80.2 for males and from 75.3 to 84 for females. Then, the share of the population that are above the retirement age in population would increase from 3.7% in 2015 to 14.9% in 2080. Furthermore, the old age dependency rate would rise from 6.8% in 2015 to 23.4% in 2080, which would extremely increase costs of the pension bill. Fortunately, the demographic pyramidal shape in Palestine would not be inversed as in the case of the most developed countries, but the low income and production have a serious impact on the vulnerable groups from these projected demographic changes. Moreover, more investments are necessary to balance the demographic growth; otherwise, the

economic growth is far to achieve and larger groups of dependent population would be created for younger ages as the unemployment would be critically increased.

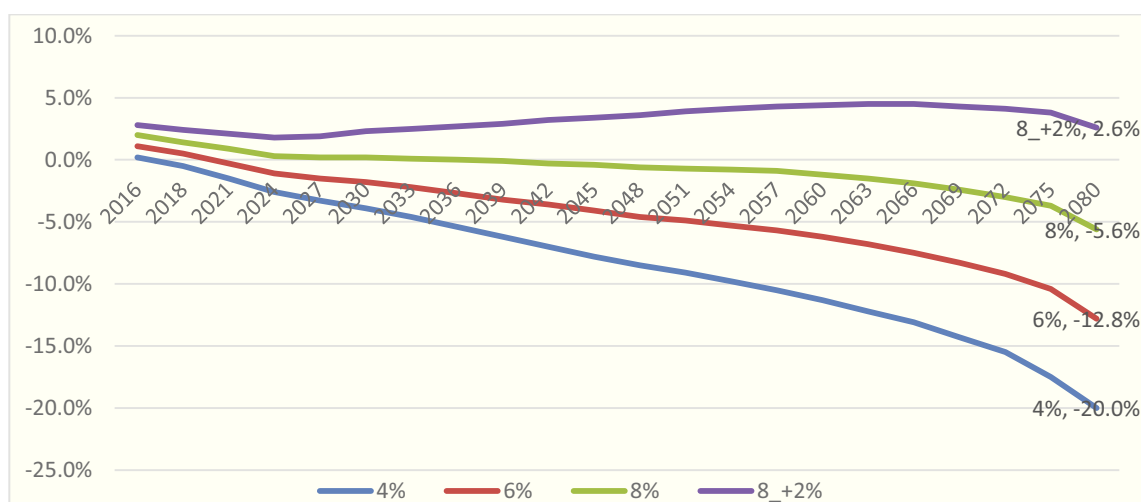
5.4.3.2- Financial Balance of the PAYG System

For sustainable pension system, financial balance should be the target through the process of adjusting the parameters of the system. The DB component of the proposed pension system is PAYG, in which the financial balance of the total revenues compared to the total expenses is essential. Under each of the three scenarios of unemployment rate, there are four different contribution rates that are tested to find the necessary contribution rate to reach the financial balance of the system in each case.

The First Scenario: High Unemployment Rate

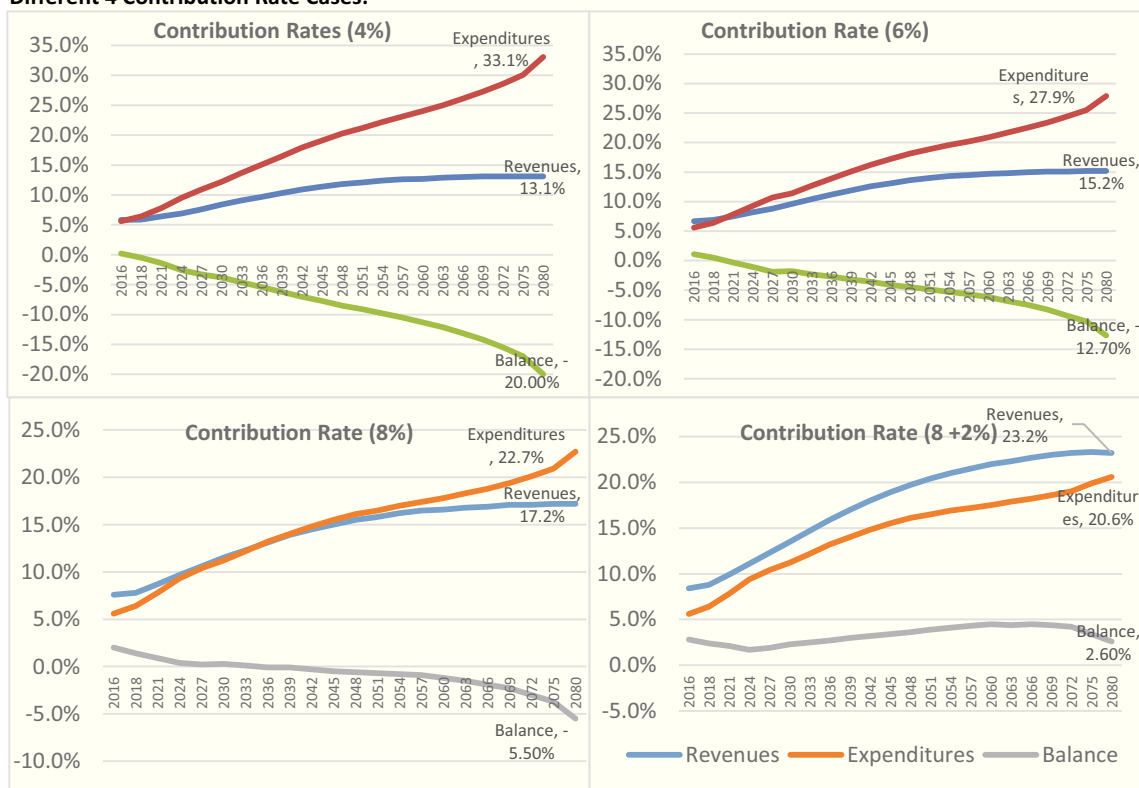
At the first scenario, we suppose the unemployment rate is high at 30%, which would cause shorter contribution periods of the beneficiaries that impact the total revenues and expenditures of the system and income of the beneficiaries after retirement. However, we review in this scenario the impact of different contribution rates on the balance of the system.

Figure 159: Projected Financial Balance of the Pension System in the Scenario of High Unemployment Rate at 30% by Four Contribution Rate Cases of (4, 6, 8, and 10%) through the period from 2015 to 2080:



The author by the LFS and UN data as in 2015 using PROST model.

Figure 160: Projected Balance of Expenditures and Revenues as % of GDP in High Unemployment Rate (30%) at Different 4 Contribution Rate Cases:



The author by the LFS and UN data as in 2015 using PROST model.

The results indicate that the financial balance of the system can remain positive by 2080 only at the contribution rate of 10% (8% from the employees and additional 2% from the employers)⁹⁶, which records a positive surplus at 2.6% of the GDP as total revenues exceed total expenditures.

For the other cases of contribution rates, the financial balance of the pension system would decline sharper with less contribution rates. At 4% contribution rate, the deficit of the system starts very early in 2017, which would accumulate the highest burden on the public budget expenses in this scenario. While, the contribution rate of 6% will delay the deficit to the year 2021 that is considered also so early. However, raising the contribution rate to 8% would delay the deficit for longer period as it starts in about 2040, then it continues declining gradually to reach -5.6% in 2080. The proposed pension system with less

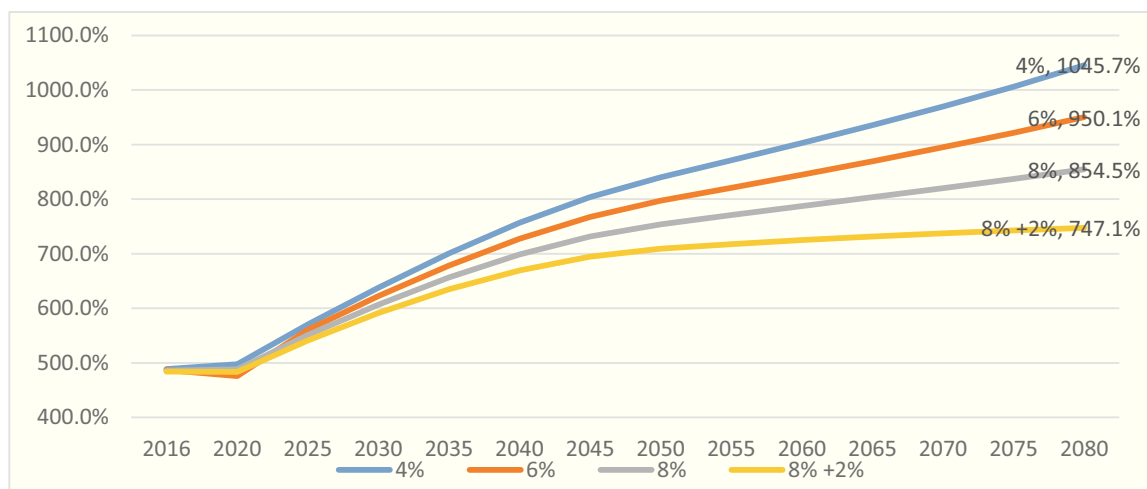
⁹⁶ The contribution rate in the 10% case would be distribution 8% from the employees and 2% from the employers in addition to the previously mentioned 9% to total 11% from the employers.

contribution rates of both 6% and 4% end in 2080 with a deficit at (-12.8) and (-20%), respectively.

However, it is important to focus on the revenues and expenditures of each case for better understanding the causes of the deficit. It is clear in the previous figure how sharp each balance line is declining, which reflects the gap between the total expenditures and total revenues.

As expected, the highest revenue of this scenario is at the highest contribution rate at 23.2% of GDP that decreases to 17.2%, 15.2%, and 13.1% at the contribution rates of 8%, 6%, and 4%, respectively. It is accepted that the revenues are affected directly by different contribution rates in positive relation. However, it is surprising to notice that the expenditures increase with less contribution rates. The highest expenditures are at 4% contribution rate at 33.1% of GDP that decreases to 27.9, 22.7%, and 20.6% at the contribution rates of 6%, 8%, and 8%+2%, respectively. This negative relation of expenditures with contribution rate mainly refers to more debts on the system in less contribution rate cases that impose more interests on funds. Thus, with less contribution rate, the debt is earlier and the interest is accumulated at higher amounts on the long-term. Another important indication on the balance of the system is the consolidated PAYG debt, in which PROST can estimate the cost of the total benefits for all current beneficiaries. The highest deficit in this scenario is at the case of 4% contribution rate, which results the highest consolidated debt of the system at 1,045.7% of the GDP as in 2080.

Figure 161: Projected Consolidated PAYG Debt as % of GDP with High Unemployment Rate



The author by the LFS and UN data as in 2015 using PROST model.

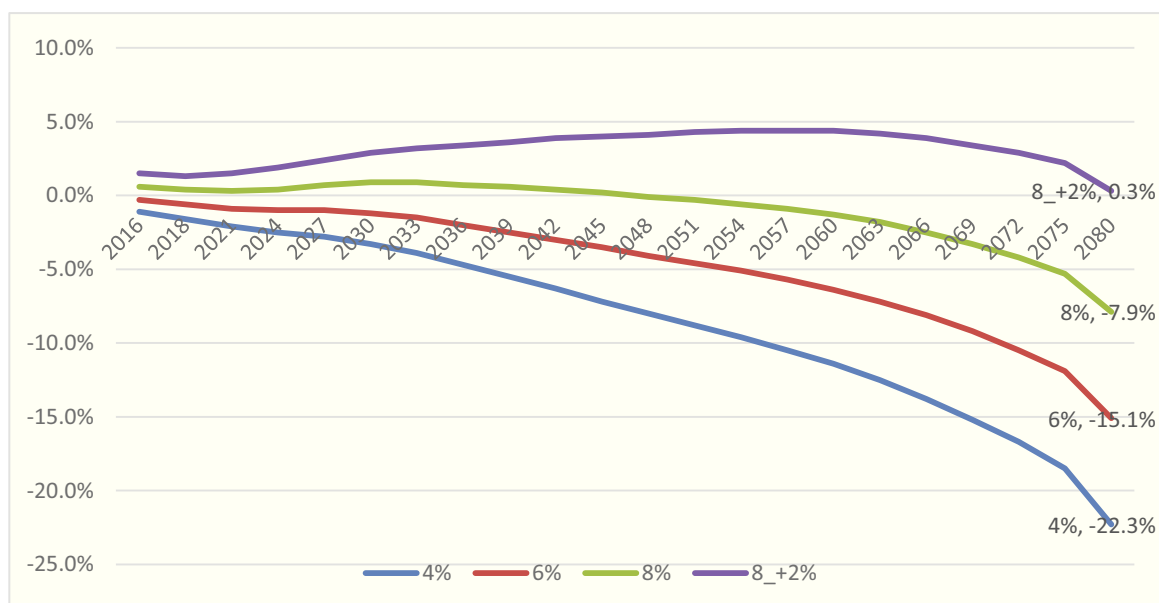
The consolidated debt of the system decreases with higher contribution rate, as the gap of the financial deficit is getting closer. Thus, the results show that it is 950% of the GDP at 6% contribution rate, followed by 854.5% and 747.1% at the 8% and 8%+2% contribution rates, respectively.

The Second Scenario: Medium Unemployment Rate

In the second scenario, we suppose that the historical average unemployment rate is the normal one that would be more realistic as it reflects the reality. The first to check is the balance curve of the system of the four different contribution rates. In the medium unemployment rate, the average employment period is expected to be longer compared to high unemployment scenario and better financial balance situation is expected; however, it is not the case.

The results indicate to higher expenses in the medium unemployment rate scenario and very similar revenue indications except that of the highest contribution rate of 8%+2%, in which the revenues are higher at 22.4% compared to 20.6% of GDP in the high unemployment rate scenario. Further, the 8% contribution rate case has in medium unemployment rate longer period of financial balance duration until 2051 compared to 2040 in the previous scenario of high unemployment rate. Thus, we conclude that the short- and medium-term impact of medium unemployment rate on the financial balance of the system is positive compared to the high one, while it is negative on the long-term. Further, the two other lower contribution rates have very negative financial balance along the period.

Figure 162: Projected Financial Balance of the Pension System in the Scenario of Medium Unemployment Rate at 20% by Four Contribution Rate Cases of (4, 6, 8, and 10%) through the Period from 2015 to 2080

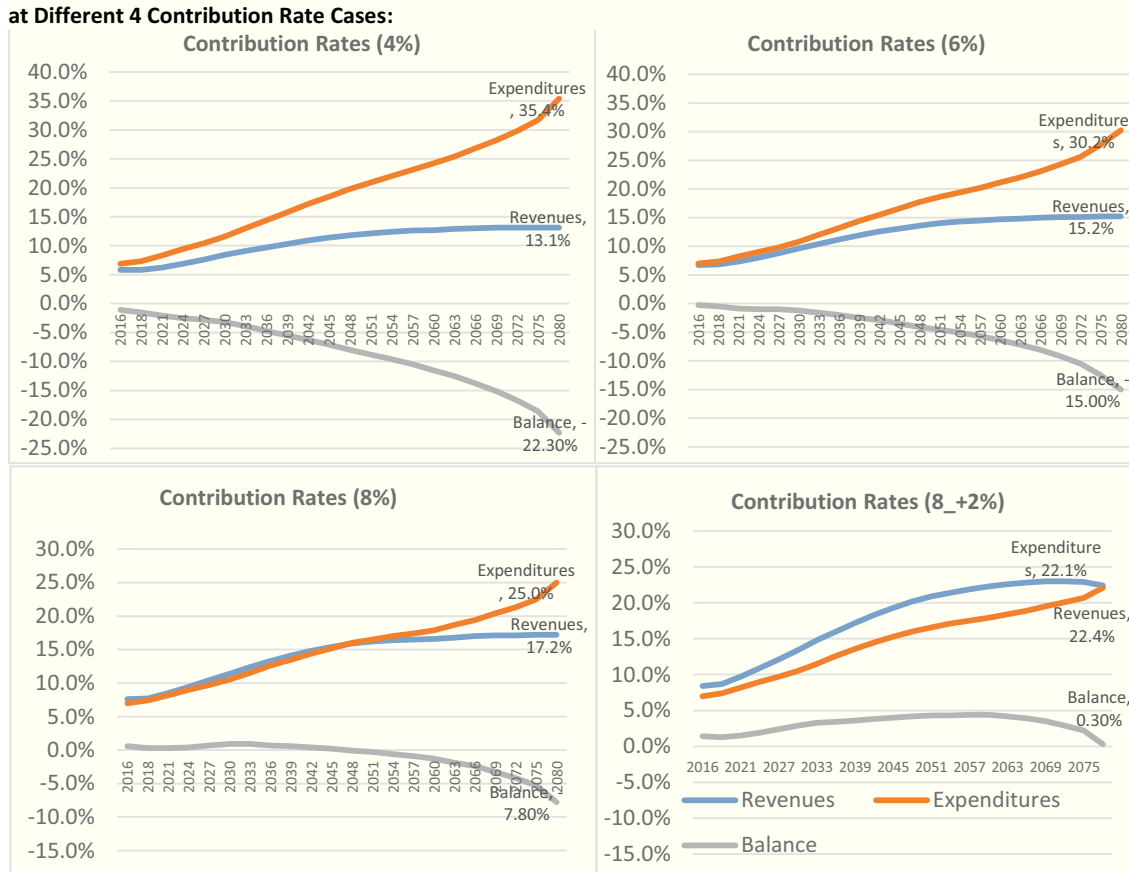


The author by the LFS and UN data as in 2015 using PROST model.

In the medium unemployment rate scenario, the system financial balance for the highest contribution rate option would be 0.3% of GDP in 2080 compared to 2.6% in the previous scenario of high unemployment rate. Further, for the second option of 8% contribution rate it would have a deficit at about (-7.9%) compared (-5.6%) of GDP in the previous scenario. This unexpected increase in the financial deficit in this scenario refers to the increase in expenses more than that of the revenues. The expenditures in the high unemployment scenario for each of the proposed contribution rates of 4%, 6%, 8%, and 8%+2% are 33.1%, 27.9%, 22.7%, and 23.2% of GDP, respectively. While, in the medium unemployment scenario the expenses increase to 35.4%, 30.2%, 25%, and 22.1%, respectively. However, the revenues in the high unemployment scenario are 13.1%, 15.2%, 17.2%, and 23.2% of

the GDP, compared to 13.1%, 15.2%, 17.2% and 22.4% in the medium unemployment scenario.

Figure 163: Projected Balance of Expenditures and Revenues as % of GDP in Medium Unemployment Rate (20%) at Different 4 Contribution Rate Cases:



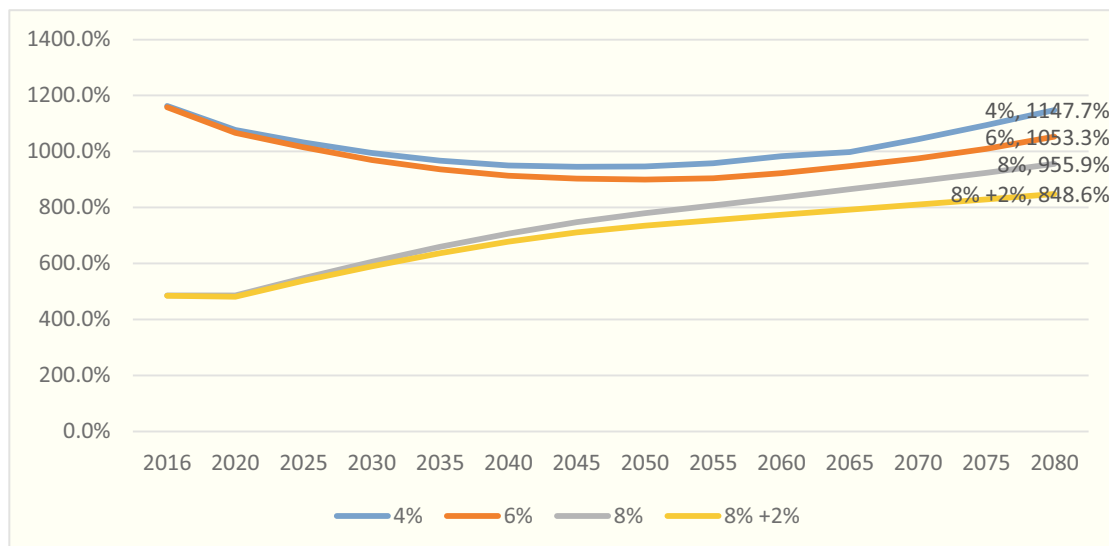
The author by the LFS and UN data as in 2015 using PROST model.

Thus, the revenues increase by higher contribution rates, but they do not change by the change in unemployment rate. There was an increase in the revenues at the highest contribution rate in the scenario of high unemployment rate as it accumulates the highest positive reserve that would generate extra revenues from investments return.

Regarding the consolidated PAYG debt, the results in the medium unemployment rate scenario indicate to higher financial deficit with less contribution rate. The highest consolidated debt as in 2080 is at 4% contribution rate case at 1,147.7% of GDP, compared to 1,053.3%, 955.9% and 848.6% in the contribution rates of 6%, 8%, and 8%+2%, respectively. However, compared to the results of the high unemployment scenario, the debt is higher in this scenario in general. Furthermore, the starting debt also is much higher in both 4% and 6% contribution rate cases, which makes the choice of lower contribution

rates more excluded as it would result in higher burden on the public budget or the pension balance.

Figure 164: Projected Consolidated PAYG Debt as % of GDP with Medium Unemployment Rate



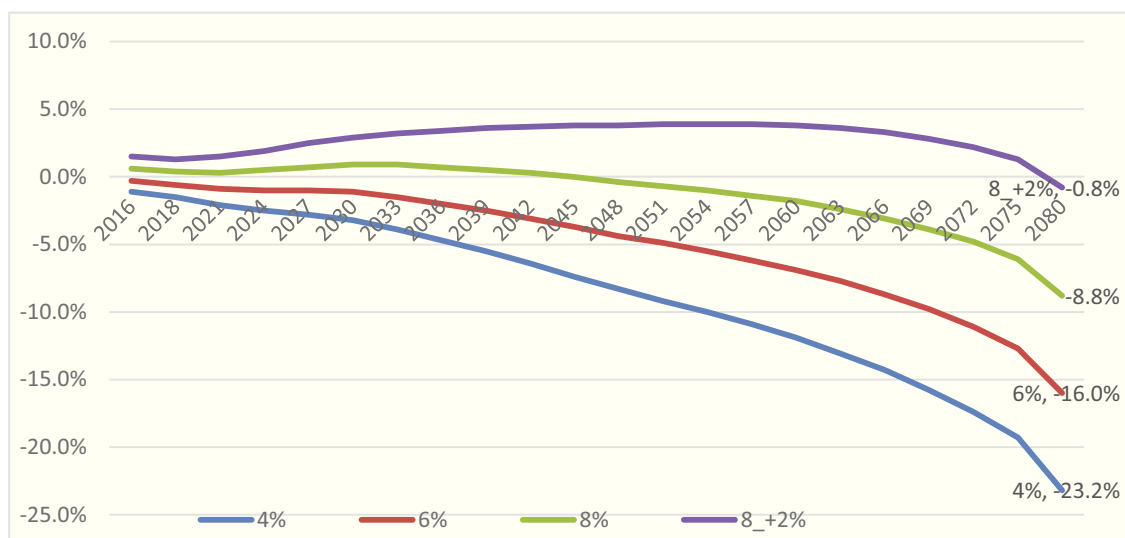
The author by the LFS and UN data as in 2015 using PROST model.

The Third Scenario: Low Unemployment Rate

This scenario is a desired scenario as it is an optimistic one and expects more stability and improvement in the economic performance that would decrease the unemployment rate to its lowest rate in the Palestinian case, reminding that the supposed 10% unemployment rate is considered as a bad rate in other developed countries.

What is surprising in this scenario is to have a negative financial balance in all contribution cases in 2080. Although there are two cases that have positive financial surplus for different periods, unless at the end of the projection the expenses exceed the revenues to end up with a financial deficit in 2080. The four different cases of contribution rate of 4%, 6%, 8%, and 8%+2% have a financial deficit at (-28.2%), (-16%), (-8.8%), and (-0.8%) of GDP as in 2080. Thus, we notice that higher unemployment rate scenario has less financial deficit. The main reason for this sharp increase of the deficit with less unemployment rate is the longer working periods that result in more replacement rate in average.

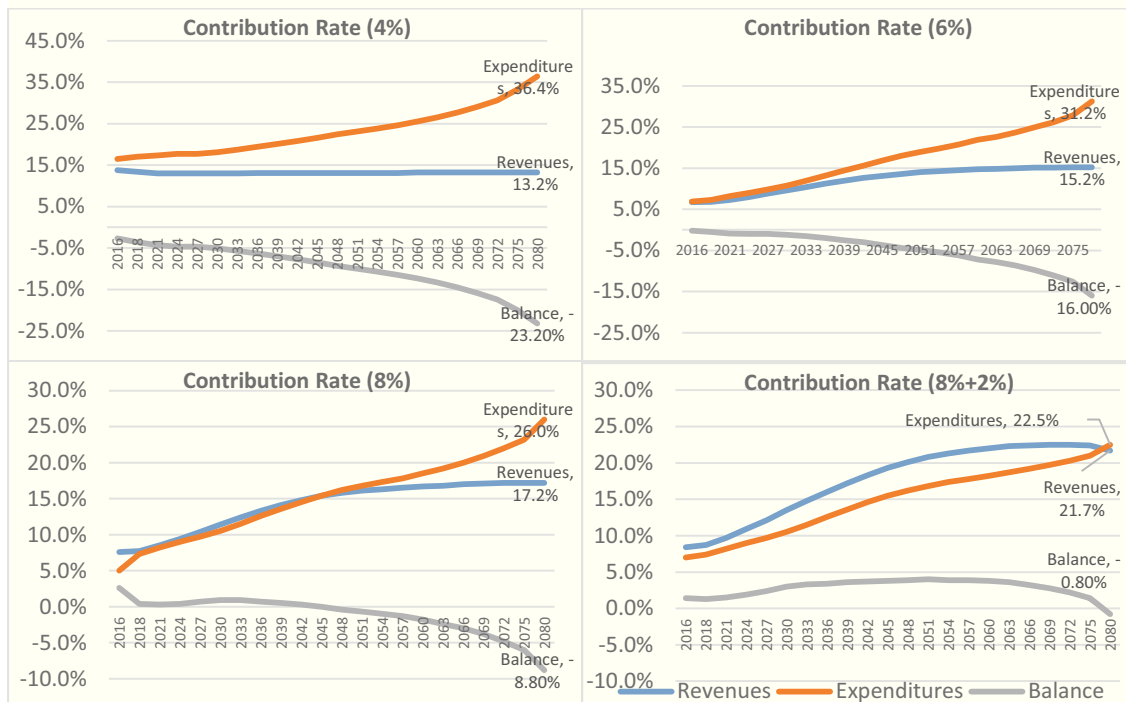
Figure 165: Projected Financial Balance of the Pension System in the Scenario of Low Unemployment Rate at 10% by Four Contribution Rate Cases of (4, 6, 8, and 10%) through the Period from 2015 to 2080



The author by the LFS and UN data as in 2015 using PROST model.

The expenditures in the low unemployment scenario are higher compared to both medium and high unemployment scenarios, as the replacement rate would be higher. At the contribution rate cases of 4% and 6%, the expenditures exceed the revenues all the period and reach to 36.4% and 31.2% of GDP compared to revenues at 13.2 and 15.2% of GDP, respectively. While, the other higher contribution rate cases keep the revenues at higher level compared to expenditures that last until 2045 for the 8% contribution rate case compared to 2078 for the 8%+2% contribution rate case.

Figure 166: Projected Balance of Expenditures and Revenues as % of GDP in Low Unemployment Rate (10%) at Different 4 Contribution Rate Cases:



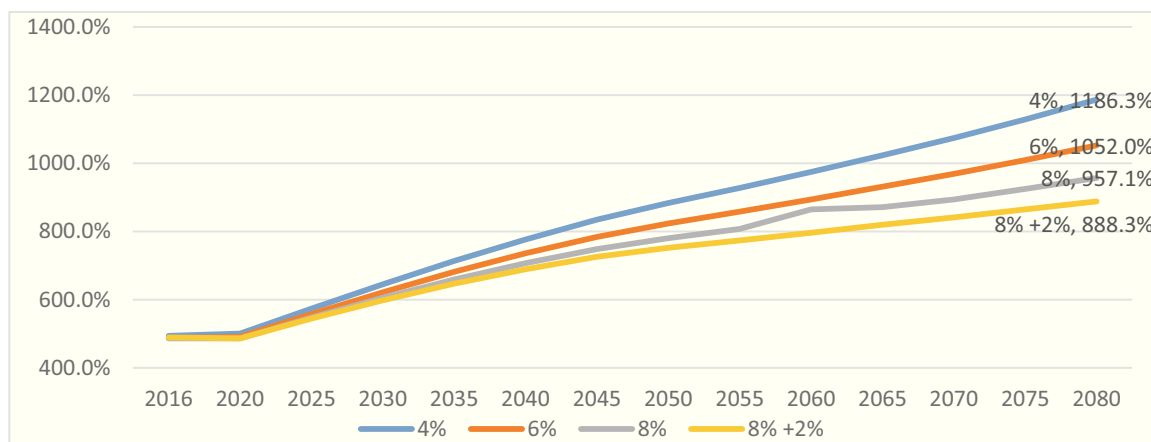
The author by the LFS and UN data as in 2015 using PROST model.

Furthermore, other reason of the higher expenditures in the low unemployment scenario compared to other higher unemployment rate may refer to the change in the structure of contributors and retirees regarding income level as there are different average replacement rates in each unemployment scenario that generate a change in income distribution of the beneficiaries. Given that in the low unemployment scenario, lower income employees would join the system as they were the majority of unemployed labor force. Further, the majority of unemployed labor force were almost from low skilled, younger age groups, female labor force, or low educated groups. Moreover, the system was set to have a minimum pension for the beneficiaries in order to protect those with low income employees from poverty, which would almost be higher of what would the replacement rate offer. Further, the higher unemployment rate would decrease the average service period that would cause less average replacement rate that would lead to less total expenditures. In this framework, the unemployment rate and contribution rate alone are not enough to determine and explain the reasons of financial balance, rather more other factors besides them should be analyzed as well.

Thus, it is important to take in consideration more factors in any analysis of pension systems, whereas the more information we have the better explanation we can give. However, this has disadvantage as it becomes more complicated to determine the effect of each one.

The data of consolidated PAYG debt indicate to less debt in high unemployment scenario compared to the two other higher unemployment scenarios in each of the contribution rate cases, which is caused by more increase in the expenses compared to the revenues in each contribution case. The level of contributions is limited by the low average income, while the expenses have a minimum limit that would extremely increase the cost of the total pension bill, while more expenses can occur by the early average retirement age. Thus, the more low-income employees enter the system the more expenses to revenues will increase. Moreover, increasing the contribution rate would be one of the most effective policies to achieve the financial balance as there is an opportunity to increase the total revenues from investments returns of the surplus reserves of the fund that would postpone and reduce any future consolidated debt.

Figure 167: Projected Consolidated PAYG Debt as % of GDP with Low Unemployment Rate



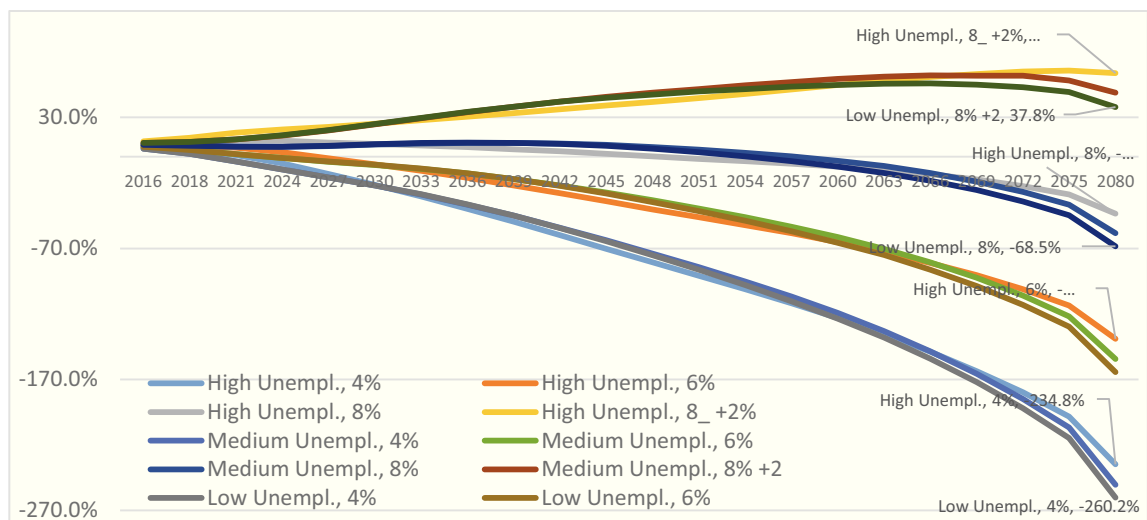
The author by the LFS and UN data as in 2015 using PROST model.

5.4.3.3- The Impact on Pension Fund Reserves by Different Scenarios:

The impact of unemployment rate on the balance of the system and accumulated reserve is very low compared to the contribution rate. The deficit in the high unemployment rate scenario would be less compared to other medium and low unemployment scenarios because of less expenses on pensions is expected. This decline in expenses refers to less

replacement rate as there is less period of paying contributions through the average working career of the beneficiaries. On the other hand, it is noticed that less contribution rate would cause less accumulated reserve that would result in less investment returns as well. The following figure supports the explained analysis of the system regarding the impact of each different proposed unemployment rate and contribution rate. We notice that the reserve is positive only at the highest proposed contribution rate of 8%+2% and partially positive at the contribution rate of 8%, in all scenarios of unemployment rate. While, there are no reserves accumulated at the lower contribution rate cases in any of the unemployment scenarios.

Figure 168: Projected Pension Fund Reserve in Different Three Unemployment Rate Scenarios and Four Different Contribution Rate Cases:



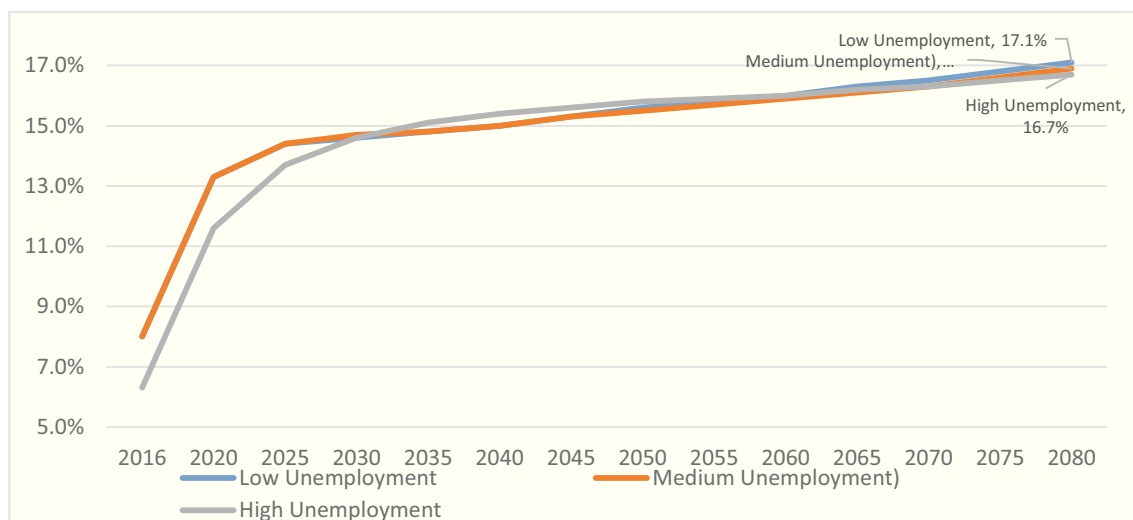
The author by the LFS and UN data as in 2015 using PROST model.

Thus, with less contribution rate the total revenues would be declined, while the total expenditures would be increased as explained earlier because of higher debt in earlier time that would generate steadily increasing interests. This increasing gap between revenues and expenditures would increase the impact of the change in contribution rate on the reserve of the pension fund and the consolidated debt of the system as well.

While, the unemployment rate in the Palestinian case has positive relationship with the financial balance of the system, given that it is related more to the average income level of the contributors and the received pension system. As explained previously, the lower unemployment rate, the less average income of the total contributors as more low-income

contributors would join the system. Given, the average income is low in Palestine and there would be a minimum pension or a basic salary, the expenses would increase more than the revenues. Further, higher unemployment rate would increase the ratio of total benefits period to total contributions period, which means less revenues that would lead to less financial balance of the system. However, in lower unemployment rates, higher increase in expenses compared to revenues leads to end the financial balance at earlier time also. Comparing the required contribution rate to balance the fund in different unemployment rates indicates that there is no great difference between the different scenarios. Thus, we notice that the impact of unemployment rate on the balance of the system is very small compared to the contribution rate. However, what duplicates the expenses in higher unemployment rate and less contribution rates is mainly the earlier increasing debt that increases the accumulated interests. Thus, higher contribution rate significantly enhances the financial balance of the system as less interests would be generated.

Figure 169: The Required Contribution Rate to Balance Fund from Base to Current Year by Three Different Unemployment Scenarios.



The author by the LFS and UN data as in 2015 using PROST model.

As a result, it is highly recommended to increase the contribution rate to be at least 8% scenario regardless the distribution of contributions between the employees and employers and without harming or distorting the labor market and in an affordable manner. According to the results above, this contribution scenario is the least rate that can guarantee a reserve of PAYG fund and realize a financial balance of the system until about 2060. The more the

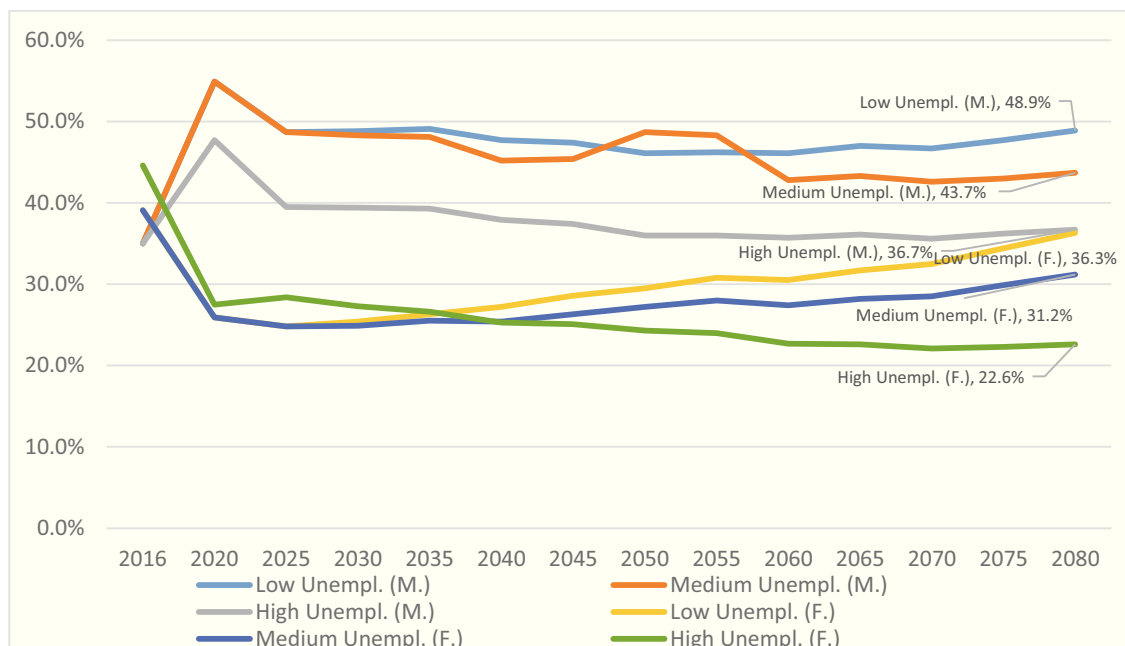
contribution rate is, the more reserves are accumulated to support the sustainability of the system, but considering the labor market stability and affordability is a priority as well. It would be also highly recommended to increase revenues through the investment return before the higher increase and the change in demographic structure as any accumulated reserve in earlier times would avoid the fund from interest expenses and enhance the financial balance.

5.4.3.4- Average Income Level by Gender upon the Unemployment Rate:

In order to measure the impact of both the unemployment rate and contribution rate on the average income level of individuals, we review the results regarding the replacement rate and pension wealth by gender. These measures are important to know the income distribution and adequacy of the pension for each gender, and how to choose the optimal option of contribution rate in different unemployment scenarios, which would guarantee the maximum sustainability of the system and an adequate income after retirement in fair redistributive policy.

We found that the replacement rate does not change with contribution rate, but only with unemployment rate. In the first scenario of high unemployment rate, we notice that the replacement rate decreases by time for both genders to reach to 36.7% for males and 22.6% for females by 2080. While, in the low unemployment rate it improves by time for both genders to reach to 48.9% for males and 36.3% for females by 2080. However, in the medium unemployment scenario the replacement rate declines for males and improves for females to reach 43.7% and 31.2% for females.

Figure 170: Projected Replacement Rate by Gender in 3 Unemployment Rate Scenarios (30%, 20%, and 10%)

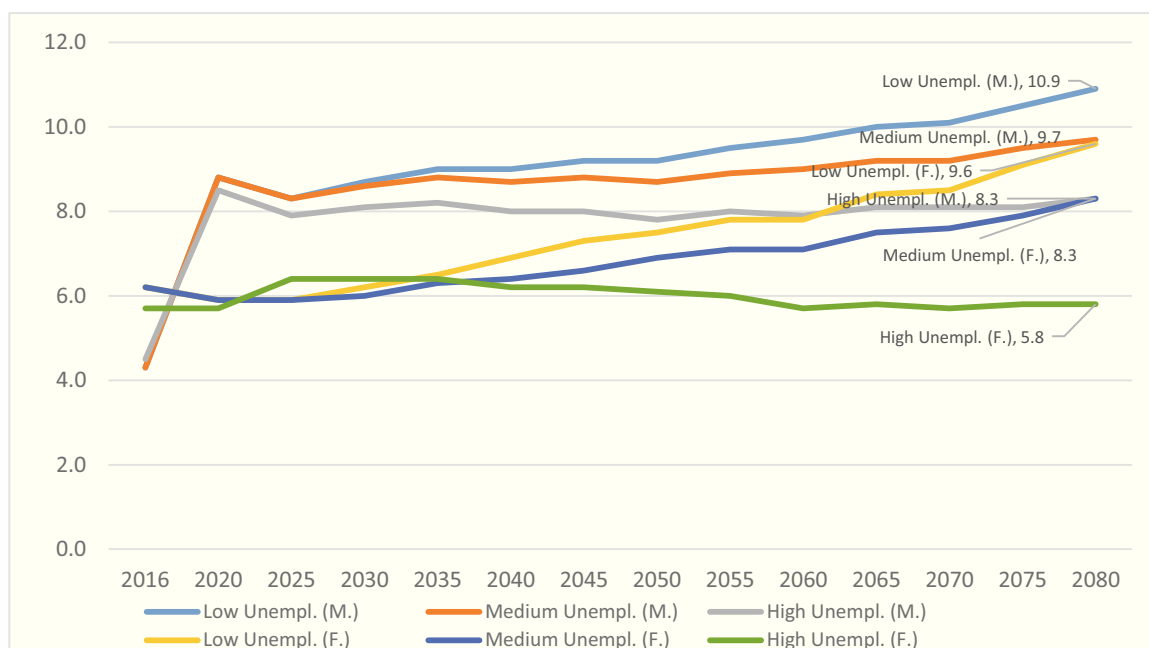


The author by the LFS and UN data as in 2015 using PROST model.

Furthermore, the males have higher replacement rates than females in all scenarios, which indicates how vulnerable are the females under the given parameters of the system and working periods. Reminding that the females have less income means that they receive less replacement rate of less salaries, which would create a large gap in income compared to males.

Correspondingly, the wealth of pensioners in terms of average wage indicates to a gap between males and females. In this regard, the wealth of male pensioners has an increasing trend in both scenarios of low and medium unemployment rates to reach 10.9 and 9.7 multiples of the average wage as in 2080, respectively. Likewise, the wealth of female pensioners has an increasing trend in the same two scenarios to reach 9.6 and 8.3 multiples of the average wage as in 2080, respectively.

Figure 171: Projected Pension Wealth in Terms of Average Wage by Gender in 3 Unemployment Rate Scenarios (30%, 20%, and 10%)



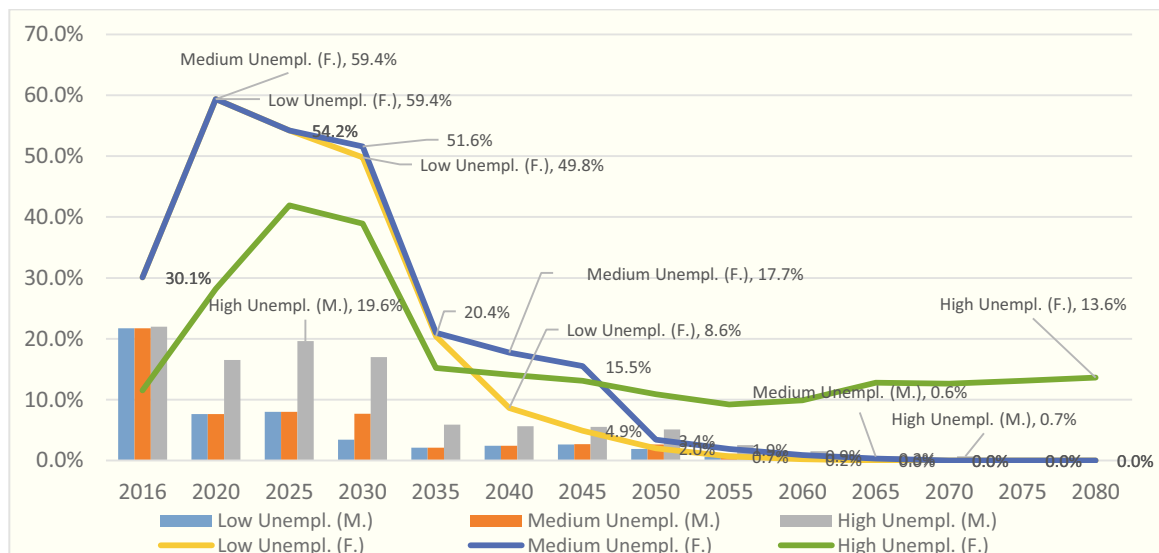
The author by the LFS and UN data as in 2015 using PROST model.

However, the high unemployment scenario decreases the wealth of pensioners for both males and females to be 8.3 and 5.8 multiples of the average wage as in 2080, respectively. Additionally, for better understanding of the income adequacy, we focus on the percentage of pensioners that are receiving the minimum pension as determined in the assumptions at 700 NIS. Even the 700 NIS is a low income for a family⁹⁷, it could be considered the minimum income for a person alone and it was set compared to the available average wages of employees that is considered very low. Further, it at least gives an indication to measure the impact of income level. Thus, the next figure clearly shows the difference between males and females regarding the vulnerability to poverty rate at old age and the projected impact of the pension system on their income status. The number of females that receive a pension less than the minimum pension largely exceeds the males, and it is the only group to remain receiving less than the minimum pension in 2080. In all unemployment rate scenarios, the income of old-age retirees increases gradually by time. As a result, the rate of old age retirees receiving less than the minimum pension diminishes to the minimum by

⁹⁷ Given that the poverty line is 2,350 NIS and the minimum wage is 1,450 NIS, the 700 NIS is less than the half of the minimum wage and about 29.78% of the poverty line.

2050s, except for the females in the high unemployment rate that remains at 13.6% of the total old age females in 2080. Another notice is that the impact of the unemployment rate scenario on the income is different for each gender. For males, the rate of old age receiving less than the minimum pension is higher at the high unemployment rate scenario and decreases with lower unemployment rate, while for females this rate is less with high unemployment rate and decreases with lower unemployment rates. This confirms that the high unemployment rate affects females more negatively on the long-term as their income would not be improved enough as their average working period is less. Further, more participation of female labor force would be at lower income on the short and medium terms, but this would be improved on the long-term as their working period in getting longer.

Figure 172: Projected Percentage of Pensioners Receiving Minimum Pension by Gender in 3 Unemployment Rate Scenarios (30%, 20%, and 10%)



The author by the LFS and UN data as in 2015 using PROST model.

Therefore, we conclude that females need more protection and their labor force participation is more sensitive to unemployment rate as well as their income and wealth. There should be more concern to the females, particularly in the high unemployment rate scenario as they would suffer more on the long term. In the high unemployment scenario, only the very limited high income female labor force would benefit from an adequate income, while the majority would remain under poverty line. Increasing job opportunities

would remarkably enhance the income and wealth of females, and promise better income for males as well.

While, higher contribution rates would enhance the financial balance of the system and its sustainability to pay benefits and improve life standards. Thus, we highly recommend increasing the contribution rate to at least 8% from employees, in addition to the 9% from the employers, in order to achieve the pension system sustainability. Further, it is highly recommended to increase the age of retirement to at least 62 for both genders that is supposed to have another increase to be 65 by 2025, which would enhance the sustainability of the system and adequacy of income after retirement as the employees are supposed to work for longer periods in one side and benefit less periods on the other side. However, any pension reform option regarding increasing retirement age and higher contribution rate from the employees should be parallel with an economic growth development plan that targets creating new job opportunities locally and abroad that are covered by the pension system. Finally, another parallel review should be made to the regulations of the work conditions regarding the minimum income, females and the informal sector.

5.5- Conclusions and Policy Recommendations:

This research focuses on one of the most important issues of modern societies as the social security systems are related to stability of individuals as well as society through the guarantee of stable income for individuals and vulnerable groups of the society and protect them from possible risks through their careers. However, these systems are very complicated as they are sensitive to the environmental changes including economic, political, and demographic factors. At the same time, these systems have direct and indirect impacts on these factors as well as the individuals.

We concluded that the social security systems and pension systems as part of the social protection policies are essential as a human right issue that was raised by the highest and largest international institutions that concern to the humanitarian and labor rights as UN, ILO, and the World Bank. They have developed the legal framework including the social security rights in several international conventions that call the governments around the world to commit with and include the social security rights in their constitutions. Thus, the current various social security systems represent the last form of accumulated development of the welfare concept that reflect the heritage of cultures and modernity that human kind has accumulated in different civilizations. In this framework, we find different approaches to the development of the social security that may take various forms of application to the same welfare concept at different stages of development. Indeed, they may differ according to many factors in each distinct society including the culture, financial and economic conditions, demographic structure, and political development; however, the concept remains the same.

It was important in this study to review different cases of development in several societies to understand the reasons for the development, to reveal the challenges and trends, and to try to learn the optimal practice among many changing samples as part of the literature review. As a result, we concluded that there is no one best model, but there are several experiences that sometimes are unique. Therefore, the focus should be on the global trends that are developed according to the international standards in this field, humanitarian conventions, and the legal framework. Besides, studying the individual cases of some related countries is also highly recommended as they may provide a successful experience in some fields or a failure of some policies that should be avoided.

The Palestinian case may have some privacy that forms special challenges that need optimal solutions. However, as in all other cases the main purpose is to protect the individuals and families of vulnerable groups from poverty and enhance their living standards. In this regard, ILO had developed a social security staircase as a strategy of extending coverage of social security system in applicable stages for all societies in different stages of development. Thus, what is important is to determine the real needs of the Palestinian society and the right diagnosis of the environmental conditions that would determine the priorities among various choices.

The high poverty rate (25.8%) problem may have been the most important concern of the Palestinian policy makers since the establishment of the Palestinian National Authority (PNA) in 1994. Given that protection from the poverty is considered as obligatory policy to the governments from the legal perspective and humanitarian side. In addition, both the stability and security of the society need a low poverty rate. In this perspective, we remind here the distinctive role of ILO to adopt the inclusion of social security to the main principles of human rights. Further, the adoption of Social Protection Floor (SPF) approach in its International Labor Conference in 2009 that was incorporated into the Global Job Pact. As explained in the literature review, the Global Job Pact requests countries that do not yet have extensive social security system to build adequate social protection for all; drawing on a basic social protection floor and urges the international community to provide development assistance, including budgetary support to build up a basic social protection floor on a national basis.

Thus, the old-age population in Palestine have priority to be protected from poverty risk under the given data of deteriorating economic situation and projected changes in the demographic and family structures as explained in the literature review. Given that Palestinian population is small one that is estimated at about 12.7 million as in 2015; whereas, half of them are living abroad as refugees and the remaining population are living in West Bank and Gaza Strip (4.75 millions) that have been under the Israeli occupation since 1967. Further, as the old-age population over the age of 60 form a small ratio of the population (4.4%) and many of them are not expected to be eligible, the expected costs of adopting SPF program for them would not be high.

The economic situation in Palestine is very fragile with a volatile performance, which almost are related to the political stability and the international economic changes as well. Thus, projection of the future is very ambiguous regarding the economic figures that highly impact the harmony of the society. The review of recent economic data has revealed the existing main economic problems in the Palestinian case that may be considered as obstacles for any proposed pension system, including; high unemployment rate (25.9%), high informal sector of labor force (57-88%), and low female labor force participation rate (19.1%).

Nevertheless, currently the demographic structure have advantage regarding the demographic dividends (median age is 19.3), where there is high youth-age ratio out of the population (72.78 for young dependency ratio) compared to low old-age dependency ratio (5.23 for old age dependency ratio). This demographic structure encourages the policy makers to adopt a social security system with an optimal pension system that can be financially balanced on the long-term. However, any proposed comprehensive pension system needs a parallel development plan that creates new job opportunities for the sharply increasing labor force. Otherwise, the expected costs would increase steadily with the increasing old-age dependency ratio and higher unemployed labor force that would need social assistance relief programs.

The current social security system lacks some important benefits according to the international standards of social security. It does not guarantee an adequate income at retirement, quality health services, or fair welfare distribution. Further, the pension system that is our focus in this study has some problems as limited coverage scope to the public servants only, scattered several schemes that is performing inefficiently, and having financial unsustainability. Therefore, there should be an urgent action plan to have a social security system that guarantees an adequate pension, in addition to a development plan that creates new job opportunities in order to absorb the sharply increasing labor force. The time is critical for strategic steps that guarantee the most efficient use of the available demographic dividends in a comprehensive development plan.

Regarding the reform of the social security system, the priorities were determined in the literature review according to the needs of the Palestinian society taking into consideration the international challenges and trends of social security.

The first priority is to extend coverage of the social security in a legal framework according to the ILO's social security staircase strategy for extending coverage of social security that provides essential four guarantees including; relief programs and protection from poverty for old-aged, children, unemployed and poor, and essential health-care for all in its first stage. Then, mandatory social insurance and voluntary insurance should be adopted to enhance living conditions upon the available resources. At the same time, sustainability of the system is essential for any proposed pension system that should be at the top priorities at the agenda of policy makers.

On the other hand, we reviewed selected cases of the region that have relation or impact on the Palestinian case or have some common problems. Jordan, Iraq, and Israel were selected as they are the best in the region that can fit or relate to the Palestinian case. We concluded from the review that the selected cases have PAYG DB system structure, while the parameters vary highly. However, the Israeli system provides two additional programs of "Long-term Care" and "Family Allowance" compared to the other cases, which indicates to the development of the system and more financial balance compared to the other cases. Further, the contribution rate is also highly varying between the cases. At the same time, the contribution rate may be different in the same case, depending on predetermined categories upon the income and social status. The Israeli case responds highly to socio-economic differences of its contributors as the total contribution rate ranges from 6.15% to 28.91%. The participation rates of both the employee and employer depend on the income level and the number of dependents. Accordingly, it could be low at 3.49% for the employee and 2.11% for the employer and increase up to 11.94% for the employee and 16.42% for the employer. Further, the government participates with a fixed contribution rate that supports the fund and guarantees the financial balance for a sustainable system. While, in Jordan and Iraq the target and policy is different in determining the contribution rate, which is almost fixed for most of categories and the government does not contribute, but it is the guarantor of the system in case of deficit. However, the international trend regarding the financial balance and determining the contribution rate is completely different than the practices in the reviewed cases. The new optimal international trend for financial balance is to set an automatic mechanism that controls the parameters of benefits and expenses taking into consideration the changes in demographic and economic factors.

Likewise, responsive accrual rate is important for an adequate income with fair redistribution policy. Iraq has held the accrual rate fixed, while in both Israel and Jordan it was more responsive as the benefits are determined upon the socio-economic conditions. Responsive accrual rate enhances the system to achieve its goals to protect beneficiaries from poverty. Further, there is a significant role of setting a minimum for the pension, which is related to the poverty line or minimum wages, also it protects beneficiaries from inadequate income and enhances fair distribution of income with less gaps. The maximum limit is applied also as an international trend to have fair protection with an average range income. We also found a gap in age of retirement between Israel in one side and Iraq, Jordan, and Palestine in the other side. There are also differences related to females and family protection between Israel and other cases, which due to the socio-economic factors. In general, there are some gaps in the development of the social security system and provided benefits in each case, which almost are related to the economic development, social norms, and labor market.

The analysis of social security system in Palestine has found that the health-care system provides essential services for most of the citizens in WB&G; however, the quality of health-care is unaccepted, given that there is a shortage in some kinds of medicine, tools, and expertise. As there is high burden of required services that are related to the political instability and the fact of being under occupation, the health-care services are highly dependent on the foreign support. In this framework, some reforms on administrative issues and regulations that would improve the quality and reduce the services are highly recommended. Thus, a reform to the health-care is on the agenda of the government, but we agree with the recommendation of the related national committee to remain separated from other social security systems.

On the other hand, the formal social assistance programs in Palestine also depend highly on foreign donors, while the informal assistance plays important role in reducing poverty. Our results confirm the importance of the social assistance programs to improve the living standards for very poor population, but they still inadequate, limited, and unsustainable. These problems are depending on the degree of stability, the data transfer and cooperation level among many working institutions in this field, financing sources that are almost from

foreign countries, and the kind of assistance. Further, the informal assistance depends highly on family assistance and some charity organizations; however, it has some problems related to limited coverage and inefficient distribution and transparency.

The replacement of more than 50% of the population in 1948 was a catastrophic event that created a large ratio of the population under the poverty line. Given the fact that Palestinians still live under occupation with large ratio of the population that are refugees, the national GDP cannot support the relief programs, while the international community tries to alleviate poverty with relief and employment programs through UNRWA. The international responsibility is the least thing that can be done for the catastrophic events until the end of occupation, given that the occupation restrictions and instability prevent a national sustainable development program. In this context, the main recommendations regarding the social assistance programs were to improve the data registry system and integrate the several programs of social assistance relief and poverty alleviation. The failure of many formal assistance and relief programs and the informal tools of assistance to reduce the poverty and enhance the economy refers partly to the failure of the public institutions and NGOs to work together. This failure leads to unfair distribution performance of the total available resources. Thus, the direct result is the duplication of the services to some groups and the failure to reach others.

Regarding the pension system in Palestine, the study reviews the current public pension systems and discusses the main challenges, which confirms the need for an urgent reform to develop the pension system as there are serious challenges to implement the current pension systems in accordance with the international standards of social security. The main challenges are; how to extend coverage of the system to private sector and other categories of the population, achieve financial sustainability of the system, how to provide an adequate pension, and how to apply the pension system in equity and integrity.

Indeed, extending coverage of pension system in fair and equity needed analysis of the access to social security systems upon socio-economic characteristics of the population. The results of this analysis indicate to different access opportunities to social security among population that lead us to think about the differences of socio-economic characteristics to guarantee fair access to the social security systems for more persons from

all categories. Further, as the focus is on the pension system and how to alleviate poverty, we analyzed the taken measures of households to reach financial stability by socio-demographic characteristics.

Upon an analysis of the data of the poverty survey of 2003, we concluded that the absence of modern and dynamic social security systems in Palestine has forced the Palestinian families to seek alternative solutions for their housing, educational level, healthcare, and retirement future needs. The results confirm that there are different measures that are taken by the heads of households to have financial stability, which was different at most according to income level and stability, in addition to some other personal and social characteristics. These results need to be in consideration in any proposed pension system in order to assist poor citizens as they have less alternative opportunities to have financial stability. We also found that Palestinians have depended on personal savings and family resources to keep their financial stability and meet their needs; however, these kinds of mechanisms make little contribution to capital accumulation for investment and economic growth in Palestine.

These results highlight the importance of the detailed data of the beneficiaries to have better and fair distribution of the available resources. The more recent, integrated, and specified the data are, the more integrity and fair distribution policy can be. Further, benefits and assistance programs should be targeted and designed to treat the available problems and to support the needed poor citizens upon the available resources.

A social security system reform was an inevitable choice in any proposed pension system to extend coverage by including more groups of the society and introduce more benefits. Further, following the international standards of social security as a framework for any proposed pension system would have the reliability and compliance rewards to the system, which would with no doubt lead to successful experience. However, the privacy of the Palestinian case may impose to add or suspend some benefits to fit the most optimal choice of an applicable pension system.

In chapter four, we focused on how to address the problem of low access to pension system and discussed how to extend coverage in an optimal pension reform. For fair redistribution policies, we tested the socio-economic individual characteristics to help in setting objective

criteria for selecting the families and individuals upon the priority of the need for social assistance or other social security benefits.

Thus, we first reviewed the main objectives of the last pension reform of 2005 that was supposed to include the private sector. However, the system failed to achieve most of the pre-determined objectives. The study determined the main internal and external barriers to implement public pension reform of 2005 for the private sector and discussed how these barrier impact the implementation of 2005 pension reform. Among the external barriers are the public budget deficit, instable economic performance, the capacity building of the Palestinian Pension Agency (PPA), and the weak local financial and insurance market. While, among the internal barriers of the system are caveats towards the sustainability and financial balance of the system that is a result of expensive slow transition, early retirement, large-scale of survivors, and government incapacity to pay the contributions of public employees. Other internal barriers are the high contribution rate and compliance problem, mandatory Defined Contribution scheme , and inconsistency of the current pension system with the private sector conditions and the international standards, in particular; inadequacy of the pensions and lack to unemployment insurance.

On the other hand, we found that the taken measures to protect old-age population from poverty in Palestine are not enough as there is large ratio of old-age population suffer from poverty without any protection mechanism. Further, the large families with low income are more exposed to poverty too. Furthermore, the financing sources of the assistance programs are not stable nor guaranteed in the public budget, while some legal provisions of the welfare or labor protection are disabled or serve specific group without the others.

The analysis of the previous pension reform proposals and trends in Palestine indicate to the lack of a comprehensive pension system and all previous attempts in this regard have been failed. We concluded that the pension reform has a national priority concern. However, all proposed systems depended on having improvement in the political and economic situations, and almost directed to introduce the fully funded defined contributions system in multi-pillar systems. The proposed systems were unrealistic or overoptimistic in a fast changing environment, weak and highly volatile economic

situation, and a complicated political structure, which reflected in the public policy to concentrate on the relief programs in order to deal with consequence crises instead of development programs. Therefore, all proposed pension systems failed in introducing a proper one that could be accepted by the policy makers as they ignored the most important problems of high poverty rate, large informal sector, and high unemployment rate with low labor participation of females.

Thus, we can say the challenge is serious for the new SSL of 2016 for private sector that is supposed to be comprehensive and mandatory. The new SSL law of 2016 has introduced a comprehensive social security system as mandatory with many benefits for more categories and more proper conditions for the private sector; however, it still ignores the universal basic pension for poor old aged population and postpones many benefits as unemployment insurance and leaves their application up to the conditions. The law has many critics regarding the contributions rates and some benefits conditions, and still have administrative barriers as a new institution would be established for that purpose. Furthermore, there are concerns regarding the ability to apply the law in Gaza Strip as there is still a political division that led to Hamas control over Gaza Strip.

Political instability and volatile economy have been the main challenges for the previous and future pension systems as explained previously. However, we have a high demographic dividends advantage of youth population that encourages to launch a pension system urgently before losing this opportunity. At the same time, the proposed pension system is supposed to take in consideration the needs of the society in priority as explained in order to be applicable.

In order to extend coverage through an optimal pension reform, we believe it is important to determine a decision strategy choice of enrollment to a pension system. A decision strategy choice targets using proper tools for extending pension coverage, which respond to the needs of the society that would enhance compliance to pay contributions and attracting new participants on voluntary basis. The significance of having voluntary choice refers to the difficulty to apply the pension system mandatorily on large scale basis due to the high informal sector, low female participation to labor force, and the nature of the labor market in Palestine that depends highly on working in Israel and abroad, which almost does not offer them a social security system. Fortunately, PCBS has offered recently the annual

data of the Labor Force Survey of 2014 at the time of the analysis that offers a new and detailed personal data of labor force, which was very helpful for the analysis of their socio-economic characteristics. The same analysis could be performed periodically to test and evaluate the applied pension policies. The results were derived from the questions of the survey, given that participation to a pension system was considered as the dependent variable, while the other socio-economic personal data as the independent variables. The binary analysis resulted in a model that best describes the relationship of the dependent variable and independent variables that best can predict the probability of pension participation of each cohort according to the individual characteristics. The results of the probit regression parameters explain the related independent explanatory variables in relation to the dependent variable, which determines the probability of participation to a pension system. Thus, the results determine the significant variables that increase the probability of participation to a pension system, which should be taken in consideration in any proposed pension system and in a strategy for extending pension coverage.

The data indicates that the majority of the Palestinians working in private sector lack the coverage of any kind of pension benefits, given that only 47.95% enjoy with some kind of benefits. Although most of socio-economic characteristics show some relation to the pension coverage, only some of them have strong relation. The characteristics that have more probability to participate to a pension system are having a pensioner at the same household, being over the poverty line, income level, worked days, working in enterprise registered in tax administration, working in enterprise with over 20 employees, the paid employees are more than six employees in the enterprise, affiliated to unions, having a contract, worked months at the same job, working in commerce-hotels and services industries, working in UNRWA or in non-profit organization, working in Israel, and living in West Bank. While, the characteristics that have less probability to contribute to a pension system are living in rural areas, being a son or daughter in the household, working at occupation of proficient clerks, and irregular employees in private sector.

We concluded that there is a need for urgent measures to protect vulnerable groups from poverty, particularly, old-aged and females as the available conditions of labor market expose them to poverty. Thus, there are some recommendations depending on the results of the analysis that may contribute to extending pension coverage.

The study proposed both short-term and long-term solution mechanisms that alleviate poverty and increase participation rate taking in consideration the current socio-economic factors in the light of the international standards and experiences. Introducing structural and parametric pension reform is inevitable on the long-term; while, there should be urgent relief and employment programs on the short-term. In this regard, we recommend to integrate the database of poverty relief programs and to coordinate among the charity institutions to guarantee transparent and fair distribution of these relief programs. Further, organizing and supporting the unions of employees are recommended as they increase the participation probability to pension systems. While, the Ministry of Labor is supposed to organize and control having contracts of employees and the minimum wages. On the other hand, the proposed system should target the employees working in part-time and irregular jobs.

In this framework for an optimal proposed pension system reform, we worked upon the literature review and the previously discussed cases and analysis to develop general guidelines for a pension system reform in Palestine. These guidelines determine the optimal proposed system structure, contributions, and benefits upon the risks, financing mechanism, governance, and scope of coverage. However, it leaves the details of the parameters to be adjusted through more technical measures, besides the pace of implementation and distribution of contribution rate among the employees, employers and the government are almost related to a political issue that should be discussed further separately.

Taking in consideration all factors together as indicated above, the alternative proposed pension system is supposed to be a mandatory multi-pillar system that can deal with several problems and offers flexibility with the existing complex cases of individuals as there are political instability and volatile economy. Further, it is supposed to open the participation opportunity voluntarily for informal employees and other uncovered categories. Each pillar was discussed separately to determine the needs for the scheme and clarify the challenges and problems. The proposed parametric determinants of contributions and benefits take in consideration the currently applied pension systems, particularly the SSL of 2016 as its parameters were a result of long negotiations with the related parties. At the same time,

different contribution rates for different categories upon income level is also recommended, while the pensionable salary is supposed to have a maximum limit for the PAYG scheme and some cases need to be tax-exempted for a certain ceiling to encourage voluntary savings in the personal accounts DC scheme. We recommended that the total contribution rate not to exceed 18% of the salary, in order to keep the contributions rate as low as possible and have an adequate income at the same time. Keeping low contributions rate is import to attract investments to the local markets and keep stable labor market that contributes to the economic growth. However, the simulation of the system finds that higher contribution rates enhance the sustainability of the system as they accumulate more reserves at the earlier stages, which create significant challenge to solve this tradeoff with the volatile labor market that needs less contribution rate.

On the other side, we concluded that the permanent high unemployment rate is related mainly to the fact of being under occupation that imposes restrictions and tight regulations on movement of persons and goods as well as money transfers. Besides, there are periods of unemployment that are related to natural reasons as waiting period after graduation or for searching for another job, which is estimated in average at about 6 months. Thus, we proposed the unemployment insurance to include the employed persons in formal sector with 1% contribution rate from the employees that would cover the natural unemployment insurance for certain period. While, other employment and relief programs should continue to be the responsibility of the government in cooperation with the international community to support employment programs that target poverty alleviation and sustainable development.

Alongside the international trend to increase the official age of retirement as a response to the increasing life expectancy and better healthy old aged population, we proposed increasing the retirement age to be 62 until 2025, by which it is supposed to be left more to 65. However, the main obstacles are the high unemployment rate and volatile economic performance due to instability in Palestine under the current circumstances. The proposed increase in age of retirement would limit the available job opportunities; at the same time, the old aged employees would hardly be accepted in the labor market.

Another important issue of the proposed pension system is indexing the pension to consumer price index (CPI), which would protect the beneficiaries from any unexpected sharp changes in inflation rate and keep the purchasing power of the pensions.

Furthermore, volatile economic performance and the probability of having high inflation imposes the necessity to extend the period of the average salary considered to calculate the pension, which would better protect the beneficiaries and the fund as well from sharp changes in inflation. Regarding the large-scale problem of the survivors, adding family allowance to the pensionable salary is one of the solutions that enhances the balance of the system regarding the large-scale of survivors, and in order to be able to comply with the social needs to protect more family survivors as there are high unemployment rate and low female participation to labor force.

On the other hand, a “National Welfare Reserve Fund” is one of the international experiences that can support some basic universal benefits for old aged population and enhances the integrity of assistance and relief programs. Given the high poverty rate in Palestine and the large number of charity associations working in this field, we find the impact of these associations is minor on poverty alleviation. This may refer to many reasons, but the main ones are the high salaries of the working people in these associations that exhaust the funds, unfair distribution, or some of them may be corrupted for personal or political targets. Such a fund centralizes the data and reduces the expenses and achieve the goals of fair distribution and integrity more efficiently. Thus, funding the system and benefits were proposed in a way to achieve the financial balance of the system according to the international trends and to adopt re-distribution of income policies that respond efficiently to the internal socio-economic needs at the same time.

Performing PROST analysis was an opportunity to test the proposed system balance on the long-term and the individual pension adequacy for several income levels and by gender. The data used for testing the system are the micro data of the annual Labor Force Survey (LFS) of 2015, in addition to the macro-economic and demographic data that were acquired from the PCBS and UN.

Accordingly, PROST analysis was performed on the proposed pension system in different unemployment scenarios and different contribution rates, we concluded with important

results that would guide the policy makers choosing among the available reform options for the pension system.

Thus, we conclude that females need more protection as they are more sensitive to unemployment rate regarding their income and wealth. There should be more concern to females, particularly in the high unemployment rate case as they would suffer more on the long term. In the high unemployment scenario, only the very limited high income female labor force would benefit from an adequate income, while the majority would remain under poverty line. Thus, increasing job opportunities would remarkably enhance the income and wealth of females, and promise better income for males as well.

Further, results show that the revenues increase at higher contribution rates, but they do not change by unemployment rate. Furthermore, the expenditures in the low unemployment scenario are higher compared to both medium and high unemployment scenarios, as the replacement rate would be higher and the structure of contributors and retirees change regarding income level, given that more low-income employees would join the system at lower unemployment cases.

While, higher contribution rates would enhance the financial balance of the system and its sustainability, to pay benefits and improve life standards. Therefore, we highly recommend readjusting the contribution rate to at least 8% from employees, in addition to the 9% from the employers, in order to achieve the pension system sustainability. Further, it is highly recommended to increase the age of retirement to at least 62 for both genders that is supposed to have another increase to be 65 by 2025, which would enhance the sustainability of the system and adequacy of income after retirement as the employees are supposed to work for longer periods in one side and benefit less periods on the other side. Here are some proposed steps and reforms in order to have the maximum coverage extension targeting the informal labor and to have more compliance to pay contributions in formal sector. The first step is to achieve the data integration among related institutions in one central National Data Bank for social assistance programs that is supposed to be distributed upon the registration of the needed residents. Therefore, the system should require the registration of unemployed labor force in labor offices to request a work, which is supposed to administer the unemployment programs and offer job opportunities in cooperation with the enterprises from private sector.

At the same time, there should be lower contribution rate for those with low income, as they are almost low skilled labor and with low educational degrees. Moreover, the voluntary contribution is important to be allowed for self-employed, other informal jobs, and people working abroad. In order to avoid any negative shocks to the economy, government participation is highly recommended at first or for low income groups, which would enhance the financial balance of the system and reduce the cost on the employers and employees of this category. Unifying all available and proposed public pension schemes under one administration is an international trend as that reduces the administrative costs and ease the transfer between different schemes, whereas the data integration in one database would be achievable more easily.

The flexibility to the individual heterogeneity is one of the most important recent international trends that should be taken in consideration, particularly at the high informal sector labor markets and voluntarily participation should be allowed. However, another important related recommendation is to tighten the conditions of early retirement by imposing high reduction penalties for early retirement decisions. This will highly enhance the sustainability of the fund and encourage labor force for more working careers. Further, returning to work after early retirement should be encouraged by canceling the imposed reduction and re-calculating the pension rights at new end of service. Another important recommendation is that the combination of another income source with the pension is not recommended as it conflicts with the basic principles of the target of these social security systems. Once there is a formal job opportunity of any retiree, the pension should be suspended and pension participation could be voluntarily after the retirement age.

Increasing the public awareness of the labor force is highly recommended as that let large part of the population think rationally regarding compliance and commitment to pay contributions as they believe that would benefit them and their families at their weakness. For this purpose, an awareness program could be in one of the materials at schools beside the regular awareness programs of workshops and media.

Increasing the cooperation with unions would enhance the harmony and acceptance of new regulations and reform options as these reform options would take in consideration the common benefit for all parties and in cooperation with these unions.

Summary of Policy Recommendations:

- Introducing more policies to encourage labor to join formal sector is one of the top priorities of the Palestinian case.
- There should be a review of the legal framework of females and old-age population working conditions to create incentive to increase their participation to labor force.
- Creating incentives for low income groups is highly recommended at the beginning, including government participation to contributions or tax exemption to the employers, which would encourage joining formal sector and committing with the minimum wage.
- We found that the environmental conditions have been changing in Palestine exposing to poverty each of old-aged, females, low-wage employees in informal sector, employees in Israel and abroad, and children; therefore, preventive policy actions should be in consideration.
- Introducing a non-contributory universal scheme is an urgent need and is inevitable, in order to protect vulnerable groups from poverty as a basic principle of human rights.
- Extending social security system through the public pension reform to cover employees in the private sector is a necessity and a right to protect vulnerable groups from poverty and to reduce the future public expenses on social security.
- Unify the administration of the pension systems to reduce the expenses, and guarantee equity and equality, and enhance the technical development, quality of service, and data integration.
- Regarding health-care, the study recommends to keep it separated due to the privacy of Palestinian case of political instability that causes higher expenses and financially unbalanced. However, there is a need to reform the system to enhance its financial status and quality.
- Regarding the social assistance programs, there should be some kind of cooperation between the social security institution and the related ministries of Labor and Social Affairs, and Finance as it would depend on collecting data and essential part of funding these programs has been depending on foreign assistance due to the reality of being under occupation.
- Organize and integrate the social assistance programs.

- For sustainable development plan, there should be a balanced budget allocation for both; social security and relief programs on one side and the development programs on the other side.
- Being under occupation with massive security measures are the main obstacles of sustainable development; therefore, there should be an international responsibility towards lifting imposed restriction and supporting some relief and development programs in Palestine according to the conventions of human rights and recommendations of UN and the World Bank to end poverty.
- The establishment of a National Welfare Reserve Fund that is financed mainly by individual donations as Zakat, grants, and charities. The participation is voluntarily and is preferred to be tax deductible to encourage the largest groups to contribute and register for tax administration as well.
- Even informal assistance forms very important role in reducing the poverty and solve the financial shortage, particularly for old-age persons and low-income employees, introducing other borrowing facilities is the responsibility of the government in cooperation with private financial sector.
- It is recommended to enable voluntary contribution to any proposed social security system, as the ratio of informal sector is so high and that would enable other groups to participate more simply as self-employed and those working in Israel, abroad, or unrecognized informal jobs.
- Any proposed pension system is recommended to be a multi-pillar system in order to provide a flexible safety net for the most vulnerable groups, which is essential to deal with the variety of objectives, vulnerability of conditions, and respond to the heterogeneity of individuals.
- Increasing the age of retirement is inevitable choice to achieve the financial balance of the system with less contributions rates.
- Tightening conditions for early retirement and imposing high penalties could significantly reduce this problem without hurting the individual heterogeneity of choice; otherwise, it is hard to avoid incompliance to register and pay contributions.
- Including family allowances to the pensionable salary would cover part of the high costs of the large-scale survivorship in Palestinian society.

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Résumé

Cette thèse étudie le choix optimal du système de retraite en Palestine. L'économie palestinienne se caractérise par un très faible niveau de protection sociale et un taux de pauvreté élevé .

Le premier chapitre présente une analyse de l'environnement démographique, social et économique en Palestine. Le deuxième chapitre propose une revue de littérature sur les systèmes de protection sociale. Le troisième chapitre analyse le taux d'accès au système de protection sociale en fonction de différentes caractéristiques socio-économiques. Le quatrième chapitre présente une analyse économétrique de la décision de participer au système de retraite. Le cinquième chapitre, en mobilisant le modèle PROST (Banque Mondiale), propose une analyse prospective du système de retraite en Palestine. L'étude prospective détermine le taux de cotisation approprié en fonction de plusieurs scénarios de chômage et son impact sur l'équilibre du système de retraite en prenant en compte la situation spécifique des femmes en Palestine.

Abstract

This thesis aims to explore the optimal choice of retirement system for the Palestinian case motivated primarily by the problems of high poverty rate and the noticeably low coverage rate of social security.

Accordingly, the first chapter focused on the environmental analysis of the Palestinian case. The second chapter focused on the literature review of social security. The third chapter explores the access rate to social security systems in each aspect of social security by socioeconomic characteristics. While, fourth chapter present an econometric analysis about the decision to participate at the pension system. Finally, chapter five presents and discusses guidelines for an optimal alternative pension reform followed by a projection test for proposed parameters of DB scheme using PROST model (World Bank) in several scenarios. The results determined the most important characteristics that increase the probability to participate to a pension system. Further, the projection shows the proper contribution rates in each unemployment scenario and its impact on the balance of the system and adequacy of income given the specific situation of females in Palestine.

Mots Clés

Palestine, Pauvreté, Sécurité sociale, Retraite, Modèle PROST, Moyen Orient, Développement.

Keywords

Palestine, Poverty, Social Security Systems, Retirement, PROST Model, Middle East, Development.