

# Triptych of liberalization, globalization and financialization: implications for economic growth, development and stability in developing and emerging economies

Saadia Irshad

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### UNIVERSITÉ DE GRENOBLE

#### **THÈSE**

Pour obtenir le grade de

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Présentée par

#### Saadia IRSHAD

Thèse dirigée par Faruk ÜLGEN

préparée au sein du Centre de Recherche en Économie de Grenoble (CREG)

dans l'École Doctorale de Sciences Économiques

Triptyque de libéralisation, mondialisation et financiarisation. Implications pour la croissance économique, le développement et la stabilité dans les économies en développement et émergentes

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#### M. Jean-Luc BAILLY

Maître de Conférences-HDR à l'Université de Bourgogne Dijon (Rapporteur)

#### M. Jean CARTELIER

Professeur à l'Université Paris Ouest Nanterre La Défense (Rapporteur)

#### M. Ramon TORTAJADA

Professeur à l'Université Pierre Mendès France (Président du Jury)

#### M. Faruk ÜLGEN

Maître de Conférences-Habilité à Diriger des Recherches à l'Université Pierre Mendès France (Directeur de thèse)



Université Joseph Fourier / Université Pierre Mendès France / Université Stendhal / Université de Savoie / Grenoble INP

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# **LIST OF ACRONYMS**

BIS	Bank for International Settlement
CDOs	Collateralized Debt Obligations
FED	Federal Reserve System, Central Bank of the United States
FDI	Foreign Direct Investment
FL	Financial Liberalization
IMF	International Monetary Fund
G-7	Group of Seven (countries)
G-10	Group of Ten (countries)
G-20	Group of Twenty (countries)
GDP	Gross Domestic Product
GNP	Gross National Product
MBS	Mortgage Backed Securities
OTC	Over the Counter
SMEs	Small and Medium Enterprises
UK	United Kingdom
USA	United States of America
UMM	Unofficial Money Market
OECD	Organization for Economic and Cooperation for Development
WB	World Bank
WTO	World Trade Organization

#### **LIST OF ANNEXURES**

- Annexure I. A Theoretical Approach to Finance and Growth
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<u>ABSTRACT</u>

The objective of this dissertation is to study the triptych of liberalization, globalization and

financialization of modern capitalism which has not only came up with distressing

consequences for developing and emerging economies during 1990s, but also devastating

crisis for developed economies during 2000s - economies with 'apparently' well-developed

financial systems. In this aim, multi-pronged body of theoretical and empirical research has

been identified, synthesized and analyzed to present a unique debate focusing on unstable and

factitious nature of neo-liberal and finance-led capitalism, developed during last four decades.

This dissertation has particular implications for economic growth and development as well as

for financial stability in developing and emerging economies which also adopted this modern

capitalism.

In this aim, this dissertation has been divided into four chapters. First chapter is dealing with

the relationship between finance and growth. In this regard, evolution of key ideas, theories

and empirical research is presented to reach at the concept of financial repression and its

implications for developing and emerging economies. Second chapter analyzes the

propositions for financial liberalization with particular emphasis on Washington Consensus

and financial globalization as well as the opposition against financial liberalization with

particular emphasis on critique by New-Structuralists and Institutionalists. Third chapter is

closely focused on the implications of series of crises and instability in liberalized and open

financial markets of emerging economies of Asia and Latin America during late 1990s. Final

chapter is using the incidence of current crisis in developed economies to explore the weak

foundations of global financial structure and its implications for neoliberal form of finance-

led capitalism which demands more consistent financial framework.

Key Words: Crisis, Economic Growth, Finance-led Capitalism, Financial Liberalization,

Globalization, Stability

**JEL Classification**: F65, F36, G01, G15, O43, P1

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**RÉSUMÉ** 

L'objectif de cette thèse est d'étudier le triptyque de la libéralisation, de la mondialisation et de

la financiarisation du capitalisme moderne qui a engendré non seulement des conséquences

pénibles pour les pays en développement et les économies émergentes au cours des années

1990, mais également une crise dévastatrice pour les économies développées au cours des

années 2000 (i.e. des économies «aux systèmes financiers apparemment bien développés »).

Dans cette optique, plusieurs corps de recherches théoriques et empiriques ont été identifiés,

synthétisés et analysés afin de présenter un débat unique se concentrant sur la nature instable

et factice du capitalisme néo-libéral, développé pendant les quatre dernières décennies. Cette

thèse a des implications particulières pour la croissance économique et le développement,

ainsi que pour la stabilité financière des pays en développement et des économies émergentes,

qui ont également adopté ce capitalisme moderne.

Par conséquent, cette thèse a été divisée en quatre chapitres. Le premier chapitre traite du lien

entre finance et croissance. À cet égard, l'évolution des idées clés, les théories et les

recherches empiriques sont présentées pour aboutir à l'analyse de la notion de répression

financière, ainsi que ses implications dans les pays en développement et les économies

émergentes. Le deuxième chapitre a analysé d'une part les propositions de libéralisation

financière, avec un accent particulier sur le Consensus de Washington et la mondialisation

financière, et d'autre part l'opposition à la libéralisation financière, en mettant cette fois

l'accent sur la critique des structuralistes et des nouveaux institutionnalistes. Le troisième

chapitre est, quant à lui, centré sur les implications de la série de crises et de l'instabilité dans

la libéralisation et l'ouverture des marchés financiers des économies émergentes d'Asie et

d'Amérique latine au cours des années 1990. Enfin, le dernier chapitre aborde l'incidence de la

crise actuelle dans les pays développés pour explorer la fragilité des bases de la structure

financière mondiale et ses implications dans le cadre de ce capitalisme financier néolibéral,

qui exige une structure plus cohérente.

Mots clé: Crise financière, Croissance économique, Capitalisme financier, Libéralisation

financière, Mondialisation, Stabilité.

**Classification JEL**: O43, F65, F36, G15, P1, G01

#### **GENERAL INTRODUCTION**

#### Context Information and Theoretical Framework:

Economic growth and development is a major subject of development economics. While discussing factors affecting it, 'finance' has been holding a crucial importance since long. By 'finance', we mean the creation and management of money, banking, credit, investment, assets, and liabilities at personal, corporate and public levels. Economists like Walter Bagehot (1873) even attributed industrial revolution in England to its financial system. From Joseph Schumpeter to Edward Shaw and Ronald McKinnon till today's modern economists, the relation between finance and growth has been analyzed in various manners. A financial system acts as a 'moderator' to allow funds flowing from those who have surplus of it to those who have shortage of it. This moderation can be performed either through direct market-based financing or through indirect bank-based financing, generally known as 'intermediation'. In simple terms, financial system channelizes household savings to the corporate sector and allocates investment funds. This is considered to be the most simple and common mechanism which links finance and growth. Despite of recognition of this finance-growth nexus since more than a century, the comprehensive and systematic analysis of the connections between financial factors and growth initiated only few decades ago with the advent of modern endogenous growth theories and models. These theories and models recognize savings and financial intermediation as primary channels through which steady-state growth arises endogenously.

Moreover, improved rates and patterns of economic growth in industrial countries having advanced financial sectors also motivated economists to deeply study the relationship between financial and economic development. Theoretically and empirically, there seems to be close ties between financial and economic development. However, little agreement exists on the definition and measurement of financial development. Thus for the purpose of this Dissertation, financial development is defined as "the factors, policies, and institutions that lead to effective financial intermediation and markets, and deep and broad access to capital and financial services" (Financial Development Report, 2008). In this respect, the direction of causality in finance-growth nexus is of critical importance. Besides relative significance of bank-based and market-based structures, legal infrastructure is equally important. However, another view is only to focus on range of financial services or functions that a particular financial sector provides in order to reduce market frictions. Whatever the nitty-gritties might

be, ample theoretical and empirical evidence seemed to assume that well-developed financial systems exert influence on economic growth and development.

Further progress in growth theories often infers that countries which save and invest more are supposed to grow more and faster in the long run. It highlights the significance of restricting measures which can control the pricing and allocation of capital. In this regard, Keynes (1936) and Tobin (1965) provided principal theoretical framework for 'financial repression' and related policies taking place of market-determined pricing and allocation. These frameworks generally hypothesized that monetary policy transmission mechanisms like interest rate channels influence the investments which in turn affect the income level and eventually economic growth and development. This provided a reasonable and logical justification for government intervention in financial markets. By financial markets, we mean domestic and international markets for the sale and purchase of financial instruments like stocks, bonds, bills of exchange, foreign currency, futures and options etc. which work as exchange for credit and money and include money markets as well as capital markets. Thus at least till late 1970's, financial restrictions were often imposed specifically in capital-scarce developing countries and government intervention was a compulsory feature of financial policies. It was the seminal work of McKinnon (1973) which provided an entirely different perspective of government intervention in financial markets. According to him, the fragmentation in the economy provides justification for intervention syndrome which prevails generally in all economies, but particularly in developing economies. However, putting ceilings on interest rates and other restrictive measures led to adverse consequences which motivated McKinnon (1973) and Shaw (1973) to set out the case for the opposite of 'financial repression' – financial liberalization.

Theory and resultant models of financial liberalization (FL) were founded on blatant faith on market clearing forces which asked for complete withdrawal of government from the market economy. The main theoretical underpinning in these models was higher interest rates having positive relationship with economic growth. In this aim, the Complementarity Hypothesis by McKinnon and Debt Intermediation view by Shaw has significant contributions in neoliberal agenda which developed afterwards. The theoretical foundations of FL and successive refinements transformed the idea of FL into a comprehensive process consisting of mix of policy measures depending upon individual country's conditions and preferences. It gave rise to a new phase of capitalism marked by 'Financialization', also known as 'Finance-Led

capitalism' in US and then Europe in which financial sector plays a central role. By the end of 1980s and 1990s, FL started to widespread in developing world, particularly the emerging countries of Asia and Latin America which were restructuring and reforming their economies along market-oriented lines. An important force responsible for the popularity of FL in these economies was the Washington Consensus, a mix of policy reforms to ease out controls in financial markets. Deregulations, privatization, liberalization of financial sector, liberalization of trade and of foreign exchange etc. were part of this agenda adopted by most of the developing countries in transition towards market economy. Another vital force that played primary role in the fad of FL buzzed at the turn of 21<sup>st</sup> century was financial globalization and integration which called for further financial opening. This provided added impetus for the extensive implementation of FL reforms in these economies.

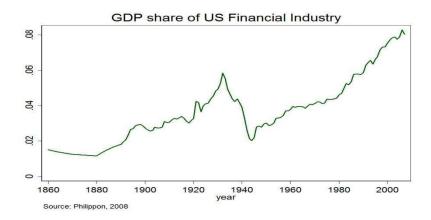
Liberalization and globalization of financial markets led to a series of financial crises which made the decade of 1990s extremely distressing for the emerging economies of Asia and Latin America. Since 1960s, the Asian economies had been outperforming with high growth rates, accompanied with gradual and sustained expansion of physical capital accumulation which made them to be termed as 'Asian Tigers'. But pressurized by neoliberal agenda, the commencement of liberalization process during 1980s and 1990s with the opening of capital markets stimulated the occurrence of financial crises in these economies. Despite of being less distortive from previous repression and following policy prescription with all necessary caution, the Asian countries particularly the East Asian countries suffered crisis from which they could not recuperated for next many years. What started in September 1997 in Thailand as currency crisis travelled to Indonesia, Korea and Hong Kong, allegedly known as 'Asian flu' descended on Russia in August 1998 which led to Russian announcement of moratorium on its external liabilities. It then spilled over to Brazil for generating financial crisis in Latin America by 1999.

This started a protracted series of FL critique, one set of which was based on the inherent evils of the market economy. That is, the assumptions on which theory and models of FL are founded are actually non-existent which infers that financial markets are imperfect. For instance, incomplete information as stressed by Stiglitz-Weiss model, along with the externalities and incompleteness of financial markets are regarded as some of the sources of these imperfections. This critique that emerged as result of financial crashes, chaos and crises in emerging countries is responded by the proponents of FL while emphasizing the proper

implementation of FL to make it successful. Two key areas in this respect are pre-conditions and sequencing. Macroeconomic stability along with efficient regulation and supervision are deemed as necessary conditions to be fulfilled before executing FL. The simultaneous implementation of internal and external FL i.e. liberalization of capital market along with trade liberalization is considered flawed due to which an optimum sequencing of liberalization reforms is also recommended. Regarding sequencing, big bang versus gradual approaches are debated which developed further criticism on the logic of FL. An important intertwined stream of critique is introduced by the New-structuralists and Institutionalists schools, characterizing FL as inappropriate for emerging and developing countries due to their structural and institutional realities and settings that are inapt as consequence of protracted financial repression in these economies. For instance, the wide prevalence of unofficial money market is one of such reality.

The devastation of most of the Asian and Latin American economies during late 1990s intensified the discussions and debates among theorists and policymakers in order to find out the possible rationales. In this respect, the historical crises are studied to determine if the sequence from liberalization to crises is inevitable. Once again the flaws of pre-FL setting are accused for post-FL crises as it is easy and quick to deregulate interest rates, privatize stateowned firms and banks, and liberalize capital flows but it is difficult and slow to develop institutional infrastructure, acquire supervisory and administrative skills, and manage infected portfolios. Moreover, the free mobility of capital also contributed in the volatility of financial markets thereby calling in question the stability of financial markets. Hence, contrary to its loud claims to bring stability, FL in emerging countries did the opposite by introducing instability in their financial markets. Thus the adverse consequences of Asian and Latin American crises of 1990s magnified the issue of financial stability which became central focus with particular attention given to various mechanisms such as contagion, derivatives market, manipulation, speculation, short term booms etc. In this regard, the key challenge is to maintain financial stability without inhibiting economic efficiency as overly protective structure of financial system can actually hamper economic growth. However, some degree and form of protection is desirable given the incidence of crises in liberalized financial markets. Third generation models of speculative attack further justify the need for capital controls. In this respect, it is of utmost importance to analyze various forms and design of capital controls, especially to control short term capital flows, as well as their relative costs, benefits and limitations.

Thus the triptych of Liberalization, Globalization and (Neoliberal) Financialization changed the structure of capitalism over last three decades. Financial markets become more integrated, more opened and gravity of economic activity is shifted from production and services to finance. This led to growth of profits in financial sector of developed economies of US and Europe. But what follows can best be exhibited in following graph which shows GDP share of US financial sector. It started around 1860 and went up steadily to almost 6 percent until Great Depression of 1930s and 2<sup>nd</sup> world war during which it went down to almost 2 percent. It then again climbed gradually till 1980s to reach at 6 percent but continued its upward trend to rise at around 8 percent till mid-2000s. And then – there is a huge crash followed by crisis and recession somewhat comparable to Great Depression of 1930s.



This financial crisis began in 2007 in US and rapidly spread to Europe. The genesis of this crisis of developed world was defaults on subprime mortgage loans and debt instruments backed by those kinds of loans. The realization that huge volume of defaults on subprime mortgages are going to spread to other sectors of financial industry started in July 2007 when Bear Stearns announced the worthlessness of assets held by two of its subprime hedge funds. It followed by collapse of securities market and bankruptcy of Bear Stearns in March 2008. From here started the series of bankruptcies, bursts, crashes, crisis and resulting recession. Reckless risk taking through complex innovations like financial derivatives along with inefficient regulatory measures and irresponsible credit ratings are considered to be main causes to explain the financial crisis of 2007/2008.

But the actual roots of this crisis are even far deeper. Current crisis happened despite of various measures suggested by international entities like BIS, IMF etc. but these efforts were

not sufficient to ensure more disclosure and transparency in the face of more integrated and sophisticated financial environment developing since last three decades. It is also accompanied by technological advancements and more focus on non-bank financial institutions like hedge funds, equity funds etc. This trend enhanced efficiency of private finance in various terms but suitability and efficiency of regulatory and supervisory approaches were lagged. This led to new and unmeasured risks contributing to the potential for volatility, instability, and crises having tendency to spread beyond any virtual or geographical boundaries.

Current crisis has highlighted the weak foundations of global financial architecture. Implicit or explicit safety nets acted as moral hazard for banks and other financial institutions covered under this net because presence of unconditional assurances provide impetus for mindless risk taking. The resulting bailouts are distortionary as they put pressure on all citizens in form of increased taxation to be given to affluent risk takers and speculators. The failure to distinguish risk from 'uncertainty' also played important role to weaken the financial systems. Banks, by taking advantage of financial derivatives and other innovations, became more involved in speculative and risky treasury operation. But they forgot, in their enthusiasm of increasing profitability, to distinguish risk from uncertainty. Crises have more to do with uncertainty which follows from irrational risk taking. This also made market discipline inept to play any significant role in early detection and prevention of imbalances to grow beyond certain limits. Moreover, various dynamics of financial markets have also changed significantly to become more conducive for 'feast and famine' phenomenon of magnifying the scale and frequency of crises. In addition to this, nature of systemic risk is also changed which demands transformation of preventive measures. Conventional tools are inadequate as they are based on assumption that systemic risk involves the flow of problems in one institution to other institutions via interbank relations, payment system, deposit run etc. thereby threatening whole financial system. Such assumptions narrow down the real threats because they ignore the extended opportunities for risk-taking. But the current approach to systemic regulations, i.e. micro-prudential regulation, generally characterizes the 'fallacy of composition' i.e., what is true of the parts of a whole might be wrong of the whole. Keynes's (1936) "paradox of thrift<sup>1</sup>" and Fisher's (1933) "stampede to liquidity<sup>2</sup>" exhibited this fallacy. Thus, it is not

<sup>&</sup>lt;sup>1</sup> If everyone saves more money during times of recession, the aggregate demand will fall and will in turn lower total savings in the population. Thus, if everyone saves, there is a decrease in consumption which leads to a fall in aggregate demand and thus leads to a fall in economic growth.

possible to ensure the safety of the whole system by merely ensuring the safety of individual banks. Here comes the need to study the growing significance of macro-prudential framework.

The failure to completely and accurately realize these weaknesses in foundations of financial systems played key role in current crisis. And now, the measures to cope with this crisis are mainly based on 'financial repression' - a notion long rejected by developed economies and also made prohibitive for emerging and developing world. Developed economies are doing exactly the opposite of what they lectured emerging and developing economies in case of crises in those economies. Nobel Laureate, Paul R. Krugman (2002) expressed it bluntly that US in particularly, and the West in general, should be feeling little embarrassment about all lecturing they did to the Third world<sup>3</sup>. Developed countries suffering from current crisis are now taking various repressionary measures as part of their 'macroprudential' framework to heal their economies. Governments are directly intervening to nationalize various big banks and injecting equity in those banks. Suffering from huge volumes of private and public debt, governments are forced to lower the cost of debt by artificially maintaining low interest rates. These lower rates become even negative in scenario of steady inflation. Unlike direct taxes or spending cuts, this kind of financial repression acts as indirect tax. Financial repression in the aftermath of crisis has historical evidence because termination of laissez-faire was also followed after Great Depression and 2<sup>nd</sup> World War. Modern financial repression also has various implications, even for emerging and developing economies as it has forced them to put capital controls and restrictions. This tendency might encourage de-globalization, but chances of such tendency seem meager at this point of time.

Current crisis has developed a new stream of debate which focuses on the 'parasitical' nature of capitalism. Since this crisis is occurred in the headquarters of capitalism, therefore, various voices are rising on the inherently unstable nature of capitalism. However, the actual problem lies with 'neoliberalism' which motivated financial globalization and liberalization and led to 'finance-lead capitalism' as opposed to 'golden era of capitalism' from 1940s to 1970s characterized by regulations and state-capitalism. The creation of fictitious wealth

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<sup>&</sup>lt;sup>2</sup> If large numbers of investors attempt to get out of debt by selling assets, investors dump stocks and property for any price they can get – desperate to pay off their debts before they are dragged into bankruptcy. What is good for every individual investor turns out to be bad for the economy itself. Asset prices fall leading to falling sales and rising unemployment.

<sup>&</sup>lt;sup>3</sup> Although Paul Krugman made these remarks in the context of globalization during 2002 meeting of World Economic Forum, but they hold perfectly true in today's scenario.

inconsistent with creation of real wealth is the key feature of this 'neoliberal financialized capitalism' which was destined to be collapsed one day. Irresponsible and dishonest attitude of financial institutions is also vital in this regard which have brought the 'political economy' to the fore. Despite of large body of suggestions to transform regulation and supervision and to adopt a macro approach, no concrete step has yet been taken to suppress the hegemony of financialized capitalism and chances for such suppression also seem opaque at this moment.

#### Statement of Research Question(s):

Within above described context and framework, this dissertation is going to find answers to three key questions. First is to explore that how did the role of finance in economic growth and development give rise to a new phase of capitalism that is finance-led and based on neoliberal agenda. Second question is aimed to find out that is there any relation between emerging economies crisis of 1990s and advanced economies crisis of 2000s during this journey towards neo-liberal and finance-led capitalism. In this pursuit, the logical question to ask is that what are the inferences of the financial crisis of 2007/2008 for the triptych of 'liberalization, globalization, and financialization' – a triptych which characterizes the current phase of capitalism.

#### Aim, Methodology, and Limitations of the research:

Current crisis has spurred a stream of research mostly focusing on existing failures and future remedies. However, this research aims to contribute in new and unique debate connecting emerging economies' crises during late 1990s and developed economies' crisis during late 2000s. For this purpose, large body of theoretical and empirical research has been identified, synthesized and analyzed to build arguments for reforming existing phase of capitalism due to its weak foundations and inherently unstable structure.

The principal limitation of this thesis is that due to broadness of research questions, it was not possible to hold an all-inclusive empirical research. Therefore, we have tried to explore wide array of literature, theoretical as well as empirical, for the purpose of this thesis. Moreover, there were various areas, especially when we analyze 'neoliberal agenda' where role of 'political economy' seems more prevalent than 'international economics' or 'development economics'. However, since the scope of this dissertation is mostly confined within the boundaries of mainstream economic framework, thus it would not be appropriate here to

discuss in detail the implications of political economy. As a future research agenda, the area of political economy can be interesting to explore.

#### Plan of thesis:

This thesis has been divided into four chapters.

First chapter deals with the relationship between financial and economic development. In this regard, evolution of key ideas and theories is presented to reach at the theory of financial repression and its implications for developing and emerging economies.

Second chapter analyzes the propositions for financial liberalization with particular emphasis on Washington Consensus and financial globalization. This chapter also discusses the opposition against financial liberalization with particular emphasis on critique by New-Structuralists and Institutionalists.

Third chapter closely focuses on the implications of series of crises and instability in liberalized and open financial markets of emerging economies of Asia and Latin America during late 1990s.

Final chapter highlights the incidence of current crisis in developed economies to explore weak foundations of global financial structure and its implications for neoliberal form of finance-led capitalism.

# <u>CHAPTER 1. FINANCIAL AND ECONOMIC DEVELOPMENT –</u> PERSPECTIVE OF FINANCIAL REPRESSION

#### INTRODUCTION

Economic growth and the factors affecting it had been one of the major subjects in development economics discussed all over the world since long. From Joseph Schumpeter (1911) to John Gurley and Edward Shaw (1955) and from Raymond Goldsmith (1969) and Ronald McKinnon (1973) till today's modern economists, the finance and growth have been regarded as relevant to each other, in one way or the other. Even economists like Walter Bagehot (1873) and John Hicks (1969) attribute Industrial Revolution to financial system in England. "In England, .... capital runs as surely and instantly where it is most wanted, and where there is most to be made of it, as water runs to find its level" (Bagehot, 1873, P. 12). Well before Bagehot recognized it, William Gladstone, British Prime Minister, expressed the importance of finance for the economy in 1858 by stating that "Finance is, as it were, the stomach of the country, from which all the other organs take their tone" (cited in speech by Duisenberg, 2001). However, at the same time, various prominent researchers, including Nobel Laureate, Robert Lucas (1988), considers the role of finance in growth as a subject that is 'over-stressed' or even simply ignored by Nicholas Stern (1989) in his review of development economics.

In the financial system, funds flow from those who have surplus funds to those who have a shortage of funds, either by direct, market-based financing or by indirect, bank-based finance. To put it in straighter manner, financial system is supposed to direct household savings to the corporate sector and allocate investment funds. This is the most common mechanism which connects finance to the economic growth. Despite of recognition of this relationship since more than a century, the comprehensive and systematic analysis of the connections between financial factors and growth has initiated only few decades ago, particularly in the context of the new generation of endogenous growth theories and models which recognize savings and financial intermediation as primary channels through which steady-state growth arises endogenously (Agénor and Montiel, 1996). In this aim, the section 1 of this chapter analyzes the evolution of key ideas on finance, growth and development.

Improved rates and patterns of economic growth in developed and industrial countries, which have most advanced financial systems, provide impetus to study the relationship between financial and economic development. Theoretically and empirically, there seems to be close connections between financial and economic development, however, little agreement exists on the definition and measurement of financial development. We found the most relevant and comprehensive definition in the "Financial Development Report 2008" which defined financial development as "the factors, policies, and institutions that lead to effective financial intermediation and markets, and deep and broad access to capital and financial services" (P. 3). In this aim, various aspects of financial system and their relationship with economic growth and development are studied by reviewing the literature on this subject. These aspects include direction of causality in finance-growth nexus, and the relative significance of different financial structures e.g. bank-based view, market-based view, legal view and financial services view. Section 2 and 3 discuss these aspects. A range of financial services which are deemed to reduce market frictions are further highlighted in section 4.

Since the empirical evidence reviewed in section 5 also seemed to assume well-developed financial systems exerting a first-order influence on economic growth and development, it motivated policymakers to 'control' market forces. Progress in growth theories also generally imply that countries which save and invest more are supposed to grow faster in the long run. It highlights the significance of the role of policies regarding pricing and allocation of 'finance' which resulted in the policies of repression taking place of market-determined price and allocation. Thus, historically, and at least till 1970's, financial restrictions were often imposed specifically in capital-scarce countries and government intervention was a mandatory factor in financial policies. In short, financial systems were 'repressed'. Keynes (1936) and Tobin (1965) provided the major theoretical framework for 'financial repression' and related policy context. Based on the complementary view of money and capital, it was hypothesized that monetary policy transmission mechanisms like interest rate channels influence the investments which in turn affect the income level and eventually economic growth and development. This provided a logical justification for government intervention in financial markets. The various theoretical and policy related approaches in this context are covered in section 6 of this chapter.

However, the ground-breaking research by McKinnon (1973) and Shaw (1973) provided an entirely different perspective of government intervention in financial markets to control price

and allocation of capital. According to them, the fragmentation in the economy provides justification for intervention syndrome which is very much prevalent in developing economies. Section 7 would explore this dimension of the topic. The reasoning behind putting ceilings on interest rates and exercising other restrictive measures for controlling financial and capital markets are discussed in section 8. This section will finally cover the adverse consequences of financial repression for financial markets, in form of credit allocation and banking activity, as well as for macroeconomy in form of inflation.

#### Section 1. Finance, Growth and Development - Evolution of Key Ideas

The interest in economic growth can be traced back as early as the advent of formal economics in 1776 when Adam Smith wrote "An inquiry into the nature and causes of the wealth of nations". By using the example of a pin factory, Adam Smith illustrated that how division of labor, specialization and technology impact the growth of firms and thereby the growth of national economies. David Ricardo (1817) further contributed in classical growth model by introducing the concept of diminishing returns to land. The change in classical growth is viewed to be brought by Karl Marx (1878) who provided a rigorous formulation of a growth model through the 'reproduction' schema and the concept of 'steady-state growth equilibrium' in multi-sectoral context. The mention of these contributions clearly articulates that they were focused on economic growth, its mechanisms and different factors affecting it. But they didn't pay much attention to the role of finance in economic growth. It was Bagehot (1873), who for the first time gave explicit analysis of how money market developments in England made capital flow across the country in search of the highest rate of return and contributed in industrialization of England. However, analysis of Bagehot was incomplete. It was Schumpeter (1911/1934), who put the role of finance at the center stage of economic development.

#### 1.1 Schumpeterian Theory

Schumpeter (1934) defined 'Development' as the carrying out of new combinations. According to him, in a competitive economy, in which new combinations mean the competitive abolition of the old ones, it describes a whole series of phenomena of the business cycle, the mechanism of the formation of private fortunes etc. If the competitive economy is broken up by the growth of great combines....The difference so made is great enough to serve as the 'water-shed between two epochs in the social history of capitalism' (Schumpeter, 1934, p. 67). Since new combinations must draw the required means of production from some old

combinations, therefore, the carrying out of new combinations means simply the different employment of existing productive means of an economic system. Schumpeter criticized pure economic theory of development implied in the traditional doctrine of the formation of capital as it always refers only to saving and investment and entirely overlooks much more essential things. The continuous increase in the national supply of productive means and of savings is obviously an important factor in explaining the course of economic history through the centuries, but one should not overlook the fact that growth and development consists primarily in employing existing resources in a different way, in doing new things with them, regardless of whether or not those resources increase.

Schumpeter's theory diverges from the traditional views existent in early 20th century. The accepted theory sees the problem in the existence of the productive means, which are needed for new productive processes. Whereas Schumpeter sees problem in removing already employed productive means from the circular flow and allotting them to new combinations. This is done by credit, by which whosoever wishes to carry out new combinations overpays the producers in the circular flow for the required means of production. Regarding the significance of credit, it is established that the structure of modern industry could not been erected without it, that it makes the individual to a certain extent independent of inherited possessions, that talent in economic life "rides to success on its debts", even the most conservative orthodoxy of the theorists cannot well deny (Schumpeter, 1934, p. 70). Therefore, in carrying out new combinations, "financing" is deemed as fundamental, in practice as well as in theory. The money and capital market as 'headquarters of the capitalist system' facilitate trading of credit for the purpose of financing for growth and development (ibid, p. 126). Based on credit-driven economy, the focal point of Schumpeterian approach is "the banker ... authorizes people, in the name of society as it were, to ....(innovate)" (ibid, p. 74). Thus capitalistic credit system has grown out of and thrived on the financing of new combinations in various countries, even though in a different ways.

Schumpeter (1934) defined the kernel of the credit phenomenon by determining credit as essential for the creation of purchasing power in order to transfer it to the entrepreneur. Besides that, the creation of purchasing power characterizes, in principle, the method by which development is carried out in a system with private property and division of labor. By credit, entrepreneurs are given access to the social stream of goods before they have acquired

the normal claim to it and entrust him with productive forces. And this function creates the foundation of the modern credit structure for economic development.

This seminal work of Schumpeter which was presented in early twentieth century<sup>4</sup> did not get immediate attention. Thus growth theories, presented even later, i.e. mid-century, by Solow (1956) and Swan (1956) paid no particular attention to the role of financial system in economic growth and development.

#### 1.2 Neo-classical and Endogenous Approaches of Growth

After the early classical period of Adam Smith, David Ricardo and Karl Marx, growth research was somewhat subsided which again came into limelight in 1956 when Robert Solow came up with his seminal work on economic growth titling "A contribution to the theory of economic growth" (1956) followed by more complete analysis of technical progress by Trevor Swan (1956) in "Economic growth and capital accumulation". This first generation of neoclassical growth models, developed by Robert Solow (1956, 1957) and Trevor Swan (1956) - commonly known as "Solow-Swan growth model" - attributed economic growth to exogenous technical change and population expansion. The neoclassical growth model, also known as the Exogenous growth model, is a class of economic models of long-run economic growth set within the framework of neoclassical economics. Neoclassical growth models attempt to explain long run economic growth by looking at productivity, capital accumulation, population growth and technological progress.

Empirical evidence offers mixed support for such models. Limitations include their failure to take account of the entrepreneurship, which may be regarded as catalyst for economic growth and also ignored the strength of institutions, which may facilitate economic growth. In addition, no explanation is given on how or why technological progress occurs. This failing has led to the development of endogenous growth theory and models, which endogenize technological progress and knowledge accumulation.

In the Neoclassical growth models, capital exhibits diminishing marginal returns in the production process. This feature prevents it from explaining the wide differences across countries in per capita income or growth rates, because the poor countries do not seem to

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<sup>&</sup>lt;sup>4</sup> Original work by Schumpeter was published in 1911 as '*Theorie der wirtschaftlichen Entwicklung*', which was later translated in English as 'The theory of economic development' in 1934

grow faster than rich ones. Moreover, output growth is independent of the saving rate and is determined only by rate of population growth and technological progress. But since population growth and technological change are assumed to be exogenous, the neoclassical models do not explain the mechanisms that generate steady-state growth. The initial research in endogenous growth was based on the work of Kenneth Arrow (1962), Hirofumi Uzawa (1965), and Miguel Sidrauski (1967). Research on endogenous growth is further extended by Romer (1986), who presented a competitive equilibrium model of growth in which technological change was endogenous. Then Lucas (1988) considered various mechanisms for constructing a growth theory in consistency with the main features of economic development. Accumulation of physical and human capital is regarded as key feature by Lucas (1988). Afterwards, Rebelo (1991) described a class of models which explained the heterogeneity in growth across countries as result of government policies employed by different countries. These class of models studied growth as endogenous but the technology exhibited constant returns to scale. Growth in all of these extended growth models was mainly attributed to indefinite investment in human capital which had spillover effect on economy and reduces the diminishing return to capital accumulation. Moreover, new growth literature addresses the limitations of earlier neoclassical models by proposing a variety of channels through which steady-state growth arises endogenously (Agénor and Montiel, 1996). Channels of savings and financial intermediation are among those channels.

#### **1.2.1 Savings**

The advent of endogenous growth theory also changed the message of growth theory regarding savings and policies (Meier and Rauch, 2000). The accumulation of physical and human capital through savings is argued to be associated with an accumulation of knowledge that staved off diminishing returns. The development of endogenous growth theory gave a powerful position to savings by recognizing it as the engine of growth, and argued that growth rates can be changed by policies that affect the incentive to save<sup>5</sup>. The AK model, attributable

<sup>&</sup>lt;sup>5</sup> Whether or not savings and investment play a leading role in economic growth, or to put it more precisely as "the engine of growth", has been a source of controversy since long. The founding intellect of neoclassical growth theory was that savings could not be the engine of growth because of diminishing returns to investment in capital. As the stock of physical capital per head increased, the rate of return on investment inevitably fell so low that the incentive for further saving was eliminated. An exceptionally thrifty population could only postpone the inevitable until a higher stock of capital per head was reached. Thus in the long run the propensity to save could only affect the level of per capita income, not its growth rate. The engine of growth was taken to be improvement in technology, which was considered to be exogenous to the saving process. Government policies could affect the rate of growth of per capita income only if it could affect the rate of technological progress. (Source: Leading issues in economic development, Gerald M. Meier and James E. Rauch; Chapter 3 "savings and investment")

to Rebelo (1991), proved an especially useful vehicle for demonstrating how such policies could have the effects on growth. The AK model, which is the simplest model, assumes a constant exogenous saving rate and fixed level of the technology. It shows elimination of diminishing returns leading to endogenous growth. Easterly, King, Levine, Rebelo (1991) show how policies affect growth in AK model either by changing the incentive to save or changing the efficiency of saving as measured by the extent to which the marginal private product of capital reflects its marginal social product.

#### 1.2.2 Financial Intermediation

Financial intermediation operates as a tax in the transformation of saving into investment. Since intermediaries appropriate a share of private saving, therefore, financial intermediation has a growth-deterring effect. If the reforms of the financial system lead to a reduction in the cost and inefficiencies associated with the intermediation process, the result would be an increase in the growth rate (Agénor and Montiel, 1996). An intermediation industry permits an economy to reduce the fraction of its savings held in the form of unproductive liquid assets, and to prevent misallocations of invested capital due to liquidity needs. This argument suggests that financial intermediaries may naturally tend to alter the composition of savings in a way that is favourable to capital accumulation. Then, if the composition of savings affects real growth rates, intermediaries will tend to promote growth (Bencivenga and Smith, 1991).

Thus new growth paradigm stressed the importance of innovation, human capital accumulation, the development of new technologies, and financial intermediation as important determinants of economic growth. A general implication of modern growth theories is that countries that save and invest more will grow faster in the long run. Thus, the economic agents may form financial intermediaries and markets to mitigate the costs of acquiring information and conducting transactions which ultimately influence saving and investment decisions. Thus, modern economic theory provides an intellectual framework for understanding how, ceteris paribus, countries with "better" financial systems, that is, financial institutions, markets and instruments which are better at performing various services e.g. acquiring information, exerting corporate control, managing risk, and mobilizing savings etc. could grow faster than countries with less developed financial systems (Levine, Loayza and Beck, 2000). This angle will be discussed in detail later in this chapter (section. 4). However, it would be relevant here to look into some empirical studies on relationship between financial variables and economic growth.

#### 1.3 Review of Empirical Research

Host of econometric studies has been conducted in the past decades in order to examine the determinants of growth. One of such studies is given in IMF World economic outlook (1993) which presents the major characteristics of high, medium and low growth developing countries using annual data for the 1970s-90s. The analysis of data implies that fast growing economies have substantially higher saving, investment, and export growth rates as compare to those of medium and slow growing economies. Levine and Renelt (1992), by examining the degree of robustness of some of cross-country growth regressions, found that investment rates for physical as well as human capital are positively correlated with average growth rates across a wide variety of samples. However, the correlation of other variables such as fiscal policy, inflation, rate of increase in population, and the initial level of income etc. does not seem to be robust with growth.

Regarding the role of financial variables, King and Levine (1993) show a robust correlation between the degree of financial development and growth, investment, and the efficiency of capital. The financial indicators used in this study includes the size of the formal financial sector relative to output, the importance of banks relative to the central bank, the ratio of credit allocated to firms relative to output, and the share of total credit allocated to firms. On other hand, Fischer (1993) establishes a negative relation between growth, inflation and fiscal deficits in a large group of countries, whereas De Gregorio (1992, 1993) finds evidence of a negative relationship between the level of inflation (as indicator of tax system inefficiency), the variability of inflation (as indicator of macroeconomic stability), and growth in Latin America. Although the study by Nelson and Singh (1994) shows no significant effect of fiscal deficits on growth in developing countries during 1970s and 1980s, but private investment appears to have a significantly positive role.

Then, Evans et al., (2002) evaluate three different strands in finance- growth relationship: the first strand is that derived from the neo-classical growth model, inspired by seminal work of Solow (1956, 1957); the second strand is that based on Romer (1986)-Lucas (1988) paradigm of endogenous growth; whereas third strand is derived from the work of Goldsmith (1969), McKinnon (1973) and Shaw (1973). This study investigates the contribution of human capital and financial development to economic growth in a panel of 82 countries covering the period of 22 years from 1972 to 1993. This study found that finance makes a significant contribution to growth, irrespective of whether money or credit is employed as a measure of the monetary

factor. In addition, results associated with the money-capital interaction clearly support the McKinnon's (1973) complementarity hypothesis and Shaw's (1973) debt intermediation view, irrespective of the definition of the monetary variable used. Although these are the hypotheses and views which we will focus in next Chapter, however, it would be relevant to briefly mention the two at this point. McKinnon's (1973) complementary hypothesis predicts that money and investment are complementary due to a self-financed investment, and that a real deposit rate is the key determinant of capital formation for financially constrained developing economies. Shaw's (1973) debt-intermediation view postulates that financial intermediaries promote investment and raise output growth through borrowing and lending.

In sum, modern growth theories generally imply that countries which save and invest more are supposed to grow faster in the long run. It highlights the significance of the role of policies. Policies aimed at encouraging savings, particularly those designed to enhance the efficiency of financial intermediation, may have a sustained effect on per capita income. Therefore, two components to analyze while studying finance-growth nexus are financial development and the policies aiming this development. Before that, it is pertinent to describe that a common tendency in the area under investigation is to assume that financial development automatically results in economic growth and thus regress real economic activity on some measures of financial development (Gupta, 1984). However, this view is ambiguous and somewhat contentious as there is no consensus in the literature and empirical research about the direction of causality.

#### Section 2. Direction of Causality in Finance-Growth Nexus

There are different opinions regarding the significance of financial system for economic growth. There are certain researchers who attribute the Industrialization in England to its financial system as it facilitated the mobilization of capital for "*immense works*" (Walter Bagehot, 1873; John Hicks, 1969). By specifying the financial system as banks, Joseph Schumpeter (1934) argue that well-functioning banks stimulate technological innovation as they are enabled to identify and fund those entrepreneurs who can successfully implement innovative products and production processes.

Well before Schumpeter, such significance was also identified by economists like Alexander Hamilton (1781) who argued that "banks were the happiest engines that ever were invented for creating economic growth" (cited in Hammond, 1991, P. 36). Opposed to this mindset that

support the finance and cause and growth as effect, there are economists like Joan Robinson (1952) who argued that 'it seems to be the case that where enterprise leads, finance follows...The same impulses within an economy which set enterprise on foot make owners of wealth venturesome, and when a strong impulse to invest is fettered by lack of finance, devices are invented to release it ... and habits and institutions are developed' (Robinson, 1952, P. 86-87). This view regards growth as cause and finance and effect. That is, it is the economic growth which creates demand for certain kinds of financial arrangement and resultantly, the financial system responds automatically to these demands.

#### 2.1 Demand-following Approach versus Supply-leading Approach

One way to analyze the finance-growth causality is through the approaches described by Hugh T. Patrick (1966) as "demand-following" and "supply-leading". Initially put by Robinson (1952), the demand-following approach explains that with the growth of the economy, new additional demands are generated for financial services which ultimately cause the growth of the financial system as result of its supply responses. Thus, the more rapid the growth rate of real national income, the greater will be the demand for external funds i.e. savings of others, which needs financial intermediation because firms are generally less able to self-finance all investment projects. It is also assumed that demand-following supply response of emergent financial system happens automatically. It implies that as the result of real economic growth, financial systems are perfectly developed to increase the opportunities for acquiring liquidity and for reducing risk etc.

However, this is not the case in developing countries where the increased supply of financial services as result of demand may not be automatic. It implies that the financial systems in these countries are under-developed due to the lack of demand for financial services by their savers and investors. Thus, as result of underdeveloped financial system, there is lack of saving and investing activities, due to which the real economy is refrained to grow. This phenomenon is often associated with a kind of 'vicious circle' of underdevelopment which these countries are unable to break. One of the historical reference given by Patrick (1966) to describe the passivity of finance in growth process is restrictive banking legislation in early 19<sup>th</sup> century France, where religious barriers to interest and loans along with imperfections in the operation of market mechanism dictated an inadequate demand-following response by the financial system. In the similar fashion, Alexander Gerschenkron (1962) analyzes the abortive upswing of Italian industrial development in the 1880s by stating that "mainly, it is believed,

because the modern investment bank had not yet been established in Italy" (Gerschenkron, 1962, P. 363). In the underdeveloped countries today, similar impediments may lead to an inadequate demand-following response by the financial system. Therefore, in one way or the other, the lack of financial services, restricts or limits effective growth patterns and processes.

The other approach is the "supply-leading" where the creation of financial institutions and supply of financial services by them is made prior to their demand, by the entrepreneurs in the modern and growth-inducing sectors. In this regard, there are two functions associated with this approach: one is to transfer resources from traditional non-growth sectors to modern ones, and second is to stimulate an entrepreneurial demand in the modern sectors. Financial intermediation which transfers resources from traditional sectors, whether by collecting wealth and saving from those sectors in exchange for its deposits and other financial liabilities, or by credit creation and forced savings, which is analogous to 'Schumpeterian concept of innovation financing'. Patrick (1966) indirectly implies that the foundations of Schumpeter's concept are also laid on supply-leading approach. Due to initial lending to nascent modern sectors, supply-leading financial system may not be profitable. However, new financial institutions can be made viable through many different ways: For example, the use of government capital and direct government subsidies (like Russia did in latter half of 19<sup>th</sup> century), indirect government subsidies, or modern financial institutions may initially lend a large proportion of their funds to traditional (agriculture and commercial) sectors profitably, gradual shifting of lending portfolio from traditional to modern sectors; a phenomenon more closely resembles the demand-following approach, that is, whether a financial institution is supply-leading depends mainly on its attitude in searching out and encouraging new ventures of a modern nature. Another characterization of supply-leading approach is that it presents an opportunity to stimulate real growth by financial means. Therefore, it may play a more significant role during the initial phases of growth process than the latter ones. As implied by Gerschenkron (1962), the more backward the economy relative to others, the greater would be the emphasis placed on supply-leading finance. However, the use of resources, especially entrepreneurial talents and managerial skills, and the costs of explicit or implicit subsidies in supply-leading development must produce sufficient benefits in the form of stimulating real economic growth; a condition necessary to justify this approach.

Which approach to follow to understand finance-growth causality is an area which needs to be explored further. According to Patrick (1966), in actual practice, there is likely to be an

interaction between demand-following and supply-leading approaches. Before sustained modern industrial growth kick starts, real innovation-type investment can be brought by supply-leading. As the process of real growth crops up, the supply-leading drive gradually subsides whereas the demand-following financial response becomes dominant. Therefore, it is the matter of timing of progression of different sectors.

Gurley and Shaw (1955) seems to lean on the view that financial development depends on economic growth, that is, demand-following phenomenon. However, they do mention that there may also be a 'retroactive impact of finance upon the real world', thereby implying a role for the supply-leading phenomenon. This position thus advocates a two-way causality between real and financial growth. However, Goldsmith (1969) suggested that financial development helped economic growth, which implied a supply-leading situation.

Besides considering two-way causality between finance and growth, it is also crucial to take into account the 'complementarity' of the two phenomena as described by Berthélemy and Varoudakis (1996). If 'supply-leading' financial development actually accelerates the economic growth, the 'demand-following' financial development is also not merely a passive conformation of the financial system to development requirements of the real sector. Rather, real growth enables the financial system to accomplish its own autonomous evolution, because the sustained increase in real income provides the means to develop an expensive and sophisticated financial intermediation. Another way to look at this complementarity is based on the work of Townsend (1983), Greenwood and Jovanovich (1990) and Levine (1992), which suggested that if the organization of financial networks is expensive, there may be a 'circular relationship' between real growth and the development of financial system. It implies that at one point of time, economic growth makes the development of financial systems profitable and, at the same time, the establishment of such systems speeds up growth in the real sector along with the structural transformation of the economy. As emphasized by Levine (1992), economic growth even influences the type of financial intermediation systems that the economy can afford. It implies that when real income per capita is low, the economy will select 'simple' forms of financial systems with the main purpose to mobilize savings, diversify productivity risks, and manage liquidity risks. However, the rise in per capita income enables the economy to develop more "sophisticated" financial systems, whose functioning will be correspondingly more costly as they need to be involved in monitoring investment projects and in the identification of the cost-effective innovations.

#### 2.2 Review of Empirical Research

As far as the evidence on finance-growth causality is concerned, Kanhaya Lal Gupta (1984) studied the causality direction by using Granger-Sims methodology on sample of 14 developing countries for the period covering 1960-1980. In the case of every country, the supply-leading phenomenon exists. Out of fourteen countries covered, in the case of eight, only supply-leading phenomenon exists. Thus, it is reasonable to suggest, that at least for the sample countries, there is overwhelming support for the supply-leading phenomenon, that is, for the situation in which economic growth is stimulated by deliberately planned expansion of financial development. Another important finding is that not for a single country covered, the evidence of strictly demand-following phenomenon is found. Moreover, only two countries exhibit a simultaneous relationship between financial development and economic growth.

Blomstrom, Lipsey and Zejan (1996) found the evidence that investment and saving tend to follow rather than lead growth. They find that growth in per capita GDP helps to forecast the share of investment in GDP but investment does not help to forecast growth. Similar findings for savings are reported by Carroll and Weil (1994) by using both country and individuallevel data. Their findings imply that growth creates opportunities that provoke saving and investment, but unfortunately they do not tell us what causes growth in the first place. In another study by Murinde and Eng (1994), the focus is on Singapore as a country which has implemented financial restructuring strategies that amounts to a 'supply-leading finance' experiment. The evidence largely supports the supply-leading hypothesis only when broad monetary aggregates and a monetization variable are used as proxy for financial development. It is concluded that there is a plausible case for those economies which intend to adopt a financial restructuring strategy driven by a supply-leading policy stance that involves enhanced monetization of the economy and bank intermediation. In another study by Nicholas M. Odhiambo (2007), the direction of causality between financial development and economic growth is investigated in three sub-Saharan African countries. The study finds that the direction of causality between financial development and economic growth is sensitive to the choice of measurement for financial development. In addition, the strength and clarity of the causality evidence is found to vary from country to country and over time, for example, a demand-following response is found to be stronger in Kenya and South Africa, whilst in Tanzania a supply-leading response is found to be dominant.

However, there are certain researchers who find the strong evidence of demand-following relationship between finance and growth, that is, financial system exerts a causal influence on economic growth. Based on the predictions made in a number of theoretical models (for instance, Diamond, 1984; Boyd and Prescott, 1986; Greenwood and Jovanovic, 1990; Bencivenga and Smith, 1991; and King and Levine, 1993), Levine, Loayza and Beck (2000) constructed a new dataset covering the period from 1960-1995 and focus on three indicators of financial intermediation. Econometrically, the results indicate that the exogenous component of financial intermediary development is positively correlated with economic growth. Economically, it is found that the impact of finance on growth is large. Rajan and Zingales (1998) also found from their investigations that in countries with advanced financial sectors, industries that are naturally heavy users of external finance grow relatively faster than other industries. Alternatively, in countries with poorly developed financial systems, industries that are naturally heavy users of external finance grow more slowly than other industries. In another study, Demirgüç-Kunt and Maksimovic (1996), by using firm-level data, show that firms in countries with better developed financial systems grow faster than they could have grown without this access.

Although there are various qualifications in these empirical studies, the predominance of theoretical reasoning and empirical evidence suggests a positive relationship between finance and growth. The direction of causality is still ambiguous as a large body of research is still skeptical about the development of financial markets and institutions as critical part of the growth process and views the development of financial system as inconsequential sideshow, responding passively to economic growth and industrialization. However, evidence also persists that the level of financial development is a good predictor of future rates of economic growth and development.

#### Section 3. Nature of "Financial Structure" for Growth and Development

The interrelatedness of financial structure and economic growth is a well-known hypothesis (Cameron, Crisp, Patrick and Tilly 1967; Goldsmith 1969, McKinnon 1973, Shaw 1973, Townsend 1983; Greenwood and Jovanovic 1990). The much of the mainstream literature on finance and economic growth is based on the seminal work of Gurley and Shaw (1955). Gurley's and Shaw's debt-intermediation view establishes a clear connection between finance and economic growth as it implies that growth would stimulate and be stimulated by the "institutionalization of savings and investment". With the growth in income, wealth-holders

will need to diversify their asset portfolio. If financial innovation is such as to accommodate this diversification demand, financial institutions can enhance their lending capacity and thus boost growth and this process then becomes a benign circle (Studart, 1995). However, their analysis stresses only the importance of the efficient use of savings; Gurley and Shaw missed a fundamental characteristic by ignoring the parts of the credit-driven investment financing of the entrepreneurial activities. Even, most of today's economists view economic growth as a problem of availability and allocation of saving. According to this, the main function of the financial system is to allocate savings to investment, that is, intermediation. However, last few decades have viewed the evolution of financial "markets" in industrial and emerging economies to allocate savings, that is, disintermediation. Now, the question arises that which type of financial structure is better or what is the optimal mix of financial intermediaries and markets for promoting long-run economic growth and ultimately overall development. This has led to, in Levine's (2002) words, "a century-old debate" on the interrelatedness of financial structure and economic growth, that is, which type of financial institutions/arrangements are best in mobilizing and allocating resources.

On basis of the existing literature on the area under investigation, the competing views on financial structure and growth can be divided into four classes: intermediary-based view, the market-based view, the financial services view/functional approach, and the legal view.

#### 3.1 Intermediary-based or Bank-based View

The intermediary-based view emphasizes the importance of intermediaries in performing key functions e.g. identifying good projects, mobilizing resources, monitoring managers, managing risk, and easing exchange etc. while stressing the paucity of market-based economies. These financial services are crucial for the efficient allocation of resources to firms, thereby encouraging long-run economic growth. As argued by Levine (2002), financial intermediaries are effective at financing projects that are characterized by substantial asymmetric information because they have substantial expertise to distinguish "bad" and "good" borrowers. It also highlights the nuisance of market-based financial system because well-functioning markets instantly reveal information in public markets, which provides individual investors with less incentive to acquire information thereby leading to accentuation of information asymmetries (Boyd and Prescott, 1986). This argument is primarily based on the well-known free-rider problem. If information is going to be revealed by the market, no one has an incentive to collect it. Consequently, well-developed markets have a negative

impact on the identification of innovative projects and thereby impede efficient resource allocation (Stiglitz, 1985; Boot, Greenbaum, and Thakor 1993). The free-rider problem is less severe in intermediary-based systems as banks can make investments without revealing their actions instantaneously in public markets. Advocates of the intermediary-based view also emphasize the fact that liquid markets can create an environment in which individual investors behave as if they were myopic (Bhide 1993). Since individual investors are able to readily sell their shares in liquid markets, they have fewer incentives to monitor managers thoroughly. This implies that greater market development may hinder corporate control and economic performance. In contrast, banks can ease distortions stemming from asymmetric information through forming long-run relationships with firms, and, through monitoring for controlling moral hazard. As a result, bank-based arrangements can produce better improvement in resource allocation and corporate governance, as compare to the marketbased financial system (Stiglitz, 1985; Bhide, 1993). Another argument that financial markets are not well suited for corporate control, especially in the context of takeovers, is that insiders have better information about the firms than outsiders do. This informational asymmetry moderates the potential effectiveness of takeovers, given that it is more likely that wellinformed insiders will outbid less-informed outsiders (Levine, 1997).

An important aspect to mention here is the distinction between banking and non-banking intermediaries. The growth of non-banking financial intermediaries since 1900 relative to commercial banks has prompted Gurley and Shaw (1955) to question the continued uselessness of the neoclassical distinction between bank and non-bank financial institutions. In their well-known 1955 paper, they argued "we are deviating from conventional doctrine regarding the banking system as one among many financial intermediaries, sharing with the others the functions of indirect finance. We take exception to the view that banks stand apart in their ability to create loanable funds out of hand, while other intermediaries in contrast are busy with the modest brokerage function of transmitting loanable funds that are somehow generated elsewhere. Neither banks nor other intermediaries create loanable funds. That is the prerogative of spending units with surpluses on income and product account" (Gurley and Shaw, 1955, P. 521). The acceptance of this view seemed to entail radical redesign of banking theory. Later, Gurley and Shaw (1960), in 'Money in a theory of finance', argue that both monetary and non-monetary intermediaries are "equally" capable of creating loanable funds, of bringing about an excess stock of money, and of producing an excess of ex ante investment over ex ante savings (Gurley and Shaw, 1960, P. 202, 218). This view is contended by Joseph Aschheim (1966) who argued that Gurley and Shaw failed to recognize the role of monopoly and quasi-monopoly institutions (e.g. central bank) as ultimate source of credit creation. Thus, the ability of banks and similar financial intermediaries is limited as they can lend no more what they receive as deposits. This makes them 'passive' credit creators whereas 'active' credit creators are those institutions which have monopoly or quasi-monopoly in the supply of currency (Selgin, 1988).

Regardless of these distinctions, Arestis, Luintel and Luintel (2005) presented "bank-based theory" which argues that banks can lead the economy to long-term growth more effectively than markets. In this regard, state-owned banks are regarded to be more suitable to overcome the market frictions<sup>6</sup> and to strategically allocate the savings (Gerschenkron, 1962). The banks which are not impeded by regulatory restrictions can exploit economies of scale and scope in information gathering and processing. Indeed, bank-based financial systems are in a much better position than market-based systems to address agency problems and short-termism (Stiglitz, 1985; Singh, 1997).

#### 3.2 Market-based View

The market-based view stresses the advantageous role of markets in diversifying and managing risks as it is argued that financial intermediaries can extract information rents from firms. More specifically, at the time of new investments or debt renegotiations, intermediaries, particularly banks, can have bargaining power over a firm's expected future profits. Powerful intermediaries can obtain a disproportionately large share of the profits, so that firms will have fewer incentives to undertake high-risk and profitable projects (Rajan 1992). Therefore. market-based view stresses the inherent inefficiencies banks/intermediaries for they "can stymie innovation by extracting informational rents and protecting firms with close bank-firm ties from competition .... may collude with firm managers against other creditors and impede efficient corporate governance" (Levine, 2002, p. 3). For this reason, some firms at a certain point of their life-cycle rely mostly on market financing. For instance, bond financing is preferred option in mature and relatively safe firms (Bolton and Freixas, 2000).

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<sup>&</sup>lt;sup>6</sup> Market friction is anything which interferes with trade, prevents markets from developing and working properly. Market friction is a collective expression for all kinds of trading costs like trader's provisions, transaction costs including cost of acquiring information, taxes etc. The sum of these costs is negligible compared with the transaction volume if the market friction is low (Paul and Baschnagel, 1999, p. 135). Thus, it can be said that a market is "efficient" when there is low "market friction".

Another argument for rejecting intermediary-based approach is that when intermediaries enter in a debt contract with firms, they have a natural bias towards low-risk projects that have a high probability of success. The drawback of this behavior, however, is that low-risk projects are generally low-return investments. Therefore, intermediary-based systems can curtail technological innovation and long-run economic growth (Levine, 2002). Weinstein and Yafeh (1998) have found its evidence in Japan by showing that while close relationships between intermediaries and firms increase the availability of capital to borrowing firms, they do not necessarily lead to profitability or growth. In fact, the cost of capital for firms with close intermediary ties is higher than that of their peers, which suggests that most of the benefits from these relationships are appropriated by intermediaries. The slow growth rates of intermediary clients also indicate that intermediaries discourage firms from investing in risky but profitable projects.

In addition, powerful intermediaries can also conspire with managers against outsiders, which in turn impede competition, corporate control, the creation of new firms, and thus long-run economic growth. Wenger and Kaserer (1998) provide evidence from Germany where intermediaries, particularly banks, misrepresent the balance sheets of firms to the public and encourage firm managers to misbehave. Moreover, Allen and Gale (1999) argue that, although intermediaries can be effective at eliminating duplication of information gathering and processing, they can have less success dealing with uncertainty, innovation, and new ideas. Due to little information about some new technological project and its potential returns or due to difficultly in judging the available information without some expertise, intermediated financing requires delegation of the decision regarding the financing of a project to a relatively small number of decision-makers. When there is no disagreement, this kind of delegation is very effective and can imply substantial cost savings. However, in case of diversity of opinions, some of the providers of funds would disagree with the decision. Since markets allow coalitions of people with similar views to join together to finance projects, markets are very effective at financing industries that are new, or where little information is available and a diversity of opinion perseveres. This approach is founded on the hypothesis that markets are more efficient than other more coordinated forms of financing the economic activities. As argued by Levine (1998), market-based systems have a comparative advantage in providing cross-sectional risk-sharing (i.e., diversification of risk at a given point in time). Markets are well suited to achieving cross-sectional risk-sharing because of the enormous variety of financial products available in market-based financial

systems. It is further established that big, liquid and well-functioning markets foster growth and profit incentives, enhance corporate governance and facilitate risk management (Levine, 2002)

A related argument is developed by Boyd and Smith (1998), who demonstrate through a model that financial structure changes as countries go through different stages of development, and countries become more market-based as development proceeds. Regarding the market-based financial system in developing countries, an important issue is that the complexity of modern economic and business activity has greatly increased the variety of ways in which insiders can try to conceal firm performance. Although progress in technology, accounting, and legal practice has also improved the tools of detection, the asymmetry of information between users and providers of funds has not been reduced.

#### 3.3 Financial Services View

Contrary to intermediary/bank based and market based views, the financial services view proposes the complementarity between financial intermediaries and markets for providing financial services in a manner that can effectively accelerate economic growth. Financial markets and intermediaries, that is, financial system, emerge to reduce transaction and information costs. In doing so, financial markets and intermediaries both provide key financial functions such as savings mobilization, information acquisition, risk management etc. The underlying argument is that the overall level and quality of financial services matters rather than the channels through which these services are provided. It is the financial services themselves that are more important, than the form of their delivery (Levine, 1998). Thus financial services view argues that markets and intermediaries are the financial structures that perform more or less the same functions but in different ways and possibly with different degrees of success (Allen and Gale, 1999). For example, by encouraging competition for corporate control and by creating alternative ways of funding investment opportunities, financial markets mitigate the adverse effects of powerful intermediaries. Rajan (1992) shows that the firm's choice of borrowing sources (bank and bond finances) and the choice of priority for its debt claims attempt to optimally circumscribe the powers of banks. Besanko and Kanatas (1993) characterize an economy in which bank and bond market finances coexist such that the market reduces the incentive of the bank to excessively monitor the firm.

As observed in last two views, markets and intermediaries have their own comparative advantages in dealing with different types of information. For example, intermediaries can benefit from increasing returns to scale in mitigating asymmetric information, but may be unsuccessful when dealing with uncertainty, innovation, and new ideas. In contrast, markets may be more effective at financing industries that are new or where information is sparse and diversity of opinion persists (Levine, 2002).

Another aspect of complementarity of both views stems from the 'financial stability', that is, in case of vulnerability of one financial arrangement (e.g. intermediaries, particularly banks), the other one continues to function thereby ensuring the stability of overall financial system. In case, if whole economy is dependent only on one type of financial structure, the whole system would be suspended due to the absence of any alternative financial arrangement (e.g. markets) to access finance. Therefore, the relationship between financial structure and financial stability provides another reason for focusing on presence of well-developed intermediaries and markets (Levine, 2002).

Therefore, the significant thing is not the 'financial structure', but the performance of 'financial functions' which are deemed to be necessary for ensuring economic growth. Quite simply, this view suggests that there are different components of the financial system; they do not compete, rather complement each other to ameliorate transaction and information costs, in the financial system (Demirgüç-Kunt and Levine, 2001). Therefore, financial intermediaries and markets emerge to ameliorate market imperfections and provide financial services that are well placed to facilitate savings mobilization and risk management, assess potential investment opportunities, exert corporate control, and enhance liquidity. In this regard, Levine (2002) argues that the financial services view places the analytical spotlight on how to create better functioning banks and markets, and subsides the debate on bank-based versus market-based systems. Thus, these two elements of the financial system may act as complements during the development process. As claimed by Allen and Gale (2001), at the end of the day, it is not an issue of *markets versus intermediaries*, but rather of *markets and intermediaries*.

It may be desirable to avoid viewing intermediary - and market-based systems as representing a trade-off. Moreover, market-based and intermediary-based systems jointly make whole financial market. Thus, both are key elements of one big market – a market that is comprised of every type of financial institution, intermediary as well as non-intermediary. This prompts

the issue that what conditions are necessary to provide better financial services in a financial market. It is the legal environment which is assumed to be the necessary condition to provide growth-inducing financial services.

#### 3.4 Legal View

The law-based view is an extension of the financial services view. It has been put forward by La Porta et al, (1998) and Levine (2002), which argues that creation of strong legal systems that support the right of outside investors and then efficiently enforcing those legal rules is crucial for providing growth-inducing financial services. As a result, the legal view infers that the overall financial development defined by the legal and regulatory systems predicts economic performance better than any measure of financial structure per se. Chakraborty and Ray (2006), in a model where financial structure arises endogenously, show that it is entirely possible for two countries to have distinctly different financial systems but enjoy similar growth rates over time. Therefore, this view takes the position that it is not the intermediary-based or market-based systems that really matters, but rather the institutional infrastructure like legal environment and the enforcement of contracts etc. which plays fundamental role in determining the growth-stimulating nature of a financial sector.

Legal infrastructure is a prerequisite for a financial sector to function properly. Firms are able to access external finance in countries where legal enforcement is stronger (La Porta et al., 1998; Demirgüç-Kunt and Maksimovic, 1998; Beck, Demirgüç-Kunt and Maksimovic, 2005), whereas better creditor protection increases credit to the private sector (Djankov, McLiesh and Shleifer, 2005). Failure to exert corporate governance and to protect investment from controlling shareholders/owners/management of companies makes investors investment-averse. Thus, the creation and maintenance of a legal system for protection the property rights, conflict resolution, effective enforcement of contracts along with strong accounting infrastructure is crucial in financial system development (Demirgüç-Kunt and Levine, 2008). In countries where legal systems are more effective, financial systems have lower interest rate spreads and are more efficient (Laeven and Majnoni, 2005).

La Porta et al. (1998) argue that there are the differences in legal traditions across countries which shape the law and enforcement mechanisms for protecting outside investors' rights thereby influencing financial development. In this regard, the two most influential legal traditions are the British Common law and the French Civil law, which greatly differs from

each other in terms of the legal rules covering secured creditors, the efficiency of contract enforcement, and the quality of accounting standards. By describing legal rights of creditors (i.e. ability of financial systems to persuade firms to pay their liabilities and repossess collateral or liquidate firms in case of default as well as prioritizing secured creditors relative other claimants in corporate default), the soundness of contract enforcement (i.e. extent to which contracts and other legal obligations are actually met), and the level of corporate accounting standards (i.e. level to which accounting standard simplify the interpretability and comparability of information about firms and ensure proper disclosure of information), La Porta et al. (1998) argue that English legal tradition countries have laws that emphasize the rights of creditors to a greater degree than the French, German, and Scandinavian countries. French civil law countries protect creditors the least, with German and Scandinavian civil law countries falling in the middle. In terms of enforcement quality, countries with a French legal heritage have the lowest quality of law enforcement, while countries with German and Scandinavian legal traditions tend to be the best at enforcing contracts. Whereas the countries with an English legal tradition tend to have much better accounting standards than French or German civil law countries.

Building on same indicators, Levine, Loayza and Beck (2000) also suggest that creditor rights, enforcement quality, and accounting standards influence financial intermediary development, and that this component of financial intermediary development positively affects economic growth. Thus, the legal and accounting reforms that strengthen these legal indicators can boost financial intermediary development thereby accelerating economic growth. By extending data set of La Porta et al. (1998) from 44 countries to 71, Beck, Demirgüç-Kunt, Levine and Maksimovic (2000) found that countries with a German legal origin have better developed financial intermediaries whereas countries with a French legal tradition tend to have less well-developed institutions. Beck, Demirgüç-Kunt and Levine (2003) also investigate that differences in initial endowments and legal origins are robustly associated with development of financial institutions and markets.

Therefore, countries with particular legal origins tend to create particular types of laws, regulations, and enforcement mechanisms which help determine the level of financial sector development. In order to ensure financial sector development, it is crucial to target those legal reforms which ensure lenders that financial system will quickly, and effectively enforce their claims against borrowers.

# 3.5 Review of Empirical Research

The empirical investigation of the impact of financial structure on economic growth is pioneered by Goldsmith (1969) who traced the relationship between the mix of financial intermediaries and economic development for 35 countries over the period 1860-1963 and compared financial systems of Germany and the United Kingdom (UK) and their relevance for economic growth. Demirgüç-Kunt and Levine (1996) extended Goldsmith's work by examining the association between the mix of financial intermediaries, markets, and economic development for approximately 50 countries over the period 1970-1993. By concluding that countries with a well-developed stock market also have well-developed banks and non-bank financial intermediaries, Demirgüç-Kunt and Levine (1996) supports the complementarity of intermediary and market based financial systems in providing growth-inducing financial services. However, Levine and Zervos (1998) show that higher stock market liquidity or greater bank development leads to higher growth, irrespective of the development of the other. It implies the indifference of each view for the other. Whereas, in a study of 36 countries from 1980-1995, Tadesse (2002) finds that the difference between intermediarybased and market-based financial systems is important in explaining economic growth. For countries with underdeveloped financial sectors, intermediary-based systems outperform market-based systems, while for countries with developed financial sectors, market-based systems surpass intermediary-based systems. Against this background, it could be tempting to establish a link between the acceleration of productivity growth in the US as from the mid-1990s till mid-2000s, in line with gains arising in the market-dominated American financial system, along with advancement in information & communication technology. During the same period, productivity growth slowed down in two major bank-dominated areas, Europe and Japan. However, findings by Arestis, Demetriades, and Luintel (2001) suggest that intermediary-based financial systems may be more growth-promoting than market-based financial systems. Their study, by using time series methods, show that while stock markets in five developed countries (Germany, United States (US), Japan, UK, and France) may be able to contribute to long-run output growth, the influence of the stock market is much smaller than that of banks.

Levine (2002) and Demirgüç-Kunt and Levine (2001) have examined the same issue by using cross-country regressions, industry panel estimations, and firm-level analyses and found that the distinction between intermediary-based and market-based systems is not important for explaining the finance-growth nexus or explaining differential growth rates across nations.

Rather, this is the institutional infrastructure which is important for accelerating economic growth. In short, they find no support for the intermediary- and market-based views of financial structure and growth, but find strong support for the financial services view and the institutional infrastructure and legal view. Econometrical analysis by Beck (2008a) also provide remarkably consistent results, implying that firms grow more rapidly in economies with a higher levels of overall financial sector development and in countries with legal systems that effectively protect the rights of outside investors.

Overall, there is a rich diversity of opinion in the existing literature on the relationship between financial structure and growth and there is no clear cut conclusion. However, existing literature places more support for the financial services and institutional infrastructure such as legal framework, to carry out these functions. After determining that financial intermediaries and markets are supposed to be complementary in the provision of growth-inducing financial services, it is significant to have a detailed analysis of those financial services which are supposed to be provided by financial system to attain economic growth.

# **Section 4. Financial Services**

The body of research built on work by Bagehot (1873), Schumpeter (1934), Gurley and Shaw (1955), Goldsmith (1969), McKinnon (1973) etc. has produced a core result: Countries with better developed financial systems tend to grow faster. Over the years, research has improved the understanding of the ways in which financial development stimulates economic growth (Murinde 1996; Levine 1997). These ways are also known as "financial services" provided by financial systems, or 'financial functions" performed by financial systems. An important point to mention here is that this "functional approach" is broad and comprehensive as it does not focus on only one financial instrument like money, or only on one institution like bank.

Taking insight from Levine (1997), five broad functions are discussed below, which are provided by the financial system to ease market frictions for exerting positive impact on economic growth. An interesting figure relating these functions with economic growth is given at Annexure I.

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<sup>&</sup>lt;sup>7</sup> Levine (1998) has also highlighted various analytical problems associated with studying relationship between financial structure and economic growth: for example, failure to quantify the financial structure, inappropriate or complex dichotomy between intermediary-based and market-based approaches etc.

# 4.1 Produce information about potential investments

Generally, individual savers and investors cannot collect and process information on a wide array of enterprises, managers, and economic conditions, due to time, money and other resources constraints thereby restraining capital to surge to its highest value use. Such constraints create incentives for financial intermediaries and markets to emerge (Diamond 1984; and Boyd and Prescott 1986). Instead of each individual conducting evaluations a financial intermediary can do it for all of its members and thus economizing their information costs which facilitates the acquisition of information about investment opportunities and improves resource allocation (Levine, 1998). Moreover, financial intermediaries have expertise to select most capable firms and managers which result in a more efficient allocation of capital (Greenwood and Jovanovic, 1990). As argued by Bagehot (1873) over 130 years ago, '(England's financial) organization is so useful because it is so easily adjusted. Political economists say that capital sets towards the most profitable trades, and that it rapidly leaves the less profitable non-paying trades. But in ordinary countries this is a slow process, ... In England, however, ... capital runs as surely and instantly where it is most wanted, and where there is most to be made of it, as water runs to find its level' (Bagehot, 1873, p. 53). England's financial system did a better job at identifying and funding profitable ventures as compared to other countries in the mid- 1800s, which helped England enjoy comparatively greater economic success.

Besides financial intermediaries, stock markets may also influence the acquisition and dissemination of information about firms. This information about firms substantially improves resource allocation with corresponding implications for economic growth (Merton 1987). However, stock markets quickly reveal information through posted prices. Thus, there will be few incentives for market participants to spend private resources to acquire information that is almost immediately publicly available (Stiglitz, 1985).

Another aspect of this function is the presence of 'close ties between firms and financial intermediaries' which reduces information costs and eases firm financing constraints. This has been proved from the empirical studies of Japan (Hoshi, Kashyap and Scharfstein, 1990), Italy (Schiantarelli and Sembenelli, 2000), and the US (Petersen and Rajan, 1994). Furthermore, borrowers with longer banking relationships pay lower interest rates and are less likely to pledge collateral than borrowers with less mature banking relationships. It implied that countries with financial institutions that are effective at mitigating information barriers

will promote more economic growth through more investment as compare to the countries with financial systems that are less effective at acquiring and processing information.

# 4.2 Monitor investments and corporate governance

The extent to which shareholders and creditors effectively monitor firms and induce managers to maximize firm value, improves the efficiency with which firms allocate resources and motivate savers to finance production and innovation. Financial intermediaries that improve corporate governance will reduce credit rationing and thereby boost productivity, capital accumulation, and growth (Bencivenga and Smith 1993). Therefore, financial contracts are established for mitigating the costs associated with monitoring firm managers and exerting corporate control, after the financing is provided to them.

In this respect, an important aspect is the role of financial contracts and collateral which are opted to reduce certain impediments to efficient investment. Since it is costly for outsider investor to verify project returns, the insiders have incentives to misrepresent project returns to outsiders. Due to verification costs, it is socially inefficient for outsiders to monitor in all circumstances. Verification costs imply that outsiders constrain firms from borrowing to expand investment because higher leverage implies greater risk of default and higher verification expenditures by lenders. Thus, collateral and financial contracts that lower monitoring and enforcement costs reduce obstacles to efficient investment (Bernanke and Gertler, 1990). In addition to this, financial intermediaries can economize on monitoring costs by mobilizing savings of many individuals and lends these resources to project owners. This 'delegated monitoring' arrangement cuts back on aggregate monitoring costs because a borrower is only monitored by the intermediary, not all individual savers (Diamond, 1984).

Besides intermediaries, stock markets may also promote corporate control. Public trading of firms' shares in stock markets reflects information about firms which allows owners to link managerial compensation to stock prices. Relating stock performance to managers' compensation helps align the interests of managers with those of owners (Jensen and Murphy, 1990). Similarly, if takeovers are easier in well-developed stock markets, the threat of a takeover of poorly managed firms and resulting firing of managers help to align managerial incentives with those of the owners (Scharfstein and Stein, 1990). However, there are disagreements with this argument as insider investors often have better information about the corporation than outsiders. Thus, if well-informed owners are willing to sell their company,

less-informed outsiders may require a premium to purchase the firm due to the information asymmetry (Myers and Majluf, 1984). Therefore, asymmetric information may reduce the efficacy of corporate takeovers as a mechanism for exerting corporate control. In addition, liquid equity markets that facilitate takeovers may hurt resource allocation (Shleifer and Summers, 1988) because a takeover typically involves a change in management. Therefore, existing implicit contracts between former managers and workers, suppliers, and other stakeholders in the firms do not bind new owners and managers to the same extent that they bound the original managers. Thus, a takeover allows new owners and managers to break implicit agreements and transfer wealth from firm stakeholders to themselves. While new owners may profit, there may be deterioration in the efficiency of resource allocation. Overall welfare may fall. Therefore, hostile takeovers may result in the fall of efficiency of resource allocation. However, there exists no formal model which directly ties the role of stock markets in improving corporate governance with long-run economic growth.

# 4.3 Facilitate the risk management

In response to information and transactions costs, financial arrangements may also arise in order to ease the trading, hedging, and pooling of risk with repercussions for resource allocation and growth. This function can be divided into three categories: cross-sectional risk diversification, inter-temporal risk sharing, and liquidity risk.

Traditional finance theory focuses on cross-sectional diversification of risk. Since savers generally do not like risk, high-return projects tend to be riskier than low-return projects. Thus, systems that make it easier for people to diversify risk tend to induce a portfolio shift toward projects with higher expected returns (Gurley and Shaw, 1955; Patrick, 1966; Greenwood and Jovanovic, 1990). In terms of technological change, King and Levine (1993) show that cross-sectional risk diversification can also stimulate innovative activity. Agents are continuously trying to make technological advances to gain a profitable market niche but engaging in innovation is risky. Therefore, the ability to hold a diversified portfolio of innovative projects reduces risk and promotes investment in growth-enhancing innovative activities. However, there exists very little empirical evidence that directly links risk diversification services with long-run economic growth.

Financial intermediaries also enable entrepreneurs to pool risks. Because financial intermediaries allow investors to share the uninsurable risk and the diversifiable risk

stemming from the inconsistency of the rates of return on alternative assets. The possibility of risk sharing affects saving behavior as well as investment decisions. In the absence of intermediaries, agents can protect against idiosyncratic liquidity shocks only by investing in liquid productive assets, thereby skipping investments that are more productive but less liquid. This inefficiency can be considerably reduced by banking intermediaries which pool the liquidity risk of depositors and invest most of their funds in more illiquid and more productive projects (Agénor and Montiel, 1996). This effect is captured in an endogenous growth framework by Bencivenga and Smith (1991) by showing that banks increase the productivity of investment waste due to premature liquidation. Alternatively, consumers' risk particularly liquidity risk, can be pooled through a stock market. In the model developed by Greenwood and Jovanovich (1990), the stock market allows agents to reduce rate of return risk by fostering portfolio diversification.

A third type of risk is liquidity risk. Liquidity allows agents to transact when it comes to the institutional setting, with two broad directions standing out. In one view, concerned with market structure and marketability, an asset is liquid if it can be bought or sold quickly at low transaction costs and at a reasonable price. In other stance, grounded in security design and financial engineering, liquidity refers to the availability of instruments that can be used to transfer wealth across periods (Holmstrom and Tirole, 1997), where wealth transfers are gauged by the inter-temporal substitution preferences of the agents in question. Liquidity risk arises due to the uncertainties associated with converting assets into a medium of exchange. Normally, these uncertainties emerge as result of informational asymmetries and transaction costs due to which liquidity is restrained thereby intensifying liquidity risk.

The most common argument to link liquidity with growth is that some high return projects require a long run commitment of funds, but savers do not like to intact their savings for longer periods. Thus, if the financial system does not augment the liquidity of long term investments, less investment is likely to occur in the high return projects thereby restraining growth. The historical reasoning of this argument is given by Hicks (1969, p. 143-145) who argues that the products manufactured during the first decades of the Industrial Revolution had been invented much earlier but it had to wait for the 'Financial Revolution'.

Economists have modeled the emergence of financial markets in response to liquidity risk such as Douglas Diamond and Philip Dybvig's (1983) seminal model of liquidity, which

shows that a fraction of savers receive shocks after choosing between two investments: an illiquid, high return project and a liquid, low return project. Those receiving shocks want access to their savings before the illiquid project produces. This risk creates incentives for investing in the liquid, low return projects. The model assumes that it is prohibitively costly to verify whether another individual has received a shock or not. This information cost assumption rules out state-contingent insurance contracts and creates an incentive for financial markets to emerge. Savers getting shocks that increase their need for liquidity can sell their equity claims to the future profits of the illiquid production technology to others. Market participants simply trade in impersonal stock exchanges. Thus, with liquid stock markets, equity holders can readily sell their shares, while firms have permanent access to what has been invested by the initial shareholders. Thus, the stock markets reduce liquidity risk by facilitating trade. In order to assess the link between stock market liquidity and economic growth rates, capital accumulation rates, and rates of technological change, Levine and Zervos (1996) studied 49 countries over the period 1976-1993 and found out that the initial level of stock market liquidity, measured either by the turnover ratio or the value traded ratio, is a statistically significant predictor of economic growth, capital accumulation, and productivity growth over next several years.

Besides markets, financial intermediaries may also enhance liquidity, by offering liquid deposits to savers and undertaking a mixture of liquid, low return investments as well as illiquid, high return investments, the financial intermediaries provide complete insurance to savers against liquidity risk while simultaneously facilitating long run investments in high return projects. In terms of growth, Bencivenga and Smith (1991) show that by eliminating liquidity risk, banks can increase investment in the high return, illiquid asset and therefore accelerate growth. However, the banking equilibrium may not be incentive compatible if agents can trade in liquid equity markets i.e. if equity markets exist, all agents will use equities and none will use banks. In this context, banks will only emerge to provide liquidity if there are sufficiently large impediment to trading in securities markets (Gorton and Pennacchi, 1990; Diamond, 1991). However, this argument seems to view banks in a very narrow context. Despite of the presence of equity markets, role of banks in extending credit remains distinct from that of equity markets.

#### 4.4 Mobilize and pool savings

Mobilization or pooling of savings is a costly process of gathering capital from distinct savers for investment. These costs involved transaction and information costs. Carosso's (1970) 'History of Investment Banking in America' describes the varied and complicated means used by investment banks to raise capital. During mid- 1880s, some investment banks used their European connections to raise capital from abroad for investment in the US. Other investment banks established close connections with major banks and industrialists in the US to mobilize capital. For economizing the costs associated with multiple bilateral contracts, the idea is emerged to pool the savings through intermediaries for which mobilizers have to convince savers about the soundness of the investments. In this regard, intermediaries have to establish sound reputations so that savers feel comfortable about entrusting their savings to the intermediary (Lamoreaux, 1995). Put it differently by Mavrotas and Son (2008), savings are mobilized with a precautionary motive, which is, facilitating the mitigation of future uncertainty. In this respect, two important factors are the liquidity of savings and the availability of insurance. In order to encourage individuals to save, well developed financial systems are required to liquidate savings when they are needed to cope with an income shock. Whereas the insurance aspect reveals that if the financial sector is extraordinarily advanced to provide adequate insurance to individuals against future uncertainties, savings will be lower. For example, if a rural farmer in a developing country can insure against the loss occurred from a bad crop, precautionary savings would not be required to allow for this<sup>8</sup>. Therefore, savings are mobilized to mitigate future uncertainties.

Regarding the positive relationship between savings and growth, number of researchers tried to empirically verify it. Traditional neoclassical models of economic growth e.g. Solow (1956) and models of endogenous growth (for instance, Romer and Rebelo style growth models) view savings leading growth. However, relatively new empirical literature on the subject seems to conclude that the direction of causation runs from growth to savings and not vice versa. Drawing on the experience of Latin America, Gavin et al., (1997) examines the relationship between saving and growth and found that higher growth precedes saving. Only after a sustained period of high growth do savings rates increase and this may be with a delay

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<sup>&</sup>lt;sup>8</sup> Thus, if the premium charged is actuarially correct, this will perform the consumption smoothing and individuals' savings will not be required for this purpose. However, if the premium is too high, insurance will not be taken, and if it is too low, insurance is not suitable in the long term and there is a risk of default by the insurance company. The key to having an effective insurance system is the presence of information. Moral Hazard and adverse selection mean that determining actuarially correct premia is difficult (Stiglitz and Weiss, 1981).

that is quite significant. However, it is noted in this study that 'link between savings and growth is not direct, but operates through the effects of investment on growth ...there is a strong link between savings and investment' (Gavin et al., 1997, p. 4). It implies that countries which succeed in increasing their saving rate, and consequently their investment, would be able to accelerate their economic growth. Carroll and Weil (1994) used both cross-country panel data and household level data to conclude that there is evidence suggesting that growth indeed affects private savings positively. Mavrotas and Kelly (2001) carried out a detailed econometric analysis of India and Sri Lanka on saving-growth nexus and revealed that the conventional neoclassical view, that savings cause growth, does not hold while looking at gross domestic savings.

All of these findings clearly exhibit that the existing evidence on the subject should be treated with caution, given the differing results as well as inappropriateness of the econometric analysis used in most of these empirical studies.

# 4.5 Ease the exchange of goods and services

Financial systems that lower transaction costs can promote specialization, technological innovation and growth. The links between facilitating transactions, specialization, innovation, and economic growth were core elements of Adam Smith's Wealth of Nations (1776). He argued that division of labor i.e. specialization is the principal factor underlying productivity improvements. With greater specialization, workers are more likely to invent better machines or production processes. "I shall only observe, therefore, that the invention of all those machines by which labour is so much facilitated and abridged, seems to have been originally owing to the division of labour. Men are much more likely to discover easier and readier methods of attaining any object, when the whole attention of their minds is directed towards that single object, than when it is dissipated among a great variety of things" (Smith, 1776, p. 3). Adam Smith argued that lower transaction costs would permit greater specialization because it requires more transactions than an autarkic environment. This argument about the lowering of transaction costs and technological innovation is made by him in terms of the advantages of money over barter. Besides transaction costs, information costs may also stimulate the emergence of money because it is costly to evaluate the attributes of goods in barter exchange. Thus, an easily identifiable medium of exchange may arise to facilitate exchange (Williamson and Wright, 1994).

Modern theorists have also tried to clarify more precisely the ties between exchange, specialization, and innovation. Greenwood and Smith (1996) have modeled the connections between exchange, specialization, and innovation. More specialization is followed by more transactions. Since each transaction is costly, financial arrangements that lower transaction costs will facilitate greater specialization. In this manner, systems that promote exchange encourage productivity gains. However, a better market with lower transactions costs does not stimulate the invention of new and better production technologies in Greenwood and Smith's (1996) model. Instead, lower transaction costs expands the set of 'on the shelf production processes that are economically attractive. Also, the model defines better "market" as a system for supporting more specialized production processes. This does not explain the emergence of financial instruments or institutions that lower transactions costs and thereby produce an environment that naturally promotes specialized production technologies.

Despite of certain debatable issues, most of the literature suggests that information and transaction costs motivate financial systems to arise for providing financial services to the economy that facilitate the selection of firms before they are financed, the monitoring of firms after they are finance, the management of idiosyncratic project risk and liquidity risk, and the exchange of goods, services, and financial claims. This description further strengthens the argument favoring 'financial development' for growth.

# Section 5. Financial Sector Development and Growth - Review of Empirical Research

A large literature, dating at least as far back as Joseph A. Schumpeter (1934), emphasizes a positive influence of the development of the country's financial sector on the level and rate of growth of its per capita income. The empirical studies including cross-country growth regressions, panel techniques, and case studies, also reveal a strong positive relationship between the level of financial system development and economic growth.<sup>9</sup>

As far as the country studies are concerned, Goldsmith (1969) has initiated the seminal work in this area by using the value of financial intermediary assets divided by GNP to measure

<sup>&</sup>lt;sup>9</sup> However, there is a lack of proper empirical proxies for financial development and deepening, such as M2/GDP ratio is not very good indicator to analyze the ability of financial system to impact real economy by providing these services (Demirgüç-Kunt and Levine, 2008).

financial development, presuming that the size of the financial system is positively correlated with the provision and quality of financial services. By using data of 35 countries from 1860 to 1963, Goldsmith (1969, p. 48) finds that "a rough parallelism can be observed between economic and financial development if periods of several decades are considered ... there are even indications in the few countries for which the data are available that periods of more rapid economic growth have been accompanied, though not without exception, by an above-average rate of financial development".

The most influential work in this regard is brought in McKinnon's *Money and Capital in Economic Development* (1973), which studies the relationship between the financial system and economic development in Argentina, Brazil, Chile, Germany, Korea, Indonesia, and Taiwan in the post-World War II period. By interpreting mass evidence from these countries, it is strongly implied by McKinnon that better functioning financial systems support faster economic growth.

However, quite before Goldsmith (1969) and McKinnon(1973), Cameron et al., (1967) analyze the historical relationships between banking development and the early stages of industrialization for England (1750-1844), Scotland (1750-1845), France (1800-1870), Belgium (1800-1875), Germany (1815-1870), Russia (1860-1914), and Japan (1868-1914). Instead of using formal statistical analysis, these country studies examine the legal, economic, and financial linkages between banks and industry during the industrialization of these seven countries. While highlighting the analytical limitations of this study, Cameron et al.,(1967) concludes that particularly in Scotland and Japan, and also in Belgium, Germany, England, and Russia, the banking system played a positive, growth-inducing role<sup>10</sup>.

<sup>&</sup>lt;sup>10</sup> Few analysts disagree with the facts underlying the conclusion made by Cameron (1967, p. 60) that "Scotland's superior banking system is one of the principal features to explain its comparatively rapid growth as compare to England during same period (1750-1845)." According to them, England did not suffer from a lack of financial services because nonfinancial enterprises provided financial services in England that Cameron's measures of formal financial intermediation neglect. Others argue that Scotland had rich natural resources, a well-educated work force, access to British colonial markets which augment its level of income per capita more speedily than that of England. Some researchers emphasized the deficiencies in the Scotlish system thereby rejecting the claim that Scotland ever had a well-functioning financial system (Sidney Pollard and Dieter Ziegler 1992). Therefore, despite the arguments of Andrew Kerr (1884) about the better banking system of Scotland than England from 1750 until 1844, the debate still exists about whether Scotlish banking explains its faster economic growth over the period 1750-184 (Ross Levine, 1997).

King and Levine (1993) advocate Schumpeter's view by studying the empirical relationship between a range of indicators of financial development and economic growth by using the date of more than 80 countries for the period 1960-1989. According to them, there exists a strong and robust relationship between indicators of financial development - size of formal financial intermediary sector relative to GDP, importance of banks relative to the central bank, and percentage of credit allocate to private firms, and the ratio of credit issued to private firms to GDP - and economic growth, the rate of capital accumulation and improvements in the efficiency of capital allocation.

Stephen Haber (1996), by comparing industrial and capital market development in Brazil, Mexico, and the US between 1830 and 1930, found that capital market development affected industrial composition and national economic performance<sup>11</sup>. Therefore, "differences in capital market development had a significant impact on the rate of growth of industry.... lack of access to institutional sources of capital due to poorly developed capital markets was a non-negligible obstacle to industrial development in the nineteenth century" (Haber, 1996, p.40). Levine and Zervos (1998) add measures of stock market and banking development to evaluate independent impact of stock markets and banks on economic growth.

In addition to cross-country studies, there are various industry level studies which have studied relation between financial sector development and growth. One of such influential study is done by Rajan and Zingales (1998) by using data on 36 industries across 41 countries to analyze the mechanisms through financial development may influence economic growth. They argue that well-developed financial systems ameliorate those market frictions which make it difficult for firms to obtain external finance. This implies that an increase in financial development disproportionately boosts the growth of industries that are naturally heavy users of external finance as compare to those industries that are not naturally heavy users of external finance. Moreover, Demirgüç-Kunt and Maksimovic (1998) use firm-level data from 26 countries to test whether financial development influences the degree to which firms are

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<sup>&</sup>lt;sup>11</sup> Haber (1991, 1996) shows that when Brazil overthrew the monarchy in 1889 and formed the First Republic, it also drastically liberalized restrictions on its financial markets, thereby giving more easier access to firms to external finance. Industrial production boomed as result of Industrial concentration. Although Mexico also liberalized its financial sector policies, the liberalization was much milder under the Diaz dictatorship (1877-1911), which ". . . relied on the financial and political support of a small in-group of powerful financial capitalists" (p. 561). Consequently, the decline in concentration and the increase in economic growth were much weaker in Mexico than that in Brazil (Levine, 1997).

constrained from investing in profitable growth opportunities<sup>12</sup>. Based on the results of this study, it is argued that both banking system development and stock market liquidity are positively associated with the excess growth of firms. Thus, in countries with high turnover and high bank Assets/GDP, a larger proportion of firms is growing at a level that requires access to external sources of long-term capital, holding other things constant. Moreover, Rousseau and Wachtel (2000) extend the Levine and Zervos (1998) study of stock markets, banks, and growth by using annual data and the panel difference estimator. Beck and Levine (2004) build on Rousseau and Wachtel (2000) found out that exogenous component of both bank and stock market development has an economically large impact on economic growth.

Despite of the presence of large body of empirical evidence on strongly positive relationship between financial system development and growth, there are some "outliers" like China which is often mentioned as a counterexample to the findings in finance and growth literature. Despite weaknesses in its formal banking system, China is one of the fastest growing economies in the world. One of its reasons can be attributed to the presence of informal financial system which might substitute for formal systems <sup>13</sup>.

To sum up, it can be concluded that significant advancements have been made in examining the relationship between financial and economic development. Rigorous theoretical work has highlighted channels and functions through which the emergence of financial markets and institutions and economic growth are positively correlated. The large body of empirical analyses also reveals a strong positive link between the functioning of the financial system and long run economic growth. Some researchers also come up with lists of 'good' financial

<sup>&</sup>lt;sup>12</sup> Questioning the assumptions underlying Rajan and Zingales (1998), Demirguc-Kunt and Maksimovic (1998) argue that it is important to allow for differences in the amount of external financing needed by firms in the same industry in different countries. These differences may arise because firms in different countries employ different technologies, because profit rates may differ across countries, or because investment opportunities and demand may differ.

<sup>&</sup>lt;sup>13</sup> Informal systems might substitute for formal systems. Indeed, inter-provincial differences in growth rates are highly correlated with banking debt, but negatively (Boyreau-Debray, 2003; Boyreau- Debray and Wei, 2005). This leads to focus more on allocating credit to the private sector, as opposed to all bank intermediation. Hence, mobilizing and pouring funds into the declining parts of the Chinese state enterprise system (which principal Chinese banks were doing) did not promote growth. However, focus on small and medium firms (which account for the most dynamic part of the Chinese economy) shows that those firms receiving bank credit in recent years did tend to grow more quickly compared to those receiving funds from informal sources (Ayyagari, Demirguc-Kunt and Maksimovic, 2007). It implies that the ability of informal mechanisms to substitute for formal financial systems might be exaggerated.

systems which may facilitate to spur growth and development; one such list by Rousseau and Sylla (2001) can be found at Annexure II. However, it is still difficult to conclude that financial system just simply and mechanically responds to the needs of industrialization and economic activity. While all financial systems provide these financial functions, there are large differences in how well financial systems do so.

Since the literature and empirical evidence seemed to assume well-developed financial systems exerting a first-order influence on economic growth, it motivated policymakers to 'control' market forces. Thus, historically, and prior to the 1970's, financial restrictions were often imposed specifically in capital-scarce countries and government intervention was a binding factor in financial policies. In short, financial systems, as put by McKinnon (1973), were 'repressed'.

# **Section 6. Money View of Economy**

The rationale behind government interventions in financial markets is the direction of capital mobility through the imposition of restrictions. Keynes (1936) and Tobin (1965) provided the major theoretical framework for restrictive financial system i.e. financial repression. It is pertinent to describe here the 'money view' of the economy, that is, how can monetary policy transmission mechanisms like interest rate channels influence the investments which in turn affect the income level. Since this section presents Keynes's and Tobin's versions of repression for which it is crucial to understand what is "money".

Money and capital markets have been mentioned in the first section of this chapter; the substance bought and sold in these markets is money, present or future. Money is a principal vehicle for private savings, so it is closely linked with real investment and growth. Therefore, the character of the money system and the way money is supplied always is a matter of prime significance in these markets. A functional definition of money can be taken from an old saying according to which 'money is any object that does money work' (cited in Cecchetti and Schenholtz, 2011). Now the question is that what is the work of money? Primarily, it is to act as a medium of exchange and as a standard of value. In order to perform these functions, money also becomes the unit in which debt contracts are written, and is used as store of value. In all economies of today, certain objects perform these functions; metallic coins and currency in paper form certainly do so, along with commercial bank demand deposits. Some other

financial assets are also good substitutes for money, but none performs all the money functions (Robinson, 1970).

However, such definitions of money do not simplify real issues. The problems related with the concept and value of money had been recognized since Schumpeter (1934). When the quantity theory set up its formula for the value of money, the critics first seized upon the fact of other means of payment, besides money. It is well known too that the old question whether these means of payment, more especially bank credits, are money has been answered affirmatively by many of Schumpeter's contemporaries. This creation of means of payment centers in the banks and constitutes their fundamental function. The creation of money by banks establishing claims against themselves has become a commonplace today; it is all the same whether or not one regards the expression "creation of money" as theoretically correct (Schumpeter, 1934).

This is the point where we can briefly shed light on traditional debate of Endogeneity vs. Exogeneity of money. The issue of endogeneity versus exogeneity of the money supply is most frequently unresolved dilemma travelling through the history of monetary theory. It is usually 'real bills doctrine versus bullionist doctrine' controversy since three centuries which is regarded as kernel of this debate. To put briefly, the 'real bills' doctrine postulates that banks notes that are advanced in exchange for 'real bills' (i.e. titles to real value) could not be issued in excess. And due to a finite non-bank public demand for currency, the excessive notes would return automatically to the issuer. Hence, notes advanced upon real bills of exchange are demand determined so in this way the over-issuance is constrained. Thus money supply, in terms of the real bills doctrine, is endogenous. Whereas Bullionists disagreed, finding a refusal to discount any bills except for those of bona fide transactions as impractical and of little value in limiting circulation (Sikorski, 1996). The money supply was proposed to be exogenously determined, corresponding solely to the will of the issuers (Green, 1989; Laidlern 1989). In this respect, it might be interesting to refer back to historically competing monetary schools, i.e. Currency School and Banking School. Currency School, being in limelight during 1840s and 1850s, argued price inflation as the result of excessive issuance of currency notes. Thus in order to restrict excessive circulation, it suggested the maintenance of gold reserves equal to the issue of currency notes. Banking School, on the other hand, contended this view by arguing that notes issuance could be restricted naturally by the will of bank depositors to redeem their notes for gold. So these are the historical doctrines which sow the seeds of modern debate on the endogeneity and exogeneity of money.

The debate about the characteristics of money is significant as it underlies the way economists view the relationship between the quantity of money and national income, and ultimately the way monetary analysis is viewed. Hence, an exogenous view of the money considers one or all of variables i.e. price level, interest rate, real output etc. as determined by movements in the money stock. On the contrary, the endogeneity view of the money proposes the stock of money in circulation as determined by one or all of the variables mentioned above. Fundamental to this issue is the direction of causality i.e. money to other variables or vice versa. The direction of the causation would determine how the monetary transmission mechanism is viewed and which monetary policies should be prescribed <sup>14</sup>. The pertinent question is that through what transmission mechanism the stock of money influence both nominal national income and its dual components of real income and prices. The discovery of this transmission mechanism pointed to the relevant policy prescriptions to be used in effectively managing the economy.

# 6.1 Keynes's General Theory

Keynes's work in the General Theory (1936) proposed the transmission mechanism of monetary policy and the role of money in the economy in relation to national income. This body of work is commonly known "Keynesian" and "Keynesian-Neo-classical" synthesis as it is an interpretation of Keynes' work consistent with classical general equilibrium concepts. The construction of the theory originates with a money demand formulation similar to the Cambridge quantity theory approach.

The primary theoretical innovation of Keynes stems from his work on liquidity preference, which found the presence of a systematic effect of nominal interest rates on people's demand to hold money<sup>15</sup>. According to Keynes, money balances are held for, besides other purposes, 'precautionary' and 'speculative' motives. Speculative balances are held with the desire to

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<sup>&</sup>lt;sup>14</sup> This debate in this form is static, with causality flowing in one-way, one-time format. Once posed in a dynamic context, the concept of exogeneity determined by Engle, Hendry and Richard (1983) seems more relevant.

<sup>&</sup>lt;sup>15</sup> The liquidity-preference relation can be represented graphically as a schedule of the money demanded at each different interest rate. The supply of money together with the liquidity-preference curve in theory interacts to determine the interest rate at which the quantity of money demanded equals the quantity of money supplied. IS/LM (IS – saving/Liquidity preference – money supply).

secure profit from 'knowing better than the market what the future will bring forth' (Keynes, 1936, p. 170). Differences in individual expectations are vital which cause portfolio shifts grounded on expected interest rate differentials. To put it simply, individuals regard a certain level of interest rates as normal level. If interest rates rise above that level, individuals would expect it to drop again to the "normal level". Yet interest rates that are lower than normal reveal higher capital losses. In such situations, holding money is more attractive than alternative assets like public annuities. Thus, this shows a higher speculative demand for money 16. Precautionary balances are held due to future uncertainty, so the individuals desire to hold money balances to avoid any risk. Holding money balances provides certainty as to the future cash equivalent of their resources (Harris, 1985). Both of these motives thus respond to changes in the interest rate. In focusing on precautionary and speculative motives, Keynes describes the role of uncertainty and expectations in economic processes and in determining individuals' demand for money balances. That is, the presence of uncertainty and future expectations begins to give money its special characteristic in an economic system.

On basis of these theoretical footings, Keynes stressed the need for careful financial management to warrant the smooth running of economic activity and introduced the concept of a 'liquidity trap' – setting a ceiling to the nominal interest rate. When a trap is obligatory, the real interest rate surpasses the equilibrium level consistent with full employment, and planned savings surpass planned investments. A decrease in income would therefore reflect a fall in savings to equal investments. The alternative to this is an interest rate ceiling to be imposed by authorities, maintaining fixed price levels so that an expansionary monetary policy could stimulate investments. But this approach is objectionable due to its inflationary consequences in monetary expansions which will be elaborated in next section.

# **6.1.1 Policy Formulations**

Keynes' theory changed the way many economists understood money and monetary policy. In those days, the leading theory was the quantity theory of money, developed by American economists like Simon Newcomb and Irving Fisher. This theory viewed monetary policy to stabilize and boost employment and national income. Keynes argued that monetary policy is neither the best way to stabilize the economy nor help the unemployment. Rather, governments need to spend when people are unemployed or when national income is low. So

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<sup>&</sup>lt;sup>16</sup> This can be presented in equation as  $M_{d=B_0+B_1}/(i+i_t)$  where  $M_d$  is money demand, i is interest rate,  $i_t$  is liquidity trap interest rate, and  $B_t$  is bond holdings at time t.

the policymakers at the Federal Reserve System (FED) started to set monetary policy by controlling the amount of money and by influencing interest rates.

Friedman (1956) reaffirmed the argument for the quantity theory of money by maintaining that the demand for money could be described as depending on a small number of economic variables. Thus, where the money supply expanded, people would not simply wish to hold the extra money in idle money balances i.e. if they were in equilibrium before the increase, they were already holding money balances as per their requirements, so after the increase they would have money balances in excess of their requirements. These surplus money balances would therefore be spent which would increase the aggregate demand. Similarly, if the money supply were reduced, people would wish to restock their money holdings by reducing their spending. In this way, Friedman challenged Keynes by suggesting that "money does not matter". This movement is now identified as monetarism and goes in contradiction to Keynesian economics. Monetarists believe that less spending by government and better monetary policy is the best way to stabilize employment and national income. Although Keynesian economics has changed considerably since the Liquidity Preference Theory was first published in 1936, but it still emphasize on government spending i.e. fiscal policy, as the best way to stabilize employment and national income.

Keynes's work during 1937-1939 developed more precise endogenous money view which paved the way for such policy formulations that aimed to deal with investment through government intervention. Congruent with Keynes theory, government intervention is considered necessary to guarantee an active and vibrant economy. Accordingly, government should stimulate demand for goods and services in order to encourage economic growth. Therefore, it suggests tax cuts and increased government spending during recessions to revive growth; and recommends tax increases and spending cuts during economic expansion to combat inflation. Many economists believe that Keynesian theory is more efficient than supply-side economics, however, critics indicate theory's failure to explain stagflation in the US during the 1970s.

# 6.1.2 Post-Keynesian Approach

Another approach, mostly aligned to monetarists has been probed by a growing body of literature related to post-Keynesians who found that traditional monetary analysis has told only half story. The term 'post-Keynesian' has been applied to the body of theory associated

with economists like Nicholas Kaldor, Basil J. Moore, and Sydney Weintraub. Most post-Keynesian literature relies on Keynes's Treatise on Money (1930), and nurtured in the banking schools affiliated with Thomas Tooke (1844) and Gunnar Mydral (1939). The central tenet of the post-Keynesian approach stressed that the role of financial intermediaries along with the behavioral and institutional characteristics of the economy in the money creation process are largely ignored. In an economy with a financial sector having a range of financial intermediaries and a large spectrum of financial assets, relevant theoretical and policy questions concern the mechanism of money creation and the ability of the central bank to control the monetary supply. It is this focus on the mechanism of money creation in a credit money economy which highlights the claim that the money stock is endogenous, responding to changes in national income and prices. Therefore, it is assumed that money supply is endogenous, responding to the credit needs of the economy. This assumption is in accordance with the 'reverse causality' hypothesis connecting prior changes in nominal income to changes in the money supply. In addition, it also presumed the significance of profit expectations and cost-push factors to result in changing credit needs. Lastly, financial system, as result of various institutional reasons, has independent ability to fulfill the demand for credit and create money. Thus, the interaction between the public and banking sectors in the money creation process becomes a determining factor in consequences of monetary policy on the economy.

The recent debate in post-Keynesian monetary theory has identified two strains of thought—the 'accommodative endogeneity', also termed as 'reserve price constraint' (Palley, 1991; Moore, 1991) and the 'structuralist endogeneity', also termed as 'reserve quantity constraint' (Wray, 1992a and 1992b; Pollin, 1991). Accommodative endogeneity is focused on the response of commercial banks as well as central bank towards production needs and ensuing credit demands of economic agents, particularly of firms. On the other hand, structuralist endogeneity is rooted in Minsky's (1957a, 1957b) tradition. Although economic agents and firms are important, but this strand gives primary significance to central bank which has the freedom to accommodate reserve needs or not. This implies the rejection of passive accommodation and the adaptation of resistance towards credit expansion. Although theoretical differences between the two groups can be noticed clearly, however, both positions are definitely aligned with the post-Keynesian approach and have the endogenous nature of money as the theoretical foundation. It infers that both groups agree that loans create deposits

and that the supply of credit money should be regarded as endogenously determined. The disparity between the two lies more on the exact nature of endogeneity (Sikorski, 1996).

### 6.2 Tobin's Portfolio Model and Inflation Tax

Tobin's monetary growth model based on the assumption of perfect substitutability of money and productive capital provided additional reasoning for government intervention. This model demands the return on capital to be more than the return on money which boost a shift from money to capital in household portfolios, higher capital to labor ratio, and increased labor productivity (Tobin, 1965).

During 1960s and early 1970s, the colonial empires started to eliminate and independent developing countries came into being. This was a time when government intervention was regarded as a remedy to perceived market failures and this perception resulted in 'interventionist' approach. Tobin's (1965) seminal paper 'Money and Economic Growth' put these ideas in a formal and logical theoretical framework. By introducing money, Tobin extended Solow model in order to analyze the effects of monetary policy on the steady state growth rate. Tobin built a two-asset portfolio choice model by employing the standard neoclassical market clearing assumptions and assuming that physical savings and investment are continuously equilibrated. In the model, growth is dependent on capital deepening, defined as an increase in the capital to labour ratio. Individuals' portfolio allocation between the assets of physical capital and the real money balances give rise to capital deepening. The exact allocation of individual's wealth amongst these assets is dependent on the relative yields of assets and on the appetites of these asset holders. If the yield on money is lower than the return on capital i.e. marginal productivity of capital, the individual's portfolio would hold greater amount of real capital. Such capital deepening leads therefore to higher economic growth.

Tobin's formal analysis introduced money as government fiat into a non-monetary economy. The effect of introducing this 'new' asset is to lower the steady-state level of capital accumulation, as in a non-monetary economy all savings are necessarily held in physical capital. The introduction of money means some savings will go into the holding of real money balances to satisfy precautionary and speculative demand. The only way for the government to offset this is to provide new money to absorb the savings now going into real balances. The way to do this is to continuously run a deficit financed by the issue of new money. Fry (1997)

and Denizer, Desai, and Gueorguiev, (1998) argue that the central implication of this reasoning is that reducing the rate of return through an optimal level of inflation, each of which serve as a tax on real money balances, can increase the rate of economic growth. Tobin emphasized that the rate of economic growth accelerates as the capital to labor ratio increases, demonstrating the need to reduce the return on money holdings.

However, the assumption of the existence of only fiat money limits the relevance of the model in a credit money economy. Discussing model's extension by Sidrauski's (1966) and Lee (1980), Fry (1988) exhibits that the results of this model can be entirely reversed if inside money i.e. credit is substituted for outside money i.e. fiat money, and inflation hedges for productive capital in households' portfolios. Any specifications of the behavioral characteristics of financial markets and the determinants of credit demand seem to be redundant with the assuming away of credit money. Although the transmission mechanism between the money supply and nominal income is generally Keynesian, but it loses the fundamental characteristics of money in a credit economy which makes this model very limited. However, this is an important model as it formalized these ideas: (i) an inflationary policy contributes to economic growth as it stimulates investment (ii) investment and capital accumulation occur when the return on money is sufficiently lower than the return on capital. Tobin supported monetary expansion and "inflation tax" as means to finance growth. For this to happen, he discouraged households' monetary holdings and asked to substitute them for productive capital. However, the narrow definition for money limits his findings. He also failed to take into account further elements like inflation hedges and government backed loans.

### **6.2.1 Policy Formulations**

In such academic climate, newly-independent developing countries started to opt for expansionary fiscal and monetary policy and worked towards maintaining low interest rate regime. In addition to this, they also formulated broader development policy goals to take into account the political concerns along with economic viability. There were optimistic views about the role of government in the development, which could be seen from the credibility given to the 'big-push' argument<sup>17</sup>. Therefore government was likely to play a vital role in

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<sup>&</sup>lt;sup>17</sup> Developing countries require large amounts of investments to embark on the path of economic development from their present state of backwardness. This argument proposes that a 'bit by bit' investment programme will not impact the process of growth as much as is required for developing countries. In fact, injections of small

fulfilling the developmental goals. These developmental goals were mainly concerned with the 'market failure' and 'infant industries'.

The market failure in financial markets was generally resulted from the insufficiency of the financial settings to provide long term credit or adequate risk sharing amongst financial institutions and industry (Cho and Khatkhate 1989). In addition, banking structures were mainly 'oligopolistic' which means that even market-determined rates of interest would also have an element of rent-seeking. The consequence of the market failures was the gap between social rates of return and private returns on investment, which implies to undertake a suboptimal level of investment unless government could provide an appropriate subsidy to equate those rates of return. The rationale for government subsidy was strengthened by the 'infant industry' arguments, which permits the developing industries to grow in a coziness of protection and subsidy until they are established to compete on their own. Thus, low nominal interest rates by putting ceilings on them are provided to such industries in order to equalize social and private rates of return.

However, the scope of government intervention was perceived to be much broader and led to more direct intervention in the credit market. In order to induce enough investment and lending to satisfy their particular goals of their development policy, governments allocated credit to favored sectors through the use of controls and incentives to commercial banking system (Fry, 1993). Under these controls, the banks were required to allocate a specific proportion of their loan portfolio to government's favored industrial sector. The incentives were in the form of implicit or explicit loan guarantees on loans extended to favored sectors and also in the form of rediscounting facilities at favorable rates. As a result of these controls and incentives, the policy-favored firms and industries can meet all of their financing demands with an elastic supply of credit. The resulting policy structure had an active role of government in determining the price and allocation of credit.

As mentioned earlier, the fiscal policy in these developing economies was also expansionary which also justifies low nominal interest rates because their governments were always short of

quantities of investments will merely lead to a wastage of resources. Paul Rosenstein-Rodan, approvingly quotes a Massachusetts Institute of Technology study in this regard, "There is a minimum level of resources that must be devoted to... a development programme if it is to have any chance of success. Launching a country into selfsustaining growth is a little like getting an airplane off the ground. There is a critical ground speed which must be passed before the craft can become airborne (Rosenstein-Rodan, 1943)

resources due to their narrow tax base and lack of expertise in tax administration. The resultant deficits had to be financed either from the financial markets or the central bank. In case they are financed from domestic financial markets, low nominal rates provided the government with the availability of cheap finance. On the other hand, financing by central bank can take various forms e.g. directly supplying finance i.e. seigniorage, tax incentives for financial institutions to hold government debt, use of government liabilities to fulfill liquidity and capital requirements etc. The inflationary pressures are inevitable when central bank accommodation is combined with credit pressures of development policy. With such broad accommodation, the central banks had recourse to direct quantitative limits on private sector borrowing and sharp reserve requirements on banks, in order to maintain some monetary control (Leite and Sundararajan 1990). As a result, the lending to the sectors outside the scope of development policy was squeezed, leading to a large proportion of private sector credit demand being rationed. The broad financial policy at that time was the use of direct controls by government to determine the price, quantity and allocation of credit.

From here, a broader perspective emerges with the fundamental ideas of McKinnon (1973) and Shaw (1973) which encompass fragmentation in economy at large.

# Section 7. Key Ideas of Repression – Developing Country's Perspective

The groundbreaking works of McKinnon (1973) and Shaw (1973) challenged the traditional view of economists like Tobin (1965), Johnson (1967), and Levhari and Patinkin (1968) that money and capital are perfect substitutes in the portfolios of private asset-holders and in the aggregate economy. By discarding this traditional view, McKinnon (1973) and Shaw (1973) stipulate that money and capital are likely to be complements, particularly in less developed and fragmented economies where the financial sector is severely repressed as result of government policies. It is observed by them that policymakers in these countries give numerous reasons for ignoring market-determined prices and for intervening directly in financial markets in an attempt to improve the allocation of resources. One form of intervention is the control on interest rates in order to reduce the rates of return on financial assets, which actually depress savings and capital formation along with increasing the demand for loans that eventually lead to credit rationing in the allocation among investment projects. Thus government intervention is so widespread, yet, generally so unsuccessful. Some of the related ideas are as ensued.

#### 7.1 Fragmentation in the Economy

Intervention is usually motivated by the perception that if a particular market is functioning badly, it is the duty of government authorities to do something to correct it. For instance, an infant textile firm is assisted with a tariff; or the price of an agricultural product is raised to allow farmers to use some new technology; or a tax exemption is granted to a foreign firm for setting up new industry. The pressure for all such public interventions is the consequence of severe fragmentation in the less developed economies (McKinnon, 1973).

There is fragmentation in the economy because firms and households are so remote from each other that they get different effective prices for land, labor, capital, and finished commodities. Even they don't have access to similar technologies. So it is not possible for public authorities to postulate that private sector will take socially profitable investment opportunities, because prevalent prices need not reflect actual economic scarcity, particularly for major segments of the population. The historical reasoning for this view can also be found during nineteenth and twentieth century in Asia, Latin America, and Africa where export enclaves for primary commodities were controlled by foreigners, as a result of which the general population stayed out of the market economy. Therefore, local entrepreneurs had restricted and narrow access to capital with little skilled labor and no means of procuring new technologies (Levin, 1960).

After the end of colonialism, the newly freed governments of developing countries felt themselves bound to play their role in offsetting economic and political colonialism. During the last sixty or seventy years, these countries seem to be successful in introducing some new industrial activities, especially the manufacturing of goods previously imported as well as the mobilization of some domestic factors of production. However, this is achieved by manipulating commodity prices in many different ways and by intervening directly to support some sectors of the economy at the cost of others. Therefore, fragmentation in this modern period can be the outcome of those government interventions. That's why we see the coexistence of small household enterprises along with large corporate firms, both producing same products with different proportions of factors and different levels of technology. Heavy mechanization along with high unemployment, underutilized capacities along with shortage of capital etc. are some other types of modern fragmentation that arise as result of development policies of government.

Heavy government subsidies e.g. tariff protection, import licenses, tax concessions, low-cost bank finance etc. is the foundation of indigenous entrepreneurship which create great income inequalities. These inequalities couldn't enable high saving rates in the classical fashion, but authorities still refuse to decrease the disposable income of wealthy investors. Rather, these investors have exclusive access to investment opportunities guaranteed by the pervasive fragmentation.

Uncertainty also fragments the interest rate structure so much as it is not consistent in reflecting the community's collective time preference. "The effect of risk ... is to lower the rate of interest on safe loans, though at the same time ... it will raise the rate of interest on unsafe loans..." (Fisher, 1930, p. 218). Moreover, "the necessity of having to offer collateral will affect not only the rate which a man has to pay, but the amount he can borrow. It will limit therefore the extent to which he can modify his income stream by his means" (Fisher, 1930, pp. 210-211). Careful monetary and financial policies are needed to moderate uncertainty and reduce fragmentation in capital markets along with a benevolent outlook of institutions to facilitate borrowing and lending over time. However, governments in developing countries generally don't follow this approach. Organized as well as unorganized finance in these countries is deteriorated and severely repressed, and they still use various devices to substitute non-operative capital markets. Governments responded financial constraints in economy by devising various "second-best" policies that usually turned out to have disastrous consequences. The basis of these policies is mainly interventionist, rightly called by McKinnon (1973) as "intervention syndrome".

# 7.2 The Intervention Syndrome

Common public policies for circumventing the domestic capital market are first classified in seven major categories by McKinnon (1973).

# 7.2.1 Tariff Protection for Infant Industries

There is enormous pressure on Ministries of trade and industry to provide protection to new industries or firms to enable them to cover initial cost so that they will eventually be viable at market prices. In this aim, a "temporary" tariff or quota restriction is applied on competing imports which increases the internal prices of domestic output. In this way, the cash flow available to the infant industry is increased while in the learning phase. This is a major

technique to implement import substitution strategy prevalent in almost all developing economies.

# 7.2.2 Import Licenses and Financial Leverage

Licensing the import of capital goods and intermediate inputs is a common exercise in developing economies. Certain industries or firms have the privilege of importing at a low price which raises the cash flow of manufacturers. This exclusivity of import license may also facilitate its holders to get external financing more easily. Government authorities intentionally use these licenses to influence the leverage of certain firms. Generally, import licenses are used along with some other privileges like short-term domestic bank finance at subsidized rates and foreign supplier credits. In this manner, the restriction on leverage is slightly relaxed by the licensing technique.

# 7.2.3 Corruption and Monopoly Privilege

Implicit or explicit state sanctions are used to confer monopoly privilege. Some forms of these privileges include, but not limited to, cheap bank credit, tax concessions for key industries or firms, access to outputs of state-owned industries such as fuel. This network of privilege is difficult to distinguish from corruption. Ultimately, the monopoly pricing become counterproductive as a result of its common weaknesses.

# 7.2.4 Cheapening of Capital Goods

Restrictions on foreign trade shift the whole structure of relative prices as they are decreased in certain broad classes of commodities because it raises them in others. As a result, the costs of imported inputs in domestic currency are reduced significantly. Feeling the inadequacy of capital accumulation, the authorities reduce the relative prices of the necessary elements of capital formation. The financial leverage of the firms buying these cheap imported inputs might reduce which endorse this technique. It can be an inexpensive method to deploy the economy's surplus in the process of capital accumulation without using capital market.

# 7.2.5 Agriculture's Terms of Trade

The manipulation of commodity prices for protecting infant industries also put pressure on agriculture, indirectly through tariff and protection and directly through policies to decrease agricultural prices. Rural incomes in many countries are distressed due to these policies. The destitution in agriculture has been overlooked by governments which are convinced to

transfer rural economic surplus to the industrial sector to get apparently favorable investment opportunities. However, there is absence of operative formal financial mechanisms for persuading agricultural savers to give their surplus to industry under the assumption of earning high rates of return. Although the transfer took place through the expropriation of agriculture, but fragmentation and isolation of capital markets leave the original issue unresolved.

#### 7.2.6 Land Reforms

Land is a tangible and visible form of endowment, but limited leverage raises the significance of initial endowments in defining production opportunities. In order to equate current and future incomes in agrarian economies, land redistribution is deemed as primary policy. Minhas (1970) supports a huge consolidation plan for existing holdings in order to use irrigation facilities, new technologies, and rural labor properly. Basically, this would amount to publically enforced multilateral land barter with improvements and other gradations in quality. Ignoring the crucial issues of externalities and payoffs emphasized by Minhas (1970), it is unlikely that the required external finance or internal liquidity be available. The prospects of irrigation and green revolution could also motivate land consolidation.

#### 7.2.7 Foreign Direct Investment and Commercial Credits

Developing countries have a love-hate relationship with foreign capital due to deep economic roots. If the domestic capital market is declining, then the use of foreign financial services becomes more striking. However, foreigners see greater risk in operating in domestic market as compare to the local investors, which make direct investment very expansive. As suggested by the fragmentation hypothesis, domestic entrepreneurs have investment opportunities but lack external financing to exploit these opportunities. Having access to Foreign Direct Investment (FDI) enables them to cope with external financial constraint at the cost of surrendering investment opportunities to foreigners for which they have to bargain. One of its consequences can be the underdevelopment of domestic entrepreneurship. Although government tries to manage it with its complicated administrative controls to ensure domestic contribution in foreign firms but they are also not without incompetencies.

# 7.3 Fad for Financial Repression – Popular Philosophies

Intense financial repression can be observed through much of the twentieth century where governments tried to adjust interest rates substantially below market levels and to regulate the allocation of credit, especially in the years after World War II. A justification behind this trend for financial repression is associated with the rise of political philosophies like populism, nationalism, and statism etc. in those days.

Populists view controls on interest rate as a way of redistributing income. The typical targets of these populists or nationalists were private bank loans to large firms, especially foreign ones. Their motivation was the aspiration to evade excessive concentrations of power in a few private hands, or to confirm that the domestic financial system was not controlled by foreigners as they would be insensitive to long term national goals. According to this viewpoint, social goals could be accomplished more easily if the operations of financial institutions are not purely profit-seeking. This also results in relaxation in debt collection, especially from government-owned banks due to political pressures.

Another major factor in the augmentation of financial repression was 'Statism'. Particularly in mid-century, state intervention was generally seen as a way to improve the allocation of resources and enable development. To perform this role, government needed additional resources which were hard to mobilize with underdeveloped tax system. Therefore, it expanded its role in resource allocation through interventions in the financial sector, along with controlling price system, investment decisions, and access to international markets.

Apropos to these philosophies, the governments of many developing countries placed low interest ceilings on bank deposits and loans in order to reduce their borrowing costs, and directed bank credit to "priority sectors" e.g. agriculture, small-scale industry, exports etc. The flow of resources was increased by printing money and by imposing low-yielding reserve requirements on banks. New entrants are restricted to avoid competition and limit disintermediation in the banking system. To discuss these measures in detail, following section would describe the principal instrument of financial repression i.e. interest rate controls, along with other instruments.

# Section 8. Interest Rate as Basic Repression Instrument – Historical Perspective

As mentioned in previous sections, the formal banking system in the colonial period mostly served foreigners involved in the exports of raw materials. The locals participated in the process of bank intermediation as depositors, and not as borrowers. Funds were directed to the banks mainly controlled from overseas, which reinvest funds with borrowers having

known reputation and collateral. The Europeans having overseas banking connections and access to finance developed various sectors like tea plantation and rubber estates in the Far East, for which non-Europeans also had technical skills but no financing. Therefore, local entrepreneurship was suffered due to inadequate financial support.

Although this 'overseas colonization' of banks ended with the independence of colonies and development of a national banking system in these independent countries, however, it has been replaced by almost similar "neo-colonial" banking system. This system favors certain private and official borrowers by providing them access to limited funds at low interest rates, often far less than the opportunity cost of scarce capital. Despite of having substantial share of deposits in these banks, the majority of small agriculturists and industrialists stay financially suppressed. As compare to the colonial system, the real interest rates in neocolonial system were more out of line, even if unrequired seigniorage is no longer accumulating to some foreign financial center (McKinnon, 1973). The term 'self-finance' is appropriate to analyze this situation in developing countries where operative and organized capital market was nonexistent, particularly for small rural and urban borrowers. Bank credit was allocated to certain exclusive enclaves like licensed import activities, specialized large scale exports, high-tech manufacturing, large international corporations, certain government agencies etc. Frequent government deficits on current account further limit the lending resources of the deposit banks. Consequently, financing of the rest of the economy had to be met from the unorganized resources of cooperative, moneylenders, and pawnbrokers which were inadequate.

Informal moneylending through village stores provide only a fractional substitute for formal and organized banking finance. From a sample survey of traditional credit markets in rural Chile, Charles Nisbet (1967) has projected that only 30 percent of the total rural population are clients of state financial institutions and private commercial banks whereas the others mostly use informal credit markets. The inclusion of organized bank lending into the rural economy and small-scale urban industry has been further validated by U Tun Wai (1956) in an enormous empirical study of developing countries. However, the informal credit markets are fairly insufficient to decrease dispersion in real rates of interest for the major proportion of population. According to Nisbet's survey, any randomly selected farmer generally had access to only two sources of credit, moneylender and village store. The exploitative monopoly or duopoly is the consequence of this fragmentation which certainly leads to highly

differentiated interest rates. "With inflation removed from interest rates on currency loans ... most commercial lenders emerge with positive rates ranging from 27 percent to 360 percent, with an annual mean rate of 82 percent (Nisbet, 1967, p. 76). Worst part is that almost half of these loans went for consumption purposes.

The usury ceilings on the interest rates charged on bank credit weaken the ability and willingness of banks to serve small rural and urban borrowers. The operating costs and default risks of small scale loans cannot be covered with a maximum interest rate of, for example, 10 percent. So the large population of small firms and households are left with no option but to go to moneylenders. Besides narrowing the total size of bank lending, the ceilings on interest rates also ensure the flow of available finance to absolutely safe borrowers with known reputation and riskless collateral. In worst cases, political influence is used to get allocation of additional loans. The beneficiaries of such loans are regarded as 'good' risks as they have enormous incomes and asset holdings, therefore, loans granted to them at low interest rates have a tendency to further aggravate the already skewed income distribution.

It is ironic but true to assert that cheap credit may not benefit the common man. Rather, it is the opposite case because it actually stops him to contend for long term finance from the organized banking system, as a result of which he is bound to get credit from village store on monthly basis. This perspective gives rise to a basic question that is the provision of cheap bank financing to agriculture and small scale industry the right strategy for the government to adopt? McKinnon (1973) demonstrated the example of a small farmer who, in the anticipation of discrete investment in 'green revolution', can significantly improve his position even if he has to borrow at the rate that surpasses the marginal rate of return under self-financed investments with the old technique. This can be inferred from this example that artificially cheap loans or subsidized credit programs may be unnecessary as well as unwise. In case of abundant loans, high interest rates to lenders and borrowers present the dynamism, which call forth new net saving on one hand and divert investment from inferior uses in order to boost technical improvement<sup>18</sup>. Contrary to this, the popular policy of keeping low or negative interest rates on financial assets and limited loan availability may achieve nothing at vast level.

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<sup>&</sup>lt;sup>18</sup> Policy of raising interest rates is generally criticized by Post-Keynesians, as high interest rates need not result in high economic growth (for detailed critique, see Dutt, 1990; Dutt and Amadeo, 1991).

# 8.1 Other Instruments of Financial Repression

The term "financial repression" refers to interest rate controls, although it is sometimes used in the literature to include other forms of government restrictions on financial sector (Fry, 1995, P. 6).

Generally, (6) types of restraining measures, besides interest ceilings, can be observed which are classified in the following categories: restrictions on entry; restrictions on the composition of liabilities, particularly minimum capital requirements; high reserve requirements; restrictions on the composition of assets; restrictions on the overall size of the risk portfolio; and specialized credit agencies.

## **8.1.1 Restrictions on Entry**

Suspension of new bank licenses, restraints on foreign-owned banks, or on their capacity to compete with local banks are some of the common forms of such restrictions. Regulations in order to limit the size of some shareholders' share may also have a similar effect. For limited entry, banks achieve substantial franchise value, and those controlling this value are more cautious to make sure that they maintain the flow of benefits coming from this. The advantages of high-yield and high-risk will have to be evaluated against the threat that they could cause insolvency and eventually the loss of franchise. In the same manner, looting a fraction of existing balance sheet by the insiders may be significantly less beneficial than the continuous flow of franchise benefits which this looting would compromise (Caprio, Honohan and Stiglitz, 2001).

# 8.1.2 Restrictions on Composition of Liabilities

Minimum capital requirement is the most common kind of restraint on the composition of liabilities. This requirement can take the form of percentage of weighted and unweighted assets, or the form of an absolute minimum account. Capital adequacy requirements directly protect depositors and deposit insurance agency as it acts like a first line of defense i.e. reserves to absorb losses. They can also partially substitute for franchise value by providing a bonding effect on shareholders. The shareholder's future flow of dividends, even less than the required return on equity, would likely to be susceptible due to the insolvency or loss of the license, so they would be concerned to control the behavior of their managers in order to preserve this flow. Although small capital requirements may result in counter-productive behavioral responses, however, the higher levels of capital requirement are dominated by the

bonding and cushioning effects. Another interesting restraint on liability side is to require a minimum issue of subordinated debt to parties unrelated to the shareholders (Calomiris 1998). Since the yield on such loans may give an early warning signal to the authorities concerning the market's perception of a bank's risk, this kind of arrangement provide an extra cushion to absorb losses before hitting depositors' funds. Not only this, it also comes with additional watchful eyes to monitor the behavior of banks' decision makers.

# 8.1.3 High Reserve Requirement

There is a required percentage of reserves i.e. deposits that banks must hold at the central bank. So by the end of each working day, the bank must ensure to have the required reserves on hand. If it doesn't have, it can borrow from other banks or the central bank's discount window to meet its requirement. Any changes in the required reserves are used to influence credit conditions. If reserve requirement is increased, lesser funds would be available for lending which results increase in interest rates. McKinnon (1993) cited the example of Colombia in 1972 where the commercial banks kept 31 percent on their deposits in non-interest bearing accounts with the central bank, and another 26 percent of their loan portfolio was directly specified by the central authorities. This pattern of high reserve requirements is typical in developing economies, but not in the advanced industrial economies.

## 8.1.4 Restrictions on Composition of Assets

On the front of composition of assets, the most extreme restraint is the "narrow banking", which limits the banks' investment in completely safe assets like government treasury bills. Lending limits are imposed on those sectors that are assumed to be risky e.g. real estate, or on assets denominated in foreign currency. Moreover, there are various requirements regarding maturity and currency mismatching which come in this category of restraint. When a ceiling is put on a part or whole amount of risk assets of banks, portfolio risk is naturally reduced. In addition to limiting identified risky assets, overall portfolio risk is reduced on the asset side demanding comparatively larger holdings of safe and liquid assets. It helps to safeguard against liquidity shocks along with providing protection against losses elsewhere in the portfolio (Chang and Velasco, 1998).

#### 8.1.5 Restrictions on the Size of Loan Portfolio

Restraints on the total size of the loan portfolio, generally on risk assets, are normally imposed on yearly basis. Ceilings on overall size of loan portfolio may lessen the intensity of

competition, thereby increasing franchise value. It may also decrease average portfolio risk, as discussed earlier.

#### 8.1.6 Specialized Credit Agencies

Having extensive resource flow at its disposal, the central bank channels cheap credit to different specialized banking agencies, which in turn lend at low disequilibrium rates of interest for purposes like promotion of exports, loan for small farmers, industrial projects that government intended to subsidize etc. Since government has exhaustive credit allocations in mind which may change on weekly basis, therefore, such agencies decentralize this enormous administrative load.

According to McKinnon (1993), among all of these types of financial repression, three characteristics which stand out in most of the developing countries are high reserve requirements, specialized credit agencies, and interest ceilings on deposits and loans.

# 8.2 Costs of Repression for Financial Sector

The economic performance of many countries gradually worsened under financial repression. The industrial as well as financial sectors of many developing countries started showing the signs of institutional weaknesses. These institutional fissures were seen as having an adverse impact on economic growth (Dooley and Mathieson 1987). Inefficiency of lending and borrowing operations along with the contraction of financial system eventually led to extensive bank insolvencies. The suffering of overall development is confirmed by econometric analysis showing that countries with sharply negative real interest rates typically experienced much lower growth and allocative efficiency than those with positive real rates (Caprio, Atiyas, and Hanson 1994). The underlying development polices failed to achieve their declared goals, however, the beneficiaries of the generated rents nurtured a political constituency for their endurance.

Thus, the critical analysis of financial repression was founded on the implicit assumption that free market mechanisms always work more efficiently. Consequential to financial repression, the inefficiencies in the financial sector and in the economy can be classified in four broad categories:

#### 8.2.1 Credit Allocation

On one hand, policies of low, often negative, real interest rates pose problems as they provide disincentive to savers, and on the other hand, the portfolio restrictions on banks leads to credit allocation on political and non-economic basis. The elastic supply of cheap credit to favored firms and individuals imply lack of discipline to use credit efficiently which ultimately leads to the misuse of resources. At below market interest rates, even inefficient investments seem feasible. Thus such projects are taken at the cost of projects of those firms which are being credit rationed. As a result, projects with higher returns are squeezed out, use self-finance, or forgo efficient technology. As in the words of Caprio, Honohan and Stiglitz (2001), despite being starved for loanable funds, repressed financial systems misallocated much of what they had, with credit often flowing to inefficient public enterprises and favored private borrowers. Such direction of credit, particularly through state-owned banks, weakens the incentive for financial intermediaries to properly examine projects and to select only those ones likely to have highest risk-adjusted return. Along with reducing the motivation to recover delinquent loans, financial supervision is distracted from prudential concerns to verifying compliance with the credit allocation policy. The poor lending decisions and worsening repayment discipline show their consequences in the form of bank insolvency and large budgetary bailouts.

Directed credit regimes also entail political dynamic which keep on encouraging the augmented misallocation. The availability of large subsidies generates incentives for wasteful rent-seeking behavior. As government deficits absorbed larger portions of the available funds, the pressures for such directed credit raised because government-determined rates diverge more from market interest rates and the interest rates on remaining "free lending" eventually increased. Since credit from ordinary channels becomes scarcer and comparatively more expensive, potential borrowers move towards political channels. This tendency thus increases the political pressure for non-market allocation of credit. In short, development goals are seldom supported by financial repression. Rather, the wealthier collected most of the rents created by repression process.

# 8.2.2 Banking Activity

As the result of increased government intervention in the financial markets, the banks rely more on state's policy guidelines. Since government provides loan guarantees, banks don't feel any need to acquire loan appraisal skills for extending credit. They also don't feel any

responsibility to resolve the problems of asymmetric information due to which their portfolios are severely weakened by non-performing loans.

The purpose of interest rate restrictions was to regulate the monopoly power of a banking system in less developed economies but even a 10 percent interest rate ceiling on loans can offer a reasonable margin between zero percent interest rate on demand deposits and, let's say, 5 percent on time deposits. Thus, when banks fail to get high equilibrium rates of return from their favored borrowers, they adjust it through low return offered to depositors. As a result of this underpricing of scarce capital, savers reduce their holdings of money and nearmonies far below socially optimal level, which commensurately reduce the outstanding bank credit. Thus the real size of the monetary system is narrowed down due to the inefficiencies in bank lending. Despite of limited flow of loans and deposits in real terms, banks, now being 'regulated monopolists', feel it unnecessary to protest against the overall structure of interest rate regulations.

## 8.2.3 Capital Accumulation

The adverse consequences of financial repression for the quality and quantity of capital accumulation as described by McKinnon (1973) and Shaw (1973) can be summarized in a step-by-step manner (i) the channeling of loanable funds through the organized banking system is reduced due to which potential borrowers are forced to rely on self-finance (ii) in the flow of bank lending, the interest rates vary subjectively from one favored or disfavored borrower to another (iii) the 'self-financing' by firms and households is impaired because they cannot easily accumulate liquid assets for making discrete investments if the real return on deposits is negative (iv) when firms are severely illiquid and inflation is also high and unstable, it is impossible to achieve significant financial deepening outside the repressed banking system because monetary stability is required for intermediation by nonbanking financial institutions like trusts, insurance companies etc. (v) the disorder in domestic capital markets and unpredictable foreign exchange rates cannot take benefit even from inflows of foreign financial capital.

# **8.2.4** Macroeconomic stability

Negative real interest rates certainly caused severe disintermediation, capital flight, and dependence on foreign funds because domestic savers pursue to preserve their capital abroad. Although some repressing governments managed, even with shallow finance, to maintain a

reasonable stability of the macroeconomy, however, most experienced a cyclical pattern of macroeconomic fluctuations related with intense financial repression. Thus, evolving fiscal burden directed such governments to gradually extract additional resources from the financial sector through an accelerating inflation tax and lower real interest rates, until the resultant overvaluation of exchange rate and increased capital flight ultimately triggered an external crisis (Caprio, Honohan and Stiglitz (2001).

The eventual consequence of all of the above described disorders is the excessive inflation which distorts all economic relationships, amplifies uncertainty and depresses overall growth and development process (Sikorski, 1996). This is the place where it would be appropriate to describe this key consequence of financial repression i.e. inflationary impact of repression.

## 8.3 Inflationary Impact of Repression

When the rate of price inflation is interacted with interest ceilings or reserve requirements, it reduces the real deposit rates of interest which lead to slow real financial growth. In such case, the inflation rate is considered as endogenous variable which central bank always strives to minimize due to the fiscal needs of the government. However, some degree of financial repression in indispensable if we consider the problem of macroeconomic control where uncovered fiscal deficits exist. Government expenditures like credit subsidies tend to surpass revenues. Due to the absence of any reasonable open market for primary securities, the government has no choice to sell its treasury bonds or bills directly to the public. Thus, government has to extract seigniorage, i.e. implicit tax revenue from the financial system by issuing base money. As a consequence, the reserve requirements and inflation interact to tax the money-holders and to tax borrowers of domestic banks through high real rates.

In this context, the seminal analysis by Friedman's (1971) describes the conventional models of the inflation tax and the extraction of non-inflationary seigniorage. These models assume a distinct homogenous demand function for non-interest bearing base money, whether it is coin and currency or official reserves held by the banking system. Friedman's analysis doesn't explicitly consider the flow of loanable funds through the commercial banking system. Contrary to this, McKinnon (1973) distinguished two kinds of the demand for base money: for currency held by households and firms and for bank reserves held with the central bank. In comparison to the direct non-bank holdings of coin and currency, official reserve requirements are more important in repressed financial system of developing countries. In a

study by Brock (1982), it is indicated that official reserve requirements against deposits are normally more than 30 percent in Latin America. Beyond holding reserves with central bank, the banks in developing countries are further forced to extend low interest loans to several public agencies. Whereas in industrial and developed countries, the same study exhibited the prevalence of reserve requirements generally even less than 10 percent, and the other methods of forced lending are also comparatively negligible. Consequentially, coin and currency constitute a much higher percentage of the monetary base in developed economies. The same study demonstrates that currency as a percentage of the monetary base is usually around 70 percent in developed countries, whereas it is almost 40 percent in developing countries of Latin America. Most importantly, these developing countries normally extract four to five times greater seigniorage as a share of gross national product (GNP) from their monetary systems than the developed economies and more than half of this originates from the required reserve component of the monetary base (Brock, 1984).

McKinnon (1973) and Shaw (1973) stress on the closeness of the link between financial repression and inflation. Since loan and deposit rates are determined in nominal terms, any appreciable rate of inflation is very much likely to turn real rate of interest on loans and real rate of return on financial assets negative. Two main culprits of inflation in developing countries, as identified by Johnson (1967) are as follows: (i) a high inflation rate tend to certainly lead to high variable inflation rate which make it impossible for economic agents to effectively anticipate an adjustment to inflation (ii) other prices, including interest rates, are likely to be controlled, so that inflation leads to distortions in the resource allocation, and higher inflation rates further aggravate these distortions. By explaining the significance of the real size of the financial sector for the process of capital accumulation, McKinnon and Shaw recognize third adverse effect of inflation on economic development. Since the market for primary securities is generally underdeveloped and less-operative in developing countries, it makes the contribution of indirect financial assets, particularly the liabilities of the monetary system, very much important in encouraging capital formation. Thus, the consequences of financial repression amplified by inflation are particularly severe.

Despite of highly concentrated banking sector in most developing countries, banks can be organized to stimulate competitive lending and deposit practice. It requires a strong willingness and ability of banks to buy primary securities from final investors at an interest rate which is reflective of the general scarcity of capital and the unusual administrative costs

of serving each class of borrower. The term of loan is equally crucial. Thus, extending loans at high interest rates but in larger quantity and for longer terms is a desired strategy, but almost impossible in an economy with unstable and high inflation. Due to uncertainty and risk-avoiding behavior, the nominal interest rates that incorporate the expected future price inflation are taken as very high to borrowers and very low to depositors. In the anticipation of low inflation in future, the borrowers tend to avoid high fixed nominal interest rate commitments whereas the depositors don't want to be 'wiped out' in case of unexpected acceleration of inflation. Consequentially, only short-term commitments can be established. An important issue in this scenario arises that if price inflation be accepted and then offset by proper adjustments in nominal interest rates. Besides defining a proper numeraire, it is difficult and expansive to index the interest rates by the banking authority in order to maintain their real value as inflation proceeds. However, it is better to adjust nominal interest rates to reflect movements in some commodity price index, rather than having no protection against unexpected price movements. A reasonable stability in the price level is crucial but the tricky part is the problem of deflation without aggravating financial repression.

## **CONCLUSION**

By reviewing extensive literature on finance and growth, it can be concluded that economic growth and development are closely related to 'finance', although there is difference of views on direction of causation as well as on relative significance of various structures. It is also established that financial systems exert significantly positive effect on economic growth though provisioning of various financial services which facilitate improvement in market frictions. The evolution of growth and development approaches had been progressed enough to assess the 'money' and 'credit' views of economy and the transmission mechanisms linking money and income. In this aim, Keynes and Tobin share the common goal of economic growth through monetary expansion, yet their rationales are different.

This chapter has tried to shed light on the concepts of financial repression and their implications particularly for, but not limited to, developing countries. Government intervention in almost all facets of financial markets created a policy structure which was identified as 'financial repression' in the seminal works of McKinnon (1973) and Shaw (1973). Since long, the governments have been intervening in the financial sector to ensure financial stability and safeguard public from unexpected losses. Along with these objectives,

it also tried to narrow down the concentrations of wealth and monopoly power, to generate fiscal resources, and to channelize resources toward most favored parties via financial system. In this aim, the authorities keep interest rates artificially at low level. Along with it, the provision of credit subsidies to favored firms and units in industries and agriculture for achieving development goals is also a seductive idea. Thus, the minister of finance in these economies is generally pressurized to increase revenue for providing direct subsidy and outright grants to certain agriculture or industrial units.

It is difficult to find a country that had never intervened in the financial sector, in one way or the other. Much of the twentieth century saw intensified financial repression. Especially in the year after World War II, the governments tried to maintain the interest rates well below market rates by putting artificial ceiling on them and to control the allocation of credit through their guidelines or through directly owning the banks. The economy is termed as financially repressed when government tax or otherwise distort their financial markets. Interest rate restrictions, heavy reserve requirements on bank deposits, and compulsory credit allocations interact with prevalent price inflation in order to reduce the desirability of holding claims on the domestic banking system. Real deposit rate of interest on monetary assets is generally negative and is hard to forecast when inflation is high and unstable in such repressed financial system. Foreign exchange rates also tend to be extremely uncertain. As a result, the demand for domestic money i.e. savings and term deposits along with demand deposits and currency reduces as a percentage of gross national product (GNP).

Even during 1970s, various development economists were still favoring the 'forced savings' through inflation and credit subsidies at below market interest rates as means to stimulate socially desirable investments. Financial sector was not regarded as major element in the economic growth and development process, unless manipulated and repressed. The resulting distortions, erosions and eventual deterioration of the financial system was regarded as consequence of financial repression, therefore, 'government intervention' is recognized to be synonymous with 'government failure' due to its associated economic inefficiencies. Thus, curing financial repression is inherent its definition.

The review of literature in this chapter has embedded suggestion to maintain positive and uniform high interest rates within similar categories of bank loans and deposits by removing heavy reserve requirements, interest ceilings, and directed allocations of cheap credit. The

stability of price level through appropriate macroeconomic measures is also needed. Only in such setting, the domestic savers and investors would be able to realize the true scarcity price of capital and therefore decrease the excessive dispersion in the profitability of investment in different sectors of the economy. There is also a widespread agreement that flows of saving and investment should be voluntary and significantly decentralized in open capital market at close to equilibrium interest rates. Subsequent to the adverse consequences of financial repression, McKinnon-Shaw presented the case for 'financial liberalization' as 'opposite' of 'financial repression' which became the core theoretical foundation for financial sector analysis and policy over the last four decades which is to be discussed in next chapter.

# CHAPTER 2. FINANCIAL LIBERALIZATION – PROPOSITION AND OPPOSITION

## INTRODUCTION

Based on their classification of financial repression, McKinnon (1973) and Shaw (1973) set out the case for financial liberalization (FL), a concept founded on blatant faith on market clearing forces and complete withdrawal of government from the market economy. The main theoretical underpinning in their models was higher interest rates having positive relationship with economic growth. In this aim, the complementarity hypothesis by McKinnon and Debt intermediation view by Shaw has significant contributions in liberal approach in economics. The first section of this chapter elaborates these key theories along with some of its extensions which seek to relate the various aspects of FL with the economic growth and development. The theoretical foundations of FL and successive refinements transformed the idea of FL into a comprehensive process having mix of policy measures consisting of internal and external liberalization depending upon individual country's conditions and preferences, which are covered in section 2.

The end of 1980s and 1990s observed the widespread liberalization in emerging and developing countries, especially East Asian and Latin American economies. An important factor that is regarded responsible for the popularity of FL in these countries is Washington Consensus, a mix of ten (10) policy reforms to ease out controls in developing countries' markets. Deregulations, privatization, liberalization of finance, trade and foreign exchange etc. were part of this agenda adopted by most of the developing countries in transition towards market economy during that period. Another vital force that played primary role in the fad of FL buzzed at the turn of 21st century was financial globalization and integration which called for further financial opening. The joint impact of Washington Consensus and financial globalization provided impetus for the extensive implementation of FL reforms in emerging and developing economies which is the subject of the section 3 of this chapter.

While touching most aspect of financial markets in developing countries, the process of FL appears have certain effects by changing the central conditions in which their financial sector operates. Two of these conditions which are discussed in section 4 are the higher interest rates

along with the elimination of other price controls and the entry of new financial firms along with the privatization of state-owned intermediaries.

The mixed consequences of FL reforms in developing economies are followed by a protracted series of critique, one set of which was based on the inherent evils of the market economy. The assumptions on which theory and models of FL are founded are actually non-existent which infers that financial markets are imperfect. The incomplete information, stressed by Stiglitz-Weiss model, along with the externalities and incompleteness of financial markets are regarded as some of the sources of these imperfections. Section 5 of this chapter elaborates all these odds intrinsically present in the financial markets.

The critique of FL that emerged as result of financial crashes, chaos and crises in post-FL scenario in emerging and developing countries is responded by the proponents of FL in which they emphasize its proper implementation to make FL successful. Two key areas in this respect are pre-conditions and sequencing. Macroeconomic stability along with efficient regulation and supervision are deemed as necessary conditions to be fulfilled before executing FL. The simultaneous implementation of internal and external FL i.e. liberalization of capital market along with trade liberalization is considered flawed due to which they recommend an optimum sequencing of liberalization reforms. However, it gave rise to further criticism on the logic of reform and there emerged new debate on big bang versus gradual approach of implementing liberalization measures. Section 6 is comprised of all this discussion.

The proponents of FL responded its opposition by focusing on implementation problems, however, even the fulfillment of all conditions cannot ensure the success. According the critique developed by the New-structuralists and Institutionalists characterized FL as inappropriate for developing countries due to their structural and institutional realities and settings developed as consequence of protracted financial repression in these economies. The wide prevalence of unofficial money market is one of such reality. The final section of this chapter thoroughly discusses New-structuralist critique as well as Institutionalist critique.

## Section 1. McKinnon-Shaw Proposition for Financial Liberalization

The 'anatomy of repression' was first classified by McKinnon (1973) and Shaw (1973) in their now seminal works which set out the case for financial liberalization. The theory of FL was prophesied on blind faith in markets and government failure was best be contended by eliminating the role of government in economy. The resultant policy prescription called for the liberation of financial markets from administrative restraints of government in order to let the market-clearing forces work. The most important element in the construction of FL theory was the idea that interest rates have a positive relationship with economic growth. It was McKinnon and Shaw who provided theory connecting high interest rates with output growth.

#### 1.1 Theoretical Foundation – McKinnon

McKinnon (1973) founded his theoretical model on the assumption that all economic units are confined to self-finance in developing countries due to prevalent financial repression. Indivisibilities in investment also play their role in this respect. This assumption in McKinnon's analysis implies that it is foremost for any potential investor to accumulate all the money balances necessary for investment before undertaking any project. Unlike Tobin's portfolio approach in which money and capital are being substitutes, McKinnon treated money and capital as inherent complements, termed as 'complementarity hypothesis'. It states that in developing economies, money and real capital assets are complements because money balances have to be accumulated before undertaking costly and indivisible investment projects due to the lack of profound financial markets and broad financial intermediation. It is inferred from this hypothesis that the demand for real money balances (M/P) is positively dependant on real income (Y), real interest rate on bank deposits (R), and real average return on capital (r). Analytically, the positive link between the demand for money balances and the average real return on capital signifies the complementarity between capital and money. This is one leg of the complementarity hypothesis. McKinnon also indicates that the investment ratio (I/Y) must also be positively related to the real rate of return on money balances. The logic behind this idea is simple. If an increase in the real return on bank deposits (R) raises the demand for money in a situation where real money balances are complementary to investment, it must also augment the investment ratio. This is the second leg of the hypothesis. Therefore, the complementarity hypothesis is a united hypothesis whereby the demand for real money balances is dependant directly, inter alia, on the average real return on capital and the investment ratio increases with the real deposit rate of interest. This complementarity is expressed in a demand equation for real balances (M/P):

$$M/P = L(Y, I/Y, d-\pi^*)$$
;  $\delta(M/P) / \delta(I/Y) > 0$ 

Where Y is real GNP, I is the investment term, and  $d-\pi^*$  is the real interest rate. Complementarity between real money balances and investment appears in the positive partial derivative.

In this model, the conditions of money supply have a first-order influence on saving and investment related decisions. This model retains Tobin's assumption of a purely fiat money stock generated through government debt that is certainly exogenous. McKinnon follows the implications of a world without credit money in order to employ purely exogenous fiat money, but it changes the primary assumptions regarding the relationship of money and income and develops a neoclassical monetarist approach. It is implied in this assumption that money and capital are two absolutely distinctive goods which are becoming part of the economy via separate production functions. Since there is no borrowing in a purely fiat economy, no mechanism is required through which the process of production capital calls forth the money necessary to finance its creation. In case of modifying the first assumption by introducing credit money, a strange assumption is to be met for the complementarity thesis to hold i.e. the business sector must be a net saver than net debtor in any one period. Thus, just like Tobin's model, the nonexistence of credit money characterizes a considerable weakness in McKinnon's hypothesis.

#### 1.2 Theoretical Foundation – Shaw

The formal theoretical analysis of Shaw (1973) is not based on the tough assumption of a fiat money world. Rather, it focuses on the role of financial intermediaries in economic growth and development. According to it, financial liberalization, in terms of high interest rates, is resulted primarily from increasing the volume of financial intermediation between savers and investors. The capacity of financial intermediaries to lend is increased by offering high returns to savers, due to which banks are enabled to allocate the resultant volume of investment funds. The growth in investment funds leads to increase in the quantity of investment. As a result, banks can realize the economies of scale in risk diversification, lending, operational efficiency, and information costs which eventually reduce the real borrowing cost for investors and raise the average efficiency of investment. These arguments presented in Shaw's model are known as 'debt-intermediation view' which is expressed in the following money demand equation:

 $M/P = F(Y, \gamma, d-\pi^*) ; \delta M/P / \delta d-\pi^* > 0$ 

Where  $\gamma$  is a vector of opportunity costs in real terms of holding money. The view fundamentally believes that the yields on all kinds of wealth, particularly money, would have a positive effect on the savings rate, and consequently on investment.

Shaw's model mainly depends on neo-classical market clearing assumption, particularly assumption regarding the functioning of interest rate in an equilibrating manner for ensuring the equality between the supply and demand of loanable funds in the financial markets <sup>19</sup>. Due to efficient financial markets as assumed in this model, the decision to reduce consumption and savings does not decrease demand as it only changes its composition from consumption to investment expenditure. Investment is only constrained by the lack of savings entering in the financial intermediation process which ultimately limits growth. In this scenario along with a constant money supply, it is the objective of the policymakers to raise the demand for real money balances and thus increase the supply of loanable funds, investment and economic growth. Therefore, holding of real money balances brings investment and growth which infers that saving is the main element for investment and growth.

However, the major loophole in Shaw's model is the deficiency of any behavioral mechanism specifying the operation of the banking system. It is weird that underlying suggested approach of FL by Shaw tries to address fragmented, repressed, oligopolistic, rationed credit markets, but his primary mechanism is strongly based on the assumptions necessitating competitive and efficient markets. As first estimation, however, Shaw's theory is naturally more reasonable and rational than McKinnon's.

In totality, the principal argument of the McKinnon-Shaw joint thesis is where savings are assumed to be positively connected to the real interest rate. According to them, a typical situation in developing countries is the prevalence of an administratively determined nominal interest rate which holds the real interest rate below its equilibrium level (Arrieta 1988, P. 589). According to Fry (1995), financial intermediation is repressed and sub-optimal due to administrative fixation of interest rates below the equilibrium. With increase in the real

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<sup>&</sup>lt;sup>19</sup> Regarding traditional approach of real interest rate determination, the work of the Swedish economist, Knut Wicksell is of particular relevance. According to Wicksell's (1898, 1907) Theory of Interest, the real rate of interest fluctuates around an unobservable equilibrium level, which is called 'natural' rate of interest. The natural rate equilibrates *ex ante* savings and investment and equals the marginal product of capital. Thus, if the real rate equals the natural rate, prices are stable. Contrarily, if real rate goes above the natural rate, the economy is contracted and prices are fallen whereas if real rate goes below the natural rate, the economy is expanded and prices are raised.

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interest rate, savings and total real supply of credit are grown, which bring a higher volume of

investment (Arestis and Sawyer, 2005).

The graphical representation of McKinnon-Shaw case for financial liberalization is given at

Annexure III.

1.3 Theoretic Refinements

Successive extensions of the McKinnon-Shaw hypothesis strive for discovering thorough

concepts of financial liberalization and try to clearly describe the transmission mechanisms

between monetary policy and economic growth and development.

Some of the significant extensions are given below:

**1.3.1 Kapur's Model of liberalization** (*Principal idea: FL augments growth by improving* 

the quantity of investment) Kapur's (1976) model demonstrates the primary linkage in

liberalization theory i.e. an increase in interest rates enhances growth because it raises the

quantity of investment funds and thus, investment.

The rationale for this model is based on Shaw's debt intermediation view i.e. higher interest

rates increase the level of savings, which expand the banking sector and hence lead towards

an increase in the quantity of investment. By looking at various stabilization programs, it is

argued by Kapur that as compare to the stabilization through an initial decrease in the rate of

monetary expansion, the stabilization through an initial increase in the average nominal

interest rate on money holdings has considerably more favorable effects on real output in

short run. Working capital nexus connecting bank financing and aggregate supply has a vital

role in transmission mechanism of Kapur's model. The significance of working capital

explains two phenomena: one is the initial decline of real output, historically describing

efforts at price stabilization, and second is the consequent expansion of real output as

inflationary expectation regress and the real stock of money increases.

**1.3.2 Galbis's Model of Liberalization** (Principal idea: FL augments growth by improving

the quality of investment) Another main ideology of FL is described by Galbis (1977) in his

model of investment efficiency by theorizing that high interest rates enhances growth as they

bring an overall improvement in the quality in the capital stock, even if total real savings are

interest inelastic. Logically, it is the rationing function of high interest rates on investment demand which leads to an improvement in the quality of the capital stock. As established in first chapter, financial repression assumes the undertaking of inefficient and low-yielding investment projects due to providing subsidy in order to maintain low nominal interest rates. This implies that crowding out of efficient and high-yielding investment projects from the organized credit markets. Therefore, the policy of raising nominal interest rates by eliminating subsidy is encouraged for rationing out the inefficient and low-yielding investment projects and thereby, improving the allocation of resources in the financial system.

Galbis also demonstrates that countries with a rigid structure of interest rates should consider the institutional credit ceilings as a second-best policy. In case of excess demand, credit ceilings permit a degree of price stability which ensures, given the limit on nominal interest rates, the maximum 'possible' high real interest rates. However, the 'optimal policy' remains letting the interest rates upsurged to a level where the supply and demand for investibles are equal, consequently eliminating the need for rationing controls. The freeing of deposit rates and the elimination of quantitative controls give rise to such form of FL where market is moving away from a direct monetary control towards more indirect monetary control.

**1.3.3 Mathieson Model of Liberalization** (*Principal idea: Best way to conduct FL is to bring simultaneous changes in regulatory regime through a rapid reform program, which asks for coordination of internal and external policy changes in order to smoothen the adjustment*) The policy frameworks of FL usually demands a 'big bang' of liberalization in which deposit and loan rates undertake enormous and distinct changes as a result of which the financial system gets freedom from most of the repressive policies.

Although, the extensive debate on 'big bang' versus 'gradualism' will be held later in this chapter, however, for the purpose of explaining this model, it is crucial to describe that the rationale for rapid reform program is that the adjustment period is ended quickly due to which political elements do not have time to resist the reform process. Besides political reasoning, it also has an economic explanation based on the neo-classical notions related with functioning of free markets and of price signals.

The simultaneity of reforms implies that the liberalization program is being conducted in an open-economy situation. The extension of FL to an open-economy framework expresses the

impact of capital flows on stabilization and financial reform. The Mathieson model is demonstrative of the probable interdependency between FL and exchange rate policy within a broad stabilization program. This interdependence is logical because FL wants to increase the supply of investible funds. The increase in domestic interest rate in an open economy will invite capital which, at first, would increase the supply of savings. However, this capital inflow will also put upward pressure on exchange rate thereby reducing trade competitiveness. With worsening balance of payment, future expectations of depreciation would raise thereby stimulating capital outflow and resultant reduction in supply of investible funds. The underlying message of this analysis is that the exchange rate policy has to be coordinated for offsetting the possibly harmful effects of capital inflows on the balance of trade.

Stabilization programs funded by IMF during 1980s took greatly from Mathieson's theoretical credence. From the optimal stabilization policy mix, given at Annexure IV, it can be concluded that 'a phase of gradual changes in policy instruments, including an initial phase of discrete and potentially large changes in policy instruments. These discrete changes are a vital part of the adjustment program because they create inflation and exchange rate expectations consistent with the stabilization program' (Mathieson 1979, p. 472).

Apropos to the theoretical foundations of financial liberalization by McKinnon-Shaw and their successors' refinements, the philosophy of Financial Liberalization (FL) had been transformed into a broad policy framework.

#### **Section 2. Elements of Financial Liberalization**

FL is comprised of many elements as it reveals a range of restrictive measures imposed under financial repression. It may include capital market liberalization, banking sector liberalization, and stock market liberalization. Depending on individual conditions and priorities, countries can choose to go from partial to full liberalization. Full liberalization characterizes six (6) dimensions of FL containing elimination of credit controls, deregulation of interest rates, free entry into the banking and financial services industry, banking autonomy, private ownership of banks, and liberalization of international capital flows (Williamson and Mehar, 1998). FL refers to measures directed at diluting or dismantling regulatory control over the institutional structures, instruments and activities of agents in different segments of the financial sector. These measures can be related to internal or external regulations.

#### 2.1 Internal Financial Liberalization

Internal FL is normally comprised of few or all of the following measure in different degrees (Ghosh, 2005):

- (i) The complete elimination or reduction of controls on the interest rates charged by financial agents. Although the central bank keeps on affecting or managing that rate structure through open market operations or through adjustments of its discount rate. However, deregulation usually removes interest rate ceilings and encourages competition which attracts potential depositors and borrowers. Consequently, price competition squeezes spreads thereby forcing banks and other financial firms to rely on volumes to warrant returns.
- (ii) The exclusion of the state from financial intermediation process along with the transformation of the development banks into commercial banks and the privatization of the state-owned banks. It is normally supplemented by the decline or removal of directed credit to priority sectors.
- (iii) The relaxation of conditions for the participation of firms and investors in the stock market by reducing listing conditions, by allowing greater liberty intermediaries like brokers, by providing autonomy in pricing of new issues, and by easing conditions related to borrowing against shares and investing borrowed funds in the market.
- (iv) The elimination of regulatory walls between banking and non-banking financial sectors which leads to the emergence of "universal banks" or financial supermarkets thereby increasing the interlinkages between various financial structures.
- (v) The expansion of the sources and instruments to access the funds.
- (vi) The liberalization of the regulations regarding the types of financial instruments that can be issued and acquired in the system. With liberalization, such financial assets are started to generate that transfer risks to the portfolio of institutions which are willing to hold them.
- (vii) The adoption of regime of voluntary adherence to statutory guidelines related to capital adequacy and accounting norms which let the central bank's role to be limited to supervision and monitoring.
- (viii) Another component of FL which remained dominant during 1980s-2010s was the self-regulation of the market mechanisms. The proponents of free market economics regarded self-regulation as the best kind of control, even to the extent being able to self-repair the market failures.

#### 2.2 External Financial Liberalization

External FL usually encompasses modifications in the exchange control regime. Trade liberalization along with full convertibility of current account transactions are complemented with varying levels of convertibility on the capital account. The liberalization of capital account generally covers the following measures with varying degree of intensity and patterns:

- (i) Measures regarding permitting foreign residents to hold domestic financial assets in form of debt or equity. Such measures allow domestic firms to undertake external commercial borrowing, even without government guarantee or supervision. These measures can also be accompanied with the reduction or removal of controls on the entry of new financial firms, provided they meet certain specified norms related to capital investments.
- (ii) Measures regarding permitting domestic residents to hold foreign financial assets. Such measures are regarded as radical liberalization because it increases the probability of capital flight in times of crisis, an area to be explored in next chapter. However, these measures are used to reduce pressure on exchange rate by those countries which get excessive capital inflows that do not enhance the net domestic investment and are mirrored in excessive accumulation of foreign exchange reserves.
- (iii) Measures regarding permitting assets denominated in foreign currency to be held freely and traded within the domestic economy, a phenomenon known as the "dollarization" of accounts. Such measures have been implemented only in few countries as they are regarded as an extreme degree of external FL.

After describing what FL entails from partial to full version, we will now discuss the vital paradigms behind advancement and popularity of FL in developing countries.

# **Section 3. Key Forces stimulating Financial Liberalization**

The easing of controls on the financial sector has not proceeded in a vacuum; it has been supplemented both by a general liberalization of the domestic economy and by an opening up toward the outside world (Williamson and Mahar 1998). The phenomena of Washington Consensus in end-1980s along with financial globalization and integration in end-1990s provided further impetus for financial liberalization.

# 3.1 Washington Consensus

"Washington Consensus" is a term which came into being in 1989 when John Williamson prepared a background paper titling "what Washington means by policy reform" for a conference that the Institute for International Economics organized for studying the magnitude of change in economic policy of Latin America, historically based on traditional views of development economics, but now converging towards philosophies that are viewed as perfect for Organization for economic and cooperation for Development (OECD). In order to deal with mutual set of issues, this background paper presented a list of ten policies that almost everybody in Washington (i.e. International Monetary Fund (IMF), World Bank (WB) and United States (US) Treasury being their offices in Washington, US) agrees upon, and labeled that list as "Washington Consensus". Here, it is pertinent to identify those ten (10) policy instruments, also known as 'ten commandments', on which Washington<sup>20</sup> showed substantial consensus.

#### 3.1.1 Ten Commandments

Washington consensus was consisting of a set of ten policy reforms needed by emerging and developing economies (Williamson, 1989):

- (i) **Fiscal Discipline**: The sufficient fiscal discipline is required so that the budget deficits are small enough to be financed without resorting to the inflation tax.
- (ii) Public Expenditure Priorities: Public expenditures must be redirected from politically focused areas towards neglected fields with high economic returns and the potential to improve income distribution e.g. health, education, infrastructure etc.
- (iii) Tax Reform: Reforming taxation is required in order to broaden the tax base and to cut marginal tax rates. Taking motivation from Bradley-Kemp tax act in the US during 1986, it argued for efficient raise in required taxes, without displaying the distorting exemptions that force high marginal tax rates on those things that are not exempted<sup>21</sup>.

The Washington of this paper is both the political Washington of Congress and senior members of the administration and the technocratic Washington of the international financial institutions, the economic agencies

of the US government, the Federal Reserve Board, and the think tanks (Williamson, 2004)

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<sup>&</sup>lt;sup>21</sup> This is not, one has to acknowledge, the consideration that drove tax reform in most developing countries during the 1990s. The dominant form of tax reform was the introduction or extension of VAT, driven by a desire for a resilient, broad-based (thus relatively non-distortive) revenue source, in part to offset the loss of revenue occasioned by tariff reductions. The main problem with VAT is that it is regressive, and for un-understandable reasons the International Financial Institutions have tended to be hostile to correcting this by exempting basic necessities like food and medicines.

- (iv) Interest Rates: Interest rates should be market-determined and positive in order to avoid resource misallocation. In this aim, financial liberalization holds the eventual objective to converge for attaining market-determined and positive interest rates.
- (v) Competitive Exchange Rate: A unified exchange rate is required at a level adequately competitive for bringing a prompt growth in non-traditional exports, and this export growth is vital to accelerate a general growth process.
- (vi) **Trade Liberalization**: Quantitative trade restrictions should be promptly replaced by tariffs by gradually reducing them until achieving a uniform low rate of 10 to 20 percent.
- (vii) Liberalization of FDI: The abolition of barriers hindering the entry of Foreign Direct Investment (FDI) in order to have a more stable flow of capital as compare to portfolio capital and bank loans<sup>22</sup>.
- (viii) **Privatization**: The state-owned enterprises should be privatized in order to increase the efficiency and viability of the privatized enterprises along with advancing access to privatized utilities.
- (ix) **Deregulation**: Such regulations must be eradicated which obstruct the entry of new firms and thus restrict competition.
- (x) **Property Rights**: The legal system should provide secure property rights without undue costs along with their availability to the informal sector.

Apparently, there seems to be three main notions of Washington Consensus: macroeconomic discipline, market economy, and openness to the world economies. These were the mainstream ideas in OECD countries, but global apartheid at that time viewed developing countries to take advantage from the opposite notions, for example, inflation to get the inflation tax and boost investment, prominent role of government to initiate industrialization, import substitution etc. The Washington Consensus proposed the end of this era of apartheid, as a result of which the term of Washington Consensus has been used to cover a broader market fundamentalism and neoliberal agenda.

#### 3.1.2 Introduction of New Economic Order

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Washington Consensus contributed in the termination of segregation between development economics and mainstream economics - a segregation particularly heating up since 1970s. The policy prescriptions of Washington Consensus, principally based on overall freeing of

<sup>&</sup>lt;sup>22</sup> Williamson (2004) claimed that his version of the Washington Consensus spoke quite specifically of liberalizing the inflow of FDI, and not of general liberalization of capital inflows.

economies were apparently odd in those times when it was believed that less developed countries could not really take advantage from freer international trade and liberalized markets because there was a strong conviction that these countries had to protect their economies from an unfair and exploitative international system. This conviction primarily came from underlying views of "Dependency theory" which was quite popular in developing world in those times.

Dependency theory emerged in 1950s as critique of modernization by holding that conditions of underdevelopment are surely the consequence of integration of third world economies into the capitalist world system which is dominated by west and North America (Randall and Theobald, 1998, P. 120). There were also certain critiques of this theory, like in the late 1950s, Nobel laureate Gunnar Myrdal signified the implementation of centralized planning as the only option a country had to overcome poverty. According to Myrdal (1956), "What amounts to super-planning has to be staged by underdeveloped countries... and grand-scale national planning is the policy line unanimously endorsed by governments and experts in the advanced countries" ... "central planning is the first condition of progress" (cited in Bauer, 1984, P.19-20). After that, many variations of these ideas were introduced<sup>23</sup>.

However, the debt crisis and cold war made it impossible and unaffordable for governments of developing countries to keep on following the economic policies of aloofness by maintaining fiscally expensive public sector. Such events left no option for developing countries but to seek support from welcoming but demanding Washington Consensus which asked for adoption of mainstream macroeconomic policies and abolition of protectionist structures prevalent in these countries. Particularly highly-indebted countries needed some relief from their enormous volume of foreign financial obligations which is provided to them in exchange for the implementation of economic reforms prescribed by Washington Consensus.

This results in the proliferation of policies of Washington Consensus through the stabilization and structural adjustment programs of IMF and World Bank which eventually became a principal approach to development (Gore, 2000). Therefore, a reform program actually

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<sup>&</sup>lt;sup>23</sup> Some of these variations include, but not limited to, Julius Nyerere's "autonomous development", Samir Amin's "de-linking", the "basic-needs" approach, François Perroux's "development poles", ECLA's "comprehensive social development", the UN's "new international economic order" (Naim, 1999).

intended to restructure and stabilize crisis-wracked Latin American economies soon became a popular 'panacea' for developing world.

# 3.1.3 Critique of Washington Consensus

The series of crises in emerging and developing countries, starting with one in Mexico by the end of 1994, by implementing prescribed policies of Washington Consensus let the world to accuse this set of neoliberal policies which acts as most damaging factor to economic growth of these economies. In fact, Washington Consensus didn't consider the 'crisis avoidance'. No warning was given to developing countries which were, as prescribed, opening up their credit and financial markets prematurely. Since crisis related issues were not urgent in late 1980s, therefore, the consideration of warning was regarded as 'non-issue'.

An extremely narrow objective of Washington Consensus can also be the reason behind its unsatisfactory performance. It suggested a path to improve economic growth without paying any heed to its distribution. Equally important is the distribution of income, along with the overall level and growth of income. In this aim, Birdsall, Augusto de la Torre and Menezes (2001) came up with '10 + 1 tools for social equity' in order to improve income distribution without impairing growth. However, they are suggested as complement, not as substitute, to Washington Consensus.

In the same fashion, the double standards of developed world are also criticized which impose liberalization on developing countries whereas maintained controls like trade restrictions on the specific commodities and pressed World Trade Organization (WTO) for intellectual property protection. Another crucial criticism on Washington Consensus is that it missed globalization. The abandoning of controls that drove economic integration owes a lot to the stimulus of Washington Consensus. However, it didn't suggest any policy set to liberalizing economies in order to cope with the consequences of financial globalization.

Financial globalization and integration of financial and credit markets is vital in explaining the widespread liberalization taking place during 1980s-1990s and took high speed at the turn of the century.

# 3.2 Financial Globalization and Integration

Globalization, a buzzword of the 21<sup>st</sup> century, is regarded as problem as well as panacea. The debate over globalization resulted in a series of books on the subject (Friedman, 1999; Soros, 1998; O'Rourke and Williamson, 1999, Davis and Gallman, 2000).

The convergence and reinforcement of certain events gave impetus to the wave of globalization in commodities as well as financial and capital markets. The collapse of the Soviet Union and the subsequent opening of the economies of Eastern Europe along with the gradual opening of China are two of such events. Then, after various unsuccessful efforts during the 1980s, the decade of the 1990s eventually brought significant change in economic policies in most emerging economies led by reduction in controls in varying degree as well as the opening to international markets. The advent of extraordinary advancement in information technology and communication further enabled the process of globalization and integration.

Regarding the evolution of global financial and capital markets, Eichengreen (1996) gather a working set of hypotheses that can be regarded as conventional wisdom vis-à-vis the evolution of international capital mobility in the post-1870 era. This time span of 19<sup>th</sup> and 20<sup>th</sup> century can be divided into four distinctive parts:

(i)The first period is started from 1870 and ended in 1914. During this era, most of the world economies were following classical gold standard and a global capital market headquartered in London. Since this regime of fixed exchange rate was regarded as stable and credible functioning as a disciplining device, therefore, interest rates across countries tended to converge and resulted in the surge of capital flows. Many peripheral countries in those times took part in a progressively globalized economy in not only the capital market, but also in the goods and labor markets (Obsfeld and Taylor, 2003).

There are many elements which could explain the greater persistence of current account imbalances in the pre-1913 period. One such factor is the highly credible commitment of policymakers' for stable monetary and fiscal policies because the anchoring with the gold standard gave signal that the borrowers followed the same rules as lenders and hence were improbable to default on their debts. Bordo and Rockoff (1996) analyzed this hypothesis for nine receivers of British capital during 1870-1914 and found robust evidence that adherents of gold standard paid lower interest rates on sovereign debt than those with blotchier histories.

Flanreau, Le Cacheux, and Zumer (1998) also found similar results for a panel of European peripheral countries. Since gold standard was synonymous with fiscal morality where capital provider and receiver shares similar set of norms, therefore, the failure of the international monetary system to support equally persistent deficits after 1st World War may reflect transference to less credible policies.

Another factor behind persistent export of British capital is that most of the British investment went to countries with which it shared common language, culture, legal system, and accounting system e.g. US, Canada, and Australia or to countries where Britain had robust commercial presence and significant political influence e.g. Argentina, Uruguay or to colonies under direct British control. The French also led their capital to countries where they had a strong political influence and close cultural bonds e.g. Italy, Spain, Russia etc. (Fishlow, 1985; Flandreau, 1996; Flandreau, 1998). The nature of investment itself also explains another element. Most of this capital was flowing in order to finance railroads and other infrastructure in new world. Such type of investments needed long-term commitment and the returns accrued only when the project is accomplished, making it costly to dismiss prematurely. A final element is the flexibility of 19<sup>th</sup> century economies which had less structured and less institutionalized markets where adjustment was also less constrained by policymakers, therefore a shift in capital flows could be easily accommodated. Bayoumi and Eichengreen (1996) and Calomiris and Hubbard (1996) provide econometric evidence consistent with this explanation.

(ii) The second period is started from 1914 and ended in 1945, during which global economy was devastated as result of two World Wars and a Great Depression along with upsurge of nationalism and non-cooperative economic policymaking. The gold-standard credibility was shattered by World War I, after which monetary policy started to relate with domestic political goals in order to support wartime deficits. Later, monetary policy became an instrument to devise devaluations under floating regime. Capital controls became extensive for guarding against currency crises in order to protect gold. So just in few decades, the global economy turned from globalized to nearly autarkic with minimal capital flows and non-synchronized international prices and interest rates. The demonization of global capital and finance is regarded as the main reason of the Great Depression of the 1930s (Eichengreen 1996; Temin 1989).

(iii) The third period, commonly known as the "Bretton Woods era" is started from 1945 and ended in 1971. During this period, serious efforts were made to rebuild the global economy. Although trade flows started to expand outstandingly and economic growth was also surging speedily, however, it was tough to dissipate interwar period fears regarding global capital. In this aim, IMF firstly sanctioned capital controls for preventing currency crises and runs, which advanced some autonomy to governments by giving more authority to activist monetary policy. This philosophy sustained for twenty years and capital markets recovered slowly. But global capital could not be held back after late 1960s, so its workings ultimately terminated the compromise for sustaining the fixed exchange rate regime (Bordo and Eichnegreen, 1993).

(iv) The fourth and final period which is known as post-Bretton Woods floating-rate era, showed a different trend. Despite of abolishing fixed rate regime hesitantly, the period from the 1970s to the 1990s saw reasonable increase in capital flows. The economic reforms in peripheral countries reduced the transactions costs and risks of foreign investment due to which capital flows raised. However, the crises of the later 1990s prompted the weaknesses of fixed rate regime prevalent in the developing economies. Thus, the smaller peripheral countries previously desirous for fixed exchange rates gradually found credibility in giving up the autonomy of domestic monetary policy through currency boards.

Consequently, the term of 'globalization' became synonymous with an integrated and interdependent world economy at the turn of 21<sup>st</sup> century, exhibiting free flow of goods, services, and capital. But today, it is hard for this era to assess the early period of remarkable global integration and the existence of global capital markets even in the beginning of 20<sup>th</sup> century, that is, almost a hundred years ago. By roughly sketching the implied movements in capital mobility, an upswing can be seen from 1880 to 1914, followed by a collapse to 1945, then a gradual rise in mobility after 1945, which became faster after the end of Bretton Woods in the early 1970s. The empirical evidence on the international integration of credit and financial markets from 1880 to the present shows that globalization has followed a U-shaped pattern for capital flows (Bordo, Taylor and Williamson, 2005). The U-shaped trend line indicated as a stylized view of capital mobility in modern history which is given at Annexure V. The U-shaped pattern of global financial integration had been explained by Obsfeld and Taylor (1998) in terms of the policy trilemma of open capital markets, pegged exchange rates, and independent monetary policy i.e. only two of the three elements hold at the same time.

This description of facts regarding global capital and financial markets infers a back to the future scenario as international markets may have been at least as integrated before 1914 as they are today (Auernheimer, 2003). However, depth of financial markets, shift from debt to equity and growth of FDI are some of the key features which strengthen the view that international financial markets are much more integrated now than they were before 1914.

So basically, the conceptual victory of FL coincided with the Washington Consensus and growing financial globalization and there started a terrible period in which the developing world became so indebted with dollar-denominated debt at world interest rates that they couldn't meet their payment obligations anymore. So they have to rely on the IMF and World Bank which were confident about their FL-based policy conditions in correcting these imbalanced economies because FL, with its focus on market-clearing interest rates and the corresponding significance of interest rates in combating inflation, was popular.

## **Section 4. Process of Financial Liberalization**

The occurrences of liberalization typically portray a complex mix of financial and nonfinancial policy reforms which make it extremely challenging to work out the empirical approximations of the net economic welfare gains resulting from FL. Some studies show some evidence regarding absence of any systematic increase in the overall saving (Bandiera et al. 2000), but some econometric studies suggest the increase in the allocation of credit (Caprio, Atiyas and Hanson, 1994). However, the process of FL itself seems to impart certain effects by altering the fundamental conditions in which the financial sector functioned. Two of these elements were (i) removal of interest rate and other price controls along with less state-administered direction of credit. It entails a decrease in the implicit taxation and related rents of financial intermediation, and also in the higher short-term volatility in nominal interest rates (ii) entry of new financial firms, privatization of state-owned intermediaries, decline in the business related restrictions on financial intermediaries, and elimination of legal protection for cartelized financial markets. All such measures changed the incentives for risk management and risk taking thereby altering the governance of financial intermediaries. Therefore, despite of the fact that FL touches various aspects of financial markets in developing countries, most of the attention is given to the policies of interest rates and of privatization and new entrants.

#### **4.1 Higher Interest Rates**

Besides exposing existing poor portfolios, FL also threatened existing credit recipients with higher costs of credit and reduced rents thereby altering the distribution of credit (Agénor and Montiel 1996). Contrary to the secured finance under financial repression, credit recipients now had to pay higher market-based price of credit, which sometimes also led heavily-indebted borrowers toward bankruptcy. With fixed interest rate contract, some borrowers have been momentarily shielded from such insolvencies, but those with floating interest rate contracts got immediate and heavy hit. Suffering from such contingencies, intermediaries with weak supervisory framework retorted these difficulties by rolling over interest as well as principal, which later resulted in further problems because intermediaries have to mobilize equivalent resources to provide such rollovers. The intermediaries will have instant squeeze if they had financed long-term fixed interest contract with short-term borrowing. But even in case of floating rate lending, they may not have been fully protected from the increase in interest rates because only a fraction of the rate risk will have really been hedged while the residue is only converted into credit risk.<sup>24</sup>.

The high leverage of financial intermediaries makes them extraordinarily vulnerable to unhedged interest rate changes. A sharp rise in interest rates in post-liberalization scenario is tended to disrupt financial and real activities so it was a costly feature of liberalization which might have been eased by converging controlled interest rates gradually towards market-clearing levels. The intermediaries will thus lose partially due to their borrowers' failing to sustain higher interest rates and partially due to the loss of the benefits previously received from effective deposit rate ceilings.

FL affects both the level and the dynamics of interest rates. With expectations to augment the volatility of interest rates and asset prices, FL was also anticipated to have distributional consequences in the shape of reduced or relocated rents, and to have improved competition in the financial sector. By examining the existing data on money market and bank interest rates to confirm these propositions, Patrick Honohan (2000b) revealed that with more and more countries liberalization measures, the level and dynamic behavior of interest rates in developing countries converged to the norms of industrial countries.

<sup>&</sup>lt;sup>24</sup> It was witnessed in Korea and other east Asian countries during 1997

At the level of government, heavy domestic borrowings have to be refinanced at new higher interest rates which have knock-on effects on resort to added taxation or borrowing thereby tending to produce macroeconomic fragility and uncertainty. The liberalization process also backed macroeconomic instability with a preliminary increase in aggregate credit due to financial institutions seeking market share. The resultant overheating had to be reduced down by monetary policy which resulted in inflation and nominal depreciation, feeding back onto nominal interest rates<sup>25</sup>. Another possibly disrupting influence of liberalization, as described above, was through the public finances when government is unsuccessful in responding to the higher interest rates by restricting deficits. When this happened, the deficits were either monetized resulting in an inflationary surge, or refinanced at higher interest rates in an unsustainable manner that crowd out the private borrowers thereby suckling back onto economic growth and stability.

The cross-section empirical studies on the interest elasticity of saving and investment reveal contradictory results. Greene and Villanueva (1991) by using 23 developing countries data for the period 1975-1987 find a significantly negative effect of real interest rates on investment. A weak but positive relationship between aggregate investment and real interest rates is found by Alan Gelb (1989). Demetriades and Devereux (1992) by using data of 63 developing countries for the 1961-1990 period find that the effect of higher interest rates on the cost of capital was stronger than the effect of greater supply of investible funds, so that a higher interest rate reduced investment. By using a sample of 14 Asian developing countries, Fry (1995) finds that the gross national savings rate is positively affected by increases in real interest rates. However, this result is not robust with variations in the time period or region used by Fry (Giovannini, 1983, 1985). It is also acknowledged by Fry (1995) that the effect is small which diminishes in more recent years, and is more widespread in Asia. Various studies also contend that in Japan and other East Asian countries, the high level of saving was not the result of high interest rates, but of banks' expansion into rural areas and the accessibility to low-yielding yet safe deposit instruments. This evaluation along with the mixed quantitative results led to another group of studies to test the nonlinear effects of interest rates on savings. Reynoso (1989) finds evidence that saving increases quickly with real interest rates moving from sharply negative to just below zero, but this effect levels off at low positive real interest rates and becomes negative as real rates become highly positive. Williamson and Mehar

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<sup>&</sup>lt;sup>25</sup> The run up to the 1994 Mexican crisis provides a dramatic example in this regard

(1998) questions the positive but low real interest rates showing the great potential for increased saving as the result of FL.

# 4.2 Privatization and New Entrants – Implications for Competition

Admission of new domestic and foreign entrants in the financial services industry is regarded as a part of FL in industrial countries which started to be prevalent in the developing countries (Claessens and Jansen, 2000). These new entrants are often free from handicaps of existing banks e.g. burden of nonperforming debts, costly labor contracts etc.

Greater competition can harvest direct efficiency gains and innovation in form of improved variety of financial services. These benefits are considerable and they also rise over time. But new liberties frequently led to a preliminary struggle to retain or gain market share, with banks looking for new business in unacquainted zones whose risks are usually underestimated (Honohan, 1999). The fear of new entrants could have eroded the prospects of inefficient incumbents which lead them into more risk taking. The resulting amplified macro-volatility accompanied with liberalization inferred new risks even for established forms of banking business like secured lending on property.

The threat of new entry is also responded with efficiency initiatives and restructuring that makes the job of new entrants tougher than their anticipation. Even if old players hold most of the market share in the new equilibrium, it is a contestable and low-margin equilibrium, without rents generated by the directed credit. Thus, banks realized the potential dangers of excessive risk taking due to reduced franchise value which made them understand that now they had a little room for error.

The increased competition also allowed financial intermediaries for new scopes and trends in their activities. It includes universal banking not only by large commercial banks, but also by previously specialized intermediaries e.g. mortgage banks, saving banks etc. The new liberties came up with new profit prospects thereby contributing to the franchise value. However, the removal of barriers to competition between different institutions and overall liberalization of restrictions on activities of banking business also amplified the intensity of competition for current activities, often ensued by lower-then-anticipated margins (Sikorski, 1996).

It is often argued by the proponents of privatization that great improvements in performance would result from the transformation of enterprise ownership that redefines the enterprise's objectives and managers' incentives (Jackson and Price, 1990). Profits and returns on capital are the elements in order to judge the performance of privatized enterprises. Contrary to this, it is argued by the opponents of privatization that change of ownership is insufficient, rather unnecessary to improve financial performance. Instead, the increased competition and organizational reforms have been more significant than the change of ownership (Bishop and Kay, 1989).

The mixed consequences of FL in emerging and developing economies, to be discussed in next chapter, are followed by a long and still never-ending critique which entails the 'basics' of market economies.

#### **Section 5. Intrinsic Evils of Financial Markets**

One way to criticize FL is to go through its foundations i.e. the assumptions on which the theories and models of FL are based, are non-existent in reality in their perfect form. As established till now, the aim of FL is to address the problem of 'government' failure in the 'market' place. In this aim, it is generally presumed that the eradication of government failure will permit the market to efficiently allocate available resources. In this intellectual setting, the 'government' and 'market' are viewed as two mutually exclusive phenomena. But the reason for government interventions in developing countries' markets was based on the perception to resolve the market failures. Thus, FL assumed the co-existence of market and government under financial repression and tried to find policy solutions on basis of this presumption. However, this view is based on faulty assessment of the full problem of developing countries while concentrating on only one part of the problem. There are certain in-built defects in the financial markets which put significant limitation on the functioning of markets and imply to limit the market freedom. But liberalization literature gives no space to intelligent government intervention to improve the market failures which can be regarded an important weakness of FL.

This can be also be inferred that proponents of FL had an overly simple model of the economy in their minds, which supposed efficient and perfect markets. FL could enhance welfare if financial markets are perfect by allowing all parties to voluntarily engage in trade

along with complete insurance markets in order to lessen the costs of volatility associated with FL. But FL makes matters worse due to permanently imperfect financial markets.

# **5.1 Sources of Market Imperfections**

A market imperfection occurs when a market outcome or a market force deviates from a standard used by economists to define the economically efficient quantity and allocation of goods and services (Sandler, 1992; Stiglitz, 2000). Economic efficiency infers the allocation of resources for a combination of production, consumption etc. in such a way where no individual can be better off through a reallocation of economic resources without making another individual worse off i.e. Pareto-efficient or Pareto-optimal. As per a basic hypothesis in welfare economics, the 'invisible hand' of market will result in economically efficient i.e. Pareto-efficient outcome under well-specified conditions regarding perfect competition and perfect information<sup>26</sup> (Schinasi, 2006).

In case of a market imperfection, the price of a good determined in the market would not equal its marginal social benefit and therefore not equal the marginal social cost of its production. Consequently, that good would be consumed and produced in economically inefficient quantities. This can occur even if market price equals the marginal private cost and marginal private benefit i.e. equilibrium price can also bring deviations from a socially optimal outcome. This is a situation in which a sustainable equilibrium is economically inefficient and socially suboptimal, thereby known as market failure (Schinasi, 2006).

This section will cover three most important imperfections which are inherent in financial markets: externalities, incomplete markets, and incomplete information. These imperfections, in one way or the other, make the strong case against FL literature.

# **5.1.1** Externalities

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Externality refers to a secondary or unintended consequence. When financial activity imparts benefits or costs on third parties or uninvolved markets, an externality is said to be occurred. In case of benefits, it is positive externality and in case of costs, it is negative externality

<sup>&</sup>lt;sup>26</sup> Within this context, market imperfections occur because of the existence of five deviations from the definition of a perfectly competitive economy; externalities, public goods, incomplete information, incomplete markets, and a lack of competition (Schinasi, Chapter 3).

which is actually the problem. If a financial activity levies costs on a large number of parties or markets, it has potential to become systemic, thus posing systemic risk. In developing countries, there are no or very weak insurance markets for managing risk created by liberalizing markets which makes matters worse.

Some features of finance are related with the probability for both the positive and negative externalities at the same time. Liquidity to potential borrowers along with superior opportunities for risk sharing is provided by banks funded with short-term deposits i.e. positive externalities. But these banks can also be exposed to bank runs and panics due to imperfect and incomplete information i.e. negative externality, particularly in unregulated environment. Although various arrangements and mechanisms, such as deposit insurance, have been implemented to counter these negative externalities but they themselves are pricey to society, which imply private and public trade-offs.

Externalities can take form of 'price' and 'quantity' externalities in capital markets. Price externalities can take place during capital inflows as well as capital outflows. In case of inflows, the exchange rate usually appreciates and harms exporters. In case of outflows, interest rates are raised by government to restrict the currency depreciation. Entities holding foreign-denominated debt perceive the value of these debts rise in terms of domestic currency. Thus, both the exchange rate depreciation and interest increases have potential to put firms into bankruptcy. Quantity externalities are particularly observed when capital outflows lead to credit rationing as banks are pressurized to limit the credit availability in case of capital outflow.

Externalities in finance are also raised when many individual market participants are involved in independent actions beneficial to them 'only if' a small number is engaged in that activity simultaneously. The classic bank run during the global financial panics in 1931 when many banking systems remained shut down for some days. Depositors started to withdraw cash from some particular banks thinking by some others to have difficulties. Those banks soon ran out of cash and closed their doors which led to alarming condition for solvency. In such situation, it was rational for third parties, that are, depositors of other banks, to start showing their concerns due to which even good banks had to experience runs and solvency problems with their dwindling deposit base, a phenomenon known as 'systemic risk'. In this example, individually rational decisions to withdraw deposits collectively created the negative

externality crashing the banking system which imposed costs on everyone (Diamond and Dybvig, 1983).

There are also certain network externalities in financial markets which can capture some benefits of scale. A network externality occurs when value of product to a user enhances the number of users in case of product growth. Besides deriving private benefits by using that product, each new user also bring external benefits i.e. network externalities for existing users. Network externalities can cause market failures when a network is failed to arrive at its optimal size because users don't consider external benefits.

Therefore, such discrepancies between the returns to individual market players and returns to collective society signify the case for government intervention. This is particularly convincing in developing countries with weak financial institutions, governments' inability to regulate them, and fragile safety nets, along with limited ability of individuals and firms to get insurance against risk. In these economies, the volatility accompanying with FL have potential to impose large costs. It argues for some degree of government intervention which may not solve the problem completely, but can at least increase general well-being. For example, the economist's natural 'intervention of choice' involves the imposition of a 'tax' to resolve the externality and reduce the discrepancy between social and private costs and benefits<sup>27</sup>.

#### **5.1.2 Incomplete Markets**

Markets are regarded as incomplete when markets forces are unable to produce a good with lesser private cost of production than what individuals are willing to pay. Economists have submitted many reasons for this kind of market imperfection, such as adverse selection; high transactions costs in operating in markets, in enforcing contracts, and in introducing new products; information asymmetries regarding financial risks; and enforcement costs on defaulted contracts. This implies that markets are usually incomplete as the result of the prevalence of other market imperfections, such as incomplete information or insufficient competition.

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<sup>&</sup>lt;sup>27</sup> In the mid-1990s, Chile and Colombia instituted taxes on capital inflows to moderate their volatility. These types of capital market restrictions reduce the level of activities that generate negative externalities.

This kind of market imperfection is widespread particularly in case of loans, insurance contracts and capital market instruments. For example, regarding capital markets, the US sustained capital account regulations in the 1960s for restricting capital outflows which caused attack on the dollar in 1971 thereby forcing to opt fixed exchange rate system. In the mid-1990s, the US was concerned about the drop of the dollar in comparison to the yen in spite of no apparent alterations in their real economic positions whereas in 2003-4, Europe was anxious about the rise of the euro in comparison to the dollar. These concerns emerged from the capital movements which were responsible for the fluctuations in exchange rate. Although all countries are concerned about capital market instability, however it has greater consequences for developing countries where it often results in excessive lending, overheating and high volatility along with potential for market manipulation.

The currency mismatches between assets and liabilities in financial sector is another source of incomplete markets in developing countries. Most of the external debt in developing countries is issued in foreign exchange because international creditors are usually reluctant to take local market risks so they prefer to lend developing countries in hard currencies where risk is borne by domestic borrowers. The resultant currency mismatches in the balance sheets of domestic financial institutions can bring massive costs.

Even the debt denominated in domestic currency is also lent in developing countries only for short term, and not long term. This results in maturity mismatches which have the risk that creditors may not rollover short term debt in problem times while generating liquidity crunch and making borrowers unable to repay. Even if short term liabilities are rolled over, the cost of interest rate fluctuations is borne by the domestic borrowers. Moreover, since financial institutions in developing countries are weak and unable to completely endure shocks, therefore, the volatilities from liberalization can simply lead to systemic difficulties in the financial sector.

Insurance can reduce the distress associated with mismatches. But currency risk is difficult to insure in developing countries or else, the insurance terms are not reasonable, or the insurance provide only short term coverage. Resultantly, it is the developing country which has to bear the risk, whereas lenders in developed countries are better off to take currency risk as they can diversify their currency portfolios.

Perfect market models are mostly irrelevant for developing countries. Therefore, economic research since the 1990s has concentrated on recognizing the significant limitations of the perfect market models inducing FL.

#### **5.1.3** Incomplete Information

There are large costs related with assessing firms, managers, and market conditions before making any investment decision. The collection and processing of information on investment opportunities is not possible for individual savers. Savers are reluctant to invest in projects on which they have little or no information therefore capital couldn't go towards its highest value use. The assumption of most models about the flow of capital toward most profitable project presupposes that investors have complete information which is apparently possible only in the efficient financial system (Levine and Demirgüç-Kunt, 2008). So the job of gathering information on the risk and return of investment opportunities, and thus allocation of risk is done by financial institutions (Green, Kirkpatrick and Murinde, 2005). The development of Credit Registries and advancements in computer technology is playing important role in the collection, processing and use of all necessary information related to lending. However, in case of developing countries, the counterparts in financial transactions are not completely well-informed due to which free-market outcomes have tendency to allocate resources inefficiently.

With incomplete information, the problems of adverse selection <sup>28</sup> and moral hazard <sup>29</sup> can lead to situations in which economically undesirable goods drive out the economically desirable goods from the market. Adverse selection and moral hazard are widespread in the financial markets with significant implications for the effects of FL. The adverse selection tends to lend the loans to bad credit risk due to which lender may choose not to make any loan at all even in the presence of good credit risks in the market. Whereas moral hazard tends to reduce the probability of repayment of loan due to which lender choose to make no loan at all (Mishkin, 2007). The government regulation is argued to reduce the problems of adverse selection and

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<sup>&</sup>lt;sup>28</sup> A problem created by asymmetric information before the transaction occurs. Adverse selection in financial market occurs when two potential borrowers who are the most likely to produce an undesirable (adverse) outcome - bad credit risks - are the ones who most actively seek out a loan and are thus most likely to be selected.

<sup>&</sup>lt;sup>29</sup> A problem created by asymmetric information after the transaction occurs. It's a risk (hazard) that borrower might engage in activities that are undesirable from the lender's point of view, because they make it less likely that the loan will be paid back.

moral hazard in financial markets thereby enhancing their efficiency by increasing the amount of information available to investors. Particularly the developing countries need regulatory supervision because they suffer from inherent hindrances in developing the efficient financial regulations along with the lack of economies of scale in the banking sector (Murshed and Subagjo, 2002).

The effects of imperfect information on investor behavior are crucial for understanding arguments against FL. Since the late 1990s, economists have highlighted two main reasons for boom and bust periods in capital flows. One is the 'irrational exuberance', i.e. heightened state of speculative fervor. Shiller (2005) argued that this speculative fervor is not grounded in sensible economic fundamentals. Instead, he highlighted various structural, cultural and psychological factors which are mainly responsible for such irrational exuberance. Second reason, a psychological one, behind boom and bust periods is 'herd behavior', i.e. lack of individual decision-making which leads everyone doing what everyone else seems to be doing. These types of irrational market behaviors may not have tendency to prevail with perfect information.

In this regard, herd behavior seems to be more consistent with rational expectations when information is imperfect (Stiglitz et al., 2006). Being unaware of the future events, investors make decisions on basis of expectations which are founded on information about current conditions and this information is inherently incomplete and pricey to process due to the extensive data required. As some market players are at a better position for accessing and processing information, it is rational for someone to gather information about the desirability of a certain project from others' actions and opinions i.e. herd behavior. Since the major market players use the similar sources of information, therefore, they have tendency to reinforce each other's analyses of information. However, this contagion of opinions may lead to panics or euphoria and result in boom and bust cycles. In such case, there is a risk of 'correlated mistake' which happens when some unexpected news disputing the general opinion is reported, while making all market players 'simultaneously' realize about their mistake and they take their funds out of the market.

New theoretical developments, such as the implementation of the theories of 'asymmetric information' and 'incomplete contracts' to financial markets, suggests that financial markets are different from other markets like commodity markets, and market failures are more

persistent in financial markets. A large theoretical literature indicates that financial markets, by default, are structurally more imperfect than the other markets. As information has characteristics of a strong public good, it naturally leads to inadequate acquisition of information even in competitive markets. In financial markets this implies that the managers of investments are inadequately monitored, which inspires inappropriate risk taking or fraud thereby resulting in insolvency.

Although the imperfections in financial markets have long been argued, the relatively recent theory of asymmetric information has put these debates on firm footing. It describes credit rationing, and thus explain firm's acting in risk-averse manner, importance of banks in determining the creditworthiness, monitoring and enforcing contracts as well as the significance of balance sheet variables, cash flow, and the availability of credit. Policymakers often discuss the availability of credit with standard competitive model in mind in which credit is always available and the only concern is the price to be set where demand equals supply. In such circumstances, the theory of asymmetric information makes sense of observations and distinctions that played vital role in policy discussions.

For instance, there exists a distinction between insolvent firms and liquidity constrained firms. With perfect information, complete contracts, well-functioning judicial system, and effective enforcement, there would be no distinction between these two firms because any firm with a positive net worth is able to acquire funds at a price according to its corresponding risk. With asymmetric information and other problems in contract enforcement, the lenders would view firm to have potential for insolvency with no positive prospects, thus become unwilling to lend. The reason behind the illiquidity of firms is the belief of major market players that the firm is insolvent (Stiglitz, 1975).

# 5.2 Stiglitz and Weiss Model of Imperfect Information

A theoretical framework established by proponents of FL in order to describe the weaknesses of FL is embedded in the information theories of financial intermediation linked with Stiglitz and Weiss (1981). The Stiglitz and Weiss model presents the graphic account of the significance of interaction between borrowers and bankers in influencing the monetary policy mechanisms thereby transmitting effects to the real economy, that is, economic growth and development. The importance of such interactions is amplified in case of developing

economies with imperfect and shallow financial markets signified by severe informational inefficiencies.

The significance of the Stiglitz and Weiss theory lies in its demonstration of an equilibrium market rate being indicated by credit rationing. It has the theoretical logic that interest rate charged by the bank has a tendency to categorize potential borrowers i.e. adverse selection, along with affecting their actions i.e. moral hazard. Adverse selection and moral hazard are the consequences of severe asymmetric informational problems which lead to inability of banks to correctly and sufficiently describe the risk related qualities of their borrowers. Being unable to classify borrowers on the basis of real risk, the banks raise the lending rate in order to compensate which result in unexpected deterioration of borrowers' creditworthiness (Sikorski, 1996). There are two reasons of it. First of all, the borrowers are discouraged from borrowing due to high cost of capital may be the actual borrowers to be preferred by banks to lend as they are safe borrowers. It is natural to think that borrowers taking loan at interest rate well above the critical value are those ones who are least willing to pay back the high charges, i.e. adverse selection. But market selects bad borrowers and rejects the good ones due to, as noted above, its inability to evaluate risk profile of potential borrower. Secondly, if choice is given to borrowers, they will incline to prefer projects with high default probability in case of higher interest rates, i.e. moral hazard (Cho, 1986). It is natural to think that riskier project has a high return rate in good outcomes, and low return in poor ones.

In order to maximize expected profits, both of these effects will prompt the bank to willingly limit the interest rate charged from any one class of borrowers. This may result, in equilibrium, in arbitrary credit rationing with unsatisfied potential borrowers who are apparently equivalent to borrowers actually getting loan. In their model, Stiglitz and Weiss assumed bank to behave in a risk-neutral manner in order to reach at rationing equilibrium. The banks in Stiglitz-Weiss model would voluntarily limit the interest rate for credit rationing, even in the absence of any outside regulations, in order to avoid undue adverse selection and decline in expected net profits (McKinnon, 1993).

But this might not hold true, generally in all developing and developed economies, but predominantly in case of developing countries which are characterized by unpredictable and unstable fiscal environment. Particularly the large fiscal imbalances are regarded as troublesome in counteracting the influence of the adverse inflation emerging from large scale deficits (Dooley and Mathieson 1987; Snowden 1987). In the situation of large fiscal deficit, the inflationary environment is inevitable as it provides option to the government to raise revenue through the inflation tax. The high and inconsistent inflation rates are problematic for FL as they need larger and variable increases in nominal interest rates in order to meet objectives of liberalization reforms. These larger and variable increases in interest rates further aggravate the problems of adverse selection and moral hazard problems that are regarded as principal reasons for failure in developing countries' financial markets.

In addition to this, the variation in prices of goods and production factors result in increasingly high variance in project returns in the periods of macroeconomic instability. Suffering from increasingly variable returns, these projects are then adversely affected by the uncertainty induced by poor macroeconomic performance. Due to higher variance in project returns, the optimal lending rate has to be further decreased which resultantly increase the credit rationing. The huge real increase in interest rates followed by liberalization exacerbates the moral hazard along with amplifying the deterioration of the borrowing pool (Villanueva and Mirakhor, 1990). Therefore, with binding asymmetric informational problems, liberalization may actually deteriorate the banks' portfolios thereby making the financial system more vulnerable to economy-wide adverse shocks. This worsening of banks' portfolios in situation of macroeconomic instability is also regarded as convincing theoretical cause for the incidence of financial crisis in post-FL scenario, an area to be explored in next chapter.

However, the problem with the Stiglitz-Weiss model is that it doesn't presents the worsening of banks' portfolio as 'immediate' in the period of financial distress ensuing FL, because considerable time is needed by higher interest rates to nourish through adverse selection and thus to deteriorate banks' portfolio. It implies that for this worsening and corrupt effect, banks are required to expose themselves in excessively high interest rates environment for a prolonged time period. But this is not the case with banks in developing countries having infected portfolios even before liberalization. In post-FL era, the problem firms are those which received credit at repressed interest rates in pre-FL era, thus making Stiglitz-Weiss model as 'not clearly applicable'. Yet, it emphasizes the problems related with prolonged periods of liberalization and difficulties associated with liberalizing in the environment of macroeconomic instability. As stressed by McKinnon (1989, P. 49), 'full liberalization of banks during a high and variable inflation is not warranted ... these problems with prudential

control over bank loans portfolios become magnified in stressful periods when central bank is trying to impose tight monetary control in order to disinflate successfully'.

# Section 6. Response of Proponents of FL in Wake of its Discontent

During 1980s, the FL brought various financial crashes and related chaos (Cho and Khatkhate 1989; Corbo, de Melo and Tybout 1986; Diaz-Alejandro 1985). The consequential discontent with FL was rapid which gave rise to an area of response highlighted by the proponents of FL themselves in pursuit of explanations behind failure of FL reforms. While examining the implementation of FL reforms, two major areas with regard to pre-conditions and sequencing thus emerged to make FL successful.

#### **6.1 Pre-Conditions**

There are certain 'pre-conditions' which have to be met before implementing FL reforms. One of these most important pre-conditions is macroeconomic stability. Macroeconomic instability, signified by severe inflation, turned the domestic financial system too weak and vulnerable to breakdown as result of any reform measures at large scale (McKinnon 1989). This pre-condition exhibits a dilemma as FL itself was regarded as key element of stabilization. Thus, the need to have macroeconomic stability as a precondition to FL actually diminished policy choices. Therefore, most of the stabilization process is borne in fiscal policy area i.e. true austerity. The capability of government to restrict fiscal deficit before liberalization would let it omit the usage of inflation tax and hence not weaken the foundation of reforms with rapid inflation. Health and education are normally those fields on which these spending cuts are focused, as they cannot mobilize any considerable political opposition. The consequential unemployment in the absence of any social security arrangements is tended to drop the demand and wages thereby dragging down the inflation. It infers that welfare cost of stabilization is tolerated by those who are most dependent on this spending, making stabilization very costly as international institutions then had to develop programs to save the suffered ones from starvation.

Another angle to view the macroeconomic stability, particularly price stability as an essential pre-condition for the implementation of FL reforms is that a stable macroeconomic atmosphere would decrease the ensuing increase in interest rates, thus limiting the consequential problems of adverse selection and moral hazard for banks' portfolios. The risk-sharing bond between bank and borrower is also positively affected with macroeconomic

stability because banks require high degree of certainty about future opportunity cost of funds in order to maintain risk-sharing relationship with borrowers. The uncertainty in the future cost of funds is brought by macroeconomic instability and weakens the willingness of banks to involve in risk-sharing contracts for long term (Villanueva and Mirakhor, 1990). The crucial for such stability is the fiscal responsibility, which indicates an extensive reduction in government spending. Hence, the reason behind the failure of FL is that the other macroeconomic policies are inconsistent with objectives of FL reforms.

Proper regulation and supervision was also regarded as another important pre-condition by the proponents of FL as the problems of adverse selection and moral hazard tended to become more troublesome when they are interacted with inadequate and inefficient regulatory and supervisory framework thereby aggravating the difficulties related with implementation of FL. Weak supervision implies insufficient provisioning for delinquent loans and absence of deposit insurance which, in liberalizing environment, encourage banks to involve in moral hazard. Banks get profit from unfamiliar bet against government by charging high interest rate and by providing high risk loans. Due to the government as lender of last resort, banks earn high profits by taking undue risks in goods times without paying its full costs in bad times. In such risk-taking environment, moral hazard is additionally worsened in case of relationship between borrowing firm and bank through a large holding company. The involvement in such moral hazard exacerbates the risk characteristics of the financial systems' assets, due to which its stability could easily be threatened when exposed to adverse shocks.

The occurrence of asymmetric information also justified the public sector role in regulation and supervision. Maintaining updated information about bank's solvency is unimaginatively high for the depositors who bear most of the cost of bank failure in the absence of deposit insurance as banks are highly leveraged with very modest equity base making it very likely for depositors to go for run on bank the moment they suspect. Implicit or explicit deposit insurance by government is a natural outcome in order to prevent such runs. However, it is implied in such insurance plans that once bank's equity is washed away, the future losses would be socialized, while the future profits would be retained by the bank. Facing failure risk, the bank gets incentive from such setup in order to "gamble on resurrection" through granting highly risky loans (Williamson and Mehar, 1998). But such incentives can be deterred by prudential regulation and supervision which try to pressurize banks to maintain an adequately high level of capital, sufficient reserves against loan losses, and the appropriate

pricing of deposit insurance etc. Proper regulation and supervision also tend to provide adequate information for allowing the outsiders to evaluate the financial health of a bank. Unlike the absence of bank autonomy, the presence of bank supervision is aimed to confirm compliance with principally abstract rules and regulation, rather than making inherently discretionary decisions for banks.

Dooley and Mathieson (1987) give caution against the dangers of presupposing the already existent supervisory framework, or to develop it very rapidly while implementing FL reforms. Actually, such frameworks are evolved with the financial system with at least some extent of terrible experiences. Due to the absence of a supervisory framework in the situation where non-bank enterprises can be potentially insolvent under market-oriented regime, specific subsidies or purchases of shares by the government in such firms may be indispensable (Collier and Mayer, 1989). However, the issue of insufficient supervision has deep-rooted implications because inadequate regulatory provisions are certainly a fraction of failures for which repressed monetary systems were guilty. So even before implementing FL, financial systems tend to suffer from the concentrated risks, the risks that are the results of incomplete regulations. Thus, instead of poor supervision, it is insufficient regulations which make FL unwarranted.

### **6.2 Sequencing**

The simultaneous undertaking of internal and external financial liberalization along with trade liberalization was considered flawed by proponents of FL. The changes in real exchange rate generated by an opening of the capital account make the integration of domestic and foreign goods markets much more difficult (Dooley and Mathieson, 1987). The main issue is that the trade liberalization encourages the reallocation of production factors from the non-trade and import substitution sectors towards the export industries. Consequentially, the imports and exports would increase with initially temporary trade deficit as result of production delays due to the transfer of resources among different sectors. With the absence of capital flows, this will result in currency depreciation which is considered appropriate due to its positive effects on export and import of competing commodities. The adjustment process is smoother if trade liberalization can precede FL (de Grauwe, 1987). Unfolding lessons taken from liberalization process in Korea, Anne O. Krueger (1991) observed that 'trade liberalization could not succeed if authorities don't simultaneously ensure the continuing maintenance of a realistic exchange rate... Financial liberalization may not be as necessary initially if a government

starts in a situation where many markets are regulated' (Krueger, 1991, p. 56). But if both financial and trade liberalization are undertaken at the same time, capital inflow in response to FL will appreciate the exchange rate that will obstruct the competitiveness of import and export sectors, thereby discouraging the liberalization process and aggravating the adjustment costs for the economy. If liberalization of domestic financial markets doesn't precede the liberalization of capital market, the large internal or external capital flows, based on real interest rate movements, would make the markets destabilize thereby depressing the reform process. Improper sequencing would thus have pernicious effects on the economy and lead to policy failure and policy reversal (Dooley and Mathieson, 1987).

Blejer and Sagari (1988) argued for some other reasons for sequencing the liberalization of capital controls and interest rates. If capital controls are liberalized first or at least at the same time, very few borrowers will access international borrowing due to informational problems thus excluding most of the potential borrowers. As result of very few banks in competition, pricing by one bank will tend to considerably affect the financial flows to the other banks. Those having international access can get monopolistic rent seeking, particularly in case of large spreads between domestic and foreign interest rates, which lead to excessive concentration and monopolistic behavior in the financial markets. This increased concentration is more crucial if foreign banks are mainly benefiting from liberalization at the cost of the domestic intermediaries. Besides, the monopolistic banking structure has to be deteriorated by the internal FL before considering to go for external liberalization. Moreover, allowing the domestic interest rates to be determined freely by the market forces is regarded as appropriate method for reducing the monopolistic structure of financial markets (Blejer and Sagari, 1988), but no identification of exact mechanism is made by which this would work.

Thus the general assumption emerged in liberalization literature that trade and financial liberalization is best conducted in autarky, while leaving the opening up of the economy to financial flows till last.

## 6.3 Optimum Sequencing of Liberalization

The liberalization of financial and credit markets is accompanied by an overall liberalization of domestic economy and its opening up to the outside world, which result in various dilemmas for policymakers. There are certain parameters for the comparative speeds of liberalization in commodity and capital markets and also for the speed at which controls and

interventionist policies can be withdrawn in domestic and foreign trade (Edwards, 1984). It is critically important to understand the sequencing of monetary, fiscal, and foreign exchange policies in relation to the financial polies. It is not possible and rational to undertake all liberalizing reforms at the same time. Rather, there is an "optimal" order of economic liberalization, a part of which is FL, which may vary for different liberalizing economies depending on their initial conditions (McKinnon, 1993). It implies the optimum sequencing to move from controlled and repressed economy to a liberalized and market-based economy, that is, the 'ideal' way to undertake liberalization.

#### **6.3.1 Domestic Liberalization – Fiscal Sector**

Before any liberalizing measure, the first and foremost thing required is to balance the government's finances, which justifies the fiscal controls to precede FL. In this aim, direct government spending must be restricted to a small fraction of GNP which could rise only modestly with the rise of per capita income. Equally significant is the imposition of broadbased taxes at low rate on firms and households. It is also indispensable for liberalizing government to have an internal revenue service which is enables to collect taxes in a decentralized market setting (McKinnon, 1973). After abolishing direct control or ownership of business activities, the liberalizing government must rapidly develop a regularized tax system in order to regain the revenues lost from surrendering ownership of the resources, a vital step that government usually forgot. The broad tax base will provide government the sufficient revenues to avoid inflation without resorting to arbitrary confiscations of enterprise profits or personal property, which lead to the adverse incentive effects that bedeviled the repressed economies (Litwack, 1991; McKinnon, 1990).

Indirect i.e. off-budget government spending is widespread in developing countries. For protecting the central bank from forced issue of excessive base money, such off-budget subsidies have to be gathered with regular budget or be phased out. Central bank frequently suffer from large net losses in supplying foreign exchange, domestic credit, or deposit insurance very inexpensively to domestic farms, households, urban enterprises, or commercial banks (Blejer and Chu, 1988). In the 1990s, strict budget balance has become more needed than it was in the 1960s, when the Keynesian proposition of moderate deficit financing by the governments was widespread. The need for tighter fiscal discipline during 1990s was based on less favorable expectations from potential domestic and foreign creditors of the government.

#### 6.3.2 Domestic Liberalization – Domestic Capital Market

Second in the optimum order of liberalization is the opening of the domestic capital market for allowing depositors to receive and borrowers to pay considerable real interest rates. Only when the price level is stable and fiscal deficits are removed, free borrowing and lending among firms and households can progress reasonably. It implies the freeing of banking system from heavy reserve requirements and official directives to set standard interest rates on loans and deposits only after placing tight fiscal controls, thereby making it impossible for government to rely on the inflation and reserve taxes to generate revenue.

The pace of deregulating banks and other financial institutions must be cautiously geared to government's accomplishment towards macroeconomic stability, in order to minimize the likelihood of bank panics and financial collapses in the scenario of exorbitantly high risk premiums in real interest rates tending to damage borrowers' creditworthiness. In the absence of price stability, unexpected volatility in real interest rates makes unrestricted domestic borrowing and lending very risky. Due to the moral hazard related with private monetary intermediaries having insured deposit base, the decentralization of the banking system might come near the end of the domestic liberalization process.

Liberalization of the banking sector is incomplete and unfruitful in the presence of large state-owned enterprise, particularly where banks are still under government moral suasion in their lending decisions. The need to develop a deep financial system before introducing reforms in state-enterprises is regarded as a condition in order to encourage the success of the latter (World Bank, 1995). It is argued that since state banks are normally less effective than private financial intermediaries in providing financial services, therefore, the deregulation and privatization of state enterprises can proceed more easily with well-developed private financial sector that can meet the requirements of the newly privatized enterprises.

The authorities should proceed carefully perhaps wait for some years, before establishing independent banks that are only indirectly regulated by the central bank. The bad loans of the existing state-owned banks certainly require a major recapitalization of both banks and enterprises before safe undertaking of privatization or decentralization<sup>30</sup>.

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<sup>&</sup>lt;sup>30</sup> In the 1980s, China, Hungary, the FSU, and Poland undertook premature decentralization of their banking systems; the consequent loss of control over the flow of credit contributed to upsurges in inflationary pressure

At the outset of liberalization, private capital markets need to operate freely for which government should rapidly develop a framework of commercial law that can adjust and enforce all private debt contracts. So even before attaining monetary stability, various forms of short term money lending (e.g. ordinary commercial credits, urban markets' commercial bills, rural credit cooperatives etc.) are achieved. However, due to uncertain price level which makes economy unable to set any standard of deferred payment, the unsubsidized i.e. natural development of bond and equities market is almost impossible, albeit the presence of contractual enforcement mechanisms.

Therefore the appropriate policy in domestic capital markets is the key to general liberalization, and especially to the withdrawal of unwise public intervention from these markets.

#### 6.3.3 International Liberalization – Foreign Exchange

Only after liberalization at domestic front, there comes the turn of international liberalization for the foreign exchange. In the international balance of payment, the current account is liberalized much faster than capital account.

The liberalization of foreign trade of goods and services should proceed along with the decontrol of prices in the domestic trade of goods and services. However, the unification of the exchange rate for all current account transactions for allowing importers and exporters to have same effective price of foreign exchange should precede the removal of controls over 'who' can import or export. But in a confused regime with hundreds of different exchange rates for different goods and services, such decentralized and decontrolled foreign trade cannot be efficient in any market mechanism. It is evidently tough for authorities to get right order of liberalization in deregulating the buying and selling of foreign exchange.

In the course of trade liberalization, the commercial policy should be appropriately specified. While moving to free conversion on current account i.e. unified exchange rate, the initial limits on trade are greatly dependent on the already prevailing protection system. Before liberalization, most developing countries have both tariff and quota restrictions with quota

that seriously undermines their efforts to decontrol prices and liberalize quantitative restrictions in commodity markets.

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restriction being more important. Compared to the tariffs, the quotas along with other direct controls on imports and exports usually distort the economy much more. Besides raising revenue, tariffs also don't discriminate among different categories of potential importers and exporters. While studying the protectionism in developing countries, Anne Krueger (1978) and Jagdish Bhagwati (1978) describe trade liberalization as the replacement of quantitative restrictions with reasonable import tariffs or export subsidies. If variance in the unified real exchange rate is limited, this tarification of quantitative restrictions could be the optimal first step in an ultimate phase to free trade. It implies conversion of implicit quota restrictions into explicit tariffs in the way to optimum order of liberalizing foreign trade. After formally codifying, the highest tariffs can then be decreased to zero or near zero during some stipulated time period. The free currency convertibility for export and import on current account can be maintained only after placing such defined commercial policy.

Such realizations however don't warrant full foreign exchange convertibility to capital account transactions in developing countries. Before authorizing firms and households to freely deposit in and borrow from international financial markets, the domestic financial markets should be fully liberalized, as mentioned earlier. Otherwise, it would be destructive to allow foreign banks or other foreign financial institutions to operate liberally in domestic financial markets. Even more stabilizing is to allow "hard" foreign currencies to circulate simultaneously with the soft domestic currency. The free undertaking of borrowing and lending at equilibrium rates of interest and the restriction of domestic rate of inflation are the arbitrage conditions to allow free mobility of capital at international level. Else, the premature removal of exchange controls on foreign capital flows could result in unwarranted capital flight and accumulation of foreign indebtedness.

# **6.3.4 International Liberalization - Capital Account**

It is the only dimension in which most of previously financially repressed countries followed conventional wisdom on the sequencing of liberalization. Bernhard Fischer and Helmut Reisen (1992) categorized capital flows into inward and outward flows, long-term and short term flows, and bank and nonbank flows. They argued for the immediate liberalization of capital controls on long term trade related inflows as their liberalization can be beneficial even in the primary phases of development. They recommend the elimination of controls on short and long term outflows only after establishing government finances, resolving bad loan problems, and removal of controls on domestic interest rates in order to bring down the

differential between domestic and foreign interest rates. After liberalizing domestic financial system and the resolution of weaknesses in domestic bank, the removal of barriers to foreign banks is recommended. Whereas short term capital inflows should not be liberalized until an adequate competition is present in the banking sector along with a sound system of regulation and supervision.

Williamson (1993) defines the preconditions for prudent liberalization of capital inflows and outflows. The development of nontraditional export industries, fiscal discipline, liberalized import regime, and liberalized domestic financial system are key preconditions for the elimination of controls on capital inflows. The retention of some controls in short term capital flows, such as variable reserve requirements on foreign borrowing, is also suggested for protecting against periods of undue capital inflows. On the other hand, the preconditions to eliminate the controls on capital outflows are more challenging. They include a permanent policy regime, ability to manage demand through fiscal flexibility, and measures to limit erosion of the tax base.

So basically, proponents of FL tried to emphasize that carefully sequenced and implemented liberalization in all sectors can move forward, not just as a reaction to obvious mistakes of the past, rather in ways that alleviate legitimate fears of pure laissez-faire.

# 6.4 Incompleteness of Response – Ignoring 'Logic' of Liberalization

The response by proponents of FL was stressed on the presence of adverse factors interrupted in liberalization process and suggested the preconditions and sequencing, the consideration of which might make FL successful. However, their response failed to fundamentally question the 'logic' of liberalizing reforms. This point of view is briefly illustrated by McKinnon (1989) by restating FL paradigm as 'finance and trade liberalization with borrowing and lending at substantial rates of interest made possible by a stable price level, is not easy and is full of potential pitfalls. Nevertheless, it remains the only game in town as far as successful development is concerned'.... However he emphasized that he is now 'more inclined to emphasize the pitfalls' (McKinnon, 1989, p. 53). Enthusiasm to go for 'big bang' of liberalization also started to fade, with some earlier proponents suggesting that financial reforms should be phased in gradually to protect the domestic financial system during transition (Dooley and Mathieson, 1987). A gradual change process is typically supported by a combination of arguments (Greenaway and Morrissey, 1992).

One justification for gradualism lies in the ability of gradual change to alleviate the adjustment costs tolerated through the growing unemployment of capital and labour as the factor specificity of capital and labour would let the gradual reform in attaining socially optimal write-off and restraining rates. Another argument in favor of gradualism is based on income redistribution which is favoured as gradual changes slows down the rate at which rents to factors are decreased, thereby providing a lengthier adjustment time to previously favoured sectors to let them diversify their income sources and lessens their dependence on rents. The credibility issue is the final argument in favor of gradual approach as the government presents various gradual reforms on which it can establish its commitment thereby building a reformist status. As per these arguments, the ideal way is an economic pragmatic approach which favours small incremental changes whereas the big-bang liberalization is viewed with skepticism. However, some neo-classical economists like Leite and Sundararajan (1990) argue that a gradual approach to liberalization bring distortions of its own and raise the issue of political sustainability of the process.

Despite of proponents' justifications on viability of FL with pre-conditions and sequencing as described above, the opponents of FL remained skeptical. This skepticism can be analyzed with two distinct but related set of critiques, based on the structural and institutional settings of developing and emerging countries.

## Section 7. New-Structuralist and Institutionalist Critique

The efforts of proponents of FL to respond its opposition shed some light on the problems of implementing reforms. However, the question arises is that will FL be successful if it fulfills its 'criteria' i.e. undertaken by a credible government, in relative autarky following advised sequence and pre-conditions, in an atmosphere of macroeconomic stability? In fact, the significance of such theory is doubtful to be transformed in a policy prescription.

The indication of preconditions and sequencing is not certainly wrong, but they cannot convince the occurrence of financial crisis following from liberalization – an issue to be covered in detail in next chapter. The basic failings of FL are not covered in response of its proponents because the severity of these failings tends to infer that it is not just the sequencing or pre-conditions. Rather FL is basically inappropriate for emerging and developing countries due to their current structural and institutional realities and settings, developed as result of prolonged periods of financial repression.

#### 7.1 New Structuralist School

The period of rapid FL during 1980s brought a deep cynicism leading to theoretical and practical reasons against this orthodoxy. The question of 'logic of liberalization' is emerged largely enshrined in New Structuralist school. The critique by the new structuralists classified the negative effects of liberalization which highlighted the working capital cost-push nexus (Buffie, 1984). This component of liberalization along with its effect on the productive sector is the most important feature of the critique. However, the formal theoretical critique ignored cost-push effects and focused more on informal or unofficial financial markets (Van Wijnbergen, 1982). According to this side, the failure of FL liberalization stems from the fact that the resulting increase in interest rates in the official market reduces the quantity of finance at firms' disposal as it draws resources out from the unofficial market. The receiver of these funds, through household asset substitution, is the formal market that is less efficient in intermediation than the curb market due to the existence of high reserve requirements. Therefore, New Structuralists (Taylor, 1983; Van Wijnbergen, 1983) suggest that the higher interest rates, which come as result of financial liberalization, might leave unchanged or, certainly, reduce the total supply of productive investment funds.

The group of New Structuralists like Van Wijnbergen, Taylor and Buffie analyzed the particular structures of financial markets and its players in the developing economies which resulted in a critique which highlighted two distinct features of these financial systems, as described below.

**7.1.1 Unofficial Money Market Effect** (Principal idea: The curb or unofficial market is more efficient than the official market. FL expands the size of official sector at the cost of unofficial market shrinking the real quantity of credit which is unfavorable for growth)

This first feature of the new-structuralist critique highlights the significant role of curb or unofficial money market (UMM) co-existent with official market in financially repressed economies. Unlike McKinnon and Shaw, the new-structuralists tried to describe this characteristic of developing countries' markets by clearly recognizing the very presence of UMM. Basically, the UMM is the informal market where credit demanders and credit receivers are involved in free transactions at interest rate not controlled or determined by any authority. A framework of credit multiplier is engaged by new-structuralists to explain the significance of the UMM in transmission mechanism. The main cognition behind this critique

is that the reserve requirements in official markets represent a leakage from the process of financial intermediation. Whereas UMM operates without any reserve requirements so all the savings allocated to UMM are most efficiently intermediated in investment. This implies the UMM having a larger credit multiplier due to its 'one-to-one' intermediation as compare to official market where intermediation is constrained due to having 'one-to-(1-k)' intermediation, where k is the required reserve ratio. By withdrawing funds from efficient UMM to the constrained official market through FL would reduce the supply of real credit due to causing a reducing in the effective credit multiplier of the economy. The decline in net financing results a fall in aggregate supply, hence is consistent with a growth-reducing adjustment period (Taylor, 1983).

**7.1.2 Working Capital Cost-Push Effect** (Principal idea: A change in real interest rates brought a working-capital cost-push effect which would impose a contractionary adjustment period in FL)

The second feature of the new-structuralist critique signifies the working- capital cost-push effects in linking the financial and real sectors of the economy. The resort to banks and UMM is crucial in developing countries to finance the working capital which is required to make input payments before receiving the sales revenues. The permanent need for working capital means that the cost of credit i.e. real interest rate is an important part of input cost. The instant cost-push effect on prices due to any rise in the interest rate is assumed by 'Kaleckian markup pricing rule' (Van Wijnbergen 1982; Lim 1987). In this respect, the new-structuralists maintained their emphasis on UMM as the main supplier of funds for working capital. An explanation in this regard is that tight monetary policies make credit very expensive, due to which the firms are pushed towards UMM that force UMM interest rates to move upward thereby leading to rise in input costs. The mark-up pricing effect encourages inflation along with decreasing output below the level obtained from the demand-reducing effects of restraint. Therefore, monetary restraint or unexpected sudden rise in the interest rate originates an additional supply-side shock tending to turn such policies stagflationary in the context of developing countries. The working-capital cost-push effect is present during the adjustment period but this period is assumed to be pretty short due to short term maturity of most of the loans in developing countries. So, the supply shock is normally transitory and quickly drawn out of the system. Whereas the demand-restraining effect is regarded as more persistent which, in start, reduces the aggregate demand i.e. investment thereby leading to increased unemployment and then progressively eases out real wage pressure and inflation. A usual reaction to tight monetary policy would be an inverted U-shaped pattern of inflation rate, which accelerates in the start and then gradually narrows down when the aggregate demand effect begin to govern (Van Wijnbergen, 1982).

Taylor (1983) introduced the feature of cumulative causality in order to expand the above described explanation. Taylor's approach let the positive saving response to the rise of real interest rates via real wealth effect, irrespective of whether the interportfolio substitution happens at the cost of UMM loans. But the inflation will upsurge if the initial effect reduces the total supply of funds because aggregate supply will fall more than the aggregate demand. International competitiveness will be declined due to high inflation which further reduce profits and investment and result in deterioration of economic growth rate due to which smaller quantity of wealth is produced. The fall in net wealth would decrease the aggregate demand in the medium term, which will lessen the inflation and cause real wages to upsurge, assuming a lagged wage response. The growth of real wages will lead to reduced unemployment, hence dropping economic growth as entrepreneurs hurt from the squeezed revenues.

#### 7.1.3 Weaknesses in the New-Structuralist Critique

The criticism by new-structuralist school reveals certain flaws in its theoretical basis. The depiction of UMM as perfectly efficient market to achieve complete intermediation of high-powered money is criticized by Owen and Solis-Fallas (1989). The assumption that this efficiency deteriorates the quantity of credit in reaction of portfolio movements at the cost of UMM loans rather than other unproductive assets, is put to doubt by these critics drawing mainly from descriptive literature on the UMM. This gives rise to such picture of UMM which illustrate it as highly segmented and localized market able to provide only short-term credit while suffering from intermediation inefficiencies. The lenders in the UMM are also quasi-monopolistic with only small-scale markets which restrict extensive opportunities for providing maturity transformation of funds or attaining economies of scale in risk-sharing and administrative activities. However, UMM is able to resolve the problems of asymmetric information at local level and to recourse to supra-legal ways of loan recovery. Consequently, an average UMM loan has low informal and transaction cost as compare to an average bank

loan, but the system-wide efficiency of informal and fragmented markets remain substantially low (Llanto, 1990).

Hence, the new-structuralist critique is not reasonable due to the fragmentation and inefficiency of the UMM (Burkett, 1989; Owen and Solis-Fallas, 1989). UMM may not be vital in macroeconomic adjustment to policy changes, because this curb market serves those firms which add very little in aggregate investment. Therefore, the UMM cannot convincingly explain the financial instability or large investment drops in post-FL environment (Greenaway and Morrissey 1992). New-structuralist critique is sidelined due to this unconvincing nature of new structuralists' theoretical models.

The criticism moves further on the idea related to UMM effect on the size of multiplier. In banking system, the bank liabilities act as means of payment, due to which there exist a multiplier effect on deposit intermediaries. In such payment system, the liquidity creating ability of formal market takes benefit from having funds re-deposited from where it was extended, and they can further be re-lended to new borrowers. Such benefit is not possible in case of UMM due to its inability to re-deposit and re-lend (Bhaduri, 1989). This inability makes the status of UMM to be even impaired as a real 'money market' because the role of UMM is restricted in money creation process. The capability of UMM to create liquidity is only limited to the initial quantity of deposits. This makes credit multiplier of UMM as unitary which is not the case in a banking system working with reserve requirements. Therefore, any substitution that increase the deposit money ratio would increase the multiplier size and hence the total size of credit in the economy.

Kapur (1990) also criticized new-structuralists for their treatment of reserves requirement. It is argued by him that reserves perform a productive function as they enable banks to meet cash demands in excess of concurrent cash flows. Such liquidity as a feature of a financial asset is desirable for letting asset holders to meet unanticipated contingencies. Therefore, as compare to the UMM, the banking sector is able to mobilize greater quantity of resources by allowing asset holders to curtail their holdings of money balances for transactions. Greater amount of savings is used productively with the expansion of the formal banking sector whereas UMM is beneficial in providing higher yielding but illiquid deposits.

Absence of specifications regarding credit demand and its impact on money creation is another flaw in new structuralist critique. The resulting 'black box' exposes an inflationary period enabled to accompany a fall in net size of the bank credit. The high interest rate having negative credit response presents no source in which rise in inflation due to cost-push could be accommodated. According to new structuralists, reason for high inflation is the reduction in aggregate demand. But this doesn't justify an immediate rise in inflation consistent with previous assumption of mark-up pricing. Mark-up pricing does not infer a fall in aggregate supply. In addition, a brief decline in real wages implied by the inflation should facilitate to offset the contractionary impact of interest rate increase, and thus mitigate the aggregate supply response. Here, the intrinsic problem is related with the exogenous nature of high powered money which has to be divided amongst competing assets to define the amount of credit in the whole system. This exogeneity doesn't present any possibility for changes in credit demand to stimulate the money supply, and thus provide a source to accommodate higher prices. By not predicting a positive credit response to high interest rates, the significance of cost-push effects on the adjustment process turns devalued.

The ambiguities and weaknesses, some of which are explained above, of new structuralists' critique fundamentally diluted those crucial issues which this critique wanted to address. But in case of developing countries' financial markets, one cannot deny the significance of accounting for UMM and of the interest rate cost-push effects. However, UMM is not the only frail characteristic of developing countries' institutional structure. In this respect, it was the "Institutionalist critique" which demonstrated weak institutional characteristics of developing countries to be a convincing reason to stay abstain from FL.

### 7.2 Institutionalist Critique

The principal tenet of this critique is that the "institutions" of a country have to be primarily taken into consideration while designing and implementing FL reforms. Without paying attention to the institutional realities and settings, FL cannot bring desirable results. Following North (1990, P. 3), institutions can be defined as a set of rules, formal or informal, that actors generally follow, whether for normative, cognitive, or material reasons, and organizations as durable entities with formally recognized members, whose rules also contribute to the institutions of the political economy. From this perspective, markets are institutions that support interactions of particular types, manifested by arms's length relations and high levels of competition. These markets are affiliated with a legal system that supports formal

contracting and encourages quite complete contracts. All capitalist economies also have the hierarchies that firms build to resolve the problems that cannot be addressed by markets. In liberal market economies, these are the principal institutions on which firms rely to coordinate their endeavors (Hall and Soskice, 2001).

Despite of having certain caveats in IMF charter regarding the need to develop sufficiently strong and stable institutions before implementing FL, most of the developing countries were forced to implement FL agenda without fulfilling this institutions-related condition. The significance of such caveats has been increasingly acknowledged today. It is even tough for developed countries to establish and maintain adequately strong financial institutions with effective regulatory and supervisory structure in order to avoid instabilities and crises, as demonstrated by the financial crises in Scandinavia during early 1990s and subprime crisis of 2008 in the US that transformed in global financial crisis and economic meltdown. This issue will be discussed in detail in final chapter. In such scenario, the position of developing economies becomes more grave and fragile.

## 7.2.1 Institutional Characteristics of Developing Countries

The interaction of banks and industry during period of financial repression creates a highly leveraged structure because firms having access to official credit market are those that are linked with development programs of government. Such firms are dominated in aggregate economy while they rely on bank credit and related subsidies for most of their financial requirements (Villanueva and Mirakor, 1990). The result is thus severely high debt-equity ratios. The exclusive dependence on debt finance is a distinctive feature of firms in developing countries under financial repression as debt is used as an alternative for equity financing, even in case of foreign flow of funds that are also debt based (Sundararajan, 1985). By developing a debt-equity choice model, Sundararajan (1985) argues that cost of equity is higher than that of debt, partly due to its risk premium that is overstated in developing countries having repressed interest rates. Optimally acting firms thus raise the debt-equity ratio to equalize the advantages of additional credit at subsidized rates and its related costs of augmented risks of additional investment. Other reasons behind greater reliance on debt financing in developing countries are the fragility of equity markets, the lack of appropriate accounting practices and the entrepreneurs' wish to keep corporate secrecy (Snowden, 1987).

The indispensability to bring significant increase in interest rates while implementing FL also causes the problem of high debt-equity ratio as high interest rates put already leveraged firms into Ponzi-game. A Ponzi-game is a situation in which a firm is forced to borrow to fulfill increase in payments on outstanding debt. However, the added borrowing brings growth of total debt burden, worsening the firm's financial position. The firm actually borrows to survive but makes its position even riskier in this aim (Minsky, 1986). In Ponzi-game, the rise in interest cost on outstanding debt comes as an exogenous shock to the firm because past borrowing was not based on this expectation. Firm has to borrow additionally to meet this new cost for which it has to enter into another debt contract that becomes another source of increase in cost. Such borrowing by firms for their survival put banks into a vicious circle as their loan portfolios are severely exposed towards these firms the failure of which will threaten banks' own viability. So despite of increasing non-performing loans, banks have to continue lending to these firms in order to protect banks' own solvency. The capacity of banks to satisfy Ponzi-boom is reliant on authorities' monetary policy stance in post-FL scenario. In case of complete accommodation of Ponzi-boom needs by the monetary authorities, the system would remain solvent in short run. But in the long run, the doubling of rising costs would continue to deteriorate the financial position of firms and banks. Stiglitz (1989) called this 'road to hell' as continuation of such accommodation is unsustainable due to huge build-up of non-performing debt in the system. As a supplementary observation, it might be interesting to note that Minsky's own work on this subject focused on fully industrialized economies with highly developed financial markets and institutions. However, it also has implications for developing and emerging economies because financial positions become highly indebted during prosperity. Both lenders and borrowers become easy-going to high debt-to-equity ratios. This fragility of the financial system to financial crisis poses problem for central bank to pursue tight monetary policy and high interest rates. The ultimate consequence could be financial crisis when central bank is actually trying to avert it. As noted by Foley (2003), 'in this repeated pattern of events (series of emerging economies' crises during 1990s), we can see the outlines of Minskian crisis based on increasing financial fragility' (Foley, 2003, p. 157).

Therefore, the high debt-equity ratios and banks' overly exposed to highly leveraged firms during financial repression weakens the implementation of FL policies. Despite of macroeconomic stability and proper sequencing, FL leads to prompt upward change in the price of credit that may not be feasibly for a developing economy with such institutional

structure. But this conclusion is weakened with only one precondition i.e. complete industrial restructuring and full overhaul of banks' portfolios. It implies that these countries must stop exhibiting the problematic features as the barriers to development. In other words, developing countries should stop being developing countries – the practicality of such implication is non-existent.

## 7.2.2 Institutional Structure of Developing Countries

The existence of 'financial dualism' is widespread in the financial systems of developing countries. The partition between organized and unorganized money market (UMM) is characterized by various financial intermediaries with varying access to financial markets. On one side of this dualistic divide lie the financial markets under government regulation with large and middle sized private and state owned enterprises as their participants. Appropriated to get most of the credit, these enterprises dominate the macroeconomic response of the economy to monetary policy changes. On the other side of the dualistic divide lies UMM under almost no government regulations with small intermediaries e.g. pawn brokers, loan houses, suppliers' credit etc. This source of funding is mostly exploited by small and financially unsophisticated firms.

The existence of such financial dualism exert significant influence on the mobilization of resources, creation and allocation of credit money, the nature of money and the way financial system responds to demand (Sikorski, 1996). In order to make a case for liberalization, McKinnon (1973) also assumed this dualism existent in a repressive economy, as described earlier in first chapter. Since highly repressed financial systems tend to be weak and suffered with severe credit rationing, therefore, greater portion of economic activity has to be financed from UMM, thus signify financial dualism (Cole and Patrick, 1986). The borrowings in UMM are determined by demand, independent of any direct control or manipulation of monetary authorities. Country-specific features of its informal institutions determine the degree of success that UMM gets in supplying the unmet credit demands of the economy. UMM is emphasized to be heterogeneous between and within countries.

Therefore, theory taking the institutional realities into consideration can be advantageous in determining the limits to change and possibilities for advancement. The failings of FL in neo-classical as well as new-structuralist versions to sufficiently define various roles of government and of market are based on the faulty understanding of institutional structures.

The worth of theory and its derived policy would improve if these institutional structures are taken into account (Sikorski, 1996).

Until now, most of the discussion only takes formal banks as credit-supplying institutions and private firms and households as credit demanding institutions. Besides them, there are two other significant participants in financial sectors of developing countries: government on credit demand side and central banks of credit supply side.

#### 7.2.2.1 Government on Credit-Demand Side

A pervasive borrower in developing economies is the government sector usually defined by variety of publically-owned enterprises. In accordance with the political priorities in developing countries, the government spending takes place in three major areas. The first area of government expenditure is the free flow of public services to business and household which includes public goods, transfer payments and goods carrying ethical justification e.g. education, health etc. The second area of government expenditure is infrastructure, mostly large-scale projects, e.g. building roads, pipelines, irrigation facilities etc. The last area of government expenditure is public investments that are near alternatives for potential private projects.

All these areas of government spending share one feature, that is, all of them require financing. Governments' effort to balance tax and non-tax revenues would reveals various financing options and constraints. The dependency of government on tax revenues lies on its ability to exploit the taxable capacity of the economy, a capacity reflected by the ability of individuals to pay and ability of government to collect. While exploiting the tax base, the governments of developing countries often face practical problems e.g. bad administration, large enforcement costs etc. as well as social problems e.g. tax avoidance, black economy etc. (Alm, Bahl and Murray, 1991). So these countries think that there are "too few sources of revenues and too many demands for expenditure" (Ahmed and Stern, 1989, p. 1010). This results in only partial financing of expenditures through taxation.

For non-tax sources, government can go for debt financing by borrowing from the non-bank domestic private sector, foreign sources, the monetary authority or the commercial banks. Debt finance has marginally different consequences for the macroeconomy than taxation because it is not likely that two revenue instruments exhibit Ricardian equivalent

characteristics. Any fiscal expansion through 'debt' would encourage more effective aggregate demand as compare to an equivalent expansion through 'taxation'. It infers that debt finance would create non-Ricardian solutions (Ahmed and Stern, 1989) because being unable to foresee future tax burden, the individuals in developing countries are not likely to view future tax liabilities in the same relations as a current tax liability. By deficit financing through this debt, the government can attain an inter-generational resource transfer from a presumed wealthier future generation to the present. However, governments are severely constrained to realize the non-Ricardian gains of debt finance due to the unsophistication and shallowness of domestic financial markets (de Haan and Zelhorst, 1990). The absence or under-development of secondary market for government bonds makes the debt finance relatively expensive and unattractive financing method in relation to alternatives (Hutchison, 1986).

Foreign financing, especially in form of aid or concessionary loans, may become attractive to the extent it brings non-Ricardian gains in terms of aggregate demand, but it is usually although it is tempered to be used only to buy foreign goods (Hutchison, 1986). In this manner, foreign financing has no direct inflationary consequences which may allow the conduct of monetary policy independent of the government's financing needs. The possibility of financing with a reduced counterpart of money creation is an attractive and unusual feature of foreign financing. However, international interest rates can be prohibitive for some developing countries, especially if they include individual country risk premiums, which may make the foreign financing prohibitive.

The residual credit demand of government, that is, demand not met from abroad or domestic non-bank sources, has to be fulfilled by resorting to the central and commercial banks. This residue is usually large in developing countries and its financing have a great influence on the dynamic behavior of monetary aggregates. The inevitability of the central bank and the capacity of commercial banks to meet government's credit demand is, thus, at the heart of the money-creation process. The willingness and the ability of these two intermediaries to fulfill the credit demands would define the size and speed of money creation in the economy.

## 7.2.2.2 Central Bank on Credit-Supply Side

In the developing countries, central bank has a complicated role by virtue of its position as supplier of financial resources to the economy as well as the custodian of monetary policy.

The central bank in these countries is not very independent from the government (de Haan and Zelhorst, 1990), so the reconciliation of two functions is not easy. The central bank is burdened by the government to achieve fiscal and other development policy goals. The policy trade-offs are resulted from political pressure versus monetary stability concern present a most challenging job for the central bank. The attainment of some middle ground is not always probable, especially when strong political forces overpower the central bank's monetary concerns to their fiscal and development concerns.

To fulfill development concerns, the central bank has to accommodate the credit requirements of private priority sector, mostly through commercial bank financing and opening access of commercial banks to its discount window to get necessary funds to meet their lending requirements. In such situation, the central bank has to follow accommodation policy and monetize the debt liabilities of the government and the commercial banks. Since the economy is dominated by fiscal and development policies, therefore, the monetary management of the economy is dominated by the obligations to supply required financial resources. An implication of such policy dominance is the endogenous supply of money under this regime in response to the credit requirements for development policy expenditures of the government. Another implication is that any change in discount policy can disturb the economy by altering the available quantity of bank lending (Gertler and Gilchrist, 1993).

To fulfill fiscal concerns, the government earns capital gain through seigniorage and the inflation tax in an inflationary environment. By taking inflation rate as tax rate and stock of outside money as tax base, the idea of 'inflation tax' can best be understood. Whereas seigniorage is the advantage that government gets in financing its budget due to its ability to issue fiat money. Additional seigniorage is collected by giving inflationary surprise to the economy by the central bank. With the issuance of the currency beyond expectations, the prices and the real money holdings of individuals will not adjust immediately to new equilibrium levels (Osband and Villanueva, 1993). Therefore, the government can collect additional real tax revenues in the short-term adjustment period. However, the benefits of seigniorage are limited as individuals will adjust their expectations in case of persistent inflation and will decrease their cash holdings (de Haan and Zelhorst, 1990). The revenues from inflation tax are small when agents are economizing on money holdings, therefore, the central bank has to generate high inflation rate in order to get a certain amount of revenue. This high and increasing inflation will dampen the real activity by diminishing domestic

competitiveness, distorting relative prices and boosting capital flight, thus lessening the income and revenue (Modigliani, 1987). Hence, inflationary financing is discouraged as the excessive use of the inflation tax will raise uncertainty in the economy. Unstable inflation also encourages labour to demand indexing, which brings more inflationary pressure as the inertial inflationary impulses are hard to stop after indexation (Dornbusch and Reynoso, 1989). However the government, despite all these adverse effects of inflation, may depend on the central bank to monetize a part of their debt in case of severe constraints on the other financing options.

## **CONCLUSION**

The beginning of worldwide recession and the high world interest rates during early 1980s caused debt accumulation problems for emerging and developing countries which were unable to raise capital from international equity markets. The neoliberal agenda initiated during 1980s by Washington Consensus along with increasing financial globalization and integration started the case for FL in emerging economies of Asia and Latin America. This agenda was pursued by international financial institutions to force these countries to adopt FL as conditionality to access concessional loans. Even countries not accessing these reform programs also tended to get policy advice emphasizing liberalization reforms, due to technocratic environment recognizing McKinnon-Shaw ideas as orthodoxy. While recalling 1990s by developing countries to experience market oriented liberalization reforms, the same period also bring to mind the periodic financial crashes that spread in quick and unpredictable manner. For example, from 1994 to 1999, ten middle-income developing countries had major financial crises. These crashes and crises resulted in confusions and dilemmas on logic and implementation of liberalization reforms.

In this aim, certain preconditions as well as optimum sequencing to start with domestic liberalization of interest rates and leaving capital market liberalization till end has been recommended by the proponents of FL to be fulfilled before implementing reforms. However, compliance with these conditions cannot guarantee success of FL due to the flaws inherent in financial markets which make perfect market models and theories irrelevant. The demonstration of various bottlenecks in the developing economies e.g. negative externalities, asymmetric information, high debt-equity ratio, weak regulatory system etc. implies that

theories and ensuing policies of FL are based on inaccurate and incomplete representation of the institutional and structural realities prevailing in these economies.

It may be inferred that development economics should be more concerned with what it can do in the presence of existing limitations. A policy that requires substantial change in structure and institutions before implementation is of little validity and worth. A crucial question which arises in this respect is that what role is left for the theory in such circumstances. In fact, theory which considers the structural and institutional actualities can contribute in recognizing the limitations to change as well as the possibilities for progress. Unfortunately, all varieties of FL discussed in his chapter failed due to their weak and flawed understanding of these structural and institutional realities, resulted in episodes of crashes and crises. In order to strengthen opposition against FL, the crashes and crises in East Asia and Latin America during 1990s accompanied by instability in financial system are used as principal argument.

# CHAPTER 3. CRISES AND INSTABILITY IN LIBERALIZED FINANCIAL MARKETS OF EMERGING ECONOMIES

## INTRODUCTION

Globalization and liberalization of financial markets led to a wave of financial crises which made the decade of 1990s extremely distressing for the emerging economies of Asia and Latin America. Since 1960s, the Asian economies had been outperforming with high growth rates, accompanied with gradual and sustained expansion of physical capital accumulation which made others terming them 'Asian Tigers'. But pressurized by neoliberal agenda, the commencement of liberalizing reform process during 1980s and 1990s with the opening of capital markets stimulated the occurrence of financial crises in these economies. Despite of being less distortive from previous repression and following policy prescription with all necessary caution, the Asian countries particularly the East Asian countries suffered crisis from which they could not recuperated for next many years. What started in September 1997 in Thailand as currency crisis travelled to Indonesia, Korea and Hong Kong, alleged known as 'Asian flu', descended on Russian in August 1998 which led to Russian announcement of moratorium on its external liabilities. It then spilled over to Brazil for generating financial crisis in Latin America by 1999. The first section of this chapter is focusing on unpredictable event of Asian financial crises, its association with 'emerging market disease' and its eventual advancement into financial crisis of Latin American crises during 1990s.

This devastation intensified the discussions and debates among theorists and policymakers in order to find out the possible reasons and rationales of these events. One key area in this regard focuses on the inevitability of sequence from liberalization to crises by taking evidence from historical crises of financial and capital markets, which is presented in second section of this chapter. The previous environment of repression introduces such distortions in market economy due to which liberalization reforms are flopped. In other words, the flaws of pre-FL setting are accused for post-FL crises to which it is crucial to pay attention because it is easy and quick to deregulate interest rates, privatize state-owned firms and banks, and liberalize capital flows but it is difficult and slow to develop institutional infrastructure, acquire supervisory and administrative skills, and manage infected portfolios. These considerations are also emphasized in the second section of this chapter.

Alongside relatively new phenomenon of liberalization, age-old globalization and integration has also been associated with the free mobility of capital flows and resultant crises which has the topic under analysis in third section which also described some of the key historical crises following golden age of globalization. Since incidence of financial crises during 1990s is more closely related with the free flow of financial capital, thus fourth section is particularly concentrating on sequence of financial crises and liberalization of capital markets.

Contrary to its loud claims to bring stability, FL in emerging countries did the opposite by introducing instability in their financial systems. Thus the adverse consequences of Asian and Latin American crises of 1990s magnify the issue of financial stability which became focus of policy discussion in order to attain sustainable economic growth. This area has been discussed in fifth section along with analyzing various mechanisms such as contagion, derivatives market, manipulation, speculation, short term booms etc. Moreover, this section also goes deep to look into the challenge of maintaining financial stability without inhibiting economic efficiency as overly protective structure of financial system can actually hamper economic growth.

However, some degree and form of protection is desirable, given the incidence of crises in open and liberalized capital and financial markets. In order to further justify the need for capital controls, third generation models of speculative attack are explored in sixth section of this chapter. The final section has given the detailed analysis of various forms and design of capital controls, especially to control short term capital flows, as well as their relative costs, benefits and limitations.

## Section 1. Case of Financial Crises in Asia and Latin America

The decade of 1990s was devastating for the emerging economies of Asia and Latin America due to experiencing financial crises as result of liberalizing and globalizing their financial markets, especially the capital markets. Opposed to the conventional wisdom, the overall liberalization process in these economies started with the liberalization of capital markets, mostly due to the pressure of neo-liberal agenda.

The research in this area often use various metaphors which certainly cannot be compared with economic analysis, but prove helpful in understanding the contending views on liberalization induced instability and crises. Stiglitz et al (2006) described a transportation

metaphor. It is described by the critics of liberalization that problem may lies with the driver if there is one accident on a road but in case of repeated problems at the same road, the problem would be with the design of the road. It is countered by the proponents of liberalization to repair the road and train the drivers instead of abolishing cars and bringing horse carts. That is, financial markets which are not liberalized are assumed as old-fashioned and inefficient. The critics of liberalization counter it by arguing that with incomplete road signs, ordinary drivers cannot follow experienced racetrack drivers who can survive even a rocky road.

The decade of 1990s during which most of the Asian and Latin American economies experienced instability and resulting financial crises was usually the reference case in such metaphor-based debates.

#### 1.1 Asian Crisis

After a decade of outstanding and unprecedented growth, the Asian economies, especially East Asian ones, unexpectedly and crushingly stopped in 1997 by suffering from a chronic crisis which then took many years for recovery. This crisis acutely affected Indonesia, South Korea and Thailand along with hurting Hong Kong, Malaysia, and Philippines. Although China, Taiwan, Singapore, and Vietnam were least affected but they also faced the loss of demand and confidence in the region.

A series of currency crises transformed into Asian crisis which started from Thailand when its central bank decided to go for floating exchange rate regime in July 1997 after getting disappointed from its anxious efforts to keep its currency Baht from depreciating. Then, after losing foreign reserves worth almost US\$ 1 billion due to capital outflow, the central bank of Philippines also let its currency Peso to float. After few days, the Central bank of Malaysia took the same step by putting its currency Ringgit on free float after losing foreign reserves of more than US\$ 10 billion. It was followed by central bank of Indonesia which also couldn't prevent its currency Rupiah from floating after facing huge capital outflows. Although the Korean currency Won remained relatively stable following active interventions of central Bank of Korea but the pressures from massive capital outflows became unsustainable by the end of 1997, which allowed depreciation of Korean Won against dollar. The tide of capital outflows in these Asian economies was the founding factor of ensuing currency and then financial crisis.

Interestingly, this crisis was not predicted even by the pundits of emerging markets. Rather before mid-1997, these economies were regarded as 'Asian tigers' and 'miracle economies' with exemplary policies. For example, World Bank Report in 1993 noted that in Asian countries, 'fundamentally sound development policy was a major ingredient in achieving rapid growth. Macroeconomic management was unusually good and macroeconomic performance unusually stable, providing the essential framework for private investment' (World Bank, 1993, p. 5). The international investors were encouraged by economic and financial experts to rush for the emerging markets. For example, an article by Clemente (1994) wrote that 'the Asian stock markets have been hot and there are no signs of cooling off. Attracted by solid economies, credible reform and a trend of liberalization, global investors continue investing on a grand scale in these countries ... the rates of economic growth in East Asia will continue at the highest levels in the world during the next decade' (Clemente, 1994, p. 92). The future economic growth of Asian economies was somewhat foresaw by few like Paul Krugman who cautioned about East Asia's slowdown. He argued that Asia's growth is largely attributable to the accumulation of physical and human capital, and not to the technological change, thus the diminishing returns certainly infer a slowdown of growth. But he couldn't predict the total collapse of growth by concluding that growth in East Asia would continue to outpace growth in the West (Krugman, 1994, p. 78).

Since 1960s, this region was exhibiting positive fundamental indicators of economic performance due to which no clue to the crisis could be found. Just few weeks before occurrence of crisis, the *World Economic Forum* in Geneva released its ranking of most competitive economies with growth potential on 21 May 1997. It is ironic that out of 53 industrialized, emerging and transition economies, Indonesia was ranked as the fifth and Thailand as the tenth economy with great growth potential whereas Malaysia was ranked as the ninth most competitive economy in the world. The crisis emerged in 1997 was a sudden and complete reversal of the situation which is characterized by the positive patterns of long term growth in Asia.

#### 1.1.1 Growth Patterns in Asia

Except Philippines, all East Asian economies surpassed the US average growth rate of per capita income during the period from 1960 to 1995 (Barro and Lee, 1994; World Bank, 1998). Even compared to all industrial economies, the Asian countries outperformed unlike other developing countries which grew slower (Barro and Sala-i-martin, 1995). This economic

growth was accompanied by their gradual and sustained expansion in physical and human capital accumulation. During 1960-1990, the investment rates of almost all Asian countries grew more than double.

Although inflation was high as per the standards of industrialized countries, but much lower with declining trend as compare to other developing countries. The annual average inflation rate in East Asia was 9.1 percent during 1980s which dropped to 7.9 percent during 1990-95 and it went down further to 7 percent by 1996 (IMF, 1998).

Government authorities in these economies intervened actively in the foreign exchange markets in order to stabilize their currency values. This stability worked in the context of enormously increasing capital inflows. The types of foreign capital entering in Asia were various in which the leading type was Foreign Direct Investment (FDI) having volume of US\$ 78.5 billion during 1990-1996 along with exploding flows of portfolio equity. A sudden and prolonged halt in this prosperous and flourishing scenario was a surprise in itself.

## 1.1.2 Spill Over to Latin America

By 1998, the Asian financial crisis also spilled over to Brazil and quickly spread to all economies of Latin America. During next two years, they experienced severe economic recession which forced firms into bankruptcy and closing down. The fall of banking system and enormous lay-offs resulted in increased unemployment and loss of purchasing power. Most of the analysts attribute the massive flow of short-term capital, encouraged by IMF via the opening of capital account, as the main trigger for this crisis. Joseph Stiglitz, then Chief Economist of the World Bank, stated that 'the drive toward liberalization of the capital and financial markets, without the necessary attention to the design and execution of regulatory structures appropriate to the circumstances, was based more in ideology than in economic science' (Stiglitz, 1999).

Thus the short-term capital inflows to emerging markets tripled during 1990-1995. Till these flows were positive, emerging economies grew as these inflows were used to finance imports, private sector credit, external debt payments etc. But due to the speculative and volatile nature of these flows, they declined abruptly in 1996, continued in 1997 with the Asian crisis and worsened with Latin American crisis in 1998 and afterwards. Almost US\$ 9 billion left Latin

American economies during 1997-98. As written by Furman and Stiglitz (1998) 'the ability of this variable i.e. short-term capital, by itself, to predict the crises of 1997, is remarkable'.

Hence, the Asian crisis spread rapidly to Latin American economies as a result of which billions of dollars left the region in just few weeks thereby hampering their trade transactions with the US which resulted in one of the worst economic recessions of Latin America. The foreign capital dried up when crisis is compounded with persisting macroeconomic vulnerabilities and slowing growth which undermined investors' confidence, triggering crises in a wide range of countries. The consequences of the crisis were severe for Argentina, Colombia and Chile but they were especially intense for small economies of Bolivia, Ecuador and Uruguay.

### 1.2 Emerging Market Disease

While considering the causes of the Asian and Latin American crises, researchers considered various factors like currency overvaluation, moral hazard, excessive risk-taking, growth of short-term foreign currency debt, domestic bank fragility, speculative lending bubbles, financial panic, herd effects, contagion etc. All these factors are significant and are discussed throughout this chapter, but there is one fundamental economic phenomenon according to which crisis is a reflection of a basic problem facing all emerging markets, not just Asia or Latin America. The economic boom and investment which categorize these economies as emerging markets also bring the kernels of an ultimate slowdown that reverses some economic growth. This phenomenon is referred as 'emerging market disease'. Unlike virus or flu, terms sometimes used with reference to Asian crisis, disease implies the long-term nature of involved forces.

In nutshell, the high economic growth in emerging economies is achieved through extensive expansion of investment along with international liberalization which invites flood of capital inflows letting economies to boom. But at the same time, these capital inflows appreciate domestic currency which ultimately slows down export growth and worsens the balance of current account. The reduction in output growth as result of decreased exports is damaging for investors' confidence. The deterioration of current account balance leads to the accumulation of external debt that raises the default risk. The appreciation of currency may cause expansion of domestic credit that result in inflation (Ito and Krueger, 1996). All of such negative developments ultimately result in the withdrawal of funds from the country and the

consequent credit crunch drops the economy into recession. In the presence of a fragile banking system, the capital flight is aggravated by policymakers who persistently refuse to devalue, and the end result is a crisis (Rivera-Batiz, 2001). Although this mechanism is introduced with a newer term, however, the economic forces behind emerging market disease have been recognized since long time. For instance, the problem of capital inflows in Latin America has been studied even before crisis of 1998 (e.g. Diaz-Alejandro, 1985).

Some of the indicators of emerging market disease are similar to the 'Dutch disease'. The Dutch disease refers to the case of countries where a boom is based on the exploitation of natural resources and it eventually results in a catastrophic de-industrialization of the economy. In emerging market disease, the inflow of capital is not related with the exploitation of natural resources but with the rising domestic investment, financial liberalization, especially liberalization of the capital markets.

Besides short-term capital, the emerging markets also became popular destinations for direct and portfolio investment. For instance, net capital flows from industrial countries to emerging countries are estimated to grow from less than US\$ 15 billion in 1990 to more than US\$ 100 billion in 1993 (Ito and Krueger, 1996). McKinnon and Pill (1996) regarded the 'excessive' capital inflows in 'overborrowing syndrome' and linked it to reform process. That is, the credible policy reforms encourage people to instantly increase their consumption in expectation of higher future real incomes. Its outcome is a severe deterioration in the saving-investment balance, financed by huge increase in capital flows. According to them, it is the failure of financial market that cannot restrict such inflows which provide financing even for risky projects and result in weakening of banks' balance sheets. This mechanism suggests curbing the deregulation at an early stage of policy reform. But this is paradoxical to note that reform process in Asia was gradual (Williamson and Mehar, 1996).

The presence of deposit insurance intensifies the situation by creating moral hazard. Although basic goal of deposit insurance is to reverse the psychology of bank runs by assuring depositors that their funds would be protected (up to a certain limit) if their bank fails for any reason (McCoy, 2006). Even economists like Milton Friedman and Anna Schwartz asserted public deposit insurance to be the most important structural change in the banking system that emerged from the Great Panic of 1933 (Friedman and Schwartz, 1963). But generally, explicit or implicit public deposit insurance is often accused for bringing moral hazard (Demirgüç-

Kunt and Kane, 2002). Moral hazard is created because deposit insurance would provide incentive to banks to take more risks for capturing any profits thereby increasing the government's exposure to losses. It is pointed out by William Lowett that "If governments and modern nations do not allow most banks to fail, how can the leaders and managements of banking institutions be disciplined and avoid unduly risky, negligent, or adventurous lending policies or poor asset-liability management" (Lowett, 1989).

However, it must also be noted that deposit insurance does not necessarily create moral hazard for the bank management which is responsible for taking lending decisions. Only depositors are protected with insurance, and not the management. Thus, existence of deposit insurance might not be a sufficient incentive for bank management for making imprudent decisions (Chang, 2000). Kindleberger's remarks in this regard also support the view that deposit insurance in itself does not necessarily create moral hazard on the part of the bank management. "Depositors may not lose, but stockholders suffer and risk-prone banks may have trouble raising capital .... Reputations generally suffer. Not always, however (Kindleberger, 1989, p. 196). Unlike general perception, the ability of deposit insurance to create moral hazard is limited. Thus, it cannot be ascertained strongly that deposit insurance in itself could have generated over-borrowing and over-lending that led Asian economies into crisis during 1990s.

# 1.2.1 Clues of Asian Crisis before its Emergence

Due to long-term patterns of economic growth as described in previous section, the Asian crisis was unanticipated in most circles. But there were some danger signs long before it exploded in July 1997.

Regarding investment in stock markets, the prices were stagnant in the year before crisis. Although market capitalization continued to grow until the crisis emerged as domestic and foreign investors continued to invest, but the boom in prices was over much earlier. There are various economic and political forces which can explain deflation in stock market prices but one primary force was growing perception that the Asian currencies would be severely devalued in the near future which will accompany economic distress. These expectations of devaluation eventually lead to massive capital flight.

Now the question arises about the stimulator of the devaluation expectations. Before the crisis, the value of Asian currencies remained exceptionally stable but the prices had been increasing at a moderate rate in the region. There was a declining trend in inflation but it was around 8 percent during 1990-1996. As a result of fixed exchange rate and increasing domestic prices, the price of goods produced in this region increased in relation to the price of goods produced in other countries, which is translated into the loss of competitiveness in international markets and reflected in declining foreign exchange rate in Asian economies prior to the eruption of crisis.

The tenacious decrease in real exchange rate and the consequent loss of competitiveness caused a fall in the exports compared to imports in these economies due to which trade deficit as well as current account deficit grew. For example, the current account balance of all East Asian economies deteriorated and moved from surplus to deficit during 1985-1997. There are usually two ways to finance this deficit i.e. loss of foreign reserves or external borrowing (Rivera-Batiz and Rivera-Batiz, 1994). The joint deficit of current account of five East Asian economies was US\$ 53.9 billion in 1996 which is financed completely through external borrowing. Thus, the external borrowing of these countries amounted to US\$ 74.4 billion in 1997.

The growth of current account deficits and their entire financing through external borrowing made the Asian economies the biggest debtors in the world by the end of 1996. During same period, external debt to GDP ratio revealed that three of the Asian economies, Philippines, Indonesia, and Thailand, were the world's most indebted countries (World Bank, 1998).

The growth of short-term debt is regarded as a major warning signal of potential distresses in future. The nonexistence of this type of debt had helped East Asian economies to survive through the debt crisis of 1980s. This is concluded by Woo and Nasution (1989) that "there is a trade-off in external debt management between generally lower interest payments and predictability of debt-service payments. Short-term liabilities pay lower interest rates most of the time, but it is risky to rely on a strategy which rolls over a large amount of short-term debt every period. An unforeseen credit crunch would force the country to increase borrowing in order to cover its interest payments. If this credit squeeze were to persist ... the extra borrowing would be difficult to sustain as the situation increasingly smacked of a Ponzigame" (Woo and Nasution, 1989, p. 115).

Despite of incredible economic growth, the high level of indebtedness caused issues regarding the servicing of this debt. Moreover, this debt was mainly private debt, most part of which was not backed by government guarantee. The growth of private debt reduced the significance of current public sector budgets for financing external debt payments. The health of the economy, especially of its financial sector, became more important. Both of these factors were crucial in the transformation of external debt into productive investment. The mismanagement of investment funds by investing in low-return and high-risk projects, accompanied by an economic downturn could trigger loss of investors' confidence, leading to capital outflow and a probable crisis which happened in Asia and then Latin America.

Mismanagement is also observed when part of the capital funds goes to consumption, instead of investment for economic development. This trend tends to increase aggregate demand and create inflationary pressure. As a result, real exchange rates are appreciated due to capital inflows thereby generating current account deficit. It increased vulnerability of the economy to variations in international capital flows. This vulnerability become even greater when further short-term foreign funds are borrowed. Foreign investors, being cautious of such unfavorable developments, quickly withdraw their funds. This is what exactly happened in case of Korea (Jeon, 2010). In this manner, capital funds which have otherwise been crucial for economic development became troublesome due to their mismanagement, rather their misuse. The vulnerability is even multiplied several times when domestic financial system is weak enough to being unable to endure this reversal of capital flows.

This mismanagement of funds was even deeper when it comes to maturity and currency mismatches. The maturity mismatch of debt is an important phenomenon in Asian crisis. Short-term borrowing to finance long-term projects became significant, particularly in Korea, Malaysia, and Thailand, causing a mismatch in the maturity of assets and liabilities. The currency mismatch also occurred when domestic banks were lending to domestic firms in local currency whereas borrowing in foreign currency. This made them particularly susceptible to exchange rate fluctuations.

Another issue regarding external borrowing was the bank lending which is troublesome because of the weak and imperfect banking systems of these economies. Despite the positive image of Asian economies till mid-1990s, their financial systems were underdeveloped leading up to the crisis (Delhaise, 1998). In retrospect, the World Bank reported that 'the

Asian countries had some weaknesses in their banking systems including low capital adequacy ratios of banks, inadequately designed and weakly-enforced legal lending limits on single borrowers or group of related borrowers, asset classification systems and provisioning rules for possible losses, which fell short of international standards, poor disclosure and transparency of bank operations, lack of provisions for an exit policy of troubled financial institutions, and weak supervision' (World Bank, 1998, p. 20).

Another view attributes the two decades of high growth rate, high savings and investment rates and high rates of capital accumulation to the significant distortions in the financial sector of emerging countries. It propagates that the performance of the Asian economies was caused by growth-oriented strategies founded on centralized coordination of production activities, resource allocation, protection of domestic industry, government guarantees on private investment projects etc. Such projects let the firms to undertake risky projects by depending heavily on bank credit. The dominant practice of relationship banking also provided incentives to develop strong informal ties between creditors and debtors which gave the resources to the economy needed to finance objectives of high growth (Pesenti, 2001).

The role of derivatives is also not negligible as the unhedged currency and interest rate exposures were main elements in the scope and severity of the Asian crises. The exposure was unhedged because domestic interest rates were higher than foreign interest rates. In addition, the pegged exchange rates were generally supposed as stable. Moreover, domestic hedging products were underdeveloped whereas offshore hedges were expensive. Due to these factors, foreign banks were keen to lend Asian banks that strive to get profits from interest rate differentials. However, the volume of profitable arbitrage was limited due to local regulations like limits on net open foreign exchange exposures, risk to capital ratios etc. This situation forced Asian banks and other financial institutions to take derivatives in order to 'avoid prudential regulations by taking their carry positions off balance sheet' (Dodd, 2001, P. 10). Most of the losses by US and European banks in Asian lending were listed as due to 'return swaps' and 'currency swaps' (Kregel 1998). Derivatives trading, especially 'future contracts' exerted a de-stabilizing influence during Asian crash (Ghysels and Seon, 2005). Highlighting the role of these innovations, particularly over-the-counter (OTC) derivatives in Asian financial crisis, Kregel (1998) argued that they are structured to clients' specific needs by banks which themselves accept little risk, thereby impede efficient capital allocation and prudent risk assessment.

Each of the forces discussed may not have had the power to generate a crisis in Asia or Latin America by itself, but all of them together were potentially explosive. In the light of all these considerations, it cannot be argued that Asian and Latin American crisis of 1990s was different from anything else seen before due to not displaying the usual symptoms such as chronic inflation, huge budget deficits, and high unemployment.

In the presence of limits to foreign borrowing, these forces and distortions cannot translate domestic vulnerability to external shocks, which is why the crisis of this level happened in the 1990s and not before. The process of domestic financial liberalization altered this main feature due to which international capital markets became more accessible in 1990s with deregulated and liberalized domestic markets. However, financial liberalization is not the exclusive feature of the Asian and Latin American crises. In this regard, the work of Carlos Diaz-Alejandro is very relevant who worked on the financial crisis in Chile during its deregulation and liberalization process during 1980s. It is argued by him that in case of bad economic situation, governments are expected to intervene to save financial institutions i.e. expectation of future bailout, irrespective of the presence or absence of government guarantees. As put by Diaz-Alejandro (1985, P. 18), "agents expect to be bailed out regardless of the 'laissez-faire' commitments which a misguided minister of finance or central bank president may occasionally utter in a moment of dogmatic exaltation". So basically, investors know that in case of a crisis, government would not stay calm doing nothing and letting the system to get worse.

Thus, it is a serious mistake to think Asian financial crisis as a 'solo event'. Due to the relatedness of weaknesses, problems and difficulties described above in this sub-section, it is generally referred as 'crises within crises' by then-Director of IMF, Michael Camdessus (cited in Eichengreen, 1998). Particularly the combination of macroeconomic imbalances, banking sector weaknesses, mismanagement of funds and resultant exchange rate problems gave rise to a self-fulfilling crisis in Asia in which countries got into such a vulnerable position where governments became failed to withstand a credible protection of their currencies.

## Section 2. Unavoidable sequence from Liberalization to Crisis

Although financial liberalization is not the exclusive feature of Asian and Latin American crisis of 1990s, but it has been often observed that liberalizing countries have encountered quite strong crisis after liberalizing their capital and financial markets.

A considerable body of evidence has been gathered during last decade which confirms the social benefits of FL (Bekaert, Harvey and Lundblad, 2001; Rajan and Zingales, 2003; and Williamson and Mahar, 1998). However, the series of crises engulfing the developing countries after FL are reflective of its dangers due to which it faced criticism like Stiglitz (2001) criticized it as "all too often, the dogma of liberalization became an end in itself not a means to a better financial system"... FL may actually have had a perverse effect, contributing to macro-instability through weakening the financial sector" (Stiglitz, 2001, p. 31). The FL to crisis sequence is often explained by the liberalized environment that does not take into account the previous inefficiencies and weaknesses of the initial conditions and the failure to promptly develop robust legal, regulatory and supervisory frameworks. Thus, it is cautioned that "unless the economy is competitive, the benefits of free trade and privatization will be dissipated in rent-seeking, not directed towards wealth creation. And if public investments in human capital and technology transfers are insufficient, the market will not fill in the gap" (Stiglitz, 2001, p. 49). For instance, proponents of privatization overvalued the benefits of privatization and undervalued the costs, especially the political costs. However, privatization demands first the creation of institutional infrastructure like competitive markets and regulatory framework. Government no longer holds the right to intervene as it does under public ownership. Private owners have only one objective, the profit maximization. So the conditions under which privatization can attain the public objectives of efficiency and equity are very limited. These conditions are much similar to those conditions under which competitive markets attain Pareto-efficient outcomes, as explicated in the fundamental theorem of privatization by Sappington and Stiglitz (1987).

Thus, the gap created by inefficient and noncompetitive market conditions set the path which goes from liberalization to crisis – an area for which some empirical evidence is discussed below.

#### 2.1 Some Empirical Evidence

The title of Carlos Diaz-Alejandro's 1995 paper "Good-bye financial repression, Hello financial crash" is considered vital in ascertaining the inevitability of FL to lead to crises. Almost all countries in his survey suffered from financial crisis in one way or the other during 1980-1997 most of which were associated with FL including Argentina, Brazil, Chile, Egypt, Indonesia, Japan, Korea, Malaysia, Mexico, Philippines, South Africa, Sri Lanka, Thailand, Turkey, Venezuela etc. This survey recorded 25 crises following FL but all of them might not

be the direct consequence of liberalization but it was a direct or indirect factor that contributed in most of the cases.

The positive correlation between FL and crises has also been confirmed with an econometric study of fifty-three countries during 1980-1995 by Asli Demirguç-Kunt and Enrica Detragiache (1998) which revealed that the probability of crisis occurrence is high in liberalized financial systems but strong institutional environment prevents them. Cross-country estimations are used by Carmen Reinhart and Graciela Kaminsky (1999) to identify causality between FL, banking crises, and balance of payment crises. This study exhibits that FL is positively and significantly correlated with ensuing banking crises. This study does not establish the precipitation of balance of payment crises from banking crises but this observation would not hold if experience of Asian crisis of 1997 is also taken into account.

In the survey of Williamson and Mehar (1996), no visible pattern of pace or sequencing is observed. Out of nine countries in that survey which suffered from severe crises after liberalization (Argentina, Chile, Malaysia, Mexico, Philippines, South Africa, Thailand, Turkey, and Venezuela), six liberalized rapidly and three gradually. In these nine countries, five liberalized their financial systems in a stable macroeconomic environment whereas other three stabilized during the process of liberalization. Trade regimes were liberalized before or during FL in seven countries while two countries had quite closed regimes throughout liberalization process.

Real interest rate, share of credit in private sector, and growth of credit are three variables related with FL that are used by Asli Demirguc-Kunt and Enrica Detragiache (1997) in a study covering 65 countries from 1980-1994 in order to find probability of banking crisis. All of these variables are found to have positive and significant probability for banking crisis. However, no macroeconomic model is laid down to exhibit interaction of these variables to exert this probability or to include the degree of regulation and supervision in the financial sectors under study. Moreover, these variables are also affected by factors others than FL.

According to Michael Gavin and Ricardo Hausmann (1996), the root of the banking crises resides in credit boom which permits every borrower to service its debt by taking debt from another source due to which lenders are unable to have information to distinguish sound and risky borrowers. An evidence is presented by Gerard Caprio, Berry Wilson, and Anthony

Saunders (1997) that rapid credit expansion was a principal reason of the collapse of Mexican banks in 1994. It is observed in this study that lending boom was the reaction of curbed demand in previous financial repression. Insufficient supervision, deficiency of proper incentives, and presence of broad deposit insurance are also cited as elements that limit banks' need to diversify risks in the newly liberalized environment. Williamson and Drabek (1999) also provide evidence to put forward that countries which did or did not have crisis can be distinguished on the basis of whether or not they opted for liberalization. This made them to suggest that premature financial liberalization without adequate prudential regulation played a key role in the occurrence and depth of Asian crisis.

It might be interesting to note here that many researchers, in the wake of Asian crisis, also tried to extend Minsky's analysis (1972) to developing economies. For instance, it is argued by Gary Dymski (1999) that huge capital inflows in open developing economies create 'imbalances' if there are no institutional mechanisms to channel these funds towards investment projects. Instead of productive investment, they will channel towards speculative investment which would create asset bubble to become a new source of Minskian crisis. Yilmaz Akyüz (1998) also mentions the lack of proper institutional mechanisms as exacerbating a Minskian process within an open developing economy.

All these studies suggest that vulnerabilities in financial sector often develops after liberalization, but it can also be argued that core source was the preceding financial repression which indirectly leads to crises.

# 2.2 Indirect Forces from Previous Repression

Even if FL doesn't necessarily lead to crisis, it nevertheless works to reduce the franchise value which indirectly and adversely affects the banks' performance. That's why the need for some form of bonding had always been recognized to take proper care of depositors' money. It was a usual practice of senior bank staff even in nineteenth century to post a significant bond that could be forfeited in case of mismanagement of funds<sup>31</sup>. In today's period, the connection between low franchise value and high risk of failure is observed. Under Basel II, the capital requirement set at 8 percent of risk weighted assets also signifies to maintain certain level of franchise value. The decline of capital below this threshold gives warning

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<sup>&</sup>lt;sup>31</sup> Gibbons, J. S (1859), "The banks of New York, their dealers, clearing house and the panic of 1857", New York: Appleton

signal to regulators for timely intervention but it is hard to assess the real value of capital. Besides that, the shareholders' and insiders' incentives may diverge which also diminish the effectiveness of capital requirements, particularly in case of reduced bank profitability (Caprio and Honohan 1999).

FL during 1970s and 1980s resulting in unchecked competition has often been blamed for subsequent banking fragility in many developing (and developed) countries. Sometimes FL brings strong competition which pressurizes banks to offer such deposit rates that turn prudential lending practices unprofitable. The presence of implicit or explicit deposit insurance put a gap between portfolio risk taken by banks and risk perceived by depositors. Deregulation and privatization becomes dangerous when banks take excessive risk under fear of insolvency. In addition to excessive risk taking and earlier weaknesses in portfolios, outright managerial failure by underestimating risk in liberalized environment is also an important source of weakness (Honohan 2000a).

In order to have some detailed analysis on competition, we can refer to Beck (2008b) who presented competition-stability versus competition-fragility views. Some theoretical models predict less competition and more concentration to be more stable as profits provide cushion against fragility and give incentive against excessive risk taking. On the other hand, more competition put pressure on banks to earn more profits due to which they have to take excessive risk thereby leading to more fragility (e.g. Marcus, 1984; Chan, Greenbaum and Thakor, 1986). Keeley (1990) presented empirical evidence that increased competition reduces banks' capital buffer and increases risk premiums which are then shown in increased interest rates. Thus, Hellman, Murdock and Stiglitz (2000) proposed anti-liberalization measure like deposit interest rate ceilings and other restrictive measures to prevent extreme and unhealthy competition to avoid excessive risk taking and resulting fragility. However, it is hard to make any clear conclusion whether increased bank competition as result of FL increased stability or fragility. Theory makes uncertain and equivocal predictions about the results of competition whereas empirical research finds it difficult to have proper measures of competition.

Another handicap in newly liberalized setting is the existence of legal, regulatory and supervisory system ill-suited for a market-based environment. Under repression, the risk assessment of credit is considered unimportant by supervisors as credit allocation is

performed by the government itself. Supervision is directed to enforce government orders to meet development policy goals rather than ensuring prudent risk taking. Legal systems favoring debtors are also difficult to quickly understand and implement new laws in deregulated and liberalized environment. In short, the deficiencies in legal, regulatory and supervisory system hamper efficient market decisions. Thus, the shortcomings of pre-FL environment are usually blamed for post-FL crises. Deregulating interest rates, privatizing state-owned banks and financial institutions, opening up financial and capital markets etc. is easy, quick and cheap whereas institutional infrastructure development, portfolio management, skill development etc. is difficult, time taking and expensive. The last two decades of financial crises present convincing case to require more of the latter.

Banking crises had been categorized by Patrick Honohan (2000a) in three classes of syndromes namely macroeconomic epidemics, microeconomic deficiencies, and endemic crises in a government-permeated system under financial repression. Instead of accusing repression or liberalization, he blamed the change of regime as main cause of crises by stating that "change in regimes altered the nature, scale, frequency, and correlation pattern of shocks to the economic and financial system, increasing the riskiness of traditional behavior, or introducing new and inexperienced players" (Honohan, 2000, p. 99). The study of numerous developing countries provided him various types of regime changes such as financial repression, financial liberalization, financial globalization, privatization, structural transformation, technological innovation etc. which usually result from the reform process.

The increased integration of financial markets as part of financial globalization also took its toll in form of crises. The international integration of financial markets was stressed due to its benefits such as optimal resource allocation, intertemporal optimization, and international portfolio diversification (Obstfeld, 1995). However, the series of crises in Latin America and Asia during 1990s has led some to argue that the costs of complete integration of financial markets for developing and emerging countries may outweigh its benefits (Rodrik, 1998; Cooper, 1998). It may lead one to infer that Integration and globalization were not without mounting pains.

#### **Section 3. Financial Globalization and Crises**

The aftermath of what happened in emerging economies during 1990s raised doubts to move forward or take back steps from integrating with international financial and capital markets. A

more general debate on globalization is whether or not its benefits outweigh its disruptive effects. A comprehensive historical description on this issue is provided by O'Rourke and Williamson (1999) by analyzing the earlier 'golden age' of globalization before World War I.

## 3.1 Golden Age of Globalization

Unprecedentedly massive flow of capital contributed in rapid economic growth in golden age during third quarter of the 19<sup>th</sup> century which found capital moving from the capital-rich nations of Western Europe to take advantage of the higher returns in the resource-rich regions. Free flow of capital along with the mobility of goods and labour contributed in the convergence of real wages and incomes per capita between the core countries of Western Europe and much of the periphery.

It had effects on the distribution of income because the massive migrations during 1870-1914 reduced the returns to land-owners in land-scarce and labor-abundant regions of Europe along with worsening the income distribution in New world of US, Canada, Australia as unskilled immigrants had to compete with more skilled labor force. The landowners in old world lobbied for more tariff protection of agriculture in last two decades of the nineteenth century whereas as new world also closed its doors to migrants by the second decade of twentieth century. This backlash to globalization is held responsible to give rise to nationalism and lead to World War I. In the interwar period between first and second World War, there seemed almost complete cessation of capital mobility as nations were determined to protect their monetary sovereignty in Great Depression.

The present golden age of globalization can also have similar backlash which terminated the last one. As compare to the pre-1914 era, the present golden age of globalization regards capital and trade flows as more important than labour mobility.

#### 3.2 Historical Crises following Globalization

Financial crises in Asia and Latin America during 1990s generally give impression that these crises are phenomena of current period of globalized financial markets. However, this impression is wrong and misleading. Since the advent of capitalism and during the previous golden age of globalization in pre-1914 period, various waves of crises related with massive capital flows are experienced.

The classic case with today's reverberation is Latin America's experience with lending booms and busts before 1914 (Marichal 1989). The first wave of British capital flows to the new states of this region for financing infrastructure and gold and silver mines. This wave terminated with the crisis of 1825. The second wave of foreign lending to this region during 1850s and 1860s was used to finance railroads and ended with the crisis of 1873. The third wave that started in the 1880s involved enormous capital flows from Britain and Europe to finance the interior development of this region and ended with the crash of 1890s leading to the insolvency of Baring's, a well-known merchant bank of London.

The Latin experience is classic, but lending booms and busts were also experienced by US due to British capital flows (DeLong, 1999). A number of crises also emerged in Europe during 1837, 1847, 1857 which forced Bank of England to raise its discount rate in reaction of external drain of gold reserves that led to serious consequences for capital flows (Auernheimer, 2003). The shifting of international financial setup from London to New York during 1920s also caused a new wave of capital flows to the emerging markets which terminated with the Great Depression (Bordo, Edelstein and Rockoff, 2002).

The interwar crises were linked with the weaknesses of the gold exchange standard. Due to weak credibility of gold convertibility, the capital flows were not stabilizing. So in the face of Great Depression, banking panics spread through the gold exchange standard. The adverse consequences of this depression were avoided only when countries delinked from gold standard by devaluing their currencies. The era of Bretton Woods responded to the problems of interwar crises by putting limits on capital flows along with developing systems of deposit insurance and lender of last resort. So the crises in this era were purely currency crises in which speculators attacked countries that tried to protect exchange rates regardless of their macroeconomic and financial policies.

Regarding the incidence and severity of crises of 1990s with the earlier ones, Bordo and Eichengreen (1999) exhibited the behavior of real GDP growth during five years before a crisis and during five years after a crisis in fifteen emerging and six advanced economies in the period of free capital flow from 1880 to 1913. It is then compared with similar behavior for ten emerging countries suffered crises during last quarter of twentieth century. They encompassed twenty-two crises in emerging economies and seven in advanced economies prior to 1914 whereas thirty crises are observed in ten emerging economies for the period

since 1972. The incidence of emerging market crises today is noted to be substantially higher than in the earlier period, i.e. 11.5 percent per country versus 4.3 percent. This study also revealed the output effects of emerging market crises to be more severe in recent period as compared to the pre-1914 period. The recent crises in emerging economies declined growth by 3 percent as compared to the decline of 2 percent in pre-1914 crises.

The measures in this study implied that recent crises of emerging economies are more severe with dramatic recession as compared to the emerging market crises before 1914. However the recovery was quicker in the crises before 1914 as compared to the recent ones because growth rate rose by 2-3 percent during crises before 1914 whereas it didn't rise at all in recent crises. This faster recovery is attributed to adherence to the gold standard before 1914 as countries intended to restore convertibility at the former exchange rate once the assets suffered losses when the exchange rate collapsed and gains are anticipated as the currency recovered to its traditional parity (Miller, 1998). In simple words, as long as authorities are committed to reestablish previous exchange rate, they don't see any fear of unleashing wild inflation by abandoning currency peg. Due to this adherence, persistent capital flight is not provoked from devaluation. Rather, capital is flown back quite early thereby recovering and stabilizing the economy (DeLargy and Goodhart, 1999).

If these two periods i.e. pre-1914 and recent ones are compared with the interwar period, it is revealed that interwar period was prone to crises with the incidence of crisis at 10 percent per year per country. The severity of Great Depression in US is attributed by Friedman and Schwartz (1963) to the failure of the FED to act as lender of last resort. Bernanke and James (1991) explained this severity as the exceptional depth of the global collapse. But it is important to reiterate that crises during interwar period were not linked with the globalization, rather they were associated with lending boom and bust experienced as result of global macro instability and flawed exchange rate.

The detailed account of historical crises of emerging economies signifies the core importance of capital market liberalization in the international free flow of capital.

#### **Section 4. Capital Account Liberalization and Crises**

It is usually argued that financial liberalization, particularly the opening of capital account played a key role in the propagation of East Asian crisis in 1997 while South Asian

economies escaped it to a large extent by putting control on their capital markets. Since then, capital market liberalization is recognized as a main conflict in the debate on globalization and integration.

As result of free market agenda, the final decade of twentieth century witnessed the development of free trade areas, creation of world trade organization, introduction of intellectual property rights, privatizations and deregulations. But liberalization of capital markets i.e. free flow of financial capital had always remained a point of contention. IMF as major party in international financial architecture made amendment in its charter in Sep 1997 in its annual meeting in Hong Kong for encouraging capital market liberalization. This was exactly the time when Asian crisis was swelling up which grown within a year into a global economic recession demanding rescue packages of more than US\$ 200 billion. Today, it has been well recognized that short-term capital flows i.e. hot speculative funds played a central role in the dissemination of this crisis. An IMF paper by Prasad et al. (2003) openly accepted the risks inherent in liberalization of capital markets. It initiated critical policy debates on the suitability of capital market liberalization for developing and emerging economies.

Now, we would shed some light on the most often observed behavior of international capital flows and its implications in bringing crisis. Lending and borrowing as well as sale and purchase of financial assets among resident or governments of different countries is regarded as capital movements which have two related but distinctive functions. Letting the borrowers to consume today and lenders to postpone consumption is one form of it. The other form permits borrowers to buy investment instead of consumption which then allows division between those who wish to save and those who wish to invest. In case of different countries, lending can take form of portfolio capital such as deposits with banks and other financial institutions, private or public bonds etc. whereas the borrowers are 'consumers' acquiring consumption goods or mostly the 'firms' acquiring investment goods.

A 'standard portfolio balance approach' is usually used to study the behavior of international capital in which investors assess the relative return on competing assets by weighing them up and make allocation decisions on basis of it (Sikorski, 1996). The movement in international capital is receptive of and sensitive to the interest rate differentials between domestic and foreign rates that are adjusted according to capital movements in domestic currency and the expected rate of domestic inflation. Thus capital inflows are discouraged and capital outflows

are encourage when domestic economy is putting ceilings on domestic interest rates in order to keep them well below world interest rate (Snowden, 1987). The resulting net outflows would eat away domestic as well as foreign deposits of domestic banks due to which they have to depend on the central bank for the supply of primary reserves. It implies that the role of central bank as net supplier of financial resources becomes more important in case of capital flight.

Regarding sensitivity of international capital flows to the expected movements of domestic currency, it is argued that devaluation expectations involve capital loss which discourages inflow of pure financial capital. The expected rate of currency depreciation is responsive to the performance of current account and the form of exchange rate regime. Regarding sensitivity of international capital flows to the expected domestic inflation, it is argued that assets denominated in foreign currencies provide an inflation hedge in economies with high and unstable inflation. Thus, these assets are regarded as stable store of value by domestic investors which encourage capital outflow.

Here, it would be relevant to distinguish the exchange rate crisis from the banking crisis, although one generally results other, also known as 'twin crises'. The devaluation expectations motivate the exchange rate crisis stimulating holders of domestic currency or assets denominated in domestic currency to convert in foreign exchange thereby reducing foreign reserves of central bank and eventually the domestic monetary base. It forces banks to recall loans which lead to banking crisis. In the anticipation of bank insolvency or devaluations, depositors hastily withdraw their deposits in domestic currency to exchange them in foreign currency due to which banks are again pressed to recall loans. In this manner, exchange rate crisis and banking crisis reinforce each other.

The standard portfolio analysis is applicable to capital flows entering in country to buy domestic equity and bonds. But in developing countries, most of the capital is entering as debt i.e. direct borrowing from foreign financial institutions or as FDI. Such forms of capital flow are not responsive of portfolio based decisions. Instead, debt-based flows may be based on the desired foreign borrowing of domestic private or public borrowers and on their perceived creditworthiness. The FDI flows may be based on the desire of foreign investor to take advantage of certain resource of country e.g. low labor costs.

It is generally believed that massive, sudden, and quick capital outflows play key role in propagating financial crisis. One reason of such outflows can be attributed to currency mismatches i.e. banks borrowing in foreign currency and lending in domestic currency or maturity mismatches i.e. firms borrowing short-term to finance long-term projects. Shifting from short-term to long-term borrowing is not easy as countries differ immensely in their financial structures in terms of institutions, financial technology, and rules of the game that specify how financial activity is organized at a given time. Countries with weak financial structures usually do not support long-term debt contracts. There is clear evidence that long-term debt is more widespread in countries that score high on a legal efficiency index (Demirgüç-Kunt and Maksimovic, 1998). These mismatches often create liquidity problems. In case of sudden capital outflows to instigate crisis, it is crucial to distinguish solvency problems from liquidity problems. Unlike liquidity, solvency is generally associated with inconsistent government policies reflected in budget constraint that is caused by high level of government expenditure thereby requiring relatively high inflation tax i.e. financing through money creation. In such circumstances, crisis is almost inescapable.

There is another situation known as 'multiple equilibria' which can instigate crisis despite of maintaining solvency but having liquidity problem. These equilibria are present in a situation when negative expectations are self-fulfilled as market reaction to these expectations is enough to alter the fundamentals to make solvent condition into insolvent condition. Here comes the analogy between exchange rate crisis and banking crisis. The liquidity problem of banks will force them to recall loans due to which firms have to liquidate their assets thereby jeopardizing their solvency. A classic example in case of exchange rate problem is the expectation of government debt default which promptly increase the interest rate at which government can refinance its liabilities that would increase their financing costs and result in an unsustainable situation thus confirming an originally unjustified expectation. At least at theoretical level, cases of multiple equilibria are recognized for bringing banking and exchange rate crises. However empirically, ample evidence does not exist. The issues of herd behavior and contagion are also associated with the case of multiple equilibria. It infers that lenders, particularly foreign lenders base their expectations on behavior of other lenders i.e. herd behavior, or crisis one country may spread even to other countries which were initially having no solvency problems i.e. contagion. Herd behavior and contagion are quite possible even in the environment of perfectly rational economic behavior. These two phenomena will be discussed in detail in following sections.

The analysis of crises till now clearly reveals the inducement of financial instability following financial liberalization and globalization as these trends by the end of  $20^{th}$  century augmented the possibility of gigantic adverse consequences of financial instability on economic performance.

# Section 5. Liberalization and Instability

During and after Asian and Latin American crises of 1990s, the subject of financial stability has become overwhelming in policy discussions, which can be demonstrated from periodic reports on this subject by dozens of central banks and international financial institutions. Along with policy discussions, the academic literature also continues to grow in this area (Allen and Gale, 2004; Bernardo and Welch, 2004). Consequent upon negative experiences and lessons, financial stability is broadly acknowledged as significant to maintain macroeconomic and monetary stability for achieving sustainable economic growth.

## **5.1** Growing Significance of Stability

The scenario which intensified the significance of financial stability has been elaborated by Schinasi (2006) by indicating four key prevailing conditions. One is the expansion of financial systems at much high pace as compared to the growth of real economy. Another condition that accompanied this financial deepening is the change in the composition of the financial system with decreasing share of monetary assets and increasing share of non-monetary assets which amplifies the leverage of the monetary base. Third condition is the cross-industry and cross-border integration of financial systems resulting in their greater international orientation which is reflected in the growing size of international transactions in bond and equity relative to GDP. Final condition is the increased complexity of financial systems in terms of sophisticated financial instruments, diverse activities and related risk transfers, all of which are encouraged by financial innovation stemmed from liberalization. This complexity has made it very hard and challenging for market participants, supervisors, and policymakers to trail the development of risks over time. All of such developments have made the task of safeguarding the financial stability difficult more than ever, in all financialized economies, developing as well as developed ones.

Despite of all the intellectual and practical advancements in financial stability analysis during last two decades, it is yet in a preliminary stage as compared to the macroeconomic and monetary analysis. Even entire body of analysis on this subject is failed to provide a

meaningful and comprehensive framework to monitor and evaluate financial stability in real time in order to prevent problems before their occurrence or resolving them after their occurrence. That's why no unified definition exists for the term of 'financial stability', may be because modern finance does not view private financial activities in the collective or government purview. However, the private benefits that are widespread and enormous are resulted from the existence of modern financial systems which are recognized as 'public good'. This does not necessarily justify the public policy involvement in private finance as all people does not have equal access or take equal private benefits but social benefits do exist in liberalized economies. Due to inherent market imperfections discussed in last chapter, private incentives and actions alone cannot lead to efficient pricing and allocation of capital and financial risks. This encourages some arrangement of collective action and public policy involvement in order to provide incentives to inspire the private sector for obtaining desirable outcome. Since such involvement includes various cost-benefit, inter-temporal, social and political considerations, therefore, it is difficult to develop and implement an all-inclusive and integrated framework for financial stability.

In this aim, Schinasi (2006) defined financial stability as the ability of the financial system to facilitate and enhance economic processes, manage risks, and absorb shocks. He considered financial stability as a continuum that is changeable over time and consistent with multiple combinations of constituent elements of finance. But no consensus exists as yet on what financial stability exactly means (Oosterloo and de Haan, 2003). Some defined it in terms of absence of a situation in which financial imbalances weaken the real economy (Davis, 2002), for instance, information problems depressing the ability of financial system to allocate funds to productive investment opportunities (Mishkin, 1999), or financial problems stemming from relations between financial institutions or markets which have potential to adversely affect the real economy (Summer, 2003). Allen and Wood (2006) and Padoa-Schioppa (2003) defined financial stability in terms of the robustness of the financial system to external shocks. Financial stability is defined by Haldane (2004) by using a simple model in which asset prices function to ensure the optimal level of savings and investment. Some others like Borio (2003) specify financial stability as restricting risks of significant real output losses accompanying with incidents of system-wide financial distress.

In this aim, the concept of financial stability can also be discussed in terms of systemic risk. De Bandt and Hartmann (2000) and De Bandt et al. (2009) did an extensive literature survey

on this subject but failed to find any agreed definition. De Bandt and Hartmann (2000) defined systemic risk as risk of being affected by systemic events as result of initial shocks which later affect institutions that have been profoundly solvent *ex ante*. Perotti and Suarez (2009) took systemic risk as propogation risk, where shocks spread beyond the extent of their direct economic impact and result in diffused distress and disruption of the real economy. Another view to analyze systemic risk with respect to (in)stability is given by Borio (2003) which is connected with the business cycle i.e. risk is fundamentally endogenous and reveals the interaction between the financial system and the real economy that results in overextension in booms, resulting in subsequent downturn and financial strains. In this context, endogenous cycle view of financial instability in the spirit of Minsky (1982) and Kindleberger (1989) are very relevant. Management of financial (in)stability is an area which will be explored in detail in final chapter. At this point, the objective of briefly discussing this notion is to initiate the critique on the claim of FL to enhance the stability of financial system.

IMF study by Prasad et al. (2003) repeatedly emphasizes that theory predicts that liberalization and opening of financial markets should enhance stability, even though it didn't, which characterizes the misguidance of theory. Thus, some of the principal reforms in financial and capital markets during 1990s, whatever their virtue might have been, subjected developing and emerging countries to increased exposure to risks and vulnerabilities causing financial instability. Allowing free capital mobility also has potential to increase equity volatility which aggravates financial instability. As expressed by Dornbusch and Park (1995), "there is ample evidence that financial market opening is likely to increase the volatility in asset prices" (p. 39).

Although previous sections have elaborated various linkages, the following section would specifically describe the mechanisms which lead FL to financial instability by taking insights from Caprio, Honohan and Stiglitz (2006).

#### **5.2 Liberalization to Instability Mechanisms**

FL increases instability, particularly short-term flows of funds most widespread in case of emerging economies. There are various different but related reasons why financial, more notably capital liberalization leads to increased instability which are ensued below.

#### **5.2.1 Speculation**

Ideas presented in Keynes' General Theory impose 'rationality' as the decisive criterion. In this regard, Winslow (2003) asserted that Keynes' rational speculation meant "rationally forecasting the irrational behavior of others" (Winslow, 2003, p. 151). Theoretically, 'rational' speculation is stabilizing because investors buy a currency when exchange rate is weak and sell when exchange rate is strong, thereby reducing the exchange rate fluctuations. For instance, Milton Friedman eminently argued that speculation in financial markets cannot be destabilizing because if destabilizing speculators drive asset values away from equilibrium levels, they will loose money and eventually be driven out of the market (Friedman and Schwartz, 1963). However, market can continue to get it wrong for a very long time (Minsky, 1972; Kindleberger, 1973). Thus, rationality is not often exhibited by markets and liberalization has potential to expose economies to irrational exuberance. Particularly the emerging and developing economies with relatively small or shallow markets are more prone to such fluctuations and resulting bubbles having devastating effects. Since liberalization of capital markets allows speculative capital to deluge in a country which appreciates currency. Although these inflows support short-term growth, but they also lead to an abrupt increase in consumption that resultantly alter the production structure. Moreover, these short-term flows of capital tend to go in real estate and equity markets, instead of long-term investments. This behavior shoots up market prices that resultantly generate wealth effects increasing consumption expenditure. This combination of appreciated currency and demand boom is growth-inducing for non-tradable sectors like services and construction but export-threating as it is difficult for domestic producers to compete with foreign goods.

These capital inflows frequently turn into outflows e.g. speculative inflows in Thailand during mid-1990s lead to real estate bubble which is then burst in 1997 undermining high return expectation thereby stopping capital inflows and turning them into outflows. The same situation happened in Latin America during late-1990s that accumulated high debt, high current account deficit and currency overvaluation during period of flooding inflows. These accumulated vulnerabilities turned off international sentiment towards emerging markets leading to capital outflows.

Just like capital inflows briefly lift an economy, capital outflows are also tended to dampen the economy as they deprive banks of required resources that put pressure for credit contraction which monetary authorities usually fail to offset. Abrupt outflows also depreciate the currency which escalates the domestic value of debt denominated in foreign currency. Anxious about the effects of this depreciation on inflation, central banks are forced to increase the interest rates in order to safeguard the economy thereby further depressing the economy. Governments are also pressurized to cut back expenditures due to falling tax revenues and drying up foreign credit thereby further aggravating the downturn of the economy.

It is ironic that such destabilizing capital flows generally upset countries with good economic policies more than the countries with not-so-good economic policies. Countries with good economies policies are encouraged to borrow more and that also on favorable terms and this high debt level makes them vulnerable thus changing investors' sentiments about these countries initially with good policies. An interesting example in this regard is of Argentina which is publicized by IMF in its annual meeting in 1998 as a 'model of developing nations' but soon reprimanded its corrupt politicians and incompetent policies after realizing Argentina's critical state in upcoming crisis.

#### **5.2.2 Financial Derivatives**

The growing use of derivative products is another source of instability related with the liberalization of capital markets. Derivatives provide substantial benefits by permitting financial risks to be precisely customized according to risk preferences and risk appetites which play a key role in completing financial markets, improving market liquidity, and increasing the risk taking capacity of the financial system. Although micro-instability has been reduced with the development of derivatives market as new hedging instruments permit individuals to cover their microeconomic risks. But the resultant reduced transparency creates large off-balance sheet positions that are tough to regulate and it also quickens markets' response to abrupt changes in expectations.

Particularly the over-the-counter (OTC) derivatives driven by advances in information and computer technologies are used heavily by international financial institutions. The series of crises during last two decades demonstrates the role of OTC derivatives in producing fragility, accumulating vulnerabilities, and threatening stability. The near collapse of long-term capital management (LTCM) in 1998 due to large buildup in derivatives credit exposures left then Chairman of US Federal Reserve Alan Greenspan (Greenspan, 1998) and former Bundesbank President Hans Teitmeyer (Teitmeyer 1999) acknowledging their failure to understand the rapidly changing structure and dynamics of global financial markets. But despite of

acknowledging risky aspects of derivative market, FED Chairman continued to encourage and praise 'self-regulation' for these financial innovations. "Key regulators, like Alan Greenspan, didn't really believe in regulation; when the excesses of the financial system were noted, they called for self-regulation – an oxymoron" (Stiglitz, 2008b).

Absence of regulation and supervision along with the lack of disclosure and limited transparency is threatening for stability of financial systems. The widespread involvement of banks in derivative business implies that its risk exposure can change on hourly basis. By realizing this fact, a new idea is emerged that supervisors should inspect the risk-assessment framework designed by bank itself to ensure that bank has implemented policies to appropriately limit its risk exposure and then monitor bank's compliance with these declared policies.

#### **5.2.3 Market Manipulation**

Market manipulation is the intentional effort to interfere with free and fair market operations in order to create artificial, false or misleading trends in market prices. Particularly the thin markets in developing countries expose them to market manipulation if they are liberalized. For example, central bank of Malaysia accused international hedge funds for manipulating Malaysian financial markets in the 1990s. Another example is of Hong Kong which was criticized for being dangerously interventionist despite of widespread reports of market manipulation done by international banks and hedge funds. Although Hong Kong's credit rating was downgraded, yet it managed to stabilize its economy by making use of its large reserves which most developing countries often does not have. Besides, holding so much wealth in reserves has high opportunity costs.

#### 5.2.4 Contagion

Liberalized financial and capital markets expose countries to irrational exuberance and pessimism of 'foreign' investments. Various empirical studies also show that most of the shocks experienced by developing countries were generated by 'external' factors which demonstrate the role of 'contagion' i.e. problems or crisis in one country leading elsewhere. For example, during optimism boom in emerging markets in 1990s, capital even rushed to countries having considerable macroeconomic problems but after 1997 crisis, it even flew away from countries having good macroeconomic fundamentals.

Dornbusch, Park, and Claessens (2000), by surveying extensive literature on contagion, established that the ways in which shocks are transmitted during a crisis seem to differ and these differences seem to be significant. For instance, Kaminsky and Reinhart (2000) have emphasized on bank channel for contagion. In case of loss in a country, bank has lesser funds to lend even in other countries due to declined capital which make other countries to suffer from 'non-fundamental' contagion. But for this channel to lead to such contagion, other banks are supposed to not to offset this reduced lending of a bank. In case of domestic crisis, Panetti (2011) extended the Diamond-Dybvig (1983) model of financial intermediation to study the effect of liquidity provision by market-based channels on contagion in liberalized environment. Instead of putting pressure solely on intermediaries, market-based channels (i.e. hidden or unobservable markets) allow agents to take benefit from autarkic interbank markets. But this benefit disappears in integrated and liberalized interbank markets because unexpected liquidity shocks lead to bankruptcy and contagion.

Various studies have tried to estimate contagion by evaluating changes in correlations across countries between periods of crisis and non-crisis. Correlations generally increase during crisis period which can infer that since crises make market move closer, there must be contagion. But such analysis is suffered from problem i.e. high absolute returns during crisis period. The correlation conditioned on the presence of large absolute returns has to be higher than the unconditional correlation even in case of constant unconditional correlation. Resultantly, it would be misleading to believe that there is contagion when actually there is none because returns conditioned on crisis periods will automatically give the presence of contagion. Empirical research fails to show the existence of a contagion if it accounts for the statistical problems in isolating contagion effects. For example, Baig and Goldfajn (1999) controlled number of economic variables and found difficulty in viewing any strong evidence of increase in correlations in equity markets during East Asian crisis. However, Bae, Karolyi, and Stulz (2000) measured the extent of contagion along with characterizing its economic significance and its determinants in emerging markets during 1990s. They argued on basis of their finding that contagion is predictable if measured by the co-incidence within and across regions of extreme return shocks. It is established by them that contagion depends on regional interest rates, exchange rate changes, and stock return volatility.

Broadly speaking, three channels of contagion can be identified in the existing body of research: real links (i.e. spillover across countries through trade and FDI), financial links (i.e.

international trading of financial assets and liabilities), and herd behavior (as result of asymmetric information). It is hard to conclude the relative significance of these channels. But general agreement exists on the existence of certain degree of vulnerability in a given country in order to get affected from contagion. Presence of strong economic fundamentals substantially reduces the chances of getting hit from an external shock<sup>32</sup>.

## 5.2.5 Balance Sheet Effects, Short-term Booms and Productivity Shocks

There are three other sources of instability through which capital flow volatility is transformed into broad macroeconomic instability. One is the 'balance sheet effects' i.e. capital flows affect macroeconomic prices e.g. interest rate, exchange rate etc. which have impact on balance sheets as well as on investment, saving, and consumption decisions. Changes in balance sheet not only generate significant wealth effects but also lead to bankruptcy and financial disruption. For instance, getting foreign debt denominated in foreign currencies and investing it in domestic assets denominated in domestic currency can result in bankruptcies in the event of domestic currency devaluation as foreign liabilities would increase in relation to the domestic assets. When these adverse effects are large, the short-term dynamics may also prove fierce and not self-correcting.

Another source is 'short-term booms' i.e. positive effects of capital inflows in short run and negative effects in long run. Capital inflows in a country having idle factors of production can stimulate a recovery but growing output and productivity that is based on the utilization of previously unutilized factors must not be confused with the structural increase in the speed of productivity improvements or with improving long-term performance of the economy. People may assume the income growth as a permanent feature and increase their consumption due to which most of the capital would go to finance consumption instead of investment. This may result in increased indebtedness without corresponding increase in ability to service debt thereby leading to destabilization.

There is one more source of instability related with medium-term fluctuations in the economy that can arise even with rational expectations. An economy experiencing abnormally high productivity i.e. productivity shock enhances its capacity and desire to borrow. It leads to capital inflows and increased incomes due to productivity shock and capital inflow. However,

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<sup>&</sup>lt;sup>32</sup> This remark seems to be weak in the wake of current crisis of 2007/08, a topic to be dealt with in next chapter.

when this bubble bursts and productivity level returns to normal, incomes will shrink due to capital flowing out of the country in search of higher returns. The effects of productivity fluctuations in domestic economy are aggravates in liberalized capital markets.

#### **5.2.6 Foreign Direct Investment (FDI)**

Unlike short-term capital flows, FDI is interested in long-term performance of the domestic economy. The example of China is very relevant in this respect which encourage FDI while maintain restrictions on short-term capital flows. FDI enters in an economy for expected advantages in terms of getting future income benefit as well as producing at minimum cost. Since FDI enters for purely productive reasons, it is accompanied by new investments in physical capital like plant and equipment, resulting in employment generation and real growth.

However, FDI can also move pro-cyclically giving rise to instability. One of its reasons is FDI is sometimes only 'finance' e.g. mergers, acquisitions and privatizations are classified as FDI whereas it is actually a mere transfer of ownership instead of a new investment, signifying the importance of separating new 'greenfield' investments from privatizations, mergers and acquisitions. Another reason is the nature of FDI which makes it to respond to a decline in domestic economy in the same manner as domestic investment does. Moreover, foreign direct investors find it tough to sell their assets in case of a crisis due to which they frequently use derivatives like options and forwards in order to sell domestic currency as a hedge of their investment which lead to run on the economy.

# 5.3 Challenging Tradeoff between Financial Stability and Economic Growth

The challenge of achieving and maintaining financial stability is characterized as sustaining smooth functioning of the financial system for ensuring its ability to support the performance of the economy and placing preventive mechanisms to avoid systemic problems "without undermining the economy' ability to grow" which is the hardest part of the challenge.

Maintaining overly protective or restraining mechanisms of stability is undesirable as it can undermine risk-taking to a level where economic efficiency is inhibited. The objective of financial stability needs to be balanced with high priority objective of economic efficiency. The nation which is revealed from this balance is that finance itself is not an end rather it plays facilitative role in improving economic system's ability to perform its main function.

The probability of systemic problems can be curtailed through such rules and regulations which can control financial activities in such a manner that that likelihood of destabilizing price volatility, asset market turmoil, bank failures etc. can at least be reduced if not completely removed. But this level of stability tends to be attained at the expense of financial and economic efficiency. This tendency leads to a perceived tradeoff between growth and stability i.e. stability may be attained and maintained by trading off some economic efficiency and eventually economic growth.

An important aspect of liberalization, as we have discussed, is its accompanying instability but it can be acceptable if it fosters growth. It can be regarded as a fundamental argument in favor of FL. Liberalized markets stimulates growth by improving economic efficiency and increasing investment. Domestic savings and investment would thus further improve with the expansion of aggregate income resulting in a 'virtuous cycle' of sustained economic growth – a cycle that contributes in converging levels of economic development among countries. However, there is a condition for liberalization to promote growth which is that capital inflows must go into investment instead of going into consumption. During 1970s and during 1990-97, capital went into developing countries but did not meet this condition because it mostly went to investment in domestic non-tradable sector unable to generate foreign exchange due to which balance of payment crises eventually occurred as mounting foreign debt is unmatched by ability to meet debt obligations.

Some analysis of trends over time and across countries revealed that liberalization is not necessarily associated the higher levels of investment and economic growth. For instance, after World War II, the global growth of GDP per capita was high despite of the fact the financial and capital markets were not very liberalized. On the contrary, pace of global economic growth fell with increasingly pervasive liberalized markets e.g. GDP per capita rose 1.8 percent during 1970s, 1.4 percent during 1980s, and simply 1.1 percent from 1990 to 2003. Moreover, the fact that China attracted more FDI than any other developing countries despite of retaining capital controls weakens the claim that liberalization is indispensable to attract foreign investment. Another similar example is of Hungary which during early-to-mid 1990s attracted the greatest amount of FDI in Eastern Europe regardless of maintaining short-term capital restrictions.

This must be recognized that financial stability and economic growth are 'inseparable'. One way to analyze this notion is the 'complementary' nature of stability and growth. Policies which are prone to instability or lower incomes today are likely to hinder growth and output in future. Economic fluctuations and volatility in general and crises in particular have massive costs in achieving dual objectives of growth and stability. Even the exceptional cases of fast recovery i.e. v-shaped recovery are not exempted from these costs because crisis has tendency to put economy on low growth path even after recovery because an economy that had, for instance, growth rate of 8 percent and then suffered a 5 percent drop in it due to crisis actually experienced 13 percent decline in real terms.

Another way to see the stability and growth relationship is the existence of 'tradeoff' between the two. As noted in IMF Global Financial Stability Report of 2012, a system that is too safe may limit the funds available for lending (e.g. minimum capital requirement that is too high) and hinder growth. It implies that maintaining more capital is a simple, direct and effective approach to stability, but it limits growth prospects. Thus, it is conflicting and hard for financial institutions to strengthen their balance sheets and capital reserves in order to satisfy stability-ensuring regulators along with increasing their lending to businesses in order to enhance economic growth.

A consensus has been developed that developing and emerging countries do not have prerequisites for FL to be successful, but no consensus exists on whether they should take FL as their ultimate goal. Even sound financial systems with improved regulatory framework might withstand some of instability. Impediment of economic growth is also another issue to be cautious about. Thus, liberalization of financial and capital markets may not necessarily be a long term goal of all developing and emerging economies. Particularly the smaller countries may never be able to sufficiently safeguard themselves from instability accompanying liberalization. This implies the need for some form and degree of capital controls to provide tools to manage risks associated with free capital movements, especially short-term flows.

The analysis of third generation models of speculative attack followed from first and second generation models is particularly relevant in this respect.

# **Section 6. Capital Controls and Third Generation Models**

Although this dissertation took the case of Asian and Latin American crises of 1997-98, the currency crisis of 1992-93 in Europe and 1994 crisis in Mexico motivated the modeling of speculative attacks on government controlled exchange rates. Since then, it has been a usual practice to group various analytical treatments of crises in first, second and third generation models.

Introduced by Paul Krugman (1979) in his seminal paper 'A model of balance of payment crisis', the first generation models consider a passive government and central banks with incompatible policies to deal with fiscal deficit by engaging rate of monetary expansion inconsistent with the stability level of prices and exchange rate. The problem lies in the passive and transparent behavior of monetary authority which is perfectly known to the speculators. So a sudden speculative attack on fixed exchange rate apparently emerging from irrational change in expectations of investors is actually emerging from their rational behavior, as they foresee monetary authority's foreign reserves drying out as result of excessive deficit up to a level where it is not possible to continue maintaining fixed exchange rate. Consequently, investors hold currency as long as fixed exchange rate is maintained but get rid of these holdings when they anticipate that fixed regime is near to its end. On the other side, monetary authority does not have any perfect information about speculators' behavior which demands a challenging task of modeling the mutual interface between speculators and monetary authority.

The second generation models are introduced by Obstfeld (1986) in his paper on 'Rational and self-fulfilling balance of payment crises' which argue that reservations about central bank's willingness to maintain fixed exchange rate lead to multiple equilibria. It suggests the existence of self-fulfilling prophecies i.e. investors attack the currency in the expectation of other investors' attack on the currency. Contrary to the first generation, the second generation models do not accuse policy inconsistency before crisis, rather crisis itself prompts a policy change that makes the crisis self-validating. That is, the expectation of fundamentals expansion *ex post* pulls the economy into crisis.

Third generation' models explored the interaction between currency crises and financial system. For instance, the over-borrowing by banks to finance moral hazard is a form of hidden government debt as governments have to bail out insolvent banks (McKinnon and Pill,

1996; Corsetti, Pesenti and Roubini, 1998) or currency crisis leading to banking crisis in case of large holdings of debt denominated in foreign currency, particularly in the face of government guarantees (Burnside, Eichenbaum and Rebelo, 2004). Third generation models predict the possibility of good and bad equilibria with more focus on private financial intermediaries.

The evaluation of capital controls is most useful and relevant in context of such multiple-equilibrium financial structure models. Some fundamental models of financial market structure are as follows:

## **6.1 Bank and Country Runs**

The classical Diamond-Dybvig (1983) model of bank runs provides a defined environment with demand for liquidity allowing banks to perform maturity transformation function which is welfare enhancing in equilibrium. But there is also a second equilibrium which leads to bank run in which all depositors try to withdraw their funds leaving bank to liquidate its assets for meeting these withdrawal demands.

There are two main factors in Diamond-Dybvig model: First is that higher returns on investments require funds to be committed for some periods of time as assets held to maturity offer higher returns than assets sold before maturity. Second factor is the uncertainty as when funds would be needed because it is probable that an investor may require to liquidate his assets before maturity. Bank can offer liquidity risk insurance to individuals by accepting their deposits to invest in long-term assets by specifying in the deposit contract the amount of withdrawal prior to maturity which would enable bank to maintain the level of reserves needed to meet withdrawal demands by 'impatient' depositors. In this environment, 'patient' depositors will be better off if they hold their assets till maturity but if they expect withdrawals by other patient depositors, it will be individually rational for them to do the same which would lead to bank run. Despite of liquidating its assets, bank would have insufficient funds to meet withdrawal demands by all patient depositors thereby resulting in bank failure. This idea of patient and impatient international investors is vital in the analysis of capital flows.

The Diamond-Dybvig model is also used by Chang and Velasco (2001) for the analysis of international capital flows. If domestic depositors believe that foreign lenders will not prolong

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short-term credit may also trigger a bank run resulting forced closure of domestic banks. Thus

the presence of short-term foreign borrowing increases the domestic financial sector more

vulnerable and fragile. Therefore the nature of financial instruments traded exhibits investors'

behavior as impatient investors having high probability of country run are more likely to

prefer short term debt instruments.

There are three principal solutions regarding international capital flows which emphasize on

the nature of the deposit contract have been studied:

**6.1.1 Narrow Banking** 

Narrow banking characterizes what is earlier termed as 'required reserves' which may reduce

the possibility of run by maintaining certain level of reserves to meet withdrawal demands,

but they do so by reducing bank's ability of maturity transformation. This implies the

economy's return to the autarkic equilibrium.

Capital control regime under narrow banking requires the maturity structure of a country's

foreign liabilities to match the maturity structure of its foreign assets. This solution to country

run is relevant in the context of international financial markets. For instance, emerging

economies usually borrow short term for investing in domestic capital stock and for building

foreign exchange reserves. But the necessity of liquidity transformation as welfare-improving

aspect of international lending is not clear.

**6.1.2 Suspension** 

Suspension of convertibility implies that bank can maintain reserves sufficient to meet

withdrawal demands of impatient depositors but it can simply suspend convertibility in case

of additional withdrawals. As its result, bank will have ample funds because it suspends

convertibility when deposit withdrawals are threatening its reserves. Consequently, impatient

depositors can withdraw their funds whereas patient ones have no incentive to withdraw when

they know that bank can meet their demands with its ample funds. Without affecting maturity

transformation ability of the bank, suspension acts like an equilibrium device by ensuring

good equilibrium in economy without creating runs.

This suspension clearly advocates capital controls as policy to avoid crisis. Even before the

creation of the FED, it was customary for US bank to suspend convertibility during banking

crises. Another example is the proposal for IMF sanctioned suspension of debt service payment.

## **6.1.3 Equity Investment**

Another solution involves the alteration of deposit contract by replacing it with equity stake. Under this arrangement, impatient depositors are enabled to sell their shares at market price while patient depositors can buy additional shares. While eradicating the likelihood of a run, equity contracts may prove worse than deposit contracts as a means to provide liquidity insurance.

However, this potential incompetence is less relevant in case of international capital flows where stability of domestic financial sector is more important than liquidity provision. Although equity contract solve problems of bank and country run, these contracts become less attractive when other imperfections of credit market are recognized e.g. imperfect information leading to agency costs and collateral demands etc. In this setting, bank's ability to raise funds is inhibited by the fluctuations in bank's share price.

In addition to these three main solutions, options of explicit 'deposit insurance' and 'international lender of last resort' to provide implicit insurance are also considered to be useful. These options might work as alternatives to capital controls for avoiding bank runs. But again, one may think these choices have moral hazard implications, as discussed earlier in this chapter. Besides these options, regulations may take form of prudential regulations to limit riskiness of underlying asset portfolio or the form of capital controls to change the incentive to run. In this aim, it is of utmost importance to evaluate the core reasons for investor runs and panics which make financial markets fragile.

## **6.2 Herding**

One such reason is associated with 'herd behavior' i.e. founding one's actions to a large extent on others' actions. Individuals exhibit herd behavior when they tend to mimic rational or irrational actions of a larger group. A key reference on this subject is the classic paper of Grossman and Stiglitz (1976) which exhibited the information aggregation in financial markets. Plott (2000) and Hey and Morone (2004) studied herd behavior in financial markets with particular focus on stock market. Beine, Benassy-Quéré and Colas (2003) also found empirical evidence on herding in the foreign exchange market.

Instead of relying on their own information about fundamental conditions, investors base their actions on what others are doing. Actions of others speak louder especially in event of a crisis when investors tend to disregard and ignore their private information while following and copying others' behaviors and actions of early movers. Now it is interesting to note that when few investors who are early movers liquidate their holdings in a country, other investors think that there must be good reasons for this action whereas actually there may not be any reason for this action. But this inference also leads other investors to liquidate and to stimulate a run. In this respect, there are two important aspects: one is the quality of investors' own information i.e. if it is of good quality, investor may ignore others' actions while relying on his private information. The other element is the belief about the quality of information possessed by other investors, i.e. belief that other investors who are liquidating have better information leads to herd behavior. It infers that actual problem is the information and the lack of information. In this regard, public information can be of some help but it entails credibility problem. Government may try to provide some information on the condition of the economy, but it would probably release only that information which can curtail the panic.

The ability to respond to others' actions generates the information cascades that my lead to panic outflows. However, capital controls can stop such outflows during crisis by making it expansive and difficult through limiting the actions available to foreign investors which could be copied by other investors. Information cascades also have implications for contagion because information from observing others' actions is not perfect or precise. For instance, it does matter that international investors during currency crisis expect fall in return due to country specific factors or due to the general factors. In latter case, they would conclude the lower expected returns not only in country facing crisis but in all countries. However, herd behavior often results in case of poor information so it is not very probable for investors to draw clear inference regarding crisis spurring either from country specific factors or from factors affecting all countries in similar manner. Thus any sign of crisis spread may promptly lead to outbreaks in other countries. Incorrect information leads to information cascades which result in runs generating inefficient outcomes. The provision of better information is not possible, as described earlier, due to credibility problem which exists with domestic government as well as international agencies as they do not have any incentive to provide release correct information unless it is good.

#### **6.3 Rational Information-Based Runs**

The Diamond-Dybvig model of runs as well as herd behavior arising from information cascades are basically reflective of bubble phenomena, i.e. there is no key reason of the runs. But contrary approach is the occurrence of runs on the basis of fundamental and rational information. Bank portfolios as subject to risk and depositors having imperfect information about value of these portfolios leads to inference that any new information about returns on one category assets would inter alia affect prices of other assets with correlated returns (Kaminsky and Reinhart, 1999). Especially in case of bad news about returns in one country, investors might sell off their holdings in other countries. Such type of contagion is resulted from a rational response to any new information. Regarding the role of information on bank runs, the work of Gorton (1985), Bhattacharya and Gale (1987), Jacklin and Bjattacharya (1988), and Chari and Jagannathan (1988) holds a seminal position.

Suspension of convertibility can be an efficient response of banks to information based bank runs in order to give signal to depositors about its health. However, those individuals who actually need to withdraw for liquidity reasons are worse off *ex post*. As noted by Friedman and Schwartz (1963), restrictions on payments ensured that 'panic(s) had a reasonable small effect on the banking structure ... and gave time for the immediate panic to wear off ... (nevertheless) they are regarded as anything but a satisfactory solution by those who experienced them, which is why they produced such strong pressure for monetary and financial reform' (Friedman and Schwartz, 1963, p. 329). Diamond-Dybvig (1983) also contend suspension of convertibility as an optimal mechanism for preventing runs unless real expenditure needs for a given period are definitely known.

### **6.4 Insurance Attacks**

There are certain distortions created by lender of last resort solution to runs and resulting panics. It provides incentives to investors to acquire insured claims on residents and then acquire government's assets due to optimal yield differentials (Dooley 2000). These incentives of private investors and timing of investment decisions are determined by the credit constraints of developing countries' governments.

This type of free insurance increases the market yield on certain liabilities for certain time period. This yield differential results in private gross capital inflow which lasts till speculative attack. The private inflow is inevitably accompanied with increase in the government's

international reserves, current account deficit, and gross private capital outflow. When the government's reserves are matched with its contingent insurance liabilities, it would drop the expected yield on domestic liabilities below market rates. It leads investors to sell their insured assets to the government thereby exhausting government's reserves. In this case, the speculative attack is completely anticipated and nothing extraordinary happens to the fundamentals or fundamentals expectations.

The conditions under which insurance is credible differentiate developed countries from developing countries. It is rational for developed countries to assume that governments can always borrow for fulfill its insurance commitments, thus they have to constantly monitor private sector to discourage any efforts to misuse insurance. On the other side, it is rational for developing countries to assume that government will face market interest rate in the face of crisis making it unviable to borrow while insurance commitments are credible only in the presence of assets with pre-determined interest rates that can be liquidated to facilitate the insurance. It must be noted that insurance related distortions emerge only when government has acquired assets and these distortions are not long lasting as private sector would instantly set out to apprehend these government's acquired assets.

In this connection, capital controls can prove useful. For instance, regulation of capital inflows can be effective in starving an insurance crisis by limiting the fuel that can endure it. Since insurance exploiting investors usually hold assets for shorter time period as compared to honest investors, therefore, the sequence of capital flow and crisis has predictable spell. A transaction tax may also be levied on such capital flows if spell is short and this tax would remove the reason to exploit the insurance.

## Section 7. Capital Management and Re-imposition of Controls

Interest in capital controls has been highly cyclical as observed by Tobin (1996) "the interest that occasionally arose came from journalists and financial pundits. It was usually triggered by currency crises and died out when the crisis passed from the headlines" (Tobin, 1996, P. ix-xviii). Financial crises being a frequent phenomenon in recent years have led to the recognition of obvious welfare costs of crises and to a general reassessment of strategies for liberalizing repressed financial systems. Most of the developing countries maintain restrictions and controls through post-World War II till 1970s after which general push for

deregulation and liberalization forced them to dismantle these controls. Most of the debate on liberalization is referred to the series of crises during 1990s hitting emerging market economies of developing countries in Asia and Latin America most of which have more developed financial and capital markets and better administrative capability than the least developed countries. However, there were still some countries in Asia including India, China, Vietnam, Taiwan etc. which despite of IMF's push for liberalization maintained capital market regulations during much of the 1990s which helped to insulate these countries from contagion during the crisis of 1990s.

Notwithstanding general skepticism regarding capital controls, growing number of economists are now starting to agree that emerging markets should think about adopting policies inclined to limit the volatility of capital flows. So much so that IMF which at one point was considering to make free flow of capital as one of its primary goals has now become more flexible on this issue during recent years. Michael Camdessus, Managing Director of IMF, encouraged East Asian countries to consider imposing temporary controls "because of the greatest threat to instability is posed by more volatile short-term inflows...the adoption of prudential requirements vis-à-vis short-term inflows has played a useful role" (Camdessus, 1997). An argument in favor of controls is the failure of individuals' ability to internalize the effect of their indebtedness on the interest rate for the rest of country's residents and government. High stock of debt held by some individuals increased their default risk which makes international lenders to impose 'risk-adjusted interest rate' on whole country's debt. This distortion theoretically asks to levy tax on foreign debt holdings. But this argument is not very popular in the proponents of capital controls. A body of evidence exist on the effectiveness of the controls in successfully switching capital inflows away from shortterm flows (Calvo and Reinhart, 2000).

But a general argument against imposition of controls is that they inhibit the optimal allocation of resources, prevent optimal portfolio diversification, stimulate irresponsible macropolicy, and lead to corruption (Cooper, 1998). Case of Latin America is presented by Edwards (1999) to establish the ineffectiveness of preventive controls on capital outflows as they can be easily evaded thereby leading to corruption and bad policies. According to him, although controls succeeded in stretching the maturity structure for foreign indebtedness which reduces vulnerabilities to unexpected reversals, however this is attained at the expense of higher cost of capital. Glick and Hutchison (2005) find evidence that capital controls may

actually make a country more vulnerable to currency crises. Another argument against capital controls is the possibility of circumvention and evasion which can make these controls ineffective. But controls can perform its function just like a dam that stabilizes the flow of water even through making some flood whereas one rush of water in the absence of dam can cause complete destruction. The aggregate amounts can be significant in long run but flows are still moderated in the short run.

In order to manage the surge of capital flows, carefully designed capital controls can be appropriate. In this regard, it is explained by Veronese (2010) that K-controls in emerging and developing economies are justified by IMF, in post-Washington consensus era, on basis of following conditions: flows are likely to be transitory; exchange rate is not undervalued; there is adequate reserve level, and economy is close to potential. However, he argued that it is not simple and objective to judge the presence of these conditions. By reviewing literature produced during 1990s, we found that contemporary view of capital controls seemed to be relevant only for developing and emerging countries. That view is driven by the experience of the 1994 Mexican peso crisis and ensuing tequila effect that affected Latin American; the 1997 East Asian financial crisis, the 1998 Russian ruble crisis; the 1999 Brazilian crisis; and the 2000 Brazilian and Argentine crises. It would be interesting to refer to Mundell's<sup>33</sup> 'impossible trinity', also known as 'trilemma', which opened a new point of discussion on capital controls. A major inconsistency between the trinity of fixed exchange rates, monetary policy that determine domestic interest rates, and free international capital mobility. Impossibility of trinity can let a country to have any two out of these three. Exchange rate and interest rate are considered as more important as a country is not likely to grow if it gets these prices wrong. It implies that policymakers have every reason to control these two variables. However, there is no comparable reason to want free capital flows, which made convincing case for capital controls.

Apropos to the problems related with fluctuations and volatility of capital flows, some analysts also argue for options other than capital controls. One such option is 'full dollarization', i.e. replacing the domestic currency with the dollar. The shift between assets and liabilities denominated in domestic currency and assets and liabilities denominated in foreign currency is 'pro-cyclical', the best way to completely remove the short-term and

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<sup>&</sup>lt;sup>33</sup> MUNDELL, Robert A. (1999), "The Prize in Economics", *Press Release*.

speculative movements is the 'abandonment of domestic currency'. However, it is accompanied with the surrender of monetary policy and exchange rate as policy instruments. Thus it would be better to use improved regulations and controls for stabilizing the domestic currency. Although these regulations and controls entail various costs but these costs are still lower than the costs associated with complete abandonment of domestic currency (Caprio, Honohan and Stiglitz, 2006).

Thus, there are contending views for and against capital controls. The conventional wisdom that developing countries should use capital restrictions but gradually dismantle them with development of institutional framework is too simplistic to have practicality. Such 'monotonicity' in controls i.e. steady decrease in magnitude of controls is irrelevant and undesirable. Rather, it is more realistic to determine the optimal mix of controls as per country's development phase and its economic and institutional capabilities. In this aim, most fundamental is the ability to adjust controls according to changes in economic conditions. This implies that governments of emerging and developing economies must have sufficient autonomy for imposing and re-imposing capital controls according to their own circumstances instead of taking dictation from IMF<sup>34</sup>. In this regard, a fundamental issue is whether interventions for controlling capital flows can remain effective in liberalized and integrated financial markets, which makes the appropriateness and suitability of capital management tools greater than ever.

The growth of derivatives market has made the capital management and the proper formulation and implementation of regulations more complicated. This has made some economists and policymakers to even argue to give up traditional capital management techniques due to their ineffectiveness in modern times. This sophistication of financial and capital markets has also made it easier to circumvent restrictions. Even some researchers suggest the inability of capital controls to effectively stop massive capital flight and balance of payment crises (Kaminsky and Reinhart, 1999). But despite of losing potency over time, the improved techniques to strengthen the effectiveness of traditional regulations can still help in moderating capital flows and their volatility.

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<sup>&</sup>lt;sup>34</sup> Again, there are issues related with political economy of capital mobility and controls. But here, our objective is to solely focus on financial and macroeconomic aspects.

An important classification in this regard lies between direct and indirect controls. Direct capital controls are either price-based or quantity-based regulations, as discussed in subsection 7.1. Indirect capital controls, as discussed in sub-section 7.2, are generally prudential regulations imposed on financial institutions in order to indirectly affect capital flows.

# 7.1 Design of Interventions – Direct

How the government designs its intervention is of primary importance. In this respect, the real variables e.g. unemployment, growth, incomes etc. are of direct concern as compared to the financial variables e.g. interest rate, inflation, exchange rate etc. which are of concern only to the extent that they affect the real variables. However, governments are better able to monitor and control these financial variables then real variables.

In this aim, interventions can be price-based e.g. taxes, subsidies etc. or quantity-based e.g. controls, administrative restrictions etc. Price-based interventions are flexible, in accordance with market incentives and with lesser opportunities for administrative manipulation. For instance, in 1998, Malaysian authorities designed 'exit tax' which implies that money can be taken out of the country at a cost. Similar tax can also be imposed on capital inflows because if there is less short-term money in the country, there is less that can leave the country. Direct regulations or taxes are among the most controversial forms of capital market interventions. However, such tax can be reduced over time to phase out intervention gradually to avoid abrupt disturbance due to its elimination. But theoretical research shows that at times, quantity-based restraints can reduce risk more successfully than price interventions by arguing that controls are better than fines and penalties. Practically speaking, the choice between price controls or quantity restrictions depends on the specific situation confronted by a particular country and on its administrative capability. They can also complement one another under various circumstances.

Regulating inflows versus regulating outflows is also an important aspect of capital market interventions. Most economies prefer putting more regulations on inflows as compared to outflows because it helps in preventing cries which is considered the ultimate objective. Moreover, regulating inflows involves more transparency and less uncertainty due to which investors are aware of the cost of their decisions before making investment.

Regarding controls on outflows, it is written in an article 'A place for capital controls' of the *Economist* magazine on May 2003 that 'experience suggests some rules. One rule is refrain from blocking capital outflows which is tempting at times of crisis. Such measures are usually oppressive, and deter future inflows of all kinds' (Economist, 2003). But empirical support for this assertion is limited. A very relevant example in this respect is of Malaysia which put restrictions on capital outflows i.e. exit tax during Asian crisis. This step is criticized by analysts who claimed that it would hamper Malaysia's capability to attract capital in future and also predict massive capital outflows once restrictions were removed. What happened in reality was contrary to these claims and predictions when tax is lifted in 2001. The expected return on investment was increased as a result of forward looking investors and Malaysia's positive fundamentals such as high saving rate, current account surplus, moderate external liabilities, and large international reserves.

Market failure in terms of collective or coordination problem can be solved by restricting outflows. Herd behavior is exhibited by creditors as well as investors during crisis as they all together want to pull their funds out of the country which tends to weaken the exchange rate and interest rate leading to overshoot of sustainability and market collapse. Since the markets often rebound subsequently, investors and creditors would have been better off collectively if they had left their funds in the country. Thus, imposition of controls on outflows may solve the collective action problems thereby stopping overshooting and rebounding markets. Despite of being cliché, such kind of control seems to implicate the 'fallacy of composition' by putting controls on individual actions in order to prevent the hazards of collective action.

Regulations on capital outflows are criticized for being unfair as they alter the parameters of original investment after investment has been made. The high probability of imposition of such regulations might increase investors' risk which leads to an overall reduction in investment. But again, this argument can either be served in favor of or against restrictions. If authorities are targeting to reduce short-term inflows during a boom, the fear of potential controls on outflows might have the anticipated effect by decreased inflows. Particularly in the event of a crisis which limits the available options, targeting outflows might be a suitable policy.

An important feature in design of direct market interventions is that they generally segment the domestic capital markets from international capital markets. For instance, regulations restricting individuals and firms to borrow in foreign currency, regulations restricting foreign individuals and firms to hold domestic currency assets and/or liabilities, and regulations restricting domestic banks to hold foreign currency assets or to lend in foreign currency.

#### 7.1.1 Market Segmentation

The basic aim of segmentation is safeguarding the domestic economy from volatility stemmed from liberalization of capital flows, without affecting current account or trade flows. In the scenario where most of the developing countries do not have well-established capital markets, the best solution is to create the long-term foreign demand for domestic currency assets and to develop strong insurance markets for protecting exchange rate and interest rate fluctuations. Since such optimal solution is normally impossible in near term, thus the second best solution is to segment domestic flows from external flows. Although domestic capital markets of developing countries already have such segmentation due to the absence of any stable source of foreign demand for domestic currency securities, however, more segmentation can be induced through imposing controls and regulations. Segmentation is particularly evident with traditional quantity based regulations imposed to forbid or discourage the use of foreign current for domestic transactions.

Soft control is a form of direct intervention which plays an important role in segmenting domestic markets from international markets. Soft controls restrict those sectors of economy which tend to affect foreign exchange market in order to prohibit them from generating procyclical disturbance e.g. requiring domestic pension funds to invest only in domestic market. Such measures also facilitate the development of domestic capital market by creating demand for domestic securities and building domestic capital base. Soft controls are also criticized as they limit the ability of domestic funds to diversify. However, this is a trade-off because the growth of domestic capital market and expansion of domestic capital base would improve the value of returns for all in long run.

The analysis of research by Ocampo and Stiglitz (2008) found three reasons for positive macroeconomic effects of segmentation:

#### 7.1.1.1 Stabilizing the Demand for Assets Denominated in Domestic Currency

Most of the domestic currency assets are held by domestic investors. It is logical to improve long term international demand for these assets because foreign holdings of domestic assets

are usually speculative and short term determined by currency expectations. Changes in international expectations and sentiments can be destabilizing for the foreign exchange market making it crucial to use regulations to reduce the speculative attractiveness of domestic currency assets for foreign investors and to inhibit the expansion of premature offshore market for the domestic currency.

Currency expectations along with interest rate differentials also lead domestic investors to transfer their investments between foreign currency and domestic currency assets but their demand for domestic currency assets is often long terms. Interventions and regulations in capital market segment the market thereby reducing the capacity of domestic investors to shift the domestic currency assets into the foreign currency assets and eventually stabilizing the domestic demand for domestic currency assets which play key role in the growth of country's capital market.

# 7.1.1.2 Protecting Economy from Pro-cyclical Foreign Borrowing

Most of the assets and revenues of domestic investors are denominated in domestic currency but they are tempted to take foreign currency liabilities when debt is available at lower interest rate. Such currency mismatch between assets and liabilities entails sizeable risk associated with depreciation which causes increase in the value of foreign currency debt and may hamper ability of borrowers to service and repay these loans. Moreover, foreign loans are mostly available during a boom, so they can be demanded to be returned when boom is over. Such supply of funds intensifies the economic fluctuations.

In case of domestic currency appreciation expectations, domestic investors borrow more in foreign currency in the hope that currency appreciation would reduce the value of their foreign loans. But the use of these external funds to purchase domestic currency assets actually increases the demand for the domestic currency and thereby appreciation. However, in case of domestic currency depreciation expectations, domestic investors are inclined to shift their foreign liabilities with domestic currency debts for which they need to buy foreign currency in order to pay back their foreign debts. In this aim, they have to sell domestic currency assets for buying foreign currency thereby leading to large devaluation. In short, the foreign currency borrowing fuels the currency fluctuations and multiplies the destabilizing effects of such pro-cyclical foreign funds. These fluctuations can be controlled by imposing

regulations to restrict the domestic investor having limited foreign currency assets to borrow in foreign currency.

# 7.1.1.3 Improving Government's Capacity to Control the Macroeconomy

Government gets more control on exchange rate due to segmentation. The monetary autonomy i.e. using restrictive monetary policy during euphoria and avoiding excessive contraction during crisis is dependent of limited capital flows that can be ensured with extent of market segmentation. In the same way, exchange rate as an essential tool for macroeconomic management can be made more effective with the use of market segmentation. Particularly when country has huge volume of foreign currency debts, the currency devaluation has balance sheet effects leading to decline in aggregate demand which would offset the positive effect of devaluation i.e. increase in exports. This situation can be avoided by making exchange rate adjustments through market segmentation in order to avoid currency fluctuations and resulting financial instability of domestic financial system.

#### 7.1.2 Costs of Direct Interventions

The imposition of direct taxes on short-term capital inflows have been among the policies proposed by various economists. However Michael Camdessus, Managing Director of IMF states that "in our experience, direct quantitative controls on capital inflows rarely work for any sustained period" (Camdessus, 1997). Although economists have criticized the different types of intervention in capital market, however, empirical work on the costs of each type is limited.

# 7.1.2.1 Corruption and Cronyism

Direct controls, especially the quantity-based, are often criticized for encouraging corruption and cronyism. Although the costs associated with corruption are hard to quantify, the benefits of such regulations can be assumed to outweigh the related costs on the basis of effectiveness of these regulations in several countries like Chile, Colombia, and Malaysia. The foremost requirement in this respect is the presence of administrative capacity in terms of regulatory frameworks, efficiency and effectiveness in implementation and the speed with regulatory framework is adapted to changing circumvention techniques. Particularly during crisis, this capacity becomes more relevant as the absence of it can generate serious credibility issues. Instead of shifting from one kind of regulations to another type of restriction, it is better to build a permanent regulatory regime which can be tightened or loosened through economic

cycles. The most important thing is the autonomy needed to impose or reimpose controls whenever required.

# 7.1.2.2 Hindering Domestic Financial Development

Capital controls are criticized for obstructing the development of domestic financial institutions by giving examples of quantity-based control in India and China. It is argued that China would have faster restructuring of its financial system with open capital markets. However this argument can work equally well in favor of controls because most of the countries restructured their financial institutions through 'shock therapy' which often led to collapse of their financial systems and resulting protracted recession while China with 'gradual' restructuring by maintaining capital restrictions managed its transition with high growth.

#### 7.1.2.3 Hurting Small and Medium enterprises (SMEs)

Direct controls, particularly price-based restrictions may be aimed to provide room to government to increase the interest rates during economic expansion. The purpose of such restrictions is to discourage short-term capital inflows in order to prevent increase in consumption and its resulting creation of financial bubbles. Although government wants to burst this bubble by increasing interest rates, but it also needs to encourage long-term investment, FDI and development of SMEs while higher interest rates during economic expansion are tended to undermine lending to SMEs. Particularly in the event of crisis, SMEs suffer even harder and severer than large domestic and foreign firms. But then, governments being anxious of inflationary pressures from cutting back government expenditure or raising taxes do not have choices other than capital restrictions. In this aim, governments can design policies to mitigate adverse effects of capital restrictions, for instance, measures to encourage FDI which eventually set up incentives to stimulate domestic lending to SMEs.

#### 7.2 Design of Interventions – Indirect

In addition to the direct quantity-based and price-based regulations, interventions can also be taken in indirect forms, like prudential regulations, in order to control capital flows. For instance, putting limit on banks' short-term foreign borrowing or demanding them to match their foreign currency liabilities with foreign currency assets. Numerous countries have also controlled the impact of exchange rate volatility through such regulations. These indirect restrictions are criticized for their potential to discourage borrowing due to elevated cost. But

this is actually the purpose i.e. to raise cost of borrowing during external financing boom to avoid the ensuing bust.

Another type of these regulations is requiring banks to maintain high liquidity or reserves which act like tax on foreign currency liabilities. High reserve requirements on short-term borrowing encourage long-term liabilities. In addition, domestic financial institutions may also be forbidden to hold deposits in foreign currency in order to avoid domestic financial dollarization. Risk-adjusted capital adequacy requirements can also be imposed to take the mounting risk into account. In countries with deposit insurance, higher insurance premiums can be demanded from banks involved in riskier practices in order to indirectly discourage them taking great foreign exchange exposure. The costs of prudential regulations, higher reserve requirements, high deposit insurance premiums etc. basically reveal the higher risks involved in certain kinds of activities – the risks for which society bears the costs. Thus, such regulations are also aimed to meet the gap between social costs and private benefits. Since these are usually the large firms and corporations which are involved in foreign borrowing and foreign exchange exposures, it is imperative to pass on its costs to these firms. This may also discourage banks from lending to these large firms thereby increasing available funds for small and medium firms.

Prudential regulations to take into consideration the foreign exchange exposure of firms borrowing from domestic banks also have systemic perspective. Since most of the capital flows in an economy are mediated by banks, the regulations targeting financial sector have major economic impact. Unless regulations concentrate their attention on the exposure of non-financial firms, the impact of the financial sector can be vitiated. For instance, if regulations only restrict banks from holding foreign currency liabilities, firms may borrow directly from abroad. Thus it is crucial for banks to scrutinize the entire balance sheet of the firms to which they are lending. The detailed analysis of prudential regulatory framework, bifurcated into micro-prudential regulations (aimed at the safety of individual financial institutions) and macro-prudential regulations (aimed at the safety of financial system as a whole), will be undertaken in the final chapter, for their implications on systemic risk and stability. The objective of studying prudential regulations at this point is only to understand their applicability for indirectly controlling capital flows.

Regulations can also take form of rules, ratios, and public disclosures regarding foreign borrowing for non-financial firms as well as form of limitations on terms of corporate debt that is contracted abroad, e.g. minimum maturities, maximum spreads etc. Moreover, regulations may also require full disclosure of derivative positions because foreign currency liabilities can be subordinated to domestic currency liabilities in bankruptcy proceedings which would discourage foreign borrowing and raise its costs. But again, this may actually the purpose i.e. limiting costs borne by the society at large. Another approach is the creation of adverse tax treatment for short-term foreign currency borrowings which may enable countries with corporate income tax having tax deductible interest payments to exclude foreign currency debt from tax deduction or make interest payments just partially tax deductible.

Regarding limitations of indirect forms, most of the indirect regulations are aimed at non-financial firms which seem more complicated to administer as compared to the direct capital account regulations. Additionally, even well-regulated banking system may face periodic euphoria. For instance, the 2001 crisis in Argentina exemplifies the failure of one of the best systems of prudential bank regulations in preventing the effects of macroeconomic shocks to the domestic financial system. Moreover, the traditional prudential regulations like the ones under Basle accord exhibit 'pro-cyclical bias'. Lending is restricted during economic slowdown due to high reserve requirements to counterbalance risky positions. Loan delinquencies during crisis further reduce the capital base and eventually the lending capacity of the financial institutions. This, in combination with greater risk perception encourages squeeze in credit and reinforces downsizing of economic activities along with weakening the portfolio quality of financial institutions. Whereas lesser loan delinquencies during economic expansion tend to make risk-adjusted capital requirements rather ineffective due to which preventive regulatory signals also become ineffective and fail to inhibit credit growth.

Summing up capital management, the presence of externalities with capital flows makes it desirable for governments to make some form and extent of intervention keeping in view its associated costs and adverse effects. The relative costs and benefits of interventions change as countries develop. There is a range of tools available to economic managers for intervening in capital markets. Some affect the risk properties of the economy whereas some affect the scope of macroeconomic management. Direct capital regulations may work better as they aim the actual source of the disturbance i.e. pro-cyclical capital flows. But developed countries with

stronger administrative capacities may choose combination of direct and indirect measures for restricting capital flows along with limiting circumvention of these measures.

# **CONCLUSION**

McKinnon-Show theory for FL and its adoption as neoliberal agenda by policymakers led several countries of Asia and Latin America to embark on liberalization of financial and capital markets with varying intensity. This embarkation left them with negative experiences taken from series of financial crises. Restrain towards the process of liberalization is resulted in order to alleviate this financial distress, often referred as 'mild repression'. Although there exists considerable arguments in favor of financial globalization and integration, the repeated episodes of crises demands rethinking on financial stability issue, an area still immature as compared to monetary and macroeconomic analysis.

In this connection, the most important is the fragility of capital flows which is exhibited as a primary risk associated with the liberalization of capital markets. This infers that liberalization should not be pushed on countries and it is duty of economists and policymakers to present their analysis and research in an accessible and convincing manner in order to protect developing and emerging countries from undue pressures for capital market liberalization. In fact, the interaction between domestic and international liberalization might result in a scenario where international capital flows feed the growth of welfare-reducing financial intermediation of domestic financial sector. Benefits from liberalization of capital markets can be sizeable only if countries have their 'house in order' i.e. liberalization in the absence of adequate regulation and effective supervision can easily and quickly lead to vulnerabilities which magnify the existing distortions. Thus the caveat for the presence of adequate institutional infrastructure implies that liberalization is still a long way off for developing and emerging countries.

The benefits of liberalization to economic welfare and growth may not be worth the costs of the crises. This implies the demand for 'restraint', a key offshoot of which is the reimposition of capital controls on international capital flows. New theoretical developments also submit that financial and capital markets are different from other markets e.g. commodities markets, because 'market failures' are more prevalent and widespread in financial and capital markets

as compared to other markets in the economy which suggest the need for some degree and form of government intervention.

However, there have been certain developments in international capital and financial markets e.g. growing use of derivatives, which are making the management of financial and capital markets complicated and difficult than ever, even for developed economies of Europe and US, as evident for 2007-2008 financial crisis which eventually turned into global recession despite of the presence of macroeconomic tools to combat boom and bust cycles along with sophisticated regulatory and supervisory framework. Before 2007, this volume of crisis of was not remotely imagined by economists and policymakers even in their worst nightmares, as they were confident about the strength of financial systems of developed economies due to their grand size.

While comparing developing countries as small boats on tempestuous sea of international finance, Paul Volcker, former Governor of Federal Reserve System, stated that a 'big ocean liner like the USS United States can safely navigate through a storm, but even the sturdiest vessel... (i.e. any developing or emerging country) is likely to capsize' (Volcker, 1998). The possibility of occurrence of crisis in US like the ones occurred in Asia and Latin America is also sturdily rejected by him by stating that 'the entire banking systems of Indonesia or Thailand or Malaysia are comparable to one good-sized regional bank in the United States. Their entire Gross National Products are smaller than the funds controlled by our largest financial institutions' (Volcker, 1998).

It was only few years after this proclamation that world saw 'USS United States' sinking like a vessel.

# CHAPTER 4. CURRENT FINANCIAL CRISIS OF DEVELOPED WORLD - NEW DEBATE ON NEOLIBERAL FORM OF FINANCIALIZED CAPITALISM

# INTRODUCTION

A financial crisis began in 2007 in US and rapidly spread to Europe. The genesis of this crisis of developed world was defaults on subprime mortgage loans and debt instruments backed by those kinds of loans. The realization that huge volume of defaults on subprime mortgages are going to spread to other sectors of financial industry started in July 2007 when Bear Stearns announced the worthlessness of assets held by two of its subprime hedge funds. It followed by collapse of securities market and bankruptcy of Bear Stearns in March 2008. From here started the series of bankruptcies, bursts, crashes, crisis and an economic recession, which most analysts compare with Great Depression of 1930s. The first section is closely focused on the occurrence of current financial crisis by briefly describing the mechanisms through which the global financial system collapsed.

Reckless risk taking through complex innovations like financial derivatives along with inefficient regulatory measures and irresponsible credit ratings are considered to be main explanations behind such huge crisis. But its actual roots are even far deeper. Current crisis happened despite of various measures on international front e.g. shifting from rules-based to risk-based capital requirements, international bodies like G-7 and G-10 collaborating with BIS and IMF etc. But these efforts were not sufficient to ensure more disclosure and transparency in the face of more integrated and sophisticated financial environment developing since last two decades, thanks to financial liberalization and globalization. It is also accompanied by technological advancements and more focus on non-bank financial institutions like hedge funds, equity funds etc. This trend enhanced efficiency of private finance in various terms but suitability and efficiency of regulatory and supervisory approaches were lagged. This led to new and unmeasured risks contributing to the potential for volatility, instability, and crises having tendency to spread beyond any virtual or geographical boundaries.

In this aim, the second section of this chapter has discussed in detail the weak foundations of global financial structure. Implicit or explicit safety nets acted as moral hazard for banks and

other financial institutions covered under this net because presence of unconditional assurances provide impetus for mindless risk taking. The resulting bailouts are distortionary as they put pressure on all citizens in form of increased taxation to be given to affluent risk takers and speculators. Another weakness is the failure to distinguish 'risk' from 'uncertainty' while ignoring Keynes's idea of uncertainty which also played important role to weaken the financial systems. In addition, banks took advantage of financial derivatives and other innovations and became more involved in speculative and risky treasury operation. But they forgot, in their enthusiasm of increasing profitability, to distinguish risk from uncertainty. Crises have more to do with uncertainty which follows from irrational risk taking. This also made market discipline inept to play any significant role in early detection and prevention of any imbalance to grow beyond certain limits. Moreover, various dynamics of financial markets have also changed significantly to become more conducive for 'feast and famine' phenomenon of magnifying the scale and frequency of crises. In addition to this, nature of systemic risk is also changed which demands transformation of preventive measures. Conventional tools based on assumption that systemic risk involves the flow of problems in one institution via interbank relations, payment system, deposit run etc. thereby threatening whole financial system. But this assumption narrows down the real threats because it ignores the extended opportunities for risk-taking.

The failure to completely and accurately realize these weaknesses in foundations of financial systems played key role in current crisis. And now, the measures to cope with this crisis are mainly based on 'financial repression' – a notion long rejected by developed economies and also made prohibitive for emerging and developing world. Developed economies are doing exactly the opposite of what they lectured emerging and developing economies in case of crises in those economies. Third section of this chapter has thoroughly discussed various repressionary measures of developed economies to prove that they are now following financial repression as part of their 'macroprudential' framework to safeguard their economies. It would be pertinent to mention here the difference between micro and macro prudential regulations. Micro-prudential regulations address those factors which affect the stability of individual institutions whereas macro-prudential regulations address those factors which affect the stability of the financial system as a whole. Upcoming reforms for the stability of the financial system are increasingly focused on macro-prudential framework which we will discuss in the final sector of this chapter. For the sake of rescue and recovery, government of affected economies are directly intervening to nationalize various big banks

and injecting equity in banks. Suffering from huge volume of private and public debt, governments are forced to lower the cost of debt by artificially maintaining low interest rates. These lower rates become even negative in scenario of steady inflation. Unlike direct taxes or spending cuts, this kind of financial repression acts as indirect tax. Financial repression in the aftermath of crisis has historical evidence because termination of laissez-faire was also followed even after Great Depression and 2<sup>nd</sup> World War. Modern financial repression also has various implications, even for emerging and developing economies, which are discussed in the same section.

The final section has an elaborated debate by relating current crisis with prevalent neo-liberal form of capitalism. As this crisis is occurred in the headquarters of capitalism, various voices are rising on the inherently unstable nature of capitalism. However, the actual problem lies with 'neo-liberalism' which motivated financial globalization and liberalization and led to 'finance-lead capitalism' as opposed to 'golden era of capitalism' from 1940s to 1970s characterized by regulations and state-capitalism. The creation of fictitious wealth inconsistent with creation of real wealth is the key feature of this financialized capitalism which was destined to be collapsed one day. Irresponsible and dishonest attitude of financial institutions is also vital in this regard with have brought the 'political economy' to the fore. Despite of large body of suggestions to transform regulation and supervision, no concrete step has been taken to suppress the hegemony of financialized capitalism and chances for such suppression also seem opaque at this moment. The only clear stance at this point of time is increasing focus on macro-prudential framework for ensuring stability of the financial systems.

#### Section 1. Incidence of Financial Crisis 2007-2008

The financial crisis of 2007 - 2008, also known as the global financial crisis, is considered by many economists to be the worst financial crisis since the Great Depression of the 1930s. Just like Asian crisis, this crisis was not generally anticipated by mainstream economists, who were rather talking about 'great moderation' i.e. reduction in the volatility of business cycle fluctuations due to structural and institutional advancements in developed markets. For instance, in US since mid-1980s, the standard deviation of quarterly real GDP declined by half, and the standard deviation of inflation declined by two-thirds (Blanchard and Simon, 2001). Even Robert Lucas (2003) declared his confidence on great moderation by stating that "central problem of depression-prevention has been solved, for all practical reasons" (Lucas,

2003, p. 1). Economists like him clearly ignored Minsky's warnings that great moderation enabled a classic period of financial instability, with stable growth encouraging greater financial risk taking (Minsky, 1982). Inability of economists and central bankers to anticipate current crisis can be clearly observed when FED Chairman Ben Bernanke, despite of being 'Depression economists', stated in FED's meeting during December 11, 2007 that "*I don't expect insolvency or near insolvency among major financial institutions*" (Bernanke, 2007, p. 89), whereas the economy was heading towards the Great Recession of modern times.

The collapse of various large financial institutions, bailout packages by national governments and downturn in stock and bond markets were experienced during current crisis. The crisis played a major role in the failure of vital businesses, drop in consumer wealth by trillions of US dollars, and a slump in economic activity leading to the 2008–2012 global recession and European sovereign-debt crisis. This crisis also gave rise to critical analysis of 'financialization', i.e. development and expansion of financial and capital markets to override real sectors' growth and development.

It all triggered with the US housing bubble that was fully blown in 2006 and started to burst in 2007 while dropping the values of securities connected to US real estate pricing thereby damaging financial institutions universally. In fact, the Russian debt crisis and Asian financial crisis during late 1990s accompanied large inflows of foreign funds in the US which made credit very easily and amply available. Therefore, the debt-financed consumer spending and housing boom were natural outcomes. Consumers were taking an extraordinary debt burden with various types of loans, especially mortgage loans. As banks started to extend more and more loans to potential home owners, the escalation of housing prices was also likely consequence.

This housing and credit boom was supplemented by growth of various financial contracts such as collateralized debt obligations (CDO) and mortgage-backed securities (MBS), which derived their worth from housing and mortgage prices. This financial innovation along with liberalization enabled investors and institutions worldwide to invest in the US housing market. Financial innovation depends greatly on securities and derivatives, all of which related closely with subprime mortgages i.e. extending housing loans and ownerships to risky borrowers without paying any attention to three C's: collateral, credit history and character.

Banks were involved in this malpractice because of the confidence that they can sell these mortgages to an underwriter or else, perform the function of an underwriter in order to sell these mortgages backed by securities of low quality. This exceptional development of subprime market also spurred the growth of Structural Investment Vehicles (SIVs), which generally took form of limited liability companies requiring trifling capital base thereby generating 'parallel banking' outside regulatory ambit and sowing the seed for current financial crisis.

The extremely illiquid nature and complicated structure of subprime market also misguided credit rating agencies which assigned AAA ratings to various low quality and even worthless securities. Stiglitz (2008) viewed rating agencies as main culprit by stating that "they were the party that performed the alchemy that converted the securities from F-rated to A-rated. The banks could not have done what they did without the complicity of the rating agencies" (Cited in Smith, 2008). Since large liquidity injections through CDOs and MBSs were not reflecting in monetary aggregates, and therefore their implications for financial systems and economy were impossible to monitor.

The local housing bubble of US became global when these securities are sold to international investors and served as contagion especially for Europe. Since banks were so avaricious in this off-balance sheet activity that when signs of credit crisis started to appear with declining housing prices, most of banks had more than desired accumulation of these worthless securities which intensified the losses of banks and related financial institutions (Arestis, Baltar and Cavalcante, 2009). Housing prices declined more than the mortgage loan which provided incentive for foreclosures. Such foreclosures which started in late 2006 eroded the financial strength of banks and other financial institutions leading to estimated global losses of trillions of US dollars.

A number of reports and studies were commissioned by US government to inquire the reason of this deep-rooted crisis. One of such report is 'US Senate financial crisis report' by Carl Levin and Tom Coburn published in Apr 2011 that asserted this crisis to be the consequence of highly risky and complex financial products along with undisclosed conflicts of interests on part of credit rating agencies (CRAs). CRAs are widely alleged for their immoral behavior because they get paid by the issuers of securities, due to which CRAs tend to give them their desired ratings. Another conflict of interest arises for CRAs for being in the advisory

business. The advisory arms of CRAs assist potential issuers to structure their offers in such a way that they can get desired rating. Thus, the 'rating arm' and 'advisory arm' of CRAs have conflicting interests from each other. Consequently, CRAs lost their credibility in the wake of current crisis as they had initially assigned high ratings to weak securities.

Failure of regulators also came to the fore with this crisis as reported by US Financial Crisis Inquiry Commission (FCIC). "The crisis was caused by widespread failures in financial regulation, including the FED's failure to stem the tide of toxic mortgages; dramatic breakdowns in corporate governance, including too many financial firms acting recklessly and taking on too much risk; explosive mix of excessive borrowing and risk by households and Wall Street that put the financial system on a collision course with crisis; key policy makers ill-prepared for the crisis, lacking a full understanding of the financial system they oversaw; and systemic breaches in accountability and ethics at all levels" (FCIC Report, 2011). Economists like Paul Krugman (2010) criticized the regulatory framework for not keeping pace with financial innovation, e.g. shadow or parallel banking, off-balance sheet financing, derivatives etc. Moreover, banking regulations based on Basel accords are also criticized in an OECD Report published in Dec 2011 for allowing unconventional business practices and resultantly reinforcing this financial crisis.

In this regard, the role of FED Chairman Alan Greenspan is also contentious who had been striving hard since late 1990s for keeping the derivatives market unregulated (Greenspan, 1997). Due to these efforts, over-the-counter (OTC) derivatives market was permitted to be 'self-regulated' in the legislation of Commodity Futures Modernization Act of US in 2000. Resultantly, the value of total OTC derivatives reached at US\$ 683 Trillion by June 2008 (Figlewski, 2009). May be, derivatives were rightly said as 'financial weapons of mass destruction' by Warren Buffet as early as in 2003 (Buffet, 2003). It was already too late when Alan Greenspan testified in front of "Congressional Committee of government oversight and reform" on October 23, 2008 for admitting his blatant faith on self-correcting power of free markets and his failure to anticipate the self-destructive power of ...deregulation (Greenspan, 2008).

In the aftermath of this crisis, institutional bailouts, fiscal stimulus, and monetary policy expansion were natural responses of central banks and governments for lessening the shock to the economy. US congress enacted the American Recovery and Reinvestment Act of 2009. In

July, 2010, the Dodd-Frank regulatory reforms were enacted to minimize the chance of recurrence. However, it must be noted that this crisis has deep roots which have seeped into the weak foundations of global financial architecture.

# Section 2. Weak Foundations of Global Financial System

This unmatched wave of financial collapse with shocking losses incurred by financial institutions has produced a body of literature which gives variety of explanations related with weak foundations of international financial structure.

#### 2.1 Financial Bailouts

There are enormous social costs of financial bailouts offered to insolvent banks. These bailouts, generally supported by IMF, are considered to be damaging as they involve bulky increases in taxation of all citizens to assist affluent risk takers. Such taxation often proved distortionary as it encourages unequal distribution of wealth. Bailouts also motivate risk takers to keep on taking risks i.e. moral hazard which encourages banks to involve in excessive risk taking – risk which they would not take if they are not unconditionally safeguarded by governments, central banks or IMF.

Calomiris (1998) described risk taking as two-step process in which first, the macroeconomic shocks diminish bank's capital base thereby increasing the devaluation probability. Due to these changes, bank's incentives and opportunities to take risk also augment. However, if there are no safety nets, macroeconomic shocks are tended to discourage excessive risk taking because bank needs to assure and calm its debtors and creditors. But when banks know that their probable losses would be borne by taxpayers through bailouts, they feel free to take any kind and amount of risk. That's why bank risk and fiscal risk nurture together that highlights the concurrence of banking and exchange rate failures. In addition to the banks and other financial institutions, large corporates also get government's protection on their loans, as we observed during current crisis.

Besides direct and instant costs in form of tax increases and moral hazard, a rather indirect and long term cost is related with the international political economy of IMF bailouts. Such bailouts allow US treasury to offer subsidies in form of liquidity assistance to foreign governments and international lenders. In order to finance these bailouts, IMF ensures increase in domestic taxation by putting it as a conditionality of bailout package. Moreover,

IMF funds are released in tranches which actually make this assistance ineffective in resolving liquidity problems.

Thus, all the expensive consequences of financial crises are not only the unavoidable results of moral hazard of bailouts. If the cost of a crisis is only the amount of wealth directly lost by activities of protected banks and corporates, Schwartz, Whalen and Todd (1998) suggestion to abolish IMF in order to protect international financial system from its safety net might be the best solution. But this is not the case because there are various indirect costs related with liquidity issue which amplifies the direct costs. This liquidity issue is further divided into four sub-issues including asymmetric information about the occurrence of noticeable shocks, speculators' expectations to overstate the effects of these shocks and to incur self-fulfilling financial collapse, contagion across countries, and the inclination of government's debt management towards short termism.

# 2.2 Failure to Distinguish Risk and Uncertainty

Revolution in information technology (IT) played a key role in not only speeding up financial transactions but also in calculating complicated risks. Market players continued to have to have illusion that their operations were prudent and virtually risk-free, as these players (mis)conceived risk calculations done by sophisticated IT as fool-proof. This trend changed the size and operations of the financial markets significantly. However, despite of all of its sophistication, IT is unable to evade the uncertainty that is intrinsic in future events. But market players were just unable or unwilling to understand this core different between risk and uncertainty. Frank Hyneman Knight's (1921) dissertation on 'Risk, Uncertainty and Profits' made a clear distinction between risk and uncertainty. It defined 'risk' as randomness with knowable probabilities and 'uncertainty' as randomness with unknowable probabilities. In the following passages, we will explain a commonly observed mechanism through which the inability to distinguish risk from uncertainty led to the weakening of global financial system.

It might be supplementary to note here that besides IT revolution, modification in the size and modus operandi of the financial system is also related with the decline of commercial banks' participation in financial operations and drop in their profit rates (Kregel, 1998). As a matter of fact, profitability of commercial banks was classically based on their ability to have non-interest short-term deposits. But after 2<sup>nd</sup> World War, FED's decision to directly manage

monetary policy for controlling inflation resulted in average increase in interest rates in US. FED kept on giving importance to monetary policy, despite of its limited ability in controlling inflation or stimulating economy. This trend resulted in reduction of non-interest deposits due to which banks' share in total financing declined. Commercial banks' share of the total assets held by all financial institutions declined from almost 50 percent in the 1950s to less than 30 percent in the 1990s (Bresser-Pereira, 2010). In this scenario, banks found them in dire need to find other sources of profit. So they started to invest in some of the interest earning deposits that they were inhibited to remunerate either in speculative and risky treasury operations or in the issue of even riskier financial innovations like derivative instruments that replaced classical bank loans. Especially new wave of financial innovations further facilitated banks in paying them off for their loss of a big portion of the financial business.

As a result of these two key forces, banks became more involved in classical tradeoff between risk and profit i.e. high risk-high return phenomenon. But they failed to distinguish 'uncertainty' from 'risk' because uncertainty cannot be determined on the basis of risk calculation. They just ignored Keynes's idea of uncertainty and his related critique to exactly estimate the future probabilities. However, it must also be noted that bubbles and crises are not only the results of irrationality in neo-classical sense or of the 'animal spirits' in Keynes sense. Financial bubbles and ensuing crises have more to do with that financial environment which is mainly characterized by uncertainty. Traditional economists believe that this uncertainty always results from irrationality or the inadequate information to act rationally. However, uncertainty is associated more closely with the impossibility to predict the future. Thus, the failure to recognize this phenomenon i.e. existence of uncertainty despite of calculating risk, also played a key role in weakening the foundations of global financial system.

# 2.3 Transparency and Market Discipline

The determination of risks is difficult when well-integrated banks and other financial institutions are involved in diverse instruments, markets and countries. For instance, a global bank in US can buy shares of a Japanese company and resell them in form of some derivative to global investors in different geographical areas and legal domains. This global distribution of financial risks has also made financial and capital markets very complex. Due to such liberalization and integration, the informational nature of balance sheets has become flawed thereby reducing the transparency of international financial transactions. Valuation of

different risks and their concentration is becoming harder for public and private stakeholders due to lessened transparency about the ownership of risk. This infers that rules and regulation of financial disclosure, especially for non-banking financial institutions such as hedge or equity funds have failed to keep themselves abreast with liberalization and integration of financial and capital markets.

Market discipline i.e. external incentives for all stakeholders to avoid insolvency, is considered to be the fundamental mechanism to limit leverage and risk taking beyond certain limits. Market discipline makes possible the timely detection of increasing financial imbalances and punishing the guilty party before these imbalances grow further to threaten entire firm, financial institution or market(s). This mechanism is based on presumption that any unjustifiable risk by a financial institution will be reflected in its share price or will hamper its ability to get deposits or raise capital which is not possible in real life due to incomplete information. In the absence of timely and complete information, it is not likely for market disciplining mechanisms to address imbalances before they turn into threats.

Besides diminishing the usefulness of market discipline, reduced transparency is also likely to weaken the effectiveness of financial supervision. Supervisory frameworks are traditionally based on customary intermediation activity of banks with more domestic orientation. But today, banks are involved in a wide array of financial services with more international orientation along with non-bank financial institutions engaged in banking-type activities that are not supervised. Resultantly, risk exposures now reside with those market participants which do not come under traditional regulatory and supervisory umbrella. In the perspective of current financial crisis, we observed banks selling off their credit risk to insurance companies, pension funds, hedge funds etc. for regulatory arbitrage because changes for credit risk are much lower or even non-existent for these non-banking institutions. The crux of this matter is that without timely and appropriate disclosures, it is almost impossible for those responsible for market surveillance to recognize the place and volume of risk and its concentration inside international financial system.

# 2.4 Configuration of Market Dynamics

The structure of market dynamics has been greatly transformed with the growing financial securitization and integration which can be observed from size of changes in financial asset prices and transaction flows. Electronic connections between variety of markets have not only

reduced the transaction costs, but also allow huge volume of transaction in short time duration making it possible to rebalance portfolio and to reallocate bulk of capital globally in literally no time. These structural changes in international markets have given rise to the phenomenon of 'feast and famine' i.e. enlarging the scale and frequency of financial cycles.

Four key features of financial modernization are changing structure of market dynamics as well as enhancing market efficiency. These features are considered to be efficiency-enhancing in neo-liberal view of markets. These features include greater reliance on actively traded securities as compared to banks' loans to obtain funds, increasing confidence on modern and sophisticated risk management and control systems e.g. mark-to-market risk management, stop loss orders, collateral calls, dynamic hedging etc., undertaking functions of market making as well as position taking at the same time, and hunger for liquidity due to which positions are liquidated very quickly. As result of all these features, market dynamics have altered in two manners: firstly, large volumes of risks are traded and priced actively which allows continuous rebalancing and reevaluating of risk leading to feedback to market prices. These frequent changes in asset prices and financial flows imply greater efficiencies along with grander complexities in market dynamics. Secondly, market makers providing market liquidity also act as investors. This phenomenon leads large price shocks to withdraw capital from market making, deteriorating the market liquidity, and resulting abrupt price decline.

These features of modern finance are efficiency enhancing if used in moderation. But real market players pushed these feature beyond their limits which lead to tempestuous market dynamics as experienced during current financial crisis. The frequency of abrupt price movements in mature markets along with quick changes in market liquidity and increased ability to shift capital posed challenges for market participants who were struggling to sustain stable profits and to manage financial risks. These features also challenge the capability of domestic and global authorities to avoid, cope, and resolve financial system problems.

#### 2.5 Changed Nature of Threats

As discussed in previous chapter, the evolving nature of financial systems has aggravated the difficulties in managing systemic risk and maintaining financial stability. In this aim, variety of efforts have been made which depend on mix of private market discipline and safety nets financed by taxpayers along with financial supervision and surveillance. Such efforts are basically founded on the assumption that systemic risk only encompasses problems in one

institution that flow via interbank relations, payment system, deposit run etc. while posing risk for financial system. This assumption narrows down the real threats as it ignores the extended opportunities for risk-taking.

Although the transformation of financial systems from domestic bank based to global market-based system entails reform in financial infrastructures to curtail systemic risk e.g. national payment systems. But greater dependence on securitized finance in these market-based financial systems tends to generate market-oriented forms of systemic risk, affecting variety of markets and their infrastructures, mostly possessed and operated by private entities. Consequently, systemic risk is now highly concentrated in derivatives markets involving private payment systems and pseudo-private clearing houses.

As discussed earlier, regulatory frameworks often provide financial safety nets along with requiring banks to keep appropriate capital and adhering to reporting and accounting standards. The capital requirement ensures that financial institutions have adequate funds to internally absorb any losses for minimizing taxpayer costs of safety nets whereas adherence to accounting standards assists to confirm that losses are promptly and amply exhibited in financial statements for allowing private stakeholders to use market discipline on financial institutions for preventing potential losses in future. But this tactic is easy said than done as it may generate conflict between the aims of regulators and those which are regulated. By providing insurance, regulators endorse risk taking beyond cautious limits whereas those which are being regulated have incentives to take greater risks within the limits of market discipline and approved rules of the game, including regulatory capital restrictions. Although it might be counter-argued, as we did in previous chapter, that the existence of deposit insurance might not be a sufficient incentive for bank management for making imprudent decisions. This can be explained a bit further by using the metaphor of health insurance. That is, the availability of health insurance doesn't provide any incentive to individuals to become careless about their health and fall ill, just because they have health insurance.

Thus, one peril in imposition of further restraining regulations is that the regulatory atmosphere might tend to inhibit even efficiency-enhancing risk taking. On the other hand, threat in not sufficiently enforcing current regulations and not possibly reforming them is that financial institution will take risks not typically considered worth taking. Maintain a balance between these two extremes is not simple and direct. The differences in incentives between

the regulator and those being regulated further complicate this situation. Those being regulated adapt to structural changes following financial modernization more enthusiastically and promptly than regulators adapt their frameworks to monitor them. Due to differences in their incentives and resources, regulated ones are more capable to learn and attain profits from financial sophistication as compared to regulators which are slow in comprehending and keeping pace with these sophistications for managing systemic risk.

This discussion implies that transformation of the modern financial system is altering the nature of systemic risk, which requires regulatory and supervisory frameworks to be constantly adapted to the varying nature of financial risk and systemic risk. But this adaption was not made by regulators, the result of which emerged in form of current financial crisis.

# Section 3. End of Liberalization and Resumption of Repression in the wake of current crisis

Policies of FL and integration followed more enthusiastically since the 1990s generated excessive liquidity in the system. The excessive liquidity which became apparent in early 2000s was not only the outcome of FL and ensued financial innovation, but it also came from the kind of monetary policy maintained in these years which emphasized the regular manipulation of interest rates. Subsequent to Asian, Latin American and Russian crises during late 1990s, FED chairman, Alan Greenspan injected liquidity which was only partly drained afterwards. Following the burst of internet bubble, famously known as dot-com bubble in 2000, Alan Greenspan felt compelled, due to deflation threat, to successively reduce interest rates from 6.5% to 1.0% and to inject enormous liquidity into the economy. This time again, he acted passively to drain that liquidity and retreating the cuts in interest rates. The next FED chairman, Ben Bernanke who took charge in the beginning of 2006 also continued on path of his predecessor by injecting more liquidity in the aftermath of credit crisis that started to occur in mid-2007.

# 3.1 Equity Injection - Tendency for Nationalization

After teaching developing and emerging countries to go for privatization as part of FL process, governments in the developed countries have now reversed their teachings by nationalizing a significant part of their own banking systems. Before finally nationalizing banks, governments of crisis-torn developed countries engaged in a series of interventions in two ways. First type of interventions were founded on governments' belief that financial

sector, in the wake of crisis, is facing problems of inadequate liquidity due to uncertainty and did not realize the general insolvency problem. Second type of interventions was based on resolving problems of individual firms through pertinent measures like mergers, closures, or public takeovers.

However, these steps are only focusing on banks. These measures were not enough in an environment where non-banking financial institutions have more important role in terms of their deep-rooted connections with overall financial system. Recognizing this, FED had offered to take enormous volumes of worthless and impaired assets of financial firms as collateral and even provided credit facilities to entities that were outside the regulated banking system at considerably low interest rates. Since all these measures were based on governments' belief that problem is of liquidity and not of insolvency, no expected results were yielded. After failure of all such interventions, governments started to partially realize and consider the issue of insolvency.

But government's attitude was different for different entities and they got treatment on case to case bases. For instance, JP Morgan Chase was paid off to take over Bear Stearns at very low price. Lehman was permitted to go, Fannie Mae and Freddie Mac were nationalized, and American International Group (AIG) got rescue package with enormous injection of public funds. But financial collapse intensified with increasing number of failures making lack of a clear plan to cope crisis more evident. Recognizing clearly the actual problem of general insolvency, TARP (Troubled Assets Relief Program) was enacted in end of 2008 by pressing congress to authorize bailout package of US\$ 700 million (reduced afterwards to US\$475 million by Dodd-Frank wall street reform and consumer protection act) in order to buy almost worthless or impaired mortgage-related assets from financial institutions, as well as any other damaged assets from any other financial entity to cleanse their balance sheets. However, this program too did not completely identify the general insolvency problem. TARP was using market-based mechanisms to take impaired assets when market price of these assets was almost zero, which means that entities selling them would show huge losses in their balance sheets. This leads to damage of their sustainability and potential performance which asked for recapitalization of these institutions by injection of fresh funds.

Thus, even before US, it was UK which opted for this option of recapitalization i.e. equity injection and partial nationalization by buying purchasing ordinary and preference shares

valuing £37 billion of UK's three largest banks: HBOS, Royal Bank of Scotland, and Lloyds TSB. The nationalization decision was based on the condition of credit market which was frozen as entities in dire need of liquidity were the most insolvent ones so funds were almost impossible to get attracted to these entities. Therefore, it was unavoidable for the government to step in as stated by UK chancellor Alistair Darling, "this is the only way, when markets are not open to certain banks, they can get the capitalization they need" (cited in Chanrasekhar, 2009, p. 10). In addition to the recapitalization and nationalization, UK government also provided guarantee to all bank deposits, with no upper or lower limit, in order to prevent run on banks.

UK proved to be first drop of rain as other crisis-affected European countries' governments also started to follow this radical path of banks' recapitalization with equity injections along with guaranteeing deposits and interbank lending. US, despite of all its efforts to avoid state takeover, had to join this flock with significant influence of Wall Street on US Treasury. Besides acquiring stake in large number of banks such as Bank of America, Citigroup, and Morgan Stanley, US also guaranteed, through Federal Deposit Insurance Corporation (FDIC), all deposits in non-interest bearing accounts and FDIC-insured debt issued by banks. But as mentioned earlier, US government intervention was fundamentally influenced by Wall Street by focusing only on 'big finance' with government having no voting rights whereas banks having all rights to pay dividends with some initial limitations, and to mobilize private capital for buying government's stake. Resultantly, government's takeover was virtually welcomed in US. One implication of these state takeovers is the implicit freedom allowed to private financial players to chase profits at the cost of all others, especially taxpayers. Moreover, takeovers are only limited to banks which left many other institutions such as hedge funds, mutual funds, pension funds etc. which have suffered massive losses from the subprime failure and stock market crash leading to wealth erosion with its adverse effects on investment and consumption demand.

These equity injections and direct takeovers by state are considered as part of rescue package for these institutions to recover. This cannot, at this moment, can be explicitly categorized as a policy shift, like the policy shift from repression to liberalization. However, these rescue and recovery measures are sufficient to explain the dichotomy between market and government.

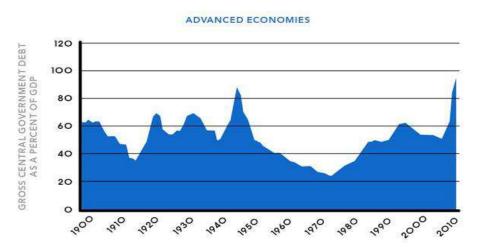
The above narrative reflects that banking system of developed world was being saved through State takeover and not merely with state support, which has once again refreshed the dichotomy between government and market – a dichotomy we focused in first two chapters. One inference in current perspective might be the misleading nature of this dichotomy. Assuming the negative relationship between government and market actually entails the failure to understand this sophisticated relationship. This relationship tends to become positive when definition of market is moved from narrow scope i.e. insignificant and minimal rules, to a broader scope i.e. significant and extensive laws, norms and practices. Moreover, in market economies, government plays multiple roles e.g. consumer, employer, debtor, creditor, insurer etc. instead of merely the role of an 'umpire', so it can influence market competition. Thus, it might be useful to distinguish government's role to create and sustain markets from its role to hinder and crowd out market. On similar lines, the distinction can be made between government's passive regulation versus active intervention or establishing the rules versus determining the outcomes etc. (Vogel, 2007). However, since government plays multiple roles of market participant as well as of umpire, it is unavoidable to have government performing dual character i.e. passive regulations with some active intervention, setting rules with some influence on outcomes and so on.

#### 3.2 Modern Financial Repression

The term of financial repression first used by McKinnon (1973) entails policies of compulsory lending to governments, specialized financial institutions, state-owned enterprises, interest-rate caps, capital controls, and the like. Mix of these repressed policies had been used by government to reduce debt levels but they usually work only for domestic debt. Today, we can again observe financial regulations to keep international capital 'out' of the emerging economies to discourage hot money whereas regulations in developed countries tend to keep capital 'in' to have captive audience for domestic debt. Such tighter restrictions in regulated domestic financial environment can be witnessed globally, reflecting resort to once-rejected notion of financial repression.

Besides these controls, indirect taxations are also widespread. Even historically, governments and central banks, in the aftermath of crises or wars, found it helpful to resort to some form of taxation in order to liquidate enormous debt overhang and to ease the burden of debt-servicing. Extremely high magnitude of public debt in US and other developed countries of Europe is the most significant feature of current financial crisis which did not reach at this

level since 2<sup>nd</sup> World War. A recent study by Reinhart, Reinhart and Rogoff (2012) has exhibited the public debt to GDP ratio of 22 developed economies from 1900-2011 which demonstrates serious policy challenge these countries are facing (Figure 4.1). This challenge becomes more severe if private debt is also incorporated – private debt which acts as principal contingent liability of governments. Unlike the period after 2<sup>nd</sup> World War when debt was only concentrated in public sector, this time has significantly high leverage in private sector. Today, this debt overhang and resultant financial fragility along with high unemployment level is the prominent characteristic of most developed countries.



**Figure 4.1** Public Debt - to – GDP Ratio (Source: Reinhart, Reinhart and Rogoff, 2012)

Since the current crisis has international orientation, it might be relevant to see financial repression under heading of 'macroprudential regulation'. In fact, the interaction between high volume of debt in developed economies and the perceived threat of currency misalignments and overvaluation in emerging economies facing capital inflows leading to pressures for currency intervention and capital controls generates 'home bias' in finance i.e. financial de-globalization and revival of financial repression – although it is mostly discussed under heading of macroprudential regulation instead of financial repression. This implies that macroprudential regulations tend to act in financially repressive manner. Unlike 'microprudential regulations' which emphasize the safety and soundness of individual financial institutions, the 'macroprudential regulations' focus on risk mitigation of the whole financial system. The differences in these two approaches are clearly described by Borio (2003) in a table which is given at Annexure VI.

Besides financial repression, governments traditionally strive to reduce debt to GDP ratio through different ways such as fiscal adjustment or austerity plans, economic growth, debt restructuring, sudden escalation of inflation etc. Economic growth is very long term phenomenon which needs stable financial system. Fiscal adjustments are politically hard and often hurting in the short run whereas debt restructuring attaches with it an upsetting stigma and may entail deep recession.

Declining growth rates tend to counterbalance much of the improvement which justifies the rapprochement to financial repression. This is accompanied by the absence of any coherent fiscal consolidation plan to help governments bring down budget deficits. Thus, the basic motive of modern financial repression is to recover country's ability to finance public and private debt without opting for fiscal adjustment (Kirkegaard, Reinhart and Sbrancia, 2011). As noted by HSBC Chief Economist Stephen King (cited in Oprita, 2012), this financial repression aims to rig the financial system in favor of developed countries and results the policies which allow governments to fund their borrowing by imposing costs on others. May be that is the reason why repression is considered to accompany widespread lack of transparency.

Repression policies are aimed to alter the pricing of debt or currency either directly through intervention or indirectly through changing the amount of debt and currency. Artificial reduction in the cost of debt below the level that free market forces might set enables government to decrease borrowing cost and debt accumulation. Apparently seems a kind of "stealthy default", such repression allows developed countries with fiat currencies to stiff their creditors while still presumably paying interest and principal (Mather, 2011). Financial repression is considered as a tricky form of taxation or fiscal austerity. Since rise in direct taxes or spending cuts are politically precarious, therefore, the taxation through repression appears more subtle. In this regard, financial repression, in combination with steady inflation, reduces debt burden in two ways. Firstly, low nominal interest rate cuts the debt servicing costs and secondly, negative real interest rate erodes the debt to GDP ratio as it is a tax on savers (Kirkegaard and Reinhart, 2012). It must be noted that inflation may not benefit repression if government needs to borrow in the near future which produce another key feature of repression i.e. pushing the maturity of debt further. This is evident from example of UK which is planning to issue bonds with maturities of 100 or more years.

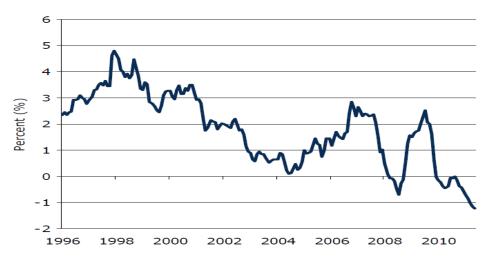
The tactics to use financial repression have been transformed over the years. Today, governments have large number of repressive tools to decrease costs of debt and transfer risk and return profile from investor to government. In this respect, Carmen Reinhart and M. Belen Sbrancia (2011) have outlined the broad set of policy areas in which financial repression is featured. They include new bank and capital regulations favoring government debt e.g. Basel III bank rules providing favorable preferential treatment to government debt in bank balance sheets through substantial differentiation in capital requirements; Solvency II insurance rules; U.K. bank liquidity requirements; increasing the amount of sovereign issues on domestic bank balance sheets; regulations and suasion regarding pension fund; growing capital controls and currency interventions; explicit or implicit caps and ceilings in interest rate e.g. recent trend of putting caps to keep interest rate below equilibrium free market level; establishment of captive domestic entities for directing credit to government at artificially low rates e.g. quantitative easing or asset purchase programs; direct ownership of banks etc.

Jackson (2012) have described the suasion regarding pension fund in detail by giving example of UK government that pushed pension fund of Royal Mail to invest in those infrastructure projects for which government is lacking funds. UK government took over a fund of assets worth £28 billion assets and liabilities worth £32 billion. The assets are going to be used to pay government debt giving rise to debate that whether these funds ought to be used for capital building i.e. infrastructure or current spending i.e. debt payment. This debate might vanish after few years because the only question that matters is who paid debt, borrower or lender. This is the lack of transparency which this modern repression entails.

#### 3.2.1 Low and Negative Interest Rate

Exceptionally low interest rate is the most important aspect of modern financial repression where it is maintained even below inflation rate so that inflation-adjusted borrowing cost is negative in real terms. It is not strictly necessary for interest rates to be negative but they need to be lower than a country's growth rate. FED has recently announced that it will keep interest rates at these extremely low levels through mid-2015. The basic objective of maintaining low interest rate is to cut back government's debt servicing cost on enormous stock of debt which may lead to deficit reduction. Not just the crisis-affected developed countries, even emerging countries are also maintaining interest rates at very low level as compared to inflation and growth. Global trend in this regard is shown in Figure 4.2.

These repressed rates may infect global financial markets by affecting asset prices. Government has central bank's assurance to borrow at low interest rates but investors and savers find it hard to earn any return on assets with this low interest rate after inflation adjustment. But the major implication of artificially low interest rate is embedded in its nature of being a 'tax'. Unlike income tax or sales tax, the 'repression tax' is quite opaque and less-noticeable because it is generally determined by inflation performance or financial regulation. Unlike painful spending cuts or extra taxation, the indirect repression tax is much easier to swallow.



**Figure 4.2** Global Real short rates (*Source: ISI and PIMCO*)

Heavy interventions by central bank and aggressive monetary policy stance of developed countries are also critical features of current crisis which raise the question about determination of such low interest rate. Whether this interest level is determined by market forces or by few official big players i.e. non-market forces is of significant importance. Reinhart (2011) has exhibited, in a graph at Annexure VII, the decreasing role of outside market players as compared to official players in determination of interest rate in US treasury market. Even FED quantitative easing along with heavy purchases of US Treasury by foreign banks could not increase the proportion of outside marketable Treasury securities more than 50 percent. This is the lowest proportion since breakdown of Bretton Woods in early 1970s which was also the era of increasing prices for oil, gold and commodities, negative real interest rates, unstable currency, and high inflation. The similar trend of considerably reduced share of outside market gilts can be observed in Europe. This implies that central banks of US and Europe have turned into biggest official players to buy government debt for the unspecified timeframe. Besides, the central banks of emerging countries are also buying US

and European government bonds on big scale, in order to protect them against potential currency appreciation. Such heavy purchases by non-market players make the pricing of government debt doubtful in relation to its risk that is a widespread feature of financial repression.

It may be relevant to mention here that such kind of artificially negative interest rates in developed countries is not a new phenomenon. Following the Great Depression and 2<sup>nd</sup> World War, the laissez-faire banking was almost terminated with advent of Bretton Woods which was founded on fixed exchange rates and controlled capital markets. This leaded to extremely low nominal interest rates and inflationary emissions across developed countries resulting in negative real interest rates. This trend persisted almost till 1980 when the wave of financial liberalization and openness started to increase interest rates that prevailed till current era of financial repression. Figure by Reinhart and Sbrancia (2011) at Annexure VIII demonstrates these trends from 1945 to 2011.

The re-emergence of highly negative interest rates since the occurrence of current crisis seems to be motivated from the repressive era of 1950s and 1960s during which government debt declined rapidly. But this could be a coincidence because debt reduction during that period can also be attributed to mega growth that brought in tax money (Oprita, 2012). Fiscal balances during those years also reversed very speedily in order to reverse the debt stock ever more speedily. However, that debt reduction was misunderstood to be spurred from financial repression alone. It can also be noted that today, debt levels still on rising trend despite of low interest rates, not only because of crisis itself, but also because of slowdown in economic growth. This implies that despite of shifting adjustment burden from debtors to creditors through unusually low interest rates, it might be unlikely for repression to bring any major reduction in government debt in relation to economic growth.

# 3.2.2 Other Implications of Modern Repression

Apropos to the historically high levels of public and private debt, it seems likely for policymakers in developed countries to remain involve in debt management even during near future. Financial repression acts as a cheap way for government to fund its heavy debt burden through twofold manner of keeping low interest rates and maintaining captive domestic audience. In addition to this, the persistently high levels of unemployment in the developed

economies in the aftermath of current crisis also pressurize central banks to maintain very low interest rates.

Moreover, repression permits governments to postpone austerity and to finance excessive borrowing at much reduced cost. This infers that repression is a way to coerce economy to create room for government excess. In this regard, it is pertinent to question the ability of repression as a way to live with government debt, rather than reducing it in long run. Though at this moment, repression seems to an approach to rescue and recover crisis-torn financial markets. However, we are unable to see any clear future agenda to either go back to those heights of liberalization that had been experienced since 1980s. It is significant to mention here that the use of financial repression to bring temporary stabilization may not be sufficient to contain debt dynamics even in medium term. Repression does not seem to liquidate government debt as fast as it accumulated leading to failure in stabilizing debt to GDP ratio. Without changes in fiscal and government spending policies and stronger growth, repression alone is unlikely to reap any benefit. But this is paradoxical that such level of debt is tended to stunt the prospects of economic growth. Although repressive measures by governments of developed countries are somewhat trying to slow down the accumulation of debt, the enduring fiscal deficits are so huge that repression cannot offset the entire debt.

Other than negative real returns suffered by savers and investors, financial repression also has other costs. Inefficient capital allocation and crowding out of productive investment tend to hinder medium to long term growth. Various market distortions are also resulted including asset booms and busts, sudden stops due to loss of confidence, intense spells of inflation etc. Modern repression involves reinforcing tactics due to which the risks it entails are difficult to recognize. This demands more caution on part of investors to analyze these development as approaches that worked in past may not prove equally beneficial in this modern era of repression.

Modern repression also contains various investment implications. Sovereign debt is considered to be the most risk free asset all around the world but current crisis has made even this class of asset to entail credit risk due to developed countries debt overhang. The situation is worsened due to governments' ability to tax and exercise other forms of financial repression which is affecting other asset classes as well. However, ignoring sovereign debt is not any solution for investors because repression and debt dynamics have turned other asset

classes even more risky as compared to the sovereign debt. Due to spillover effects, this has tendency to destabilize the global markets and economies for next several years.

# 3.2.3 Modern Repression in Emerging Economies

Where developed countries are using repression to reduce cost of financing their huge stock of debt, many emerging countries are using repression for gaining bigger share of global growth. In this aim, they have adopted measures to control currency appreciation and keeping capital out in order to maintain external competitiveness. The result is massive foreign currency reserves these emerging countries have accumulated and then invested in government bonds of highly-indebted developed countries. This, in turn, is generating 'self-reinforcing' repression sequence. Because when developed countries keep their interest rates low, currencies of emerging countries incline to appreciate which is hindered by emerging countries through intervention. This leads to re-accumulation of reserves and their reinvestment in government bonds of developed countries which puts further downward pressure on interest rate. In this manner, the repression cycle goes on. This implies that instead of market-oriented risk and return objectives, heavily-indebted crisis-torn developed countries and relatively sound emerging countries are united in their repressive stance in order to preserve growth today without paying much attention to costs and risks it may bring tomorrow.

Moreover, financial globalization and integration, once considered as 'panacea' for emerging countries, is now becoming 'culprit' as financial crisis of US and Europe also affected stability of stock markets in emerging economies. But the international transmission of turmoil through integrated markets is only one of the means by which current crisis can affect emerging and developing countries. A medium-term implication is reduction of private capital inflows due to investors' limited risk appetite. Since earlier capital inflows proved 'costly' as they were generally used to build external reserves instead of productive investment, therefore, the reduction in capital inflows is to be considered 'blessing in disguise'.

Another implication is reduction in foreign remittances which developing and emerging countries have as major portion in their balance of payment. In the similar manner, exports to US and Europe are also reduced due to decline in demand which inevitably follows from recession and downturn in these countries. Besides ending the commodity boom, current crisis is also probable to cancel or delay big investment projects due to their now uncertain

profitability. The sectors which are more likely to get this hit include construction, aviation, tourism and hospitality. This halt will have negative multiplier effects as lost jobs would reduce demand even further.

An interesting feature to note is that the effect an emerging country may suffer from the current crisis depends at what extreme it has gone for liberalization and deregulation. For instance, China and India are relatively safe and sound because they have kept most of their banking system under state control and have not permitted most of the financial innovations that played a key role in current crisis.

# **Section 4. Current Crisis and Neo-Liberal Capitalism**

Another analysis, different from the mainstream explanation given in previous sections, is that the financial crisis is simply a symptom of another deeper crisis, which is a systemic crisis of capitalism itself (McMurty, 1999). Current crisis has come up with many complications mainly because it occurred in the US that is considered to be the 'headquarter of capitalism'. A country recognized as 'global hegemon' with power and influence to impose its economic agenda of neoliberalism on rest of the world is now itself captured in a crisis having severe ramifications. The underlying notions of neoliberal agenda like 'invisible hand of market'; 'markets know best'; 'self-regulation is best regulation' etc. seem unrealistic, rather deceitful in this scenario.

However, it would not be easy for US, or even for Europe, to accept this reality. They consider the prescriptions and medicines of liberal models and open markets they used to give to developing world as 'unviable' for themselves. Resultantly, developed world is now doing just the opposite of what it had always been orated in case of crises in developing and emerging world. This is evident from government's direct interventions and Keynesian countercyclical macroeconomic policies which US and Europe are adopting. In this context, the term 'golden age of capitalism' is challenged as that ear should be called the 'age of state capitalism'. In this respect, it is relevant to see economic historian Niall Ferguson saying that "the lesson of economic history is very clear. "Economic growth ...comes from technological innovation and gains in productivity that came from private sector, not from the state" (cited in Chomsky, 2009).

However, the opposite is claimed by intellectuals like Noam Chomksy (2009) by emphasizing the crucial role of state in development and innovation throughout history. According to him, the current crisis is stemmed from the private management of the financial system which has driven into an unusually severe crisis harming not only the poor but also the rich, so it qualifies for special attention. Massive government intervention is not just a phenomenon of post-World War II. Rather, state had always been a fundamental element in economic development of US. That's why economic historian Paul Bairoch (1993, p. 30) refers US as the mother country and bastion of modern protectionism with the highest tariffs in the world. These protectionist policies continued till mid-twentieth century and even afterwards whenever US needed to rescue its corporate management by putting more protectionist barriers. Not only US, but Britain and other develop countries of Europe were also pursuing protectionism while pushing developing and emerging countries towards orthodox approach. Orthodox economic principles were implemented discriminately on weak developing economies and violated at will by strong developed economies. This actually created the foundation of harsh North-South divide. On basis of a broad survey, it was concluded by Bairoch (1993) that "it is difficult to find another case where the facts so contradict the dominant theory than the one concerning the negative impact of protectionism".

In one way, this widespread crisis of developed world has provided opportunity to theorists and policymakers of capitalist world to question the prevailing economic paradigm and to think about its possible alternatives. However, the chances to exploit this opportunity seems remote as predicted by head of a law firm Sullivan & Cromwell that "Wall Street, after getting billions of taxpayer dollars, will emerge from the financial crisis looking much the same as before markets collapsed" (cited in Chomsky, 2009). The reason for such behavior is pointed out by Simon Johnson, a former chief economist at IMF, by stating that "throughout the crisis, the government has taken extreme care not to upset the interests of the financial institutions, or to question the basic outlines of the system that got us here". It is further elaborated by him that "elite business interests that played a central role in creating the crisis, making ever-larger gambles, with the implicit backing of the government, until the inevitable collapse . . . are now using their influence to prevent precisely the sorts of reforms that are needed to pull the economy out of its nosedive...the government seems helpless or unwilling to act against them" (cited in Wilson, 2009).

Therefore, current global crisis of this magnitude that capitalist world is facing today perhaps represent a turning point in the history of capitalism. The pertinent question in this respect is whether this crisis the consequence of unstable nature of capitalism or the result of tenacious neoliberal ideologies developed since 1980s. Mostly the capitalism itself is considered as key culprit. This might not be completely true when we see the transition from golden age of capitalism during end-1940s to end-1970s towards finance-led capitalism, commonly known a neoliberal era. The general characteristics of golden era of capitalism were regulated and stable financial markets and high growth rates. Contrarily, the common features of finance-led neoliberal era of capitalism were open and unstable financial markets and declining growth rates. It may imply that finance-led capitalism of neoliberal form is intrinsically unstable. This must be borne in mind that financialization is not a new concept. Finance-led capital was first termed by Rudolf Hilferding (1919) in his seminal book 'Finance capital' which analyzed the transformation of pluralist and competitive 'liberal capitalism' into monopolistic 'finance capital'.

The increased incidence of financial instability since 1970s is documented by Boyer, Dehove and Plihon (2005) by indicating that "this succession of national banking crises could be regarded as a unique global crisis originating in the developed countries and spreading out to developing countries, the recently financialized countries, and the transitional countries". This can be inferred that crises that neoliberal and financialized form of capitalism is facing are not merely cyclical crises rather they are perpetual crises which would always persist. It is an inconvenient truth about this particular form of capitalism that stability and efficiency cannot be achieved simultaneously, an area discussed in detail in previous chapter. The intrinsic instability principally stems from speculation which is inescapable in capitalistic economies. Thus, there exists no ideal or optimum state to be achieved. So, the efforts always direct towards achieving 'second-best'.

Another way to focus this topic is to describe that it was the decline of growth rates and profits during 1970s in US and UK along with stagflation which mounted to cause the breakdown of the Bretton Woods and to originate financialization and the accompanying neoliberalism agenda. It was not coincidental that these two developed countries that were showing the worst economic performance during 1970s initiated this new economic arrangement (Bresser-Pereira, 2010). This leaded to Neoclassical macroeconomics replacing Keynesian macroeconomics and growth models replacing development economics. Key

neoclassical economists of those times such as Milton Friedman and Robert Lucas, along with other like-minded scholars and academicians, influenced the creation of neoliberal ideology based on laissez-faire concepts. Thus ideology was based on reduced government role and deregulated markets, particularly financial and capital markets. The reasoning for this ideology was instituted on the argument that only most efficient would be rewarded. State protection for 'public' interest is repudiated by considering market players as 'individuals'.

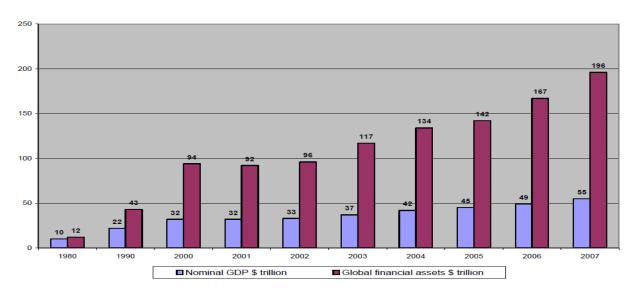
#### **4.1 Factitious Wealth**

The finance-led capitalism, based largely on excessive speculation, brought the mushroom growth of 'factitious' financial wealth which disconnected the real economy from the financial economy. Moreover, profits of financial institution also augmented significantly which enabled them to pay huge bonuses to financial traders due to their role in increasing capitalist rents. Another important feature of finance-led capitalism was the cessation of credit to be based mainly on loans from banks. Rather, it was now started to rely more on security involving hedge funds, mutual funds etc. as financial investors. Henri Bourguinat and Eric Brys (2009, p. 45) called this tendency as a 'general malfunction of the genome of finance', primarily due to the unclear nature of risks it entails.

The condition became even more complex when creation of factitious capital is combined with speculation process. Robert Guttmann (2008, p. 11) focused this trend by stating that "the phenomenal expansion of fictitious capital has thus been sustained by banks directing a lot of credit towards asset buyers to finance their speculative trading with a high degree of leverage and thus on a much enlarged scale". In this process, it was very natural for profitseeking commercial banks to use the financial innovations to cleanse their balance sheets by transferring their risks to financial investors of securities (Cintra, Macedo and Farhi, 2008). Coming back to factitious capital, it must be noted that real wealth based on production was long ago distinguished from factitious wealth by Adam Smith. Karl Marx also emphasized this distinction where fictitious wealth is created by artificial increase in asset prices as result of increase in leverage. It is stated by Marx (1894, p. 601), "with the development of interestbearing capital and credit system, all capital seems to be duplicated, and at some points triplicated, by various ways in which the same capital, or even the same claim, appears in various hands in different guises. The greater part of this 'money capital' is purely fictitious". This multiplication is even much bigger today because modern financial system is comprised of banks and financial investors, that can collaborate through financial innovations, in order to

generate fictitious wealth and to capture bigger portion of real wealth i.e. national income. As indicated by an UN Conference on Trade and Development (UNCTAD) Report (2009), "too many agents ... trying to squeeze double-digit returns from an economic system that grows only in the lower single-digit range".

Financial wealth gained autonomy from production (Bresser-Pereira, 2010). Figure 4.3 exhibits that financial assets grew around four times more than real wealth i.e. GDP during 1980-2007. Thus, it can be established that finance-led capitalism was actually 'legitimized' under neoliberalism which allows financial system to act as capitalist as well as a professional creating fictitious wealth. The creation of artificial wealth under guise of neoliberalism also enables 'rentiers' associated with capitalists-cum-professionals to capture an ample share of economic surplus produced by society. The natural result of this tendency is the concentration of wealth within a small segment of society – the richest.



**Figure 4.3** Financial and Real Wealth (*Source: McKinsey Global Institute*)

The creation of fictitious wealth leads us to consider the distinctive nature of financial markets which are entirely different from other markets. Financial markets deal with a unique commodity of money and other financial assets which depend on confidence and convention unlike operations of other markets for real commodities. Calling financial assets 'products' or new type of financial contracts 'innovations' cannot alter their nature. Unlike profit seeking in production and services, the drive for easy and huge capital gains in financial trading is very robust. This drive makes finance and speculation 'fast friends' as financial agents are always engaged in self-fulfilling prophecies, also termed as 'self-referential rationality', motivated by

short-term gains to increase bonuses, stocks or bonds. Here, we can also try to implicate the idea of 'cognitive dissonance', which can lead to irrational decision making as person tries to reconcile his conflicting beliefs. Financial agents, particularly in the most developed part of the world, were legitimate to prefer treasury operations to gain short-term profits, as compared to real production or trading. Such behavior is clearly in dissonance with the mainstream beliefs of macroeconomics. In this setting, finance becomes distorted because it is not oriented to finance real production or trading. Instead, it is only financing treasury operations which are synonymic with speculation without credit. This speculation is very risky in developing great indebtedness of financial investors and leverage of financial institutions leading to loss of confidence, panics and crises.

#### 4.2 Minsky's Approach

Now, we will turn to seminal works on crises came into being after Great Depression. During 1930s, new economic theories were developed when Keynes wrote 'the general theory of employment, interest and money' in 1936 and Kalecki published his 'Essays on the theory of economic fluctuations' in 1939. On similar lines, Galbraith came up with his classical work 'The great crash' in 1954 whereas Kindleberger published 'The world in depression' in 1973 and 'Manias, panics and crashes' in 1989. On basis of these foundations, certain institutions like central banks are established along with regulatory systems under Bretton Woods for controlling credit and avoiding crises. All these works discussed economic cycles by focusing on real or production side and the inconsistency between supply and demand.

It was Hyman Minsky who first linked economic cycles or economic crises with uncertainty and finance during early 1970s. Arruda (2008, p. 71) put it as "when Minsky discusses economic stagnation and identifies financial fragility as the engine of the crisis, he transforms the financial question in the subject instead of the object of analysis". Minsky considered unstable financial system as the result of increasing autonomy of credit and financial contracts from the real economy. Minsky established in 'Financial instability revisited' (1972) that besides economic crises, financial crises are also endogenous to the capitalist system. Although endogeneity of economic crises was already established, however Minsky determined the association of economic crises with financial crises which are also endogenous. According to Minsky (1972, p. 120 and p. 128), "the essential difference

<sup>&</sup>lt;sup>35</sup> Cognitive Dissonance, a subject of social psychology, refers to the unpleasant emotions that result from believing two contradictory things at the same time.

between Keynesian and both classical and neoclassical economics is the importance attached to uncertainty....thus, the intrinsically irrational fact of uncertainty is needed if financial instability is to be understood".

Although Minsky's model developed in 1970s expressed direct causes of crises as poor credit evaluation, uninhabited use of leverage, scanty understanding of financial innovations, weak system of credit rating, aggressive compensation, and resulting excessive risk taking and short-term profits etc. However, these direct causes are to be viewed as emerging from deregulation and self-regulation of financial system under guise of regulatory 'reforms' sanctioned in 1980s by neoliberal dogmas. The consequent stream of financial instability emerged from deregulation and elimination of welfare state and intelligent government role. It implies that crises are inherent in the logic of the current financial system. Thus, after 'thirty glorious years of capitalism' from 1940s-1970s, there began 'thirty dark years of neoliberal capitalism' from 1980-2010s.

Making financial system accommodative is now being called 'recklessness' and 'irresponsibility' that triggers booms in neoliberal capitalism. In other words, development in conditions of modern capitalism is caused by financial bubbles and ensued crises occurring from bursting of these bubbles. Thus, what Stiglitz (2011) calls 'system failure' is actually the 'system itself'. Quite insightful to find substitute of this bubble-led growth, Keynes (1936) recommended 'socialization of investment' by emphasizing the role of capitalist state to control the 'euthanasia of the rentiers'. Despite of defending capitalism, these suggestions of Keynes were rejected as they were distasteful for financialized capitalism. Therefore, one class of analysis viewed that capitalist world came out of Great Depression not because of Keynesian ideas but because of military spending in the run up to the 2<sup>nd</sup> World War (Patnaik. 2009). The temporary obstruction created by financialized capital after World War permitted the acceptance of Keynesian measures of demand management by capitalist state. This acceptance prevented crises during glorious years of capitalism. But then resurgence of financialized capitalism pushed neoliberal agenda which rejected Keynesian ideas and restarted bubble-led growth. Thus the current crisis which has revived the Great Depression is the natural product of this progression.

#### **4.3 Politics of Finance**

Although it has been implied throughout this chapter, however, it is crucial to exclusively mention the dishonesty of financial institutions and incompetence of policy makers, as mentioned by Stiglitz (2008a). This dishonesty and incompetence is probable to prevail even after crash of this grandeur that is compared with Great Depression of 1930s. Particularly banks always tend to reject strict anti-trust measure but they demand for state intervention to bail them out as they are too big to be allowed to fail. Policy makers at governments and central banks, facing the threat of systemic risk, have no policy but to intervene with their unlimited safety net.

Financial markets are based on trust and current crisis has eroded that trust. Particularly, US policy makers are under severe criticism as they did not accept that 'any' crisis is going to happen till end of 2008. For instance, US delivered assurances that things are going to be fine in G8 meeting in July 2008. In addition, US exported its toxic mortgages and deadly practices to global financial system in the name of 'innovation'. Any effort to regulate these innovations is rejected by claiming that it would subdue this innovation. The worst part of the story is that this innovation was not making economies stronger as they were based on artificial wealth, which did not actually exist. Krugman (2012) also stressed the intellectual clarity and political 'will' to end this current depression and to prevent this intense state of pain in future.

The interconnection among economic systems make them more prone to system-wide failures with enormous costs because failure in one part of system can lead to system-wide failure (Stiglitz, 2012). It is logical to design and implement circuit breakers or checks to prevent contagion i.e. a complete 'shut down'. The absenteeism or deficiency of such checks permits the contagion to blowout unimpeded throughout the global economy. However, these checks are generally discouraged. One of its reasons, described by Stiglitz (2012), is inequality as one percent of Americans control forty percent of US wealth leading to 'divided and sick society'. This inequity in US market arises because economy is astounded by 'politically engineered market advantages' i.e. rent-seeking.

Stiglitz (2012) cautioned that revolts that stroke in Middle East during last few years might also appear in US and other developed world. He wrote that "our own country has become like one of these disturbed places, serving the interests of a tiny elite. We have a big

advantage - we live in a democracy - but it's a democracy that has increasingly not reflected the interests of large fractions of the population" (Stiglitz, 2012, p. 27). It is not a coincidence that two key books published in 2012 by two Nobel Laureates, Paul Krugman's (2012) 'End this depression now' and Joseph Stiglitz's (2012) 'The price of inequality' emphasized exclusively on politics of finance. These radical pieces of work are actually reorienting economic to its earliest conception as the 'science of political economy'. We can infer that politics hold a significant, rather main, position in the field of global economy and finance. Current crises have brought the political economy of finance to the fore. This has provided impetus even to mainstream economists to turn their attention to the political economy dimension.

#### 4.4 New Capitalism

Financialized capitalism dismantled the institutions and overlooked the economic theories learned after the Great Depression of the 1930s by irresponsibly deregulating financial markets and banishing Keynesian and developmental economics. Current crisis has taught severe lesson due to which developed economies are now increasingly engaged in re-regulating financial markets. Lesson learned from this crisis must not be forgotten as there is no point to repeat same mistakes indefinitely. However, inducement to go back to 'business as usual' is strong as we can observe the delaying tactics to avoid re-regulation. For instance, G-20 signed re-regulation commitment in Nov 2008, reiterated each year till now, but they are still facing great resistance.

The regime coming out from the learnings of current crisis must also take backward steps as far as financialized capital is concerned. Since neoliberalism and finance-led capitalism is often associated with financial globalization, it is relevant to shed light on a view which considers financial globalization as unnecessary. It implies that globalization could have been only limited to commercial globalization and sidestepped the financial globalization. If financial globalization had been restricted, the capitalist system would have been more stable and efficient. Thus, upcoming era of capitalism need to concentrate more on globalization in commercial and productive sector, instead of financial globalization. This is the reason why many fast growing emerging countries of Asia are now involved aggressively in commercial globalization but strictly limiting financial globalization. For instance, China is completely integrated commercially with global economy while remaining quite closed on financial footings.

The creation and consolidation of G-20 may have some possibility of even enhanced commercial globalization. However, it is easier said than done because global financial and commercial system has been entirely determined by 'super-powers' i.e. few developed countries of western world, since ages. These countries overpower all key global institutions. For instance, G-7 presumes itself to be key designer of new financial architecture, despite of the fact that this forum does not include largest emerging economies like Russia, China, India, Brazil etc. The Financial Stability Forum of the BIS also ignores any representation from developing countries. Even the small countries of Belgium, Netherlands and Luxembourg, with a total population of less than 28 million, have more votes in the IMF than China, Brazil or India (Ghosh, 2008).

Certain analysts like Geoff Mulgan are very positive about change in capitalism as he states that "the lesson of capitalism itself is that nothing is permanent. Within capitalism there are as many forces that undermine it as there are forces that carry it forward" (Mulgan, 2009). Being optimistic that global capitalism would no longer be the financialized and neoliberal capitalism, Mulgan (2009) claimed that "just as monarchy moved from center stage to become more peripheral, so capitalism will no longer dominate society and culture as much as it does today. Capitalism may, in short, become a servant rather than a master, and the slump will accelerate this change". However, it seems little audacious claim given the resistance capitalist world is facing in even reregulating financial markets, let alone subsiding the whole system. And then there was 'democracy' which replaced monarchy. Thus the pertinent question is the availability of any alternative system to replace capitalism. It implies that till the emergence of any new system, one must learn to 'live with the existing system'.

And it is in this aim that more voices are gathering against financialized and neoliberal capitalism. Now the measures that capitalist economies would take significantly depend upon the extent to which they are ready to confront the hegemony of financialized capitalism. New capitalism demands the reinstatement of regulatory power of state for permitting markets to execute economic coordinating. Various financial innovations or type of contracts must be barred forthrightly. All transactions need to be more transparent and risks being systematically limited.

#### 4.5 Probable Measures

The current crisis in developed markets has exposed serious flaws in the structure of financial markets and in the ways they are regulated. Today, International economic policymakers are challenged by the critical issue of reforming the institutions, structures, and policies through which crises can be prevented and predicted. Although financial markets do not work perfectly, but as mentioned by Winston Churchill, they are the worst way of allocating resources except for all other forms that have been tried (cited in Eichengreen, 1999). And given the widespread and ever-enhancing technology, it is impossible to put lid on financial globalization and liberalization to reverse these trends. Various proposals offer a conclusive break from the deregulatory agenda of the past generation, with some suggesting transformation of prevailing set of political and regulatory institutions. Debates have been going on seriously within mainstream policy making circles because the globally integrated environment tends to complicate any regulatory system.

Financial liberalization followed from finance-led neoliberal capitalism clearly played a key role against safe and sound financial system for developed as well as developing and emerging countries. Current crisis has presented the economic case for a robust approach towards financial restraint. By robustness, we mean the ability to cope with a variety of failure-inducing circumstances and behavior. Restoring the complete array of controls and restraints is impossible due to information technology and communication revolution which has made the evasion very easy. But it is worthwhile to seek those mechanisms which can restore financial system and shift it from failure-prone to safe zone without strangling the social contribution of banks' financing of economic growth (Caprio, Honohan and Stiglitz, 2001). In other words, only those measures should be used to achieve the plateau of safety and soundness which don't hamper efficiency and growth-inducing abilities of financial market. In order to ensure, stable and efficient system, it is crucial to closely consider 'speculative' angle, which is intrinsic in capitalistic systems. Appropriate use of government regulations against (mis)use of liberal markets seems important for curbing excessive speculation and resultant instability.

In this regard, minimal regulation may not be sufficient to shift the financial system into safe zone. Accordingly, it is important to consider the relevance of theoretical models. For instance, many models of bank behavior exhibit discontinuities at level of an individual bank or at level of the whole system, whereby even minor changes in exogenous factors can shift

equilibrium behavior into another regime having significantly higher failure risk. Or, some models also provide caution about counterintuitive equilibrium effects of certain policies e.g. a slight change in capital adequacy requirement could actually enhance the failure risk. Thus, regulation fine tuned to a model that imperfectly captures the real world may miss its mark (Caprio, Honohan and Stiglitz, 2001). Putting it another way, intelligent regulations based on a specific model of bank or financial system behavior might be counterproductive if that model does not relate to reality.

Futuristic reforms need to cater whole financial market trading because conversion of investments into money is simplified by financial markets but actually, trading has little to do with raising funds for investment. For instance, financial market players traded during 2007 the bonds and stocks valuing US\$300 for each dollar which is raised by nonfinancial corporations for investment in plant and equipment. Thus, one key proposal can be the taxation on trading of financial assets by all financial institutions which come under country's legal rule e.g. banks, hedge funds, equity funds, holding companies etc. (Pollin, 2009). Just like sales tax, a small tax on all trading of financial market would increase the costs for shortterm speculators whereas it would have negligible effect on infrequent actual traders. Consequently, it would discourage speculation and direct funds toward productive investments. This proposal also entails the suggestion to raise the tax rate until that point where speculative traders see little incentive to engage in trading. It is also appropriate to mention here that taxing the trading of securities is not a new idea. Proposal for such taxation have been introduced in US Congress during Bush administration after crash of 1987. Even during Clinton administration, the proposal of this tax is argued persuasively by Joseph Stiglitz and Lawrence Summers, but never transformed into law.

In addition to this tax, asset-based reserve requirements can also prove helpful to channel funds to high priority and less risky areas. This requirement demands financial institutions to maintain cash reserves in proportion to their risky assets. In this respect, it is equally crucial to ascertain those priority sectors of economy that should be favored in getting credit. Domestic investments have clear risks so they should be encouraged whereas speculative investments have somewhat unclear risks so they should be discouraged. Housing is also a priority area but this sector should be subsidized directly through public policy provisions and not through risky gambling, as happened during last decade. On the other hand, businesses should have all

the freedom and control to even pursue non-preferential areas for new investments and financial institutions should also be free to finance them.

Government may also use direct lending and loan guarantees to ensure credit channeling to priority area. At present, sectors of the US economy getting considerable funding though these programs include education, agriculture, housing, small business, and rural development. However, influence of such programs on overall financial market risk is often not considered seriously because these programs are difficult to be integrated with FED's monetary policy and interest rate management.

Another proposal is the establishment of public credit rating agency to contend with private agencies because they have played a key role in housing bubble and consequent crisis. Rating agencies are supposed to do accurate and objective assessment of risks engaged in sale or purchase of a financial instrument. But even big agencies like Fitch, Moody, and Standard & Poor etc. provided exaggeratedly confident evaluations of extremely risky financial projects, particularly in securitized asset markets. An important aspect of this behavior of rating agencies, as discussed earlier in this Chapter, is related with the market incentives and conflicting interests of 'advisory' and 'rating' arms of CRAs which pressed the agencies to provide unreasonably favorable assessments. Providing favorable appraisal was worthy for these rating agencies' bottom lines (Pollin, 2009). Moreover, CRAs are 'hired' and 'paid' by companies they evaluate, which is also a reason behind this favorable bias. Thus, companies choose only those rating agencies which they consider would give them favorable ratings because companies' ability to earn high profits on their financial instruments depends on favorable ratings.

Such tenacious incentive system can be combated with a public rating agency with efficient compensation system. Although the deepening of securities markets has made the accurate risk appraisals very complicated task. However, public rating agency would be open about difficulties in rating certain instrument by classifying it 'non-ratable'. This would allow market participant to decide more cautiously if they want to gamble on such instrument. Public rating is likely to bring more transparency in financial markets and may also provide foundation to institute asset-based reserve requirements for financial institutions. More cautious assessment of risks by public rating agency is also likely to inhibit over-zealous behavior for financial innovations. However, that doesn't mean to turn the overall economy

less innovative or less dynamic. With public rating agency, the dynamism of a leashed financial market would develop in a manner that credit channels into productive areas (Pollin, 2009). Besides establishing public rating agency, another possibility can be the legal separation of the rating service from the advisory service of CRAs. Another significant proposal is to remove the CRAs rating from the structure of formal regulation. This implies that investors need to take responsibility of their decisions and regulators need not to hide behind CRAs' forecasts and play blame-game which they did in the wake of current crisis (Brunnermeier et al., 2009).

## 4.6 Macro-Prudential Framework

The current crisis has highlighted the need to opt for macro-prudential regulation and supervision. Today, policy debates are largely focused on the design, implementation and effectiveness of macro-prudential apparatus. Before incidence of current crisis, only limited literature and research was conducted on this subject. However today, macro-prudential framework has gained attention of all policymakers who talk about reforms in post-crisis scenario (e.g. Shirakawa, 2009; Nijathaworn, 2009; Tumpel-Gugerell, 2009; Bini-Smaghi, 2009; Kohn, 2009; Brouwer, 2010).

Although there exist various disagreements, the objective of macro-prudential policy is generally aimed to bring financial stability by limiting the risks and costs of systemic crises. Borio and Drehmann (2009) specify these risks as the risks of episodes of system-wide distress that have significant macroeconomic costs. Caruana (2010) postulates the objective of macro-prudential policy as "to reduce systemic risk by explicitly addressing the interlinkages between, and common exposures of, all financial institutions, and the procyclicality of the financial system" (Caruana, 2010). Perotti and Suarez (2009) regard macro-prudential policy as targeting to discourage individual bank strategies which result in systemic risk, i.e. a negative externality on the financial system.

Just like the goals and objectives, there also exist no agreement on tools and instruments of macro-prudential framework. A range of possible macro-prudential measures have been investigated without ascertaining some principal instrument or some standard nomenclature of instruments. Single key distinction on this issue is present between 'macro-prudential tools' that are defined as prudential tools set up with a macro perspective i.e. system-wide or systemic and 'other macroeconomic tools' that can support financial stability such as fiscal

policy (Blanchard et al., 2010; Borio, 2009). In this regard, Hannoun (2010) exhibited the overview of alternative sets of tools geared towards financial stability, given at Annexure IX.

In order to specify tools and instruments of macro-prudential framework, it is of utmost importance to study their respective effectiveness. It includes quantifying the effect of macro-prudential policy instruments on leverage, credit growth, asset prices and bubbles. Moreover, relevant date should be collected and assessed for an evocative analysis of macro-prudential policy. Likewise, empirical analysis also needs to be undertaken to evaluate the effectiveness of macro-prudential tools in evading financial instability. It would also be significant to study the interaction and coordination between monetary policy and macro-prudential policy.

Financial and banking crises are not new phenomena. The quite-frequent recurrence of these crises implies that when a regulatory mechanism failed to mitigate boom-bust cycles, it is not a successful strategy to keep on reinforcing basic regulatory structure (Brunnermeier et al. 2009). Thus, it is most important for macro-prudential regulation to act as a countervailing force to the natural decline in measured risks during boom and to the subsequent rise in measured risks during subsequent collapse. This countervailing force need to be maximally rule-based and focused because discretion is hard to use during booms and euphoric times.

## **CONCLUSION**

Finance-growth theories and models with which this dissertation is started were embedded in the neoliberal approach that has been implemented in countries around the world. This resulted in the portrayal of financial liberalization as a panacea for economic growth. Series of crises occurred in emerging economies of Asia and Latin America during 1990s following from FL were taken as pure problems of those economies. Policy makers in developed economies prescribed even more FL to these crisis-prone countries. Some even considered FL as an 'irreversible' phenomenon. However, current crisis of developed economies and their ensued response in form of state intervention and repression has not only exposed double-standard of global managers, but also regained the role of state in financial markets.

Faced with debt overhang of historic volumes, policy makers are obsessed with debt reduction, debt management, and other efforts to keep cost of debt at manageable levels. With the dual aim to maintain low interest rates and to maintain captive domestic audience,

financial repression is renewing favor and prospering in its many guises. This new era of financial repression has not only trimmed the savings and investments of investors but this repression is also hard to avoid as it is occurring in various forms over much of the investing world. Moreover, government is also injecting capital in financial institutions and intervening directly in financial markets.

This infers that it is not rational to simply get the government out of the way and expect 'invisible hand' to take over and correct every imbalance before it become systemic. Current crisis has not only rejected the idea of 'complete dismantling of government's role', but also proved the necessity for appropriate state intervention and ownership in financial markets. Along with it comes the need to regulate financial innovations which are so complex that central banks are facing gigantic challenge to measure, monitor and control the total liquidity in the economy. In this regard, policy makers in US and Europe are suggesting new tools and regulations for better prudential oversight, accounting disclosures and more transparency. As markets evolve and become complex, regulatory and supervisory frameworks need to be continuously reassess and adapt to the varying nature of financial risk and systemic risk. The mutual challenge for banking supervision, market surveillance, and financial policymaking is to balance efforts for maintaining financial stability and manage systemic risks against efforts to ensure that market participants bear the cost of imprudent risk-taking and consequently have right incentives to avoid imprudence. In this regard, reforming the systemic risk management systems is very important. Growing focus on macro-prudential regulation and supervision is a significant reform process in this respect. The role of credit agencies also need to be revisited with improved public scrutiny. In addition to this, fiscal expansion in order to cope with recession must also be based on controls over mobility of global financial flows. Because otherwise, large-scale and speculative shifts of finance from one country to another leading to destabilize the fiscal policy. Emerging economies have already felt this fear and put capital controls.

Capitalism is inherently unstable and crises are intrinsic to it but it is not rational to justify the cyclical nature of financial crises, especially when the size and consequences of a crisis are as great as this one. This particular crisis is not embedded in simple capitalistic system, rather it is most fragile form of capitalism. It is financialized capitalism that emerged from neo-liberal agenda and resulted in deregulation and the creation of fictitious wealth that was inconsistent with real wealth. Especially in developed countries, total financial assets represent a multiple

of annual economic production, accompanied by phenomenal growth of assets in bond and equity markets. Thus, the potential measures by capitalist economies in the face of this crisis today depend upon the extent to which they can confront the hegemony of neoliberal capitalism – hegemony which became widespread since 1980s due to fear of socialism and transformation of neoclassical economics into mainstream economics.

With neoliberal capitalism entering a period of crisis, previously dominant ideology of 'free market' and 'laissez faire' has quickly lost its legitimacy. This is analogous to the rapid demise of the once dominant Keynesian ideology of 'regulated' capitalism during 1970s. Now once again, neoliberal capitalism is going to be restructured during coming years in US and resultantly throughout world. However, the end-product of this restructuring process is yet opaque and unclear. One suggestion in this respect is to move away from traditional orthodoxy that is widespread in economic research and to work out alternatives models because standard theories that contributed to liberalizing and deregulating policies led us to this crisis and have provided apparently no guidance on how to respond. But this is bitter truth that series of crises in emerging and developing economies of Asia, Latin America and Russia during late 1990s couldn't bring this realization to global policy makers because they might not be considered as significant as crisis in developed economies of US and Europe during late 2000s.

## **GENERAL CONCLUSION**

The triptych of liberalization, globalization and financialization has not only came up with distressing consequences for developing and emerging economies during 1990s, but also devastating results for developed economies during 2000s – economies with 'apparently' well-developed financial sectors. This broad conclusion is derived from multi-pronged themes analyzed throughout this thesis.

By reviewing extensive literature on finance and growth, it can be determined that economic growth and development are closely related to 'finance', although there is difference of views on direction of causation as well as on relative significance of various structures of financial systems. It can also established that financial systems exert significantly positive effect on economic growth though provisioning of various financial services which facilitate in improving market frictions. The evolution of growth and development theories progressed enough to bifurcate the 'money' and 'credit' views of economy and the transmission mechanisms linking money and income. This gave rise to recognition of restrictive financial policies characterized by government intervention which was identified as 'financial repression'. As a matter of fact, governments of developing and emerging economies, since long, had been intervening in the financial markets to fulfill their development policy objectives. Along with these objectives, governments also try to narrow down the concentration of wealth and monopoly power, to generate fiscal resources, and to channelize resources toward most favored parties via financial system. In this aim, the authorities keep interest rates artificially at low level. In addition to this, the provision of credit subsidies to favored firms and units in industries and agriculture for achieving development goals is also a seductive idea. Thus, governments generally pursue the provisioning of direct subsidies and outright grants to agriculture or industrial units.

It is difficult to find a country that had never intervened in the financial sector, in one way or the other. Much of the twentieth century saw intensified financial repression. Especially in the years after Great Depression and World War II, the governments tried to maintain the interest rates well below market rates by putting artificial ceiling on them and to control the allocation of credit through their directives or through directly owning the banks and financial institutions. Interest rate restrictions, heavy reserve requirements on bank deposits, and

compulsory credit allocations interact with prevalent price inflation in order to reduce the desirability of holding claims on the domestic banking system as the real deposit rate of interest on monetary assets generally become negative. However, various development economists were still favoring the 'forced savings' through inflation and credit subsidies at below market interest rates as means to stimulate socially desirable investments. Financial sector was not regarded as major element in the economic growth and development process, unless manipulated and repressed. The resulting distortions, erosions and eventual deterioration of the financial system was considered as consequence of financial repression, therefore, 'government intervention' is recognized to be synonymous with 'government failure' due to its associated economic inefficiencies. Particularly the seminal works of McKinnon (1973) and Shaw (1973) and subsequent policy frameworks attributed financial repression as one of the key culprits hindering economic growth in developing and emerging countries. Thus, curing financial repression was inherent its definition.

Opposition of financial repression has embedded suggestion to maintain positive and uniformly high interest rates by removing interest rate ceilings, heavy reserve requirements, and other forms of controlled allocations of credit. Only in such setting, the domestic savers and investors might be able to realize the true scarcity price of capital and therefore decrease the excessive dispersion in the profitability of investment in different sectors of the economy. In this regard, McKinnon-Shaw presentation of the case for 'financial liberalization' as 'opposite' of 'financial repression' became the core theoretical foundation for financial sector analysis in end of 1970s.

In the perspective of this theoretical advancement, neoliberal agenda is initiated during 1980s, known as 'Washington Consensus'. It amalgamated with growing financial globalization and integration which set up the case for FL in developing and emerging countries, particularly of Asian and Latin American economies. This agenda was pursued by international financial institutions, mainly under control of US and other developed economies, to force developing and emerging countries to adopt FL as conditionality to access concessional loans. Even countries not accessing these reform programs also tended to get policy advice emphasizing liberalization reforms, due to technocratic environment recognizing McKinnon-Shaw ideas as orthodoxy.

While recalling 1990s by developing countries to experience market oriented liberalization reforms, the same period also bring to mind the periodic financial crashes that spread in quick and unpredictable manner. These crashes and subsequent crises resulted in confusions and dilemmas on logic and implementation of liberalization reforms. In this aim, certain preconditions as well as optimum sequencing to start with domestic liberalization of interest rates and leaving capital market liberalization till end has been recommended by the proponents of FL to be fulfilled before implementing reforms. However, compliance with these conditions cannot guarantee success of FL due to the flaws inherent in financial markets which make perfect market models and theories irrelevant. The demonstration of various bottlenecks in the developing economies e.g. negative externalities, asymmetric information, high debt-equity ratio, weak regulatory system etc. implies that theories and ensuing policies of FL are based an inaccurate and incomplete representation of the institutional and structural realities prevailing in these economies.

It may be inferred that development economics should be more concerned with what it can do in the presence of existing limitations. A policy that requires substantial change in structure and institutions before implementation is of little validity and worth. A crucial question which arises in this respect is that what role is left for the theory in such circumstances. In fact, theory which considers the structural and institutional actualities can contribute in recognizing the limitation to change as well as the possibilities for progress. Unfortunately, all varieties of FL failed due to weak and flawed understanding of these structural and institutional realities, resulted in episodes of crashes and crises. In order to strengthen opposition against FL, the crashes and crises in East Asia and Latin America during 1990s accompanied by instability in financial system are used as principal argument. Although there exists considerable arguments in favor of financial globalization and integration, the repeated episodes of crises demands rethinking on financial stability issue, an area still immature as compared to monetary and macroeconomic analysis.

Particularly when it comes to capital flows, their fragility is exhibited as a primary risk associated with the liberalization of capital markets. This infers that liberalization should not be pushed on countries and it is duty of economists and policymakers to present their analysis and research in an accessible and convincing manner in order to protect developing and emerging countries from undue pressures for financial liberalization. In fact, the interaction between domestic and international liberalization might result in a scenario where

international capital flows feed the growth of welfare-reducing financial intermediation of domestic financial sector. Benefits from liberalization of capital markets can be sizeable only if countries have their 'house in order' i.e. liberalization in the absence of adequate regulation and effective supervision can easily and quickly lead to vulnerabilities which magnify the existing distortions. Thus the caveat for the presence of adequate institutional infrastructure implies that liberalization is still a long way off for developing and emerging countries. The benefits of liberalization to economic growth and development may not be worth the costs of the crises which imply the demand for 'restraint', especially reimposition of capital controls on international capital flows. New theoretical developments also submit that financial are different from other markets e.g. commodities markets, because 'market failures' are more prevalent and widespread in financial as compared to other markets in the economy which suggest the need for some degree and form of 'intelligent' government intervention.

However, there have been certain developments and innovations in international financial markets like the growing use of derivatives, which made the management of financial markets more complicated and difficult than ever, even for developed economies of Europe and US, as evident for 2008 financial crisis which eventually turned into global recession despite of the presence of macroeconomic tools to combat boom and bust cycles along with sophisticated regulatory and supervisory framework. Before 2007, crisis of this grandeur was not remotely imagined by economists and policymakers even in their worst nightmares because they were confident about the strength of financial systems of developed economies due to their grand size. While comparing developing countries as small boats on tempestuous sea of international finance, Paul Volcker, former Governor of Federal Reserve System, stated that a 'big ocean liner like the USS united states can safely navigate through a storm, but even the sturdiest vessel is likely to capsize (Volcker, 1998). The possibility of occurrence of crisis in US like the ones occurred in Asia and Latin America is also strongly rejected by him by comparing the entire banking systems of Indonesia or Thailand or Malaysia to one good-sized regional bank in the US. However, it was only few years after this proclamation that world saw 'USS United States' sinking like a vessel.

As a matter of fact, the series of crises occurred in emerging economies of Asia and Latin America during 1990s following from FL were taken as pure problems of those economies. Policy makers in developed economies prescribed even more FL and deregulation to these crisis-prone countries. Some even considered FL as an 'irreversible' phenomenon. However,

current financial crisis of US and Europe and ensued response in form of state intervention and repressive measures has not only exposed double-standards of global managers, but also regained the role of government intervention in financial markets. Faced with debt overhang of historic volumes, policy makers of these developed economies are obsessed with debt reduction, debt management, and other efforts to keep cost of debt at manageable levels. With the dual aim to maintain low interest rates and to maintain captive domestic audience, financial repression is renewing favor and prospering in its many guises. Governments of crisis-torn countries are heavily injecting capital in financial institutions and intervening directly in financial markets.

This infers that it is not rational to simply get the government out of the way and expect 'invisible hand' to take over and correct every imbalance before it become systemic. Current crises has not only rejected the idea of 'complete dismantling of government's role', but also proved the necessity for appropriate state intervention and ownership in financial markets. Along with comes the need to regulate financial innovations which are so complex that central banks are facing gigantic challenge to measure, monitor and control the total liquidity in the economy. In this regard, policy makers in US and Europe are suggesting new tools and regulations for better prudential oversight, accounting disclosures and more transparency. As markets evolve and become complex, regulatory and supervisory frameworks need to be continuously reassess and adapt to the varying nature of financial risk and systemic risk.

The mutual challenge for banking supervision, market surveillance, and financial policymaking is to balance efforts for maintaining financial stability and manage systemic risks against efforts to ensure that market participants bear the cost of imprudent risk-taking and consequently have right incentives to avoid imprudence. And this challenge has to be met without impairing economic efficiency and long-term growth. The role of credit agencies also need to be revisited with improved public scrutiny. In addition to this, fiscal expansion in order to cope with recession must also be based on controls over mobility of global financial flows. Because otherwise, large-scale and speculative shifts of finance from one country to another lead to destabilizing the fiscal policy. Emerging economies have already felt this fear and put capital controls.

Following the current crisis, the debate on inherently unstable nature of capitalism has once again re-surfaced. Although crises are considered to be intrinsic in capitalistic economies,

however, it is not rational to justify the cyclical nature of financial crises, especially when the magnitude, topography and consequences of a crisis are as great as this one. This particular crisis is not embedded in simple capitalistic system, rather it is most fragile form of capitalism. It is financialized capitalism that emerged from neo-liberal agenda and resulted in deregulation and self-regulation, and the creation of fictitious wealth that was inconsistent with real wealth. Especially in most developed countries, total financial assets represent a multiple of annual economic production, accompanied by phenomenal growth of assets in bond and equity markets. Thus the potential measures by capitalist economies in the face of this crisis today depend upon the extent to which they can confront the hegemony of neoliberal capitalism – hegemony which became widespread since 1980s due to fear of socialism and transformation of neoclassical economics as mainstream economics.

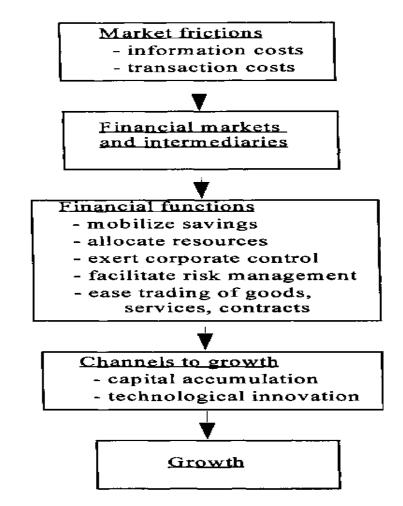
But this is bitter truth that series of crises in emerging and developing economies of Asia, Latin America and Russia during late 1990s couldn't bring this realization to global policy makers because they might not be considered as significant as crisis in developed economies of US and Europe during late 2000s. Moreover, crises of 1990s were often considered to be embryonic in the 'underdeveloped' nature of developing and emerging economies, whereas the 'fragile' nature of financial markets under neoliberal capitalism was ignored till occurrence of current crisis.

With neoliberal capitalism entering a period of chronic crisis, previously dominant notions of 'free market' and 'laissez faire' have quickly lost their legitimacy. This seems analogous to the rapid demise of the once prevailing Keynesian ideology of 'regulated' capitalism during 1970s. Now once again, capitalism might be restructured in coming years in US and resultantly throughout world economy. But the end-product of this restructuring process is yet opaque and unclear. One suggestion which can a topic for the future research agenda, is to move away from widespread and traditional economic orthodoxy and to work out alternatives models because standard theories that contributed to liberalizing policies led us to this crisis and apparently provided no guidance on how to respond. However, developing and implementing such alternatives is still the major challenge which theorists and policymakers are facing right now.

# **ANNEXURES**

#### **ANNEXURE I**

## A Theoretical Approach to Finance and Growth



(Source: LEVINE, Ross (1997), Financial Development and Economic Growth: Views and Agenda)

#### <u>ANNEXURE II</u>

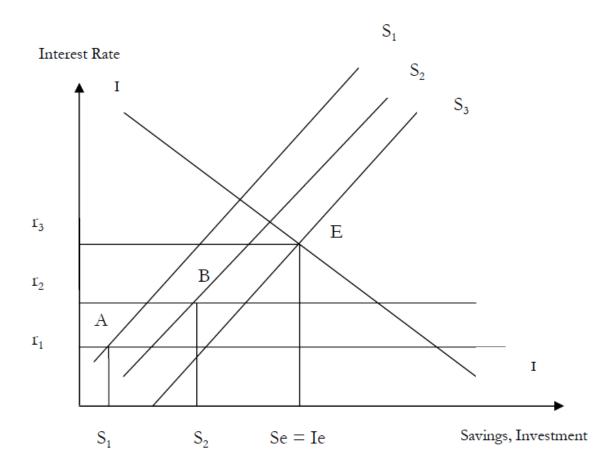
## Components of a 'Good' Financial System

While observing financial systems of highly developed economies, Pater L. Rousseau and Richard Sylla (2001) provide a list of key components of a good financial system. These components are:

- (a) Sound public finances and public debt management: Sound public finance includes setting and controlling public expenditures priorities, raising revenues adequate to find them efficiently, and if as is often the case that involves issuing public debt, then provision must be made for servicing the debt to gain and keep the confidence of the investors who purchase it.
- **(b) Stable monetary arrangements**: stable money is desirable for the usual textbook reasons. Money is useful as a medium of exchange, a store of value, and a standard of deferred payments. All three uses, but especially the latter two, are harmed if money fluctuates and depreciates in value in unpredictable ways.
- (c) Variety of banks, some with domestic and others with international orientations, and perhaps some with both orientations.
- (d) Central bank to stabilize domestic finances by preventing and alleviating problems in financial system by acting as lender of last resort; and manage international financial relations.
- **(e) Well-functioning Securities markets:** Once securities are issued, trading markets provide them with transferability and liquidity that enhance their appeal to investors, be they domestic or foreign.

#### **ANNEXURE III**

## McKinnon-Shaw Thesis: Savings, Interest rate, and Investment



McKinnon-Shaw Thesis is explained graphically in above figure, where the real interest rate is very low 1 r as it is administered rather than market determined, and so generates only relatively small savings 1 S ( at the intersection point A). Investment is savings constrained in a financially repressed regime, and investors generally depend on self-financing. With financial liberalization, 1 r will be pushed up to 2 r. The savings curve shifts to 2 S and both savings and investment rise to the point 2 S from the origin (at the intersection point B). When market is fully liberalized, the rate of interest is 3 r and savings and investment are at equilibrium (Se=Ie). Unless interest rate r= 3 r, there is a disequilibrium between savings and investment. As interest rate rise, allocation of resources will be better and growth rate of output will be stimulated (Cited in Fry, 1995, p. 24)

#### ANNEXURE IV

#### **Optimal Stabilization Policy Mix**

The optimal policy mix is implemented in two phases. During the initial phase, the program consists of increases in the loan and deposit rates, a depreciation of the exchange rate below its long-run equilibrium level, and a decline in the rate of growth of the domestic component of base money. The working mechanism of the policy mix begins by removing the initial shortage of real working capital through an increase in the deposit rate, so that the depositincome ratio can rise to equal its long-run equilibrium level. The increase in deposits allows an expansion of loans through which alleviates the shortage of working capital finance. Since the deposit-income ratio is sensitive to expected real yields on domestic and foreign assets, the interest rate and exchange rate must be coordinated from the outset. An initial overdepreciation of exchange rate will lower the expected rate of depreciation in the near future, thereby reducing the yield on foreign assets and stimulating a substitution towards domestic assets. The increase in foreign savings implies that although the increase in deposit rate may well establish a nominal deposit rate above its long-run value, the real deposit rate may be below its steady-state value. The real deposit rate will be kept below its long-run value because foreign savings will replace some of the domestic savings which would need to be mobilized to maintain the deposit-income ratio in equilibrium. Although current-period inflation is higher due to the cost-push effect of the devaluation, the increase in nominal interest rates and the lower rate of expected depreciation will also allow a lower real rate of interest to persist.

The over-depreciation of the exchange rate will also improve the trade balance by improving domestic competitiveness, thereby leading to an increase in the domestic money supply. If the increase in demand for nominal money, due to increase in deposit rates, falls short of the increment in the supply of money from the open-economy sources, an initial discrete decrease in the domestic component of base money will be required to maintain price stability. Regardless of the size of initial reduction in the money supply, the rate of growth of the domestic component must decline sharply if any improvements in the balance of payments are to be sustained. The model demonstrates a logical inconsistency at this point. The problem is that for the liberalization to be successful, the amount of demand deposits held must increase. However, for the liberalization to be sustainable, the amount of domestic money must decrease. The two goals are incompatible. If the amount of domestic deposits increases, the supply of money, by definition, must increase as well. Mathieson is arguing that the central bank should essentially be sterilizing all capital inflows.

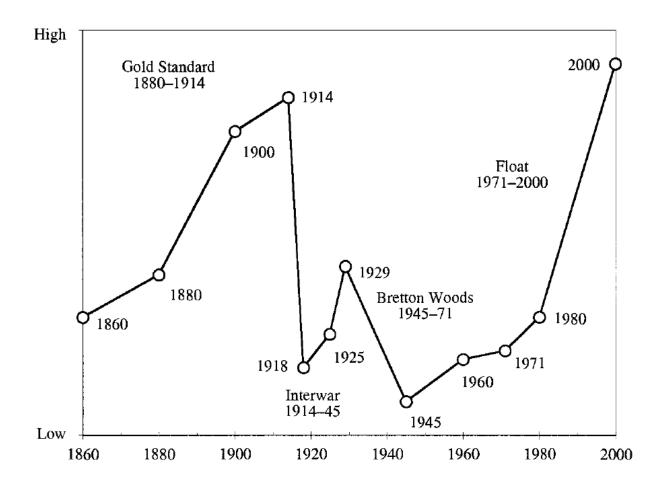
The second phase of the liberalization program involves a gradual appreciation of the exchange rate, gradual reductions in the nominal loan and deposit rates and a gradual increase in the rate of growth of the domestic component of money. The trade surplus and the expansion of output in the initial phase will then put upward pressure on the exchange rate,

pushing it back to its long-run equilibrium level. The initial increase in aggregate supply responding to competitive advantages, and the subsequent reduction in demand for foreign goods (inputs), begin to reduce domestic inflation. Falling inflation further reduces inflationary expectations and allows a reduction in nominal deposit and loan rates. Real deposit rates will rise, provided the fall in inflation is greater than the fall in nominal rates. Once portfolio equilibrium is reached, capital inflow will cease, implying that real interest rates will need to rise to their long-run values to maintain the steady-state deposit-income ratio. As foreign savings are no longer entering the economy, the domestic component of the money supply can be allowed to increase gradually to maintain the equilibrium deposit-income ratio. The higher real deposit rates will ensure increased demand for domestic money matches the increased supply. The economy then comes to test its newer, higher steady-state level of growth.

(Source: MATHIESON, Donald J. (1979), "Financial Reform and Capital Flows in a Developing Economy", IMF Staff Papers, 26 (3), September, pp. 450-489, Washington DC: IMF)

#### ANNEXURE V

## A Stylized View of Capital Mobility in Modern History



(Source: OBSTFELD, Maurice and TAYLOR, Alan M. (2003), "Globalization and Capital Markets" in Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (eds.) 'Globalization in Historical Perspective', University of Chicago Press)

## **ANNEXURE VI**

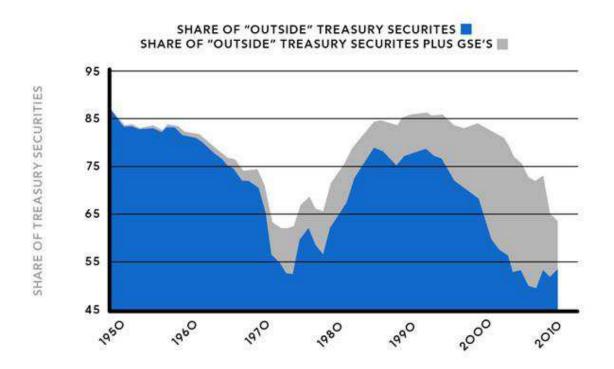
## The Macro- and Micro-Prudential Perspectives Compared

Macroprudential	Microprudential
limit financial system-wide	limit distress of individual
distress	institutions
avoid output (CDD) costs	consumer (investor/depositor)
avoid output (GDP) costs	protection
Seen as dependent on	Seen as independent of
collective behaviour	individual agents' behaviour
("endogenous")	("exogenous")
important	irrelevant
in terms of system-wide risk;	in terms of risks of individual
top-down	institutions; bottom-up
	limit financial system-wide distress  avoid output (GDP) costs  Seen as dependent on collective behaviour ("endogenous")  important  in terms of system-wide risk;

(Source: BORIO, Claudio (2003), "Towards a macroprudential framework for financial supervision and regulation?" *CESifo Economic Studies*, 49(2), pp. 181–216)

#### **ANNEXURE VII**

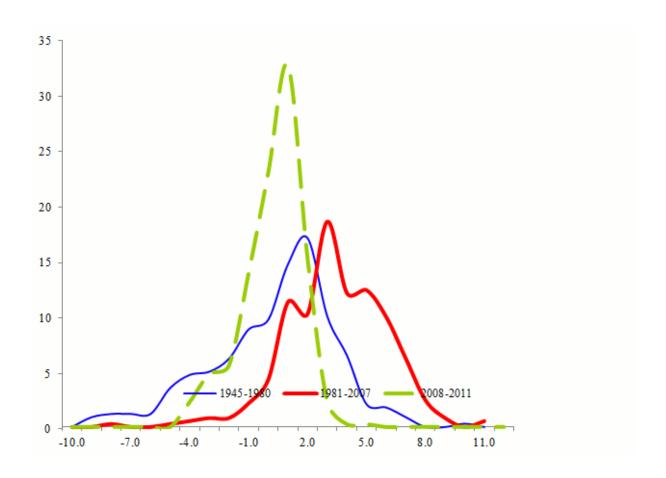
# Share of "Outside" Marketable U.S. Treasury Securities plus Government Sponsored Enterprises (GSEs) Securities during 1945-2010



(Source: REINHART, Carmen M. (2010), Financial repression: back to stay)

# **ANNEXURE VIII**

## Real Interest Rates Frequency Distributions: Advanced Economies (1945-2011)



(Source: REINHART, Carmen M. and SBRANCIA Belen M. (2011), Liquidation of Government Debt)

# **ANNEXURE IX**

# **Alternative Sets of Tools to Foster Financial Stability**

Tool set	Goal	Instruments
Prudential policy: Microprudential	limit distress of individual institutions	e.g. quality/quantity of capital, leverage ratio
Prudential policy: Macroprudentia	limit financial system-wide distress	e.g. countercyclical capital charges
Monetary policy	Price stability	policy rate, standard repos
	Liquidity management	Collateral policies; interest on reserves; policy corridors
	Lean against financial imbalances	policy rate; reserve requirements; mop-up of liquidity; FX reserve buffers
Fiscal policy	Manage aggregate demand	Taxes; automatic stabilizers; discretionary countercyclical measures
	Build fiscal buffers in good times	e.g. measures to reduce debt levels; taxes/levies on the financial system
Capital controls	Limit system-wide currency mismatches	e.g. limits on open foreign exchange positions; constraints on the type of foreign currency assets
Infrastructure policies	Strengthen the resilience of the infrastructure of the financial system	e.g. move derivative trading on exchanges

Source: Hannoun (2010)

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# **SYNTHESE**

### INTRODUCTION

### Contexte et cadre théorique

La croissance économique et le développement représentent un sujet majeur de l'économie du développement. Lors de l'examen des facteurs qui l'affectent, la «finance» a toujours été retenue comme ayant un rôle crucial à jouer. Par la finance, nous entendons les processus de création et de gestion de la liquidité, les mécanismes bancaires et de crédit, les mouvements de création, de circulation et d'annulation des créances-dettes liés aux actifs et passifs privés et publics sur les marchés financiers. Certains économistes, tels que Walter Bagehot (1873), ont principalement lié la révolution industrielle en Angleterre à son système financier. De Joseph Schumpeter à Edward Shaw et Ronald McKinnon, en passant par les économistes modernes, la relation entre finance et croissance a été analysée de différentes manières. Un système financier agit comme un « modérateur » pour permettre la compensation entre les capacités de financement et les besoins de financement. Cette modération peut être effectuée soit par contact direct, fondé sur le marché du financement, soit par contact indirecte, par le biais du financement bancaire, généralement connu sous le nom d'« intermédiation ». En termes simples, il est habituellement supposé que le système financier canalise l'épargne des ménages vers les entreprises, et alloue les fonds en faveur de l'investissement. Ceci est considéré comme le mécanisme le plus simple et commun qui relie la finance et la croissance. En dépit de la reconnaissance de ce lien finance-croissance depuis plus d'un siècle, l'analyse globale et systématique des liens entre les facteurs financiers et la croissance date de quelques décennies seulement, avec l'avènement des théories et modèles modernes de croissance endogène. Ces théories et modèles mettent l'accent sur l'épargne et l'intermédiation financière, alors vues comme les principaux canaux de la croissance endogène.

En outre, l'amélioration des taux de croissance économique dans les pays industrialisés, ayant des secteurs financiers développés, a également motivé les économistes à étudier en profondeur la relation entre le développement financier et le développement économique. Théoriquement et empiriquement, il semble y avoir des liens étroits entre ces deux sphères. Cependant, le consensus est fragile sur la définition et la mesure du développement financier. Ainsi, dans cette thèse, le développement financier est défini

comme « les facteurs, les politiques et les institutions qui mènent à une intermédiation financière et à des marchés efficaces, ainsi qu'à un accès large et profond aux capitaux et aux services financiers » (Rapport sur le développement financier, 2008). À cet égard, la direction de la causalité entre finance et croissance est d'une importance critique. Parallèlement aux structures de base de la banque et du marché, l'infrastructure juridique joue également un rôle majeur. Cependant, une autre option consiste à se concentrer exclusivement sur la gamme de services financiers ou de fonctions offertes par un secteur financier en particulier, afin de réduire les frictions du marché. Quelles que soient les raisons, de nombreuses analyses théoriques et empiriques supposent que des systèmes financiers bien développés exercent une influence positive sur la croissance économique et le développement.

Les nouveaux apports des théories de la croissance laissent souvent supposer que les pays qui épargnent et investissent davantage tendent à enregistrer des taux de croissance supérieurs à long terme. Est notamment soulignée l'importance des mesures de restriction sur le contrôle des prix et de l'allocation du capital. À cet égard, Keynes (1936) et Tobin (1965) ont fourni le principal cadre théorique à la « répression financière » et aux politiques liées qui remplacent le marché dans la détermination des prix et de l'allocation. Les cadres théoriques afférents font généralement l'hypothèse que les mécanismes de transmission de la politique monétaire, tels que le canal des taux d'intérêt, influencent les investissements qui, à leur tour, influent sur le niveau de revenu, ainsi que sur la croissance économique et le développement. Cela a fourni une justification raisonnable et logique de l'intervention gouvernementale sur les marchés financiers. Par marchés financiers, nous entendons les marchés nationaux et internationaux de transactions d'instruments financiers, comme, par exemple, les actions, les obligations, les lettres de change, les devises, les contrats à terme et les options, lesquels fonctionnent en termes de transactions entre monnaies et crédits, et incluent donc aussi bien les marchés monétaires que les marchés de capitaux. Ainsi, au moins jusqu'à la fin des années 1970, les restrictions financières ont souvent été imposées spécifiquement dans les pays en voie de développement, et l'intervention du gouvernement était une caractéristique obligatoire des politiques financières. C'est l'ouvrage précurseur de McKinnon (1973) qui a fourni un point de vue tout à fait différent sur l'intervention du gouvernement au sein des marchés financiers. Selon lui, la fragmentation de l'économie fournit une justification au syndrome de l'intervention, qui prévaut généralement dans tous les pays, mais particulièrement dans les économies en développement. Toutefois, c'est le plafonnement des taux d'intérêt et d'autres mesures restrictives, menant à des conséquences négatives, qui ont motivé McKinnon (1973) et Shaw (1973) à exposer le cas inverse de la répression financière : la libéralisation financière.

Les théories et les modèles résultant de la libéralisation financière (LF) ont été fondés sur la foi flagrante dans les forces d'équilibre du marché, et ont alors demandé un retrait conséquent du gouvernement des mécanismes de marché. Le principal fondement théorique de ces modèles est constitué par des taux d'intérêt supérieurs, ayant des relations positives avec la croissance économique. Dans ce but, l'hypothèse de complémentarité de McKinnon et celle d'intermédiation de la dette de Shaw ont représenté une contribution importante à l'ordre du jour néolibéral, qui s'est développé par la suite. Les fondements théoriques de la LF et ses raffinements successifs ont fait dévier l'idée de LF vers un processus complet composé de mélange de mesures politiques en fonction de la situation du pays et des préférences individuelles. Ceci a donné lieu à une nouvelle phase du capitalisme, marquée par la « financiarisation », laquelle est également connue sous le nom de « capitalisme financier » aux États-Unis, puis en Europe où le secteur financier joue également un rôle central. À la fin des années 1980 et 1990, la LF a commencé à se répandre dans le monde en développement, notamment dans les pays émergents d'Asie et d'Amérique latine, dont les économies ont été restructurées et réformées selon les conditions d'une économie de marché. L'un de puissants moteurs de la popularité de la LF dans ces économies était le Consensus de Washington, un mélange de réformes visant à alléger les contrôles sur les marchés financiers. La déréglementation, la privatisation, la libéralisation du secteur financier, la libéralisation du commerce et de change faisaient, entre autres, partie de ce programme adopté par la plupart des pays en développement, en transition vers l'économie de marché. Une autre force vitale, qui a joué le rôle principal dans le modèle de LF, et qui bourdonnait au tournant du XXI<sup>e</sup> siècle, a été représenté par la mondialisation et l'intégration financières, qui ont appelé à une ouverture financière supplémentaire. Cela a fourni un nouvel élan à la mise en œuvre des réformes de LF dans ces économies.

Toutefois, la libéralisation et la mondialisation des marchés financiers ont conduit à une série de crises financières, qui ont rendu la décennie 1990 extrêmement douloureuse pour les économies émergentes d'Asie et d'Amérique latine. Depuis les années 1960, les économies asiatiques avait surperformé avec des taux de croissance élevés, accompagnés de l'expansion progressive et soutenue de l'accumulation de capital physique, qui leur avaient valu l'appellation de « Tigres asiatiques ». Mais, sous la pression du programme néolibéral, les débuts du processus de libéralisation au cours des années 1980 et 1990, avec l'ouverture des

marchés de capitaux, ont stimulé l'apparition de crises financières dans ces pays. Malgré une moindre répression et le respect des prescriptions politiques avec toute la prudence nécessaire, les pays asiatiques, en particulier les pays d'Asie de l'Est, ont connu une crise dont ils n'ont pu se relever pendant des années. Ce qui a commencé en Septembre 1997 en Thaïlande en tant que crise de la monnaie, puis qui a contaminé l'Indonésie, la Corée et Hong Kong, est connu sous le nom de « grippe asiatique », laquelle est descendue en Russie en août 1998, et a alors conduit à l'annonce de son moratoire sur ses dettes extérieures. Elle s'est ensuite étendue au Brésil pour finir par générer la crise financière latino-américaine en 1999.

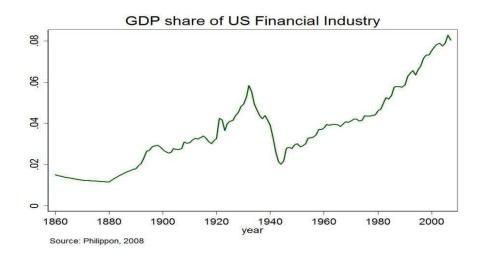
Cela a amorcé une longue série de critiques à l'égard de la LF, dont une partie était davantage fondée sur les maux inhérents à l'économie de marché en général. Selon ces critiques, les hypothèses sur lesquelles la théorie et les modèles de LF étaient fondées étaient en fait peu pertinentes, ce qui laissait supposer que les marchés financiers étaient alors imparfaits. Notamment, l'incomplétude de l'information, comme soulignée par le modèle de Stiglitz-Weiss, ainsi que les externalités et l'incomplétude des marchés financiers étaient considérées par certains comme les sources de ces imperfections. Cette critique, qui a émergé à la suite de crises financières dans les pays émergents, a trouvé réponse chez les partisans de la LF, qui insistaient alors sur l'importance des modalités de mise en œuvre pour parvenir au succès. Deux domaines clés à cet égard sont représentés par les conditions préalables et le séquençage. Ainsi, la stabilité macroéconomique, ainsi que la régulation et la supervision efficaces, sont considérées comme des conditions nécessaires au passage vers la LF. La mise en œuvre simultanée des libéralisations internes et externes, à savoir la libéralisation du marché des capitaux et celle du commerce, est considérée comme dangereuse en raison de la nécessité d'un ordonnancement optimal des réformes de libéralisation. En ce qui concerne le séquençage, le débat a porté sur les concepts de « big bang », alors opposé aux approches graduelles, et a accentué les critiques sur les modalités de LF. Un flux important de critiques a été introduit par les nouveaux structuralistes et les écoles institutionnalistes. Les deux considéraient la LF inappropriée dans les pays émergents et en développement en raison de leurs réalités structurelles et institutionnelles, ainsi que de l'inaptitude de leurs paramètres, laquelle justifierait une répression financière prolongée. Par exemple, l'étendue de marchés monétaires non-officiels (ou parallèles) est l'une de ces réalités.

La dévastation de la plupart des économies d'Asie et d'Amérique latine au cours des années 1990 a intensifié les discussions et les débats entre théoriciens et décideurs politiques afin de déceler les racines potentielles du problème. À cet égard, les crises sont étudiées dans une

perspective historique afin de déterminer si le lien entre la libéralisation et les crises est profond. Une fois de plus, les défauts de préréglage de la LF sont accusés après coup, car s'il est facile et rapide de déréglementer les taux d'intérêt, de privatiser les banques et certaines entreprises d'État, ou encore de libéraliser les flux de capitaux, il demeure laborieux de développer l'infrastructure institutionnelle, d'acquérir certaines compétences administratives et de supervision, ou encore de gérer les portefeuilles infectés. En outre, la libre circulation des capitaux a également contribué à la volatilité des marchés financiers, remettant alors en cause la stabilité des marchés financiers. Ainsi, contrairement à ses affirmations en termes d'apport de stabilité, la LF dans les pays émergents a agi en sens inverse, en introduisant l'instabilité dans les marchés financiers. De fait, les conséquences néfastes des crises asiatique et latino-américaine des années 1990 ont magnifié la question de la stabilité financière, qui est alors devenue un axe central, avec une attention particulière accordée à certains mécanismes, comme la contagion, le marché des produits dérivés, la manipulation, la spéculation à court terme, etc. À cet égard, le principal défi consiste à maintenir la stabilité financière, sans inhibition de l'efficacité économique, sachant qu'une structure excessivement protectrice du système financier peut réellement nuire à la croissance économique. Cependant, un certain degré de protection est souhaitable étant donnée la fréquence des crises sur les marchés financiers libéralisés. Les modèles de troisième génération d'attaques spéculatives justifient davantage la nécessité de contrôles de capitaux. À cet égard, il est fondamental d'analyser les différentes formes et conceptions des contrôles de capitaux, en particulier pour contrôler les flux de capitaux à court terme, ainsi que leurs coûts, en termes d'avantages et de limites.

Ainsi, le triptyque libéralisation-mondialisation-financiarisation (néolibérale) a modifié la structure du capitalisme sur les trois dernières décennies. Les marchés financiers deviennent plus intégrés, plus ouverts et la gravité de l'activité économique est déplacée de la production de biens et de services vers la finance. Cela conduit à une croissance des profits dans le secteur financier des pays développés, à savoir aux États-Unis et en Europe. Mais ce qui suit peut être mieux présenté dans le graphique ci-dessous, qui montre la part du secteur financier dans le PIB des États-Unis. Il est apparu dans les années 1860 et montait régulièrement à près de 6 pour cent jusqu'à la Grande Dépression des années 1930 et la 2ème guerre mondiale, où il est descendu à près de 2 pour cent. Il a ensuite grimpé à nouveau progressivement jusqu'aux années 1980 pour atteindre moins 6 pour cent, puis a poursuivi sa tendance à la hausse, progressant d'environ 8 pour cent jusqu'au milieu des années 2000. On

observe enfin une lourde chute, du fait de la crise actuelle et de la récession inhérente, relativement comparable à celle enregistrée durant la Grande Dépression :



Cette crise financière a débuté en 2007 aux Etats-Unis et s'est rapidement propagée à l'Europe. La genèse de cette crise du monde développé était le défaut sur les prêts hypothécaires à risque et des titres de créance adossés à ces types de prêts. La prise de conscience sur le fait que cet important volume de défauts de paiement sur les prêts hypothécaires *subprime* va se propager à d'autres secteurs de l'industrie financière a commencé en juillet 2007, lorsque Bear Stearns a annoncé la dévalorisation des actifs détenus par deux de ses fonds spéculatifs à risque. S'en suit d'effondrement du marché des valeurs mobilières et la faillite de Bear Stearns en Mars 2008. De là s'est amorcée la série de faillites, les crashs, la crise, et la récession qui en résulte. Les prises de risques inconsidérées, permises par des innovations complexes, comme les instruments financiers dérivés, ainsi que l'inefficacité des mesures réglementaires et l'irresponsabilité des évaluations effectuées par les agences de notation sur ces crédits sont considérées comme les causes principales de la crise financière de 2007/2008.

Mais les racines réelles de cette crise sont bien plus profondes. La crise actuelle s'est produite en dépit des diverses mesures proposées par les entités internationales, telles que la BRI, FMI, etc., notamment parce que ces recommandations ne sont pas suffisantes pour assurer une plus grande divulgation et de transparence face à un environnement financier toujours plus intégré et sophistiqué depuis les trois dernières décennies. Cet environnement est également accompagné par les progrès technologiques et un succès croissant des institutions financières non bancaires, comme les *hedge funds*, les fonds participatifs, entre autres. Cette tendance a accru l'efficacité du financement privé en termes variés, mais la

pertinence et l'efficacité des approches de réglementation et de surveillance ont été minimisées. Cela a conduit à de nouveaux risques, démesurés, qui contribuent à la volatilité potentielle, à l'instabilité et aux crises qui ont tendance à se propager au-delà des frontières virtuelles ou géographique.

La crise actuelle a mis en lumière la fragilité des bases de l'architecture financière mondiale. Les filets de sécurité implicites ou explicites ont agi à titre d'aléa moral pour les banques et autres institutions financières couvertes par ce réseau, parce que la présence des assurances inconditionnelles a en fait donné un nouvel élan aux prises de risques insensées. Les plans de sauvetage qui en résultent sont finalement contre-productifs, puisqu'ils mettent la pression sur tous les citoyens sous forme de taxation accrue, redistribuée aux riches preneurs de risques et aux spéculateurs. L'absence de distinction entre le risque et « l'incertitude » a également joué un rôle important pour affaiblir les systèmes financiers. Les banques, en tirant parti des instruments financiers dérivés et d'autres innovations, sont devenues plus impliquées dans la spéculation et les prises de risques. Mais elles ont oublié, dans leur course à la rentabilité, de distinguer le risque de l'incertitude. Les crises ont trait à l'incertitude qui découle de la prise de risque irrationnelle. Cela a également rendu la discipline de marché inapte à jouer un rôle significatif dans la détection précoce et dans la prévention des déséquilibres susceptibles de se développer au-delà de certaines limites. En outre, diverses dynamiques de marchés financiers ont aussi beaucoup changé pour devenir plus propices au phénomène récurrent « d'abondance et de rareté » magnifiant l'ampleur et la fréquence des crises. En plus de cela, la nature du risque systémique est également modifiée, ce qui exige la transformation des mesures de prévention. Les outils classiques se retrouvent inadaptés car ils sont fondés sur l'hypothèse que le risque systémique peut être évalué et couvert par des mesures microéconomiques, fondées sur la protection unilatérale des participants alors qu'au fond, il implique la propagation des problèmes d'un établissement à d'autres institutions, notamment par le biais des relations interbancaires et du système de paiement, la course à la liquidité menaçant par là même l'ensemble du système financier. Par conséquent, cette hypothèse réduit l'importance des menaces réelles parce qu'elle ignore les possibilités étendues pour la prise de risque. L'approche actuelle de la réglementation systémique, la réglementation micro-prudentielle, est généralement victime d'un « sophisme de composition », car ce qui est vrai pour les parties prises individuellement ne l'est pas nécessairement pour l'ensemble. Keynes (1936), avec son « paradoxe de l'épargne »<sup>36</sup>, et Fisher (1933), avec son concept de « ruée vers la liquidité »<sup>37</sup>, ont exposé cette erreur. Ainsi, il n'est pas possible de garantir la sécurité de l'ensemble du système en se contentant d'assurer la sécurité de chaque banque. En découle la nécessité d'étudier l'importance croissante du cadre macro-prudentielle.

Le fait de ne pas prendre pleinement conscience et avec précision de ces faiblesses dans les fondations des systèmes financiers a joué un rôle clé dans la crise actuelle. Et à l'heure actuelle, les mesures pour faire face à cette crise sont principalement basées sur la « répression financière », une notion longtemps rejetée par les économies développées et également prohibée dans les pays émergents et en développement. Les économies développées font exactement le contraire de ce qu'elles ont préconisé aux économies émergentes et en développement en cas de crise. Lauréat du prix Nobel, Paul R. Krugman (2002) l'a exprimé dans le cas des États-Unis en particulier, et de l'Occident en général, en disant qu'ils devraient se sentir un peu embarrassés à propos de tous les conseils qu'ils ont donnés en la matière au Tiers-Monde<sup>38</sup>. Les pays développés qui souffrent de la crise actuelle sont en train de prendre diverses mesures répressives dans le cadre de nouvelles structures à caractère plus macro-prudentiel pour guérir leurs économies. Les gouvernements sont directement intervenus pour quasiment nationaliser les diverses grandes banques en injectant des liquidités. Souffrant d'énormes volumes de dettes, privées et publiques, les gouvernements sont alors contraints d'abaisser le coût de la dette en maintenant artificiellement des taux d'intérêt bas. Ces taux plus faibles deviennent même négatifs dans un scénario d'inflation stable. Contrairement aux impôts directs ou à des coupes dans les dépenses, ce genre de répression financière agit comme un impôt indirect. La répression financière à la suite de la crise a des parallèles historiques, car la fin du laissez-faire a également suivi la Grande Dépression et la 2<sup>ème</sup> guerre mondiale. La répression financière moderne a également des implications différentes, même pour les économies émergentes et en développement, qui ont dû imposer des contrôles de capitaux et autres restrictions. Cette tendance pourrait favoriser

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<sup>&</sup>lt;sup>36</sup> Si tout le monde économise plus d'argent pendant les périodes de récession, la demande globale va baisser et à son tour, diminuer l'épargne totale de la population. Ainsi, si tout le monde épargne, il y a diminution de la consommation, laquelle conduit à une baisse de la demande globale et donc à une baisse de la croissance économique.

<sup>&</sup>lt;sup>37</sup> Si un grand nombre d'investisseurs tentent de sortir de la spirale de la dette en vendant des actifs, les investisseurs bradent leurs titres à n'importe quel prix susceptible d'être accepté, désespérés qu'ils sont de pouvoir rembourser leurs dettes avant qu'ils ne soient entraînés dans la faillite. Ce qui est bon pour chaque investisseur individuel s'avère être mauvais pour l'économie dans son ensemble. Les prix des actifs chutent, entraînant une baisse des ventes et la hausse du chômage.

<sup>&</sup>lt;sup>38</sup> Bien que Paul Krugman ait fait ces remarques au sujet de la mondialisation lors d'une réunion de 2002 du Forum économique mondial, elles restent toujours d'actualité par rapport aux évolutions actuelles.

une « dé-mondialisation », mais les chances d'une telle tendance semblent maigres à court terme.

La crise actuelle a fait émerger un nouveau débat qui met l'accent sur la nature « parasitaire » du capitalisme. Dans la mesure où cette crise est survenue dans le quartier général du capitalisme, diverses voix se sont par conséquent levées contre le caractère intrinsèquement instable de ce système. Cependant, le vrai problème réside dans le « néolibéralisme », qui a motivé la mondialisation et la libéralisation financière et a conduit au « capitalisme financier », par opposition à « l'âge d'or du capitalisme » des années 1940 aux années 1970, lequel est caractérisé par des réglementations et un certain capitalisme d'Etat. La création de richesses fictives, incompatible avec la création de richesses réelles, est la caractéristique fondamentale de ce « capitalisme financiarisé néolibérale », qui était destiné à s'effondrer un jour. L'attitude irresponsable et malhonnête des institutions financières est également essentielle à cet égard, car c'est elle qui porte « l'économie politique » au premier plan. En dépit d'un nombre important de suggestions pour transformer la réglementation, la surveillance, et adopter une approche macroéconomique, aucune mesure concrète n'a encore été prise pour supprimer l'hégémonie du capitalisme financiarisé. Et les chances d'une telle suppression semblent très minces actuellement.

## La problématique de recherche

Dans le cadre décrit ci-dessus, cette thèse cherche à trouver des réponses à trois questions clés :

- 1) La première consiste à savoir comment le rôle de la finance dans la croissance économique et le développement donne lieu à une nouvelle phase du capitalisme, lequel est dirigé par la finance et repose sur le programme néolibéral.
- 2) La deuxième question vise à savoir, au cours de ce voyage vers le néo-libéralisme et le capitalisme financier, s'il existe une relation entre la crise des économies émergentes des années 1990 et la crise des économies avancées des années 2000.
- 3) Dans cette quête, la troisième question qui se pose est de savoir quelles sont les inférences de la crise financière de 2007/2008 sur le triptyque « libéralisation-mondialisation-financiarisation », qui caractérise la phase actuelle du capitalisme.

# Objectif, méthodologie et limites

La crise actuelle a suscité un courant de recherche mettant principalement l'accent sur les défaillances existantes et les remèdes à venir. Cependant, cette recherche vise à contribuer au débat nouveau et unificateur faisant état d'une connexion entre les crises des pays émergents au cours des années 1990 et la crise que connaissent les économies développées dans les années 2007-?. A cet effet, de nombreuses recherches théoriques et empiriques ont été menées, synthétisées et analysées afin de construire des arguments pour la réforme de la phase actuelle du capitalisme à l'égard de ses faibles fondations et des instabilités de sa structure.

La principale limite de cette thèse est qu'en raison de la largeur de sa problématique, il n'était pas possible de tenir une recherche empirique exhaustive. Par conséquent, nous avons choisi d'explorer un large éventail de littérature, aussi bien théorique qu'empirique. De plus, il existe divers domaines, en particulier lorsque nous analysons l'agenda néolibéral, où le rôle de « l'économie politique » semble plus important que celui de « l'économie internationale » ou de « l'économie du développement ». Toutefois, étant donné que la portée de cette thèse est principalement confinée dans les limites du cadre économique dominant, il ne serait pas approprié ici de discuter en détail des implications en termes d'économie politique. En tant que futur programme de recherche néanmoins, ce domaine peut se présenter comme une orientation pertinente et intéressante à explorer.

#### Plan de la thèse

Cette thèse est divisée en quatre chapitres.

Le premier chapitre traite de la relation entre le développement financier et le développement économique. À cet égard, l'évolution des idées et des théories clés est présentée pour arriver à la théorie de la répression financière et ses implications pour les pays en développement et les économies émergentes.

Le deuxième chapitre analyse les propositions de la libéralisation financière en mettant l'accent sur le consensus de Washington et la mondialisation financière. Ce chapitre traite

également du courant d'opposition à la libéralisation financière en mettant l'accent sur la critique de nouveaux structuralistes et des institutionnalistes.

Le troisième chapitre se concentre sur les implications de la série de crises et de l'instabilité dans la libéralisation financière des économies émergentes d'Asie et d'Amérique latine au cours des années 1990.

Le dernier chapitre met en évidence l'incidence de la crise actuelle dans les pays développés pour explorer les faibles fondations de la structure financière internationale et ses implications pour la forme néolibérale du capitalisme financier.

Exposons alors plus en détail le contenu des chapitres qui composent ce travail.

# CHAPITRE 1. DEVELOPPEMENT ECONOMIQUE ET FINANCIERE - POINT DE VUE DE LA REPRESSION FINANCIERE

La croissance économique et les facteurs agissant sur elle ont été l'un des sujets majeurs de l'économie du développement partout dans le monde depuis longtemps. De Joseph Schumpeter (1911), John Gurley et Edward Shaw (1955), Raymond Goldsmith (1969) et Ronald McKinnon (1973) jusqu'aux économistes modernes, le lien entre finance et croissance a été considéré comme pertinent, d'une manière ou d'une autre. Les économistes comme Walter Bagehot (1873) et John Hicks (1969) attribuent la révolution industrielle au système financier britannique : « En Angleterre, .... le capital va aussi sûrement et instantanément où il est le plus recherché, et où il est le plus aisément fabriqué, comme l'eau qui coule pour retrouver son niveau » (Bagehot, 1873, p. 12).

Bien avant que Bagehot le reconnaisse, en 1858, William Gladstone, alors Premier ministre britannique, a exprimé l'importance du financement de l'économie, en déclarant que « La finance est, pour ainsi dire, l'estomac du pays, à partir duquel tous les autres organes doivent prendre le ton » (cité dans le discours de Duisenberg, 2001). Toutefois, plusieurs chercheurs éminents, dont le prix Nobel, Robert Lucas (1988), considèrent le rôle de la finance dans la croissance comme un sujet qui est « exagéré » ou même tout simplement ignoré par Nicholas Stern (1989) dans son l'examen de l'économie du développement.

Le système financier est censé diriger l'épargne des ménages vers les entreprises et allouer des fonds d'investissement. C'est le mécanisme le plus commun qui relie la finance à la croissance économique. En dépit de la reconnaissance de cette relation par Schumpeter il y a plus d'un siècle (1911), l'analyse complète et systématique des liens entre les facteurs financiers et la croissance a commencé il y a seulement quelques décennies, en particulier dans le contexte de la nouvelle génération de théories et modèles de croissance endogène, qui considèrent l'épargne et l'intermédiation financière comme les canaux primaires permettant une croissance endogène et stable (Agénor et Montiel, 1996).

Dans cette optique, la section 1 du présent chapitre analyse l'évolution des idées clés sur le financement, la croissance et le développement. Elle fait d'abord la lumière sur le travail séminal de Schumpeter en 1911, qui a vu dans le crédit le fondement du développement économique. Toutefois, cette idéé n'a pas reçu beaucoup d'attention, même dans les théories néoclassiques de croissance présentées par la suite. La première génération de modèles néoclassiques de croissance, développée par Robert Solow (1956; 1957) et Trevor Swan (1956), communément appelée « modèles de croissance de Solow-Swan », a attribué la croissance économique au changement technique exogène et à l'expansion démographique. Les modèles de croissance néoclassiques, aussi connus comme les modèles de croissance exogène, ont tenté d'expliquer la croissance économique à long terme via la productivité, le progrès dans l'accumulation du capital, la croissance démographique et technologique. Les limites des théories néoclassiques ont conduit à l'élaboration des théories de la croissance endogène, qui endogénéisent le progrès technologique et l'accumulation des connaissances. L'avancement des travaux sur la croissance aborde les limites des précédents modèles néoclassiques en proposant une variété de canaux par lesquels l'état d'équilibre de croissance endogène est enclenché (Agénor et Montiel, 1996). Les canaux de l'épargne et de l'intermédiation financière jouent alors un rôle important.

Ainsi, les théories modernes de la croissance impliquent généralement que les pays qui épargnent et investissent davantage sont censés croître plus rapidement dans le long terme. Ils mettent en avant l'importance du rôle des politiques, notamment les politiques visant à encourager l'épargne, et en particulier celles qui visent à améliorer l'efficacité de l'intermédiation financière, qui peuvent avoir un effet durable sur le revenu par habitant. Ici, il est pertinent de souligner la tendance commune dans ce domaine d'étude qui est de supposer que le développement financier entraîne automatiquement la croissance économique.

Toutefois, ce point de vue est ambigu et quelque peu controversé, car il n'existe pas de consensus dans la littérature et la recherche empirique sur le sens de la causalité.

Le sens de la causalité dans le lien finance-croissance est exploré dans la section 2 du présent chapitre. À cet égard, l'approche par la demande est comparée à l'approche par l'offre. En dépit d'un corpus théorique et empirique important sur les deux approches, le sens de la causalité est toujours ambigu. Un large pan de la recherche reste sceptique quant à l'évolution des marchés financiers et des institutions comme éléments essentiels du processus de croissance, considérant le développement du système financier comme une conséquence indirecte, qui répond alors passivement à la croissance économique et à l'industrialisation. Toutefois, les preuves persistent également sur le fait que le niveau de développement financier est un bon indicateur des futurs taux de croissance économique et de développement.

Dans cette perspective, la question se pose de savoir quel type de structure financière est le meilleur ou quelle est la dosage optimal entre les intermédiaires financiers et les marchés afin de promouvoir à long terme la croissance économique et le développement global. La section 3 du présent chapitre analyse l'importance relative des différentes structures financières, lesquelles incluent les analyses fondées sur la banque, sur le marché, ainsi que les analyses juridiques et financières des services offerts. Dans l'ensemble, il existe une diversité d'opinions dans la littérature existante sur la relation entre la structure financière et la croissance, et il n'y a finalement pas de conclusion claire. Cependant, la littérature existante met davantage l'accent sur les services financiers et les infrastructures institutionnelles, telles que le cadre juridique, pour mener à bien ces fonctions. Après avoir déterminé que les intermédiaires financiers et les marchés sont censés être complémentaires dans la croissance des services financiers, il est important d'avoir une analyse détaillée de ces services financiers qui sont censés être fournis par le système financier afin d'assurer la croissance économique.

Dans ce but, la section 4 présente une gamme de services financiers supposés réduire les frictions sur le marché. Ces services comprennent: la production des informations sur les investissements potentiels, les investissements de surveillance et la gouvernance d'entreprise, la facilitation de la gestion des risques, la mobilisation et l'accroissement de l'épargne, et l'abolition des restrictions à l'échange de biens et de services. En dépit de certaines questions discutables, la majeure partie de la littérature suggère que les coûts d'information et de transaction incitent les systèmes financiers à fournir des services financiers à l'économie qui facilitent la sélection des entreprises avant qu'elles ne soient financées, la surveillance des

entreprises après financement, la gestion des projets intrinsèquement risqués et le risque de liquidité, ainsi que l'échange de biens, de services, et d'informations financières. Cette description renforce l'argument en faveur du « développement financier » en tant que moteur de croissance. La recherche empirique dans ce domaine est alors passée en revue dans la section 5.

Puisque la littérature et les données empiriques semblent supposer que des systèmes financiers bien développés exercent une influence de premier ordre sur la croissance économique, les décideurs politiques sont alors incités à exercer un « contrôle » sur les forces du marché. Keynes (1936) et Tobin (1965) ont fourni le cadre théorique majeur pour « la répression financière » et contexte politique afférent. Basée sur une vision complémentaire de la monnaie et du capital, ils ont émis l'hypothèse que les mécanismes de transmission de la politique monétaire, comme le canal des taux d'intérêt, influent sur les investissements, qui, à leur tour, influent sur le niveau des revenus et sur la croissance économique, puis, à terme, sur le développement. Cela a fourni une justification logique à l'intervention de l'Etat sur les marchés financiers. Ainsi, historiquement, et avant les années 1970, les restrictions financières ont souvent été imposées spécifiquement dans les pays pauvres en capital, et l'intervention du gouvernement a constitué un facteur contraignant dans les politiques financières. En bref, les systèmes financiers, comme l'a dit McKinnon (1973), ont été « réprimés ». Les différentes approches théoriques et politiques liées dans ce contexte sont traitées dans la section 6 du présent chapitre.

Cependant, les recherches novatrices de McKinnon (1973) et Shaw (1973) ont donné un point de vue tout à fait différent de l'intervention du gouvernement sur les marchés financiers dans le cadre du contrôle des prix et de la répartition du capital. Selon eux, la fragmentation de l'économie fournit une justification au syndrome de l'intervention, qui est très répandue dans les pays en développement. La section 7 explore cette dimension du sujet. Les gouvernements de nombreux pays en développement ont instauré des plafonds d'intérêt faibles sur les dépôts bancaires et les prêts afin de réduire leurs coûts d'emprunt. Mais, ce faisant, ils ont fait baisser l'épargne et la formation de capital, du fait de l'augmentation de la demande de prêts qui finit par entraîner un rationnement du crédit dans le cadre de la répartition entre projets d'investissement. Une autre forme d'interventions prenait la forme de crédit bancaire dirigé vers les « secteurs prioritaires », comme, par exemple, l'agriculture, la petite industrie, les exportations, etc. Le flux des ressources a augmenté du fait de l'utilisation de la « planche à billets » et de l'imposition de réserves obligatoires à faible rendement sur les

banques. Les nouveaux entrants sont alors jugulés pour éviter la concurrence et pour limiter la désintermédiation dans le système bancaire.

Le raisonnement à l'origine de ce plafonnement des taux d'intérêt, et de l'exercice d'autres mesures restrictives de contrôle des marchés financiers et de capitaux, sont discutés dans la section 8. Outre les taux d'intérêt, diverses mesures restrictives peuvent être observées. Elles comprennent: les restrictions à l'entrée, les restrictions sur la composition des actifs et des passifs, les restrictions sur la taille du portefeuille de prêts, les réserves obligatoires élevées, les organismes de crédit spécialisés, etc. Cette section couvre enfin les conséquences néfastes de la répression financière pour les marchés financiers, en termes d'allocation de capital et d'activités bancaires, ainsi qu'en termes macroéconomiques, notamment d'inflation. Suite aux conséquences négatives de la répression financière, McKinnon et Shaw ont présenté le cas de la « libéralisation financière » en tant « qu'opposée » de la « répression financière », ce qui est devenu le fondement de base théorique pour l'analyse du secteur financier et de la politique au cours des quatre dernières décennies, dont il est question dans le chapitre 2.

# CHAPITRE 2. LA LIBERALISATION FINANCIERE - PROPOSITIONS ET OPPOSITIONS

Sur la base de leur classification de la répression financière, McKinnon (1973) et Shaw (1973) exposent le cas de la libéralisation financière (LF), un concept fondé sur la foi flagrante dans les forces d'équilibre du marché et le retrait complet du gouvernement des mécanismes de marché. Le fondement théorique principal de leurs modèles est que des taux d'intérêt plus élevés ont une influence positive sur la croissance économique. Dans ce but, l'hypothèse de complémentarité de McKinnon et celle d'intermédiation de la dette de Shaw représente une contribution importante à l'approche libérale.

La première section de ce chapitre examine ces théories ainsi que certaines de leurs extensions, lesquelles visent à relier les divers aspects de la LF à la croissance économique et au développement. Les fondements théoriques de la LF et leurs raffinements successifs ont modifié l'idée de la LF en la faisant apparaître comme un processus global dosant certaines mesures, comme la libéralisation interne et externe, en fonction de la situation du pays et les préférences individuelles. Cet aspect est couvert par la section 2.

La fin des années 1980 et 1990 correspond à la libéralisation généralisée dans les pays émergents et en développement, en particulier dans les économies de l'Asie de l'Est et celles d'Amérique Latine. Un facteur important qui est considéré responsable de la popularité de la LF dans ces pays est le Consensus de Washington, un mélange de dix réformes politiques pour faciliter les contrôles dans le développement des marchés de ces pays. La déréglementation, la privatisation, la libéralisation de la finance, du commerce et des changes faisaient, entre autres, partie de ce programme adopté par la plupart des pays en développement, en transition vers l'économie de marché au cours de cette période. Une autre force vitale qui a joué un rôle fondamental dans le mode de LF et qui bourdonnait au tournant du XXI<sup>e</sup> siècle a été la mondialisation financière et l'intégration inhérente des économies, qui a appelé à un ouverture financière supplémentaire. L'impact conjoint du Consensus de Washington et de la mondialisation financière a donné une impulsion pour la mise en œuvre complète des réformes de LF dans les pays émergents et en développement. Ce point est abordé dans la section 3 du présent chapitre.

Tout en affectant la majeure partie des fondements des marchés financiers dans les pays en développement, le processus de LF semble avoir certains effets en modifiant les conditions centrales dans lesquelles leur secteur financier opère. Deux de ces conditions, qui sont discutées dans la section 4, sont les taux d'intérêt plus élevés, avec l'élimination du contrôle des prix, et l'entrée de nouvelles institutions financières, dans le cadre des privatisations des entreprises d'État.

Les conséquences globales des réformes de LF dans les économies en développement sont suivies par une longue série de critiques, dont une grande partie est fondée sur les maux inhérents à l'économie de marché. Les hypothèses sur lesquelles la théorie et les modèles de LF sont fondées sont en fait peu pertinentes, ce qui laisse supposer que les marchés financiers sont imparfaits. Le fait que les informations soient incomplètes, ce qui a été mis en exergue par le modèle de Stiglitz et Weiss, ainsi que les externalités et l'incomplétude des marchés financiers sont considérés comme les sources de ces imperfections. La section 5 du présent chapitre approfondit ces biais intrinsèquement présents sur les marchés financiers.

La critique de la LF, qui a émergé à la suite des crashs financiers, le chaos et les crises de l'après-LF dans les pays émergents et en développement, trouve réponse chez les partisans de la LF dans l'importance accordée à la bonne mise en œuvre des réformes dans la réussite de la LF. Deux domaines clés à cet égard sont les conditions préalables et l'aspect séquentiel. La stabilité macroéconomique ainsi qu'une régulation et une supervision efficaces sont alors

considérées comme des conditions nécessaires à remplir avant l'exécution de la LF. La mise en œuvre simultanée des libéralisations internes et externes, à savoir du marché des capitaux ainsi que du commerce, ne peut réussir, en raison de l'absence d'un ordonnancement optimal des réformes de libéralisation. Cependant, ce point a donné lieu à de nouvelles critiques sur la logique de la réforme, et il a fait émerger de nouveaux débats opposant l'approche dit du « big bang » et l'approche progressive de la mise en œuvre des mesures de libéralisation. La section 6 porte sur ce débat.

Les partisans de la LF ont répondu à leurs détracteurs en se concentrant sur les problèmes de mise en œuvre. Cependant, même le respect de toutes les conditions ne peut assurer le succès. La prise en compte des conditions initiales et le séquençage ne sont certainement pas erronés comme arguments, mais ils ne peuvent pas éviter la survenance de crises financières à la suite de la libéralisation, une question qui doit être traitée en détail dans le chapitre suivant. Les bases de l'échec de la LF ne sont pas reprises par ses partisans parce que la gravité de ces manquements a tendance à laisser penser que ce n'est pas seulement une question de séquençage ou de pré-conditions.

En fait, la LF est fondamentalement inappropriée pour les pays émergents et en développement en raison, au moins, des paramètres structurels et institutionnels qui leur sont spécifiques, datant des longues périodes de répression financière, selon la critique développée par les nouveaux structuralistes et les institutionnalistes. La prépondérance du marché monétaire informel est l'une de ces spécificités. La dernière section de ce chapitre examine soigneusement les critiques des nouveaux structuralistes, ainsi que la critique institutionnaliste.

## CHAPITRE 3. LES CRISES ET L'INSTABILITE DANS LA LIBERALISATION FINANCIERE DES ECONOMIES EMERGENTES

La mondialisation et la libéralisation des marchés financiers a conduit à une vague de crises financières qui a rendu la décennie des années 1990 extrêmement pénible pour les économies émergentes d'Asie et d'Amérique latine. Depuis les années 1960, les économies asiatiques avait connu un rattrapage exponentiel, avec des taux de croissance élevés, accompagnés de l'expansion progressive et soutenue de l'accumulation du capital physique qui ont fait d'eux des « tigres asiatiques ». Mais sous la pression du programme néolibéral,

l'instauration des réformes de libéralisation au cours des années 1980 et 1990, avec l'ouverture des marchés de capitaux, a stimulé l'apparition de crises financières dans ces pays. Malgré moins de distorsions préalables liées à la répression, et malgré le respect des prescriptions politiques avec toute la prudence nécessaire, les pays asiatiques, en particulier les pays d'Asie de l'Est, ont connu une crise dont ils n'ont pu se relever pendant de nombreuses années. Ce qui a commencé en Septembre 1997 en Thaïlande en tant que crise de la monnaie est arrivé en Indonésie, en Corée et à Hong Kong, et est connu sous le nom de la « grippe asiatique ». Elle est ensuite descendue sur la Russie en août 1998, ce qui a conduit à l'annonce russe du moratoire sur ses paiements. Elle s'est ensuite étendue jusqu'au Brésil pour générer la crise financière en Amérique latine en 1999. La première section de ce chapitre se concentre sur l'événement imprévisible de la crise financière asiatique, son association avec « la maladie des marchés émergents » et ses éventuelles ramifications avec les crises financières latino-américaines des années 1990.

Cette dévastation a intensifié les discussions et les débats entre théoriciens et décideurs politiques afin de trouver les raisons et les justifications possibles de ces événements. Bien que la libéralisation financière n'ait pas été la source exclusive des crises asiatique et latino-américaine des années 1990, il a souvent été observé que les pays instaurant la LF ont connu une crise assez forte par la suite de leurs marchés boursiers et financiers. Ainsi, un domaine-clé à cet égard se concentre sur le cheminement depuis la libéralisation jusqu'aux crises, dans une optique historique, lequel est abordé dans la section 2 du présent chapitre. En outre, l'environnement antérieur de répression introduit des distorsions dans l'économie de marché en réduisant les effets bénéfiques attendus des réformes de libéralisation. En d'autres termes, les défauts de préréglage de la LF sont incriminés lors des crises post-LF, et sont d'une importance cruciale. Car s'il est aisé et rapide de déréglementer les taux d'intérêt, de privatiser les entreprises d'État et les banques, ou encore de libéraliser les flux de capitaux, il demeure laborieux de développer l'infrastructure institutionnelle, d'acquérir des compétences administratives et de supervision, et de gérer des portefeuilles infectés. Ces considérations sont également soulignées dans la section 2 du présent chapitre.

Les conséquences de ce qui s'est passé dans les pays émergents au cours des années 1990 ont soulevé des doutes sur la question d'aller de l'avant ou de reprendre les étapes de l'intégration avec les institutions financières et les marchés financiers. Parallèlement, le phénomène relativement nouveau de la libéralisation, la mondialisation et l'intégration séculaires est également associé à la libre circulation des flux de capitaux et aux crises

consécutives. C'est l'objet de l'analyse de la section 3, qui décrit également certaines des crises historiques clés suivant l'âge d'or de la mondialisation. Il est généralement affirmé que la libéralisation financière, en particulier l'ouverture du compte de capital, a joué un rôle clé dans la propagation de la crise asiatique en 1997, tandis que les économies d'Asie du Sud ont été préservées dans une large mesure en instaurant un contrôle sur leurs marchés des capitaux. Depuis lors, la libéralisation du marché des capitaux est reconnue comme un conflit majeur dans le débat sur la mondialisation et l'intégration. Depuis, l'incidence des crises financières au cours des années 1990 est plus étroitement liée à la libre circulation des capitaux. Ainsi la section 4 se concentre particulièrement sur le lien entre crises financières et libéralisation des marchés de capitaux.

L'analyse des crises jusqu'à maintenant révèle clairement que l'instabilité financière résulte de la libéralisation et de la mondialisation financière, et que ces tendances, à la fin du XXème siècle, ont accru la probabilité de conséquences néfastes de l'instabilité financière sur les performances économiques. Ainsi, contrairement à ses affirmations fortes pour apporter la stabilité, la LF dans les pays émergents a produit le contraire, en introduisant l'instabilité dans leurs systèmes financiers. Ainsi, les conséquences néfastes des crises asiatiques et latino-américaines des années 1990 ont magnifié la question de la stabilité financière, qui est devenue objet de débats politiques en vue d'atteindre une croissance économique durable. Ces enjeux sont discutés dans la section 5, de même que l'analyse de divers mécanismes tels que la contagion, les marchés des produits dérivés, la manipulation, la spéculation, les investissements étrangers directs à court terme, ou encore les booms. En outre, cette section se penche également sur le défi de maintenir la stabilité financière sans inhibition de l'efficacité économique, car une structure excessivement protectrice du système financier peut, elle aussi, réellement nuire à la croissance économique.

Cependant, un certain degré de protection reste souhaitable, compte tenu de la fréquence des crises dans le cadre d'une ouverture du compte de capital et de la libéralisation des marchés financiers. Bien que cette thèse considère plus particulièrement le cas des crises asiatique et latino-américaine de 1997-98 comme objet d'illustration, la crise monétaire de 1992-93 en Europe et la crise de 1994 au Mexique ont également motivé la modélisation des attaques spéculatives sur les taux de change contrôlés. Depuis lors, cela est devenu une pratique habituelle pour regrouper divers traitements analytiques des crises dans les modèles de première, deuxième et troisième générations. Afin de justifier de la nécessité des contrôles sur les capitaux, les modèles de troisième génération d'attaques spéculatives sont explorés

dans la section 6 du présent chapitre. Les modèles de troisième génération explorent l'interaction entre les crises du système monétaire et celles du système financier. Par exemple, le surendettement des banques pour financer l'aléa moral est une forme cachée de la dette publique puisque les gouvernements doivent alors renflouer les banques insolvables ou résoudre la crise de change conduisant à la crise bancaire en cas de grandes transformations des dettes en devises, en particulier dans le cadre des garanties gouvernementales. Les modèles de troisième génération prévoient la possibilité d'équilibres bon ou mauvais mettant davantage l'accent sur les intermédiaires financiers privés. L'évaluation des contrôles de capitaux est le plus pertinent dans le contexte de ces modèles d'équilibres multiples de la structure financière. Certains modèles portent aussi plus spécifiquement sur les ruées à la liquidité, les restrictions bancaires, la suspension des règlements entre créanciers et débiteurs, l'investissement en actions, les paniques rationnelles et les mécanismes d'assurance contre les attaques.

La dernière section aborde l'analyse détaillée des diverses formes et la conception des contrôles de capitaux, en particulier pour contrôler les flux de capitaux à court terme, ainsi que leurs coûts, avantages et limites. Ce point également donne lieu à débat entre partisans et détracteurs des contrôles sur les mouvements de capitaux. La sagesse conventionnelle considère que les pays en développement devraient recourir à des restrictions de capitaux, puis les démanteler progressivement avec le développement du cadre institutionnel. Mais ce cadre est trop simpliste pour être pratique. Cette « monotonie » dans les contrôles, à savoir la diminution régulière de leur ampleur, n'est pas pertinente et souhaitable. Au contraire, il est plus réaliste de déterminer une combinaison optimale des contrôles en phase avec le stade de développement du pays et de ses capacités économiques et institutionnelles. Dans cette optique, le plus important est la capacité d'ajuster les contrôles en fonction de l'évolution des conditions économiques. Cela implique que les gouvernements des pays émergents et en développement aient une autonomie suffisante pour imposer et réimposer des contrôles en fonction de leurs circonstances propres, au lieu de suivre à la lettre les recommandations du Fonds monétaire international (FMI). À cet égard, une question fondamentale est de savoir si les interventions pour contrôler les flux de capitaux peuvent rester efficaces dans le cadre de marchés libéralisés et intégrés, ce qui questionne la pertinence et l'adéquation des outils de gestion du capital dans le processus de développement.

Par ailleurs, la croissance du marché des produits dérivés a rendu la gestion du capital, ainsi que la bonne formulation et la mise en œuvre des réglementations plus complexes. Cela

fait que certains économistes et décideurs affirment même la nécessité d'abandonner les techniques traditionnelles de gestion du capital en raison de leur inefficacité dans le contexte actuel. Cette sophistication des marchés financiers et de capitaux a également rendu la possibilité de contourner les restrictions plus aisée. Certains chercheurs affirment alors l'incapacité des contrôles de capitaux à arrêter efficacement la fuite massive de capitaux et les crises de balance des paiements. Malgré une perte de puissance au fil du temps, les techniques améliorées pour renforcer l'efficacité de la réglementation traditionnelle peuvent encore aider à modérer les flux de capitaux et leur volatilité. Une classification importante à cet égard réside entre les contrôles directs et indirects. Les contrôles directs sont des règlements fondés soit sur les prix soit sur les quantités. Les contrôles indirects représentent généralement les règles prudentielles imposées aux institutions financières afin d'influer indirectement sur les flux de capitaux.

## CHAPITRE 4. LA CRISE FINANCIERE ACTUELLE DU MONDE DEVELOPPE : UN NOUVEAU DEBAT SUR LA FORME NEOLIBERALE DU CAPITALISME FINANCIARISE

Une crise financière a débuté en 2007 aux Etats-Unis et s'est rapidement propagée à l'Europe. La genèse de cette crise du monde développé était le défaut sur les prêts hypothécaires à risque et sur les titres de créance adossés à ce type de prêts. La survenance de cet important volume de défauts de paiement sur les prêts hypothécaires *subprime* va alors se propager à d'autres secteurs de l'industrie financière en juillet 2007, lorsque Bear Stearns annonce la dévalorisation des actifs détenus par deux de ses fonds spéculatifs à risque. Il s'en suit un effondrement du marché des valeurs mobilières, et la faillite de Bear Stearns en mars 2008. De là commence une série de faillites, de crashs, de crises et une récession économique. La plupart des analystes compare ce phénomène à la Grande Dépression des années 1930. La première section est étroitement centrée sur l'apparition de la crise financière actuelle en décrivant brièvement les mécanismes par lesquels le système financier mondial s'est effondré.

Les prises de risques inconsidérées, grâce à des innovations complexes, comme les instruments financiers dérivés, ainsi que l'inefficacité des mesures réglementaires et certaines notes de crédit irresponsables sont considérées comme les explications principales de cette crise. Mais ses racines profondes vont encore beaucoup plus loin. La crise actuelle s'est

produite en dépit de diverses mesures à caractère international, comme certaines règles fondées sur des exigences en capitaux propres compte tenu des risques, des organismes internationaux comme le G-7 et du G-10 collaborant avec la BRI et le FMI, etc. Mais ces efforts ne peuvent suffire à assurer une plus grande divulgation et la transparence de l'information face à un environnement financier de plus en plus intégré et sophistiqué depuis les années 1980, grâce à la libéralisation et à la mondialisation financières. Il est également accompagné par les progrès technologiques et les enjeux tenant aux institutions financières non bancaires, comme les *hedge funds* ou les fonds d'actions. Cette tendance à l'efficacité accrue du financement privé en termes variés réduit la pertinence et l'efficacité des approches de réglementation et de surveillance. Cela a conduit à de nouveaux risques non mesurés qui contribuent à la volatilité, à l'instabilité et aux crises, qui ont alors tendance à se propager audelà des frontières virtuelles ou géographiques.

Dans ce but, la section 2 du présent chapitre examine en détail la faiblesse des fondements de la structure financière mondiale. Les filets de sécurité, implicites ou explicites, agissent à titre d'aléa moral pour les banques et autres institutions financières couvertes par ce réseau parce que la présence des assurances inconditionnelles donne un nouvel élan aux prises de risques insensés. Les plans de sauvetage qui en résultent constituent une erreur car ils mettent la charge d'ajustement sur les contribuables sous forme de fiscalité accrue, laquelle bénéficie aux riches preneurs de risques et aux spéculateurs. Une autre faiblesse est l'absence de distinction entre le « risque » de « l'incertitude », en ignorant idée de Keynes selon laquelle l'incertitude joue également un rôle important dans l'affaiblissement des systèmes financiers. En outre, les banques ont profité des instruments financiers dérivés et d'autres innovations et s'impliquent davantage dans la mouvance spéculative et risquée. Mais elles ont oublié, dans leur recherche de rentabilité croissante, de distinguer le risque de l'incertitude. Les crises sont avant tout liées à l'incertitude qui découle de la prise de risque irrationnel. Cela a également rendu la discipline de marché inapte à jouer un rôle significatif dans la détection précoce et dans la prévention des déséquilibres susceptibles de croître au-delà de certaines limites. En outre, diverses dynamiques de marchés financiers ont aussi beaucoup changé pour devenir plus propice au phénomène récurrent d' « abondance et rareté », qui magnifie l'ampleur et la fréquence des crises. En plus de cela, la nature du risque systémique est également modifiée, ce qui exige une transformation des mesures de prévention. Les outils classiques sont basés sur l'hypothèse que le risque systémique peut être étudié en termes microéconomiques, à travers les systèmes de couverture individuelle. Or, le risque systémique implique la circulation de problèmes entre institutions par les relations interbancaires et le système de paiement, entre autres, pouvant susciter une ruée sur les dépôts qui menace alors l'ensemble du système financier. Par conséquent, l'hypothèse classique tend à minimiser les menaces réelles en ne tenant pas compte des possibilités étendues pour la prise de risque.

Le fait de ne pas réaliser complètement et avec précision ces faiblesses dans les fondations des systèmes financiers a joué un rôle clé dans la crise actuelle. Or, actuellement, les mesures pour faire face à cette crise sont principalement basées sur les principes de la « répression financière », une mesure longtemps rejetée par les économies développées et également prohibée pour les pays émergents et en développement. Les économies développées font ainsi exactement le contraire de ce qu'elles préconisaient aux économies émergentes et en développement en cas de crise. La section 3 de ce chapitre examine soigneusement les diverses mesures répressives des économies développées afin de montrer que ces derniers appliquent désormais la répression financière dans le cadre de leur politique « macroprudentielle » pour sauvegarder leurs économies.

Il serait pertinent de mentionner ici la différence entre l'échelle micro et macro de la réglementation prudentielle. La micro-réglementation prudentielle examine les facteurs qui affectent la stabilité des établissements individuels, alors que la réglementation macroprudentielle examine les facteurs qui influent sur la stabilité du système financier dans son ensemble. Les réformes à venir pour la stabilité du système financier mettent de plus en plus l'accent sur le cadre macro-prudentiel dont nous parlerons dans la section finale de ce chapitre. Par souci de sauvetage et de rétablissement, les gouvernements des économies touchées sont directement intervenus pour quasiment nationaliser les différentes grandes banques en injectant des fonds propres. Souffrant consécutivement d'une quantité considérable de dettes privées et publiques, les gouvernements sont alors contraints d'abaisser le coût de la dette en maintenant artificiellement des taux d'intérêt bas. Ces taux plus faibles deviennent même négatifs dans le scénario d'inflation stable. Contrairement aux impôts directs ou à des coupes dans les dépenses, ce genre de répression financière agit comme un impôt indirect. La répression financière à la suite de la crise a des antécédents historiques, car la fin du laissez-faire a également été promue après la Grande Dépression et la 2<sup>ème</sup> guerre mondiale. La répression financière moderne a également des implications différentes, y compris pour les économies émergentes et en développement, lesquelles sont discutées dans la même section.

La dernière section considère les liens entre la crise actuelle et la forme néolibérale du capitalisme. Comme cette crise est survenue au coeur du capitalisme, diverses voix se sont levées sur le caractère intrinsèquement instable du capitalisme. Cependant, le vrai problème réside dans le « néo-libéralisme », qui a amené la mondialisation et la libéralisation financières et a conduit au « capitalisme financier », par opposition à « l'âge d'or du capitalisme », des années 1940-1970, caractérisé par des réglementations et un capitalisme d'Etat. La création de richesses fictives, incompatible avec la création de richesses réelles est la principale caractéristique de ce capitalisme financiarisé qui devait s'effondrer un jour. L'attitude irresponsable et malhonnête des institutions financières est également essentielle à cet égard, laquelle propulse l'« économie politique » au premier plan. En dépit d'un nombre important de suggestions pour transformer la réglementation et la surveillance, aucune mesure concrète n'a été prise pour supprimer l'hégémonie du capitalisme financiarisé. Et les chances d'une telle suppression semblent tout aussi minces actuellement. La seule attitude claire à ce niveau est l'accent sur le cadre macro-prudentiel pour assurer la stabilité des systèmes financiers.

## **CONCLUSION**

Le triptyque libéralisation-mondialisation-financiarisation a non seulement conduit à des conséquences pénibles pour les pays en développement et les économies émergentes au cours des années 1990, mais les résultats ont été tout aussi dévastateurs pour les économies développées au cours des années 2000, c'est-à-dire des économies avec des secteurs financiers « apparemment » bien développés. Cette conclusion générale est dérivée de plusieurs volets thématiques analysés tout au long de cette thèse.

En passant en revue une littérature exhaustive sur le lien entre finance et croissance, il peut être déterminé que la croissance économique et le développement sont étroitement liés à la « finance », bien qu'il y ait des divergences de points de vue sur l'orientation de la causalité, ainsi que sur l'importance relative des différentes structures des systèmes financiers. Il peut être également établi que les systèmes financiers exercent un effet significativement positif sur la croissance économique, via la fourniture de différents services financiers qui facilitent la réduction de certaines frictions sur le marché. L'évolution des théories de la croissance et du développement ont suffisamment progressé pour distinguer la « monnaie » et le « crédit »

et les mécanismes de transmission reliant la monnaie et le revenu. Cela a donné lieu à des politiques financières restrictives caractérisées par l'intervention du gouvernement, lesquelles sont identifiées comme relevant de la « répression financière ». En fait, les gouvernements des pays en développement et des économies émergentes intervenaient depuis longtemps sur les marchés financiers pour atteindre leurs objectifs de politique de développement. Parallèlement à ces objectifs, les gouvernements ont également essayé de réduire la concentration des richesses et du pouvoir de monopole, de générer des ressources fiscales, et de canaliser les ressources vers la plupart des parties favorisées par le système financier. Dans ce but, les autorités ont maintenu les taux d'intérêt à un niveau artificiellement bas. En plus de cela, l'octroi de subventions de crédit aux entreprises favorisées dans l'industrie et l'agriculture pour atteindre les objectifs de développement représentait également une idée séduisante. Ainsi, les gouvernements accentuaient en général la fourniture de subventions directes et des aides pures et simples à l'agriculture ou au secteur industriel.

Il est difficile de trouver un pays qui ne soit jamais intervenu dans le secteur financier, d'une manière ou d'une autre. Une grande partie du vingtième siècle a vu l'intensification de la répression financière. Surtout dans les années qui suivirent la Grande Dépression et la Seconde Guerre mondiale, les gouvernements ont tenté de maintenir les taux d'intérêt bien inférieurs à ceux du marché en instaurant un plafond artificiel et un contrôle de l'allocation de crédits par le biais de leurs directives, soit directement, soit par l'intermédiaire de leurs banques et de leurs institutions financières. Les restrictions sur les taux d'intérêt, les lourdes réserves obligatoires sur les dépôts bancaires, et l'arbitrage sur les allocations de crédits interagissent avec l'inflation sur les prix courants afin de réduire la possibilité de détenir des créances sur le système bancaire national, puisque le taux d'intérêt réel sur les actifs monétaires peut alors devenir négatif. Cependant, les économistes du développement ont persisté à favoriser l'« épargne forcée » à travers l'inflation, les subventions et les crédits à des taux d'intérêt inférieurs à ceux du marché. Cela était vu comme le principal moyen de stimuler les investissements socialement souhaitables. Le secteur financier n'était alors pas considéré comme un élément majeur dans la croissance économique et le processus de développement, à moins d'être manipulé et réprimé. Les distorsions qui en résultaient, les érosions et l'éventuelle détérioration du système financier ont commencé à être considérées comme la conséquence de la répression financière. Par conséquent, « l'intervention du gouvernement » est devenue synonyme d' « échec politique » en raison de ses inefficacités économiques associées. En particulier, les travaux fondateurs de McKinnon (1973) et de Shaw (1973) et les cadres stratégiques qui en ont découlé ont considéré la répression financière comme l'un des principaux maux entravant la croissance économique dans les pays émergents et en développement.

Les opposants de la répression financière ont alors suggéré de maintenir les taux d'intérêt positifs et uniformément élevés en supprimant leur plafonnement, ainsi que les lourdes réserves obligatoires et autres formes d'allocation contrôlée de crédit. Ce n'est que dans un tel réglage que les épargnants et les investisseurs pourraient être en mesure d'intégrer le véritable prix du capital, et donc de diminuer la dispersion excessive de la rentabilité des investissements dans les différents secteurs de l'économie. À cet égard, McKinnon et Shaw ont opposé la « libéralisation financière » à la « répression financière », ce qui est devenu le fondement théorique pour l'analyse du secteur financier à la fin des années 1970.

Dans cette perspective, l'agenda néolibéral est initié au cours des années 1980, et connu sous le nom « Consensus de Washington ». Il a fusionné avec la mondialisation financière et l'intégration croissantes qui met en place la LF dans les pays émergents et en développement, en particulier les économies asiatiques et latino-américaines. Ce programme a été poursuivi par les institutions financières internationales, principalement sous le contrôle des États-Unis et d'autres économies développées, afin de forcer les pays en développement et émergents à adopter la LF en tant que conditionnalité pour accéder aux prêts concessionnels.

Tout en rappelant que les années 1990 correspondent, pour les pays en développement, aux réformes de libéralisation, la même période représente également les crises financières périodiques qui se sont propagées de manière rapide et imprévisible. Ces crashs et les crises consécutives ont abouti à des confusions et à des dilemmes sur la logique et la mise en œuvre des réformes de libéralisation. Dans ce but, la prise en compte de certaines conditions préalables ainsi que le séquençage optimal, consistant à commencer par la libéralisation interne des taux d'intérêt et en n'instaurant la libéralisation du marché des capitaux qu'à la fin, ont été recommandés par les partisans de la LF dans le cadre de la mise en œuvre des réformes. Toutefois, le respect de ces conditions ne peut garantir le succès de la LF en raison des défauts inhérents aux marchés financiers qui rendent les modèles et les théories d'efficience des marchés impertinents. La démonstration des différents goulots d'étranglement dans les économies en développement, comme les externalités négatives, l'asymétrie d'information, des ratios d'endettement élevés, un faible système de réglementation, implique que les théories et les politiques qui en découlent sont basées sur une représentation inexacte et incomplète des réalités institutionnelles et structurelles qui prévalent dans ces économies.

On peut en déduire que l'économie du développement devrait se préoccuper davantage de ce qu'il peut faire en présence des limites existantes. Il s'agit alors d'une politique qui nécessite un changement important dans la structure et les institutions avant la mise en œuvre, pour avoir une certaine validité et de la valeur. Une question cruciale qui se pose à cet égard est de savoir quel rôle est laissé à la théorie dans de telles circonstances. En fait, une théorie qui prend en compte les réalités structurelles et institutionnelles peut contribuer à reconnaître la limite du changement aussi bien que les possibilités de progrès. Malheureusement, toutes les variétés de LF ont échoué en raison d'une compréhension faible et imparfaite de ces réalités structurelles et institutionnelles, ce qui a abouti à des épisodes de crashs et de crises. Afin de renforcer l'opposition contre la LF, les crashs et les crises en Asie et en Amérique latine au cours des années 1990, accompagnés par l'instabilité du système financier, sont utilisés comme argument principal. Bien qu'il existe des arguments importants en faveur de la mondialisation et de l'intégration financière, les épisodes répétés de crises exigent de repenser le problème de la stabilité financière.

En particulier quand il s'agit de flux de capitaux, leur fragilité est présentée comme un risque principal associé à la libéralisation des marchés. Ceci implique que la libéralisation ne doit pas être poussée dans certains pays, et il est du devoir des économistes et des décideurs politiques de présenter leurs analyses et leurs recherches d'une manière accessible et convaincante afin de protéger les pays en développement et émergents des pressions indues en faveur de la libéralisation financière. En fait, l'interaction entre la libéralisation nationale et internationale pourrait aboutir à un scénario où les flux de capitaux internationaux alimentent la réduction du bien-être que l'intermédiation financière du secteur financier domestique pourrait soutenir. Les avantages de la libéralisation des marchés de capitaux ne peuvent être importants que si les pays ont leur « maison en ordre », car une libéralisation en l'absence d'une réglementation adéquate et d'une supervision efficace peut facilement et rapidement conduire à des vulnérabilités qui amplifient les distorsions existantes. Ainsi, la mise en garde quant à la présence d'une infrastructure institutionnelle adéquate implique que la libéralisation mettra encore du temps dans les pays en développement et les pays émergents. Les avantages supposés de la libéralisation sur la croissance économique et le développement ne semblent pas compenser le coût des crises, ce qui implique une restriction sur le fonctionnement libre des marchés, en particulier via le rétablissement des contrôles sur les flux internationaux de capitaux. Les nouveaux développements théoriques soutiennent également que les marchés financiers sont différents des autres marchés, par exemple des marchés de matières premières,

parce que les « défaillances du marché » sont plus fréquentes et répandues en matière financière, ce qui suggère la nécessité, dans une certaine mesure, d'une intervention « intelligente » du gouvernement.

Cependant, il y a eu certains développements et innovations sur les marchés financiers internationaux, comme l'utilisation croissante de produits dérivés, qui rend leur gestion plus complexes et difficiles que jamais, même pour les pays développés d'Europe et États-Unis, comme en témoigne la crise financière de 2007-08 qui s'est finalement transformée en récession mondiale en dépit de la présence d'outils macroéconomiques pour lutter contre le phénomène d'expansion-récession, ainsi que d'un cadre réglementaire et de surveillance sophistiqué. Avant 2007, une crise de cette ampleur ne pouvait être imaginée par les économistes et les responsables politiques, même dans leurs pires cauchemars, parce qu'ils étaient confiants quant à la solidité des systèmes financiers des pays développés en raison de leur grande taille. En comparant les pays en développement à des petits bateaux sur la mer orageuse de la finance internationale, Paul Volcker, ancien gouverneur de la Réserve fédérale, a déclaré que même si un « grand paquebot d'océan » comme les États-Unis pouvait naviguer en toute sécurité à travers une tempête, les autres navires, même très robustes, étaient susceptibles de chavirer (Volcker, 1998). La possibilité de survenue de la crise aux Etats-Unis comme celles survenus en Asie et en Amérique latine était également fortement rejetée par lui, en comparant les systèmes bancaires de l'Indonésie, de la Thaïlande ou de la Malaisie à une banque américaine de taille importante. Cependant, ce n'est que quelques années après cette proclamation que le monde a vu « les États-Unis faire naufrage comme un navire ».

Telle une question de faits, la série de crises qui s'est produite dans les économies émergentes d'Asie et d'Amérique latine au cours des années 1990 à la suite de la LF a été considérée comme un problème propre à ces économies. Les décideurs politiques des pays développés ont prescrit davantage de LF et de déréglementation dans ces pays sujets aux crises. Certains ont même estimé que la LF constituait un phénomène « irréversible ». Cependant, la crise financière actuelle aux Etats-Unis et en Europe cherche réponse dans l'intervention de l'État et dans des mesures répressives, ce qui revient non seulement à envisager deux poids deux mesures pour les gestionnaires mondiaux, mais aussi à réhabiliter le rôle de l'intervention publique sur les marchés financiers. Face à surendettement d'une ampleur historique, les responsables politiques des pays développés sont obsédés par la gestion et la réduction de la dette, et d'autres efforts pour maintenir le coût de la dette à des niveaux soutenables. Avec le double objectif de maintenir des taux d'intérêt bas et de

contrôler l'opinion publique, la répression financière se renouvelle et prospère dans ses nombreuses formes. Les gouvernements des pays déchirés par la crise ont massivement injecté des liquidités dans les institutions financières et sont directement intervenus sur les marchés financiers.

Ceci implique qu'il n'est pas rationnel de simplement écarter le gouvernement de la route des marchés et d'attendre qu'une « main invisible » prenne en charge et corrige tous les déséquilibres avant que ces derniers ne deviennent systémiques. La crise actuelle a non seulement rejeté l'idée d'un « démantèlement complet du rôle du gouvernement », mais a également démontré la nécessité d'une intervention de l'État et d'une main mise appropriée sur les marchés financiers. Avec elle émane la nécessité de réglementer les innovations financières, qui sont si complexes que les banques centrales sont confrontées à un défi d'une taille considérable pour mesurer, surveiller et contrôler le total des liquidités dans l'économie. À cet égard, les décideurs politiques aux États-Unis et en Europe proposent de nouveaux outils et des règlements pour améliorer la surveillance prudentielle, les informations comptables et la transparence. Alors que les marchés évoluent et deviennent complexes, les cadres réglementaires et de supervision doivent être constamment réévalués et adaptés à la nature variable du risque financier et du risque systémique.

Le défi commun pour la supervision bancaire, la surveillance du marché et l'élaboration des politiques financières est d'équilibrer les efforts pour maintenir la stabilité financière et la gestion des risques systémiques avec les efforts pour s'assurer que les participants au marché supportent le coût de leurs prises de risques imprudentes, et qu'ils aient par conséquent des incitations appropriées pour éviter de telles imprudences. Ce défi doit être relevé sans nuire à l'efficacité économique et la croissance à long terme. Le rôle des agences de notation doit également être revisité avec une amélioration de l'examen public. En plus de cela, l'expansion budgétaire, afin de faire face à la récession, doit également être basée sur des contrôles sur la mobilité des flux financiers mondiaux. Dans le cas contraire, des variations spéculatives à grande échelle d'un pays à l'autre conduisent à déstabiliser la politique budgétaire. Les économies émergentes ont déjà ressenti cette peur et ont alors instauré des contrôles sur les mouvements de capitaux.

Suite à la crise actuelle, le débat sur la nature intrinsèquement instable du capitalisme a de nouveau refait surface. Bien que les crises soient considérées comme étant inhérentes aux économies capitalistes, il n'est pas rationnel de corréler le caractère cyclique des crises financières, en particulier en termes d'ampleur, de topographie et de conséquences, à

l'approfondissement de celui-ci. Cette crise n'est pas intégrée dans le seul système capitaliste, il s'agit plutôt de la forme la plus fragile du capitalisme. C'est le capitalisme financiarisé qui a émergé à partir de l'agenda néolibéral et qui a abouti à la déréglementation, à l'autoréglementation, et à la création de richesses fictives, se révélant incompatible avec la vraie richesse. En particulier dans les pays les plus développés, le total des actifs financiers représente un multiple de la production économique annuelle, accompagnée d'une croissance phénoménale des actifs obligataires et des marchés d'actions. Ainsi, les mesures possibles pour les économies capitalistes, au regard de cette crise, dépendent de la mesure dans laquelle ils peuvent faire face à l'hégémonie du capitalisme néolibéral, une hégémonie qui s'est répandue depuis les années 1980 en raison de la peur du socialisme et de la transformation de l'économie néoclassique en tant qu'économie dominante.

Mais l'amère vérité est que la série de crises dans les économies émergentes et en développement d'Asie, d'Amérique latine et en Russie au cours des années 1990, ne pouvait pas conduire à cette prise de conscience des décideurs mondiaux, car cette série ne pouvait alors être considérée comme significative, par rapport à la crise des économies développées des États-Unis et Europe plus tard, dans les années 2000. Par ailleurs, les crises des années 1990 ont souvent été considérées comme un embryon du « sous-développement » des économies touchées, tandis que la nature « fragile » des marchés financiers sous le capitalisme néolibéral a été ignorée jusqu'à l'apparition de la crise actuelle.

Avec un capitalisme néolibéral entrant dans une période de crise chronique, les notions jusque-là dominantes de « libre marché » et de « laissez-faire » ont rapidement perdu leur légitimité. Cela semble analogue à la disparition rapide de l'idéologie keynésienne en faveur d'un capitalisme « réglementé » au cours des années 1970. Aujourd'hui, une fois de plus, le capitalisme pourrait être restructuré dans les années à venir aux États-Unis et, consécutivement, dans ensemble de l'économie mondiale. Mais le produit final de ce processus de restructuration est encore opaque et incertain. Une suggestion pour un futur programme de recherche est de s'éloigner de l'orthodoxie économique généralisée et traditionnelle, pour élaborer des modèles alternatifs, parce que les théories classiques qui ont contribué à la libéralisation des politiques nous ont conduit à cette crise sans, de toute évidence, nous fournir la moindre indication sur la façon de répondre. Le développement et la mise en œuvre de ces solutions de rechange constituent toujours le principal défi auquel les théoriciens et les décideurs politiques sont confrontés à l'heure actuelle.