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The clash of environmentalism, neoliberalism, and socialism : a research on practices and ideologies in China's sustainability accounting for agriculture

Xiaorui Wang

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The clash of environmentalism, neoliberalism, and
socialism: A research on practices and ideologies in China's
sustainability accounting for agriculture

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COMPOSITION DU JURY :

Professeur Jacques RICHARD
Université Paris-Dauphine
Directeur de thèse

Professeur Nicolas BERLAND
Université Paris-Dauphine
Président du jury

Professeur Nicolas ANTHEAUME
Université de Nantes
Rapporteur

Professeur Bernard CHRISTOPHE
Université de Picardie Jules Verne
Rapporteur

Professeur ZHAO Zhongxiu
Univ. Intern. Business and Economics
Membre du jury

Soutenue le 13.12.2016
par WANG Xiaorui

Dirigée par **Jacques RICHARD**

Executive summary

This dissertation sets out to study the feasibility of introducing a specific sustainability accounting model, namely the Triple Depreciation Line (Rambaud & Richard, 2013) in the People's Republic of China. The focus is on the agriculture sector, both at macro level (the State) and at micro level (firms).

To do so, this dissertation investigates the broad context of China's environmental situation, labour market, and finances through the following three major events, or three institutional changes: the convergence of the Chinese accounting standards to the International Financial Reporting Standards, the establishment of an ecological accounting and auditing system at national level, and the institutionalisation of corporate social responsibility reporting in agribusinesses. The choice of examining these three events in particular is explained by the research strategy, which is to recognise and to gather the instrumental factors drawn from the past and the on-going events, in order to get a better understanding on the mechanism of adopting a set of 'new rules' in China, and further, to explore the possibility of adopting the TDL principles.

As further regards the purpose of this thesis, the author also tries to go beyond the realm of management studies that seeks to apply a set of managerial tools to a given context, by looking at the ideological aspect of the issue. With reference to a number of classic works on economic anthropology, this thesis proposes a 'religionisation' of the idea 'sustainability *for existence*', within which the use of scientific-threshold-based sustainability accounting models serves the purpose of redefining some key values and taboos in contemporary human societies.

In order to make a contribution to the development of sustainability accounting by "critically confronting the unsustainable way the world is" (Thomson, 2014), this dissertation adopts the methodology inspired notably by Foucault's and Bourdieu's propositions related to language and power, namely the "Critical Discourse Analysis". A critical analysis of a particular discourse is conducted as follows: It sets out from the verbal elements of the discourse itself (the text or the spoken words), then investigates the

process of how that particular discourse is produced, distributed and consumed in society. Finally it inspects the articulation, or “instantiation” of that particular discourse among all other social practices beyond the moment of the text or spoken words.

The CDA conducted on the three major institutional changes mentioned above serves the purpose of theorising the evolution towards a TDL-based sustainability accounting in the Chinese context: Since the three events are in a way or another similar to the implementation of TDL, the investigation of these events through the critical analysis of their official discourses that have formed them facilitate the establishment of a list of favourable and unfavourable conditions concerning the expected institutional change, and therefore allow a better understanding of the mechanism through which this kind of institutional changes are conducted.

As regards the three events under investigation, the evolution of accounting standards in China shows the leading role of the Chinese central government and its control over the press and the domestic academics, in order to push through a efficient convergence of Chinese accounting standards with IFRS. It is also demonstrated that the choice of the State is to adopt a set of globally accepted accounting practices through this convergence, but not (yet) to influence these practices, so that the specifics of China are taken into account.

The sustainability accounting initiative at macro level in China shows that there is a clear vision from the highest level of authority that party cadres should be evaluated based on economic and environmental criteria at the beginning and at the end of their mandates for the positions they are assigned to. A set of scientific measures should be used in order to assess the state of natural capital for which they have a responsibility. Various measures have been pushed through by central authorities though very modest success they have encountered.

The study of two agribusinesses which publish information on their CSR practices contrasts a classical private listed company with a government run listed conglomerate. It shows that the top concern of Chinese agribusinesses seems to be quality control, in a context within which all Chinese agribusinesses define their top responsibility as to

provide food which consumers can trust. This represents more a question of economic sustainability than a question of environmental and social responsibility.

Comparing the three events, what could be noted is that, the reason of the relative ‘failure’ in the two latter is above all related to the conflicts of interest between the national, regional and local levels of the Chinese government.

The empirical study of this thesis is a demonstration of conditions—of which mostly are difficulties—concerning the implementation of a ‘strong-type’ sustainability accounting framework (notably TDL) in China. However, it is also suggested that given the centralised, authoritarian nature of Chinese society, the feasibility of applying TDL is likely to be greater in China than it is in Western countries, since the realisation of this kind of institutional change requires above all a strong State.

The observations of the “reform and opening-up” of Chinese economy in general demonstrate the consequences of the State’s ‘failure’ in assuming the role of “restrictor”, facing the free circulation of what Polanyi (2002[1944]) called “fictitious commodities” (land, labour, and money). Yet from a different point of view, they are also demonstrations of the State’s ‘success’ in deliberately deregulating the economy (though the ‘prosperity’ comes with major implications in terms of natural and social environment degradation), which prove, from the exact opposite side, the necessity of the role of “restrictor” that the State should have played.

The study of the ideological aspect of sustainability accounting proposes a state-led ‘religionisation’ of ‘sustainability *for existence*’, by renewing Lévi-Strauss’s (1987) theory related to the concept of “signifier” and “signified”, as well as that related to the power of knowledges in guiding the exploitation process of humans.

Résumé en français

Cette thèse a pour but d'étudier, en premier lieu, la faisabilité d'introduire un modèle de comptabilité environnementale, à savoir la Triple Ligne d'Amortissement (Rambaud et Richard, 2013), en République populaire de Chine. L'accent est mis sur le secteur agricole, tant au niveau macro (l'État) qu'au niveau micro (entreprises).

Concrètement, cette thèse étudie le contexte général de la situation environnementale, du marché du travail et des finances de la Chine, au travers de trois événements majeurs : la convergence des normes comptables chinoises avec les normes internationales d'information financière, la mise en place d'un système de comptabilité et d'audit écologique au niveau national, et l'institutionnalisation des rapports de RSE dans les firmes agro-alimentaires. Le choix d'examiner ces trois événements en particulier s'explique par la stratégie de recherche, qui consiste à reconnaître et à recueillir les facteurs instrumentaux tirés des événements du passé et de ceux en cours, afin de mieux comprendre le mécanisme d'adoption d'un ensemble de « nouvelles règles » en Chine, et, en outre, d'explorer la possibilité d'adopter les principes de TLA.

De plus, l'auteur tente également d'aller au-delà du domaine des sciences de gestion, qui cherchent à appliquer un ensemble d'outils de gestion à un contexte donné, notamment en examinant l'aspect idéologique de la question. En se référant à un certain nombre d'ouvrages classiques sur l'anthropologie économique, cette thèse propose une « religionisation » de la « durabilité *pour l'existence* », dans laquelle l'utilisation de comptabilité environnementale basée sur les limites scientifiques sert à redéfinir certaines valeurs clés, et aussi certains tabous dans les sociétés humaines contemporaines.

Afin de contribuer au développement de la comptabilité environnementale en « confrontant de manière critique le mode insoutenable du monde » (Thomson, 2014), Cette thèse adopte une méthodologie inspirée notamment par des propositions de Foucault et de Bourdieu relatives au langage et au pouvoir, à savoir l'analyse critique du discours. Une analyse critique d'un discours particulier se déroule de la manière suivante: Elle est basée sur les éléments verbaux du discours (à savoir le texte et les paroles), puis étudie le

processus de production, de distribution et de consommation de ce discours dans la société. Enfin, elle inspecte l'articulation, ou « l'instanciation » de ce discours parmi toutes les autres pratiques sociales au-delà du moment du texte ou des paroles.

Cette analyse menée sur les trois changements institutionnels majeurs a pour but de théoriser l'évolution vers une comptabilité environnementale basée sur la TLA dans le contexte chinois: Puisque les trois événements sont d'une manière ou d'une autre similaires à la mise en œuvre de la TLA, l'investigation de ces événements par l'analyse critique de leurs discours officiels qui les ont formés facilite l'établissement d'une liste de conditions favorables et défavorables concernant le changement institutionnel attendu, et permet donc d'obtenir une meilleure compréhension sur le mécanisme dans lequel ce type de changements institutionnels sont menées.

L'évolution des normes comptables en Chine montre le rôle clé du gouvernement central et son contrôle sur les parties intéressées (la presse et les universitaires nationaux), afin de pousser à une convergence rapide des normes comptables chinoises avec les IFRS. Il est également démontré que le choix de la Chine est d'adopter des pratiques comptables globalement acceptées (par convergence avec les IFRS) mais pas encore, à ce stade, d'influencer ces pratiques, de sorte que les spécificités de la Chine soient prises en compte.

L'initiative de promouvoir la comptabilité environnementale au niveau macro en Chine montre que le plus haut niveau d'autorité souhaite que les cadres du Parti devraient être évalués sur la base de critères économiques et environnementaux au début et à la fin de leur mandat pour les postes auxquels ils sont attribués. Un ensemble de mesures scientifiques devrait être utilisé pour évaluer l'état des capitaux naturels dont ils sont responsables. Diverses mesures ont été adoptées par les autorités centrales, bien qu'elles aient connu un succès très modeste, pour diverses raisons.

L'étude de deux entreprises agro-alimentaires qui publient des informations sur leurs pratiques RSE oppose une société classique à un conglomérat d'Etat, tous les deux cotés en bourse. Il montre que le principal souci des entreprises agro-alimentaires chinoises semble être le contrôle de la qualité, dans un contexte où ces deux entreprises définissent leur responsabilité principale comme la fourniture d'aliments auxquels les

consommateurs peuvent faire confiance. Il s'agit plus d'une question de durabilité économique (une entreprise qui vend des produits de mauvaise qualité va perdre ses clients) que de la question de responsabilité environnementale et sociale.

En comparant les trois cas, la raison de « l'échec » relatif dans les deux derniers est surtout liée aux conflits d'intérêts entre les niveaux national, régional et local du gouvernement chinois.

L'étude empirique de cette thèse est une démonstration de conditions—qui sont pour la plupart des difficultés—concernant la mise en œuvre d'une comptabilité environnementale de 'type-fort' (notamment TLA) en Chine. Cependant, il est également suggéré que, compte tenu du caractère centralisé et autoritaire de la société chinoise, la faisabilité d'appliquer la TLA est plus grande en Chine que dans les pays occidentaux, car la réalisation de ce type de changement institutionnel exige avant tout un État fort.

Les observations générales de la « réforme et de l'ouverture » de l'économie chinoise montrent les conséquences de « l'échec » de l'État, qui n'a pas assumé le rôle de « régulateur » face à la libre circulation de ce que Polanyi (2002[1944]) appelait « marchandises fictives » (la terre, la main-d'œuvre, et le monnaie). D'un point de vue différent, elles sont aussi des démonstrations du « succès » de l'État dans la déréglementation délibérée de l'économie (bien que la « prospérité » ait des implications majeures en termes de dégradation de l'environnement naturel et social), et qui prouvent en revanche la nécessité du rôle de « régulateur » que l'État aurait dû jouer.

L'étude de l'aspect idéologique de la comptabilité environnementale propose une « religionisation » étatique de la « durabilité *pour l'existence* », en renouvelant la théorie de Lévi-Strauss (1987) relative à la notion de « signifiant » et de « signifié », et aussi celle sur le pouvoir des savoirs qui guident systématiquement le processus d'exploitation capitaliste.

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The clash of environmentalism, neoliberalism, and socialism: A research on practices and ideologies in China’s sustainability accounting for agriculture

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List of abbreviations

ACFTU	All-China Federation of Trade Unions
ARD	Accounting Regulatory Department (of the MOF in China)
ASBE	Accounting Standards for Business Enterprises
CAS	Chinese accounting standards
CNKI	China Knowledge Resource Infrastructure
CCP	Chinese Communist Party
CDA	Critical Discourse Analysis
CSR	corporate social responsibility
ECP	Eco-compensation Programme
EU	European Union
FDI	foreign direct investment
FVA	fair value accounting
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Product
GEP	Gross Ecosystem Product
GGDP	green GDP
GHGs	greenhouse gases
GPI	Genuine progress indicator
GRI	Global Reporting Initiative
GSI	Global standard institutions
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IET	International Emissions Trading
IFRS	International Financial Reporting Standards

IPEA	institutionalist political economy of accounting
MACS	management accounting and control systems
MEP	Ministry of Environmental Protection
MOA	Ministry of Agriculture
MOF	Ministry of Finance
NBSC	National Bureau of Statistics of China
NDRC	National Development and Reform Commission
NEAAS	national ecological accounting and auditing scheme
PEA	political economy of accounting
PRC	People's Republic of China
SA	sustainability accounting
SEEA	System for Integrated Environmental and Economic Accounting
SEZ	Special Economic Zone
SD	sustainable development
SNA	System of National Accounts
SOEs	State-owned enterprises
TBL	Triple Bottom Line
TDL	Triple Depreciation Line
TVEs	Township-village enterprises
UN	United Nations
UNEP	United Nations Environment Programme
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development
WB	World Bank

CHAPTER I. Introduction

1. Sustainability, and accounting for sustainability

Australian aboriginals have good knowledge of the natural capital stocks and yet they would rather leave them in the wild (Grey, 1841 in Sahlins, 1972). The “bread-cutters” on the Eastern islands would be content with “12 working hours a week for the satisfaction of all his wants” (Marx, 1977[1867]c, pp. 362 – 363). Hunters and gatherers in pre-agricultural economy enjoy an “original affluent society” and are reluctant to exploit the earth’s resources to the full (Sahlins, 1972). The idea of “living in harmony with nature and with one another” has grounded many ancestral religions and medieval philosophies and could be seen as the genesis of today’s well-known notion of *sustainability* (Mebratu, 1998, pp. 517 – 518).

Our ancestors seem to be awed by the greatness of nature and content themselves with using just a little portion of the natural and the human economic capacities, in order to satisfy their very basic needs of survival whilst leaving the remaining of these capacities intact. On the other hand however, other archaeologies of this notion have been done and they suggest an alternative thinking regarding the origin of sustainability: If we look at what followed in the story, we could soon realise that the concept of sustainability did not really come into being until the rise of ‘capitalist’ economy¹, where the urge to exploit resources as much as possible is indulged by the risk-averting nature of humans, who constantly look for accumulating capital stocks as deposit to ensure that his livelihood ‘sustains’ in future.

Either originated from the inherited wisdom or from an introspection of the self-reassuring way of living that has degenerated into infinite needs, nowadays, the concept of “sustainability” has gradually gained ground and become the major competing ideology versus the mainstream neoliberalism that had dominated the world economy for

¹ Compared to the modern meaning of capitalism where the financial gain (“profit”) is underlined as the purpose of economic activities, the term used here is in its broader sense, referring to an economy of which the purpose of collecting, hunting, producing and so on is essentially to accumulate personal ownings.

more than a century. In the wake of evolutions of the society and developments in human science, it has penetrated many disciplines, notably economics and management, and become “sustainable development” and “sustainability management”, subjects that fascinate us today. Accordingly, the authorities (state governments for example) have been *claiming* to advocate—and the organisations (notably firms) to practice—sustainability, whether in ancient times or in recent decades of capitalist economy. Nowadays, international, national and regional authoritarian institutions have developed regimes that seek to deal with environmental and social problems at each level; whilst the firms, predominant form of organisation in the economy, have also responded to these challenges under pressure or voluntarily.

But after all these claimed efforts, how do we know if we are doing the right thing? Or, in the absence of a concrete answer to this, we may try to answer a set of questions instead:

- What is sustainability?
- How do we keep record of everything we’ve done for (or against) sustainability?
- Are these records faithful or biased representation of these practices and their impacts?
- How do these records help us to develop management skills to attain sustainability?
- To what extent can we improve these skills?
- To what extent can we implement these management skills in the real world in the hope of attaining sustainability?
- How does the implementation in real world settings reflect the ideological underpinnings that constitute a specific set of social and institutional context?
- And how can the understanding of these issues in turn help us to predict what we can achieve through the implementation?

It is always appropriate to start with the question of definition. Compared to the term “sustainability”, the concept of “sustainable development” (SD) seems to gain wider recognition, especially after the publication of *Our Common Future (The Brundtland Report)*, the United Nations’ World Commission on Environment and Development’s (WCED) famous report in 1987. However, this popularised concept that concentrates

essentially on the intergenerational equity is endowed with major defaults: It entails confusions with long-lasting economic growth and its tolerance of substitution when it comes to the conservation of different forms of capital stocks. Therefore it is hardly a well-defined concept (Gatto, 1995; Goodland, 1995; Huetting, 1990).

Though almost treated as equivalence to SD in public and academic discourses, the word “sustainability” is above all a less biased concept, since firstly it is not featured with the idea of pursuing economic *growth* at any point. And secondly, it is a term more open to legitimate interpretations, through which a much stronger sustainability paradigm could impose itself. And it is the strong sustainability that this dissertation holds as an *a priori* position: Sustainability is defined here as an ideal status of existence of an entity, where the natural capital, the human capital and the financial capital that the entity controls are maintained separately against scientific thresholds, with no substitutability allowed. (see more in Chapter II)

That being said, sustainability is above all an economic concept (Daly, 1991). In order to achieve it, the proper measurement and evaluation method of individual entities’ economic activities for (or against) sustainability thus become primordial.

Basing on the economic concept of sustainability, scholars on management study have long been working side by side notably with ecologists, agronomists as well as ecological economists on creating and testing different sets of indicators to assess the sustainability of entities. The researches that they have conducted bear fruits, especially when it comes to establishing scientific thresholds through quantified physical indicators regarding the carrying capacity of specific kinds of natural resources. Meanwhile, sustainability indicators that take into consideration of other aspects of human livelihood in assessing sustainability are very rare. Due to the fact that the “measuring rod(s)” for sustainability is supposed to be both multi-dimensional and aggregated, it is extremely difficult for the world to attain a unanimous consensus on the matter (Munda, 2005).

Meanwhile, some of the monetary accounting models² promoted by influential global and regional organisations whose think-tanks are composed of mainstream economics have

² See notably the International Emissions Trading (IET) granted by 1997 Kyoto Protocol, The World Bank’s (1997) Indicator of Genuine Savings, Global Reporting Initiative’s “Corporate Social Responsibility

started to enter the scene, notably since the 1990s. By attaching more importance to natural and human capital, these efforts illustrate the willingness to modify the traditional accounting and reporting practices that focus solely on financial capital. Meanwhile, these approaches have been criticised as being restricted to the level of providing fragmented information and allowing compensation among the three types of capital, therefore as “weak” measures. (Richard, 2009) The thinking that underpins these efforts is characterised by the logic of “internalisation of externalities” (Coase, 1960; Pigou, 1920), which has quickly become the mainstream theoretical framework for the subject of “measuring sustainability”.

Even though many ecologists (for instance, Labouze & Labouze (1991), Pillet (1998) and Wackernagel & Rees (1998) among many others) who support the strong sustainability³ are against the idea of monetarisation, as researcher specialised on managerial accounting, the author naturally holds the point that an adequate monetary accounting scheme would be the most promising management skill to assess the sustainability of an entity. This argument is also firmly held by a number of scholars in the domain of *sustainability accounting* (hereinafter SA; cf. Altukhova, 2013; Ge & Li, 1992; Gray, 2007; Hopwood *et al.*, 2010; Richard, 2012; Schaltegger *et al.*, 1996; Zhang, 2009⁴). The main reason is that, the monetisation that this school of ecologists are against to is only the one realised essentially through the pricing mechanism basing on the neo-classical economic theory: Apart from the mainstream means of evaluating a ‘price to be paid’, which very often turns the monetary evaluation into a subjective concept (Richard, 2012, p. 82), there are other means of monetisation that is endowed with both the objectivity generated by respecting scientific thresholds and the non-substituting maintenance of different forms of capital stocks. (see below)

reporting” under Elkington (1997)’s “Triple Bottom Line”, and United Nation, European Union, International Monetary Fund, Organisation for Economic Co-operation and Development & World Bank (2003)’s “System of Integrated Environmental and Economic Accounting”.

³ See more in Section 2.1 of Chapter II.

⁴ It’s worth noting that even though these scholars are all in favour of monetary accounting methods for the purpose of accounting for sustainability, their respective rationale varies greatly.

2. Research objectives

2.1 Model setting: Mainstream methods and the Triple Depreciation Line

Even though many sustainability accounting scholars agree that monetary accounting is the way to go, few of them agree upon the exact means of measurement and calculation to be adopted. Since today there is no such thing as ‘generally accepted sustainability accounting principles’ just like what the International Financial Reporting Standards (IFRS) is to conventional accounting practices around the world,⁵ there has been a variety of methods proposed for natural and human capital valuation; and the debate over them is still on-going. In the absence of such principles for SA and in search of a rather widely accepted model of capital valuation, it might be proper at this point to raise at first the genuine saving⁶ model of the WB (2005), which could be seen as one of the main reference of the development of SA frameworks since the last decade; then to further explore other possibilities.

2.1.1 The World Bank model

This WB model of genuine saving has adopted three different methods, namely the perpetual inventory method (PIM) for produced capital stocks, the net present value (NPV) for natural capital stocks, and an indirect method to calculate the intangible capital, where it is treated as a residual of total capital stocks minus the sum of first two types. This choice of valuation methods, especially the one for the intangible capital, is due to “a practical matter” (p. 22), because at a global level, this task of “wealth accounting” (p. 1) is extremely complex due to regional disparities and issues of information (un-)availability. This is also probably why the remainder of report has opted for the term “wealth stock *estimates*” (pp. 19, 35) rather than “*accounting*”.

⁵ Today, the IFRS is literally the commonly accepted Generally Accepted Accounting Principles (GAAP) for every country whose local GAAP is converged. See more in Chapter III.

⁶ See more in Section 1.1.1 and 2.3 of the Chapter II.

Further regarding the relations of the other two methods with accounting theories, what could be noted immediately is that the first method (PIM) refers to historical cost accounting and the second (NPV) refers to fair value accounting respectively. Even though these two valuation methods appear to weight equally in the capital stock estimates, as pointed out by Richard (2012), the accounting on actuarial basis in fact dominates the big picture, and it entails problems of valuation notably concerning natural and human capital stocks: Firstly, the natural capital, which refers to the subsoil assets, protected areas, crop- and pastureland, forest products (WB, 2005, p. 24), is valued at present values of economic *profits* on natural resource exploitation over an assumed lifetime, which ignores the value of its environmental functions⁷ far beyond that of natural resources for economic activities. Secondly, the ‘assets’ for the fisheries as well as the clean atmosphere are not included in the natural capital, due to lack of data (p. 23). Thirdly and most importantly, the human capital along with other social and institutional capital are not measured directly due to the lack of “good tools” (*ibid.*), which leads to the calculation of intangible capital stock through the indirect measure: We use “the total wealth”, calculated as the NPV of *future consumption*, and then subtract the result calculated for the first two types of capital stocks. By using this actuarial accounting method to estimate the total capital stocks as the basis of calculating intangible capital that represents “the preponderant form of wealth worldwide” (p. xiv), this valuation of resources could be seen as based on the classical Ricardian rent theory, and this model could be qualified as the loyal follower of the futuristic thinking that becomes increasingly present in the contemporary accounting theories and practices.

2.1.2 The Triple Bottom Line

On the organisational level, this trichotomy of accounting subjects seems to have also institutionalised, notably through the popularisation of the “Triple Bottom Line” (TBL), idea attributed to John Elkington (1997) and his influential consultancy, SustainAbility. As the conceptual framework not only for the mostly narrative corporate social

⁷ See more in Section 2.3 of Chapter II.

responsibility (CSR) reporting, but also for monetary accounting models such as the integrated reporting (IR) (*cf.* IIRC, 2013).

The TBL, as presented by Elkington (1997), is a key concept that promotes “environmental quality, and—the element which business had preferred to overlook—social justice” (p. 70) in addition to the conventional profit-making business perspective. People, planet and profit—the “three pillars” of sustainability—that represent the social, environment and economic bottom lines is often illustrated as in Figure 1.

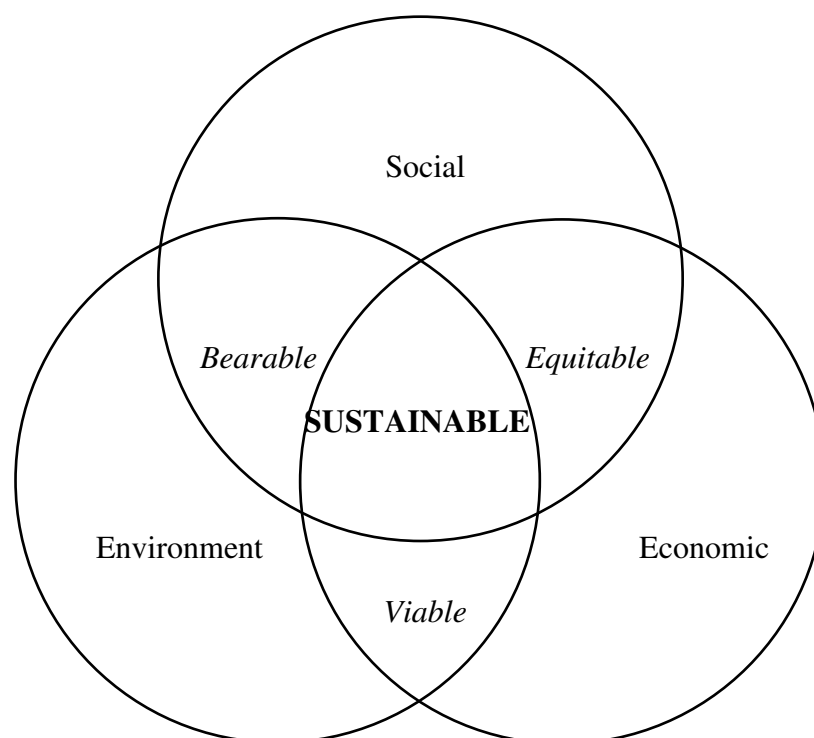


Figure 1: The Triple Bottom Line (Source: Young & Dhanda, 2012)

These three (seemingly) equally weighted dimensions of an entity are to be protected with reference to their respective ‘bottom line’ in order to check the firm’s objectives against the reality. Concretely, a TBL based accounting model is built revolving around the central concept of ‘eco-efficiency’, a sustainable development solution for businesses promoted by the World Business Council for Sustainable Development (WBCSD) (*ibid.*). This concept is defined originally by the Business Council for Sustainable Development (BCSD, predecessor of the WBCSD) as follows:

“Eco-efficiency is reached by the delivery of competitively-priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life-cycle, to a level at least in line with the Earth’s estimated carrying capacity” (1993, p. 9, in Schaltegger & Burritt, 2000, p. 49).

Just as what the term ‘efficiency’ means in the sense of economics, this ‘eco-efficiency’ indicates the achievement of established economic goals with the minimum possible input of ecological resources (Schaltegger & Burritt, 2000). At this point, it is already clear that the environment and economic aspects of a firm are not treated as parallel dimensions but as means and objective respectively, which is in contradiction with the alleged unbiased protection. Further, this concept is rather open to interpretation, in that on the one hand, the ‘eco-efficiency’ could be attained through reducing the total environmental impact as measured in absolute quantities, which is defined by Rambaud and Richard (2013) as “environmental effectiveness”. Whilst on the other hand, it also could be achieved simply by improving the *ratio* of the output and input. This latter case could be dangerous to the environment, since as long as this ratio is high, the ‘goal’ is achieved; no matter how much is the input in absolute quantities (Rambaud & Richard, 2013; Richard & Plot, 2014). Moreover, the well-known ‘rebound effect’ resulted from the pursuit of ‘efficiency’ is also found problematic both on microeconomic and macroeconomic level: As addressed in the empirical study of the European Commission, for instance, at microeconomic level, there are “direct rebound effect – where increased efficiency and associated cost reduction for a product/service results in its increased consumption because it is cheaper”, and “indirect rebound effect – where savings from efficiency cost reductions enable more income to be spent on other products and services”; and at macroeconomic level, there is also “economy wide rebound effect – where more efficiency drives economic productivity overall resulting in more economic growth and consumption at a macroeconomic level” (Maxwell *et al.*, 2011, p. 6). Besides, one can notice that the social pillar does not seem to be mentioned at all. Therefore either this social dimension is included in the ‘input’ side or not, the difficulty in valuing the social line is rather problematic (Norman & MacDonald, 2004).

2.1.3 The Triple Depreciation Line

From the above demonstrated typical SA frameworks both at macro and organisational level, we can see that, if the deficiencies in the WB's attempt for a SA report on a global scale are due to the lack of information, those of the TBL model for individual firms seem to be more fundamental, in that they demonstrate a basic fact of today's capitalist economy: After all, it is the economic bottom line that inevitably "permeates business thinking and is at present the main driver for business actions" (Ditz *et al.*, 1995 in Schaltegger & Burritt, 2000, p. 37). Since this tendency obviously goes against the equilibrium between the economic, social and environmental capital conservation advocated by the TBL itself, it seems time for us to resume the discussion over the questions listed in Section 1 of this chapter, namely, to what extent can we improve these management skills to attain sustainability?

The fact that the TBL is so well-received in the business world to a great extent confirms what Gray (2010) has insightfully pointed out: "Sustainability is both an ecological and societal concept which will only rarely, if at all, coincide with corporate or organisational boundaries" (p. 57). And this is perhaps why the social justice and ecological carrying capacities should rather be concerned at regional and global levels (*ibid.*), and then relevant measures should be imposed through political and institutional means. Nevertheless, according to what we have learnt from the 2005 WB report and from all international and national sustainability reports alike, informative aggregate analysis, effective policies and efficient capital stock management would not be achieved if there is no adequate measure to keep record and systematically maintain the capital stocks at the micro/meso level.

In this sense, the "Triple Depreciation Line" (TDL) proposed by Rambaud and Richard (2013) actually provides a possibility to apply the same accounting instrument to record and maintain the three types of capital stocks, just as what have been suggested by the 2005 WB report and the TBL model, both at macro and at micro/meso level, where the entities either in forms of firms or nation states are allowed to see clearly where they are and to (re)orient their activities towards sustainability.

The concept of TDL is originated from the model entitled “Cost Accounting for Renewing the Environment” (CARE)⁸ proposed by Richard (2012), where the historical cost principle is adopted to record and maintain both the natural and the human capital stocks. Concretely, as suggested by its name, the three types of capital are to be maintained through the *planned depreciation*, a powerful instrument developed in the conventional accounting framework that is designed to preserve the financial capital uniquely. Though having been attacked for its ‘overly conservative’ attitude in regard with impatient shareholders (Chiapello, 2005, in Rambaud & Richard, 2013), this method remains in use for the majority of assets, notably fixed tangible assets. In fact, as observed by Kapp (2000[1950]), whereas the conservation of financial capital is generally subject to all the attentive management (namely the systematic accounting depreciation) that allows putting aside a certain amount of money for its reconstitution, the natural and human capital do not seem to be lucky enough to enjoy such treatment (in Richard & Plot, 2014). According to the historical cost principle, the (actual) value of an asset is to be measured as an accumulation of its relative costs. Accordingly, if the concept of depreciation is to be introduced to the preservation of the natural and the human capital stocks, the monetary value of these capital stocks (assets) is to be measured as accumulated maintenance costs, or the cost needed for the restoration of the assets’ capacity to exercise their functions.

This TDL model has several salient features. First, the three types of capital (namely the financial, natural and human capital stocks) are to be recorded and maintained separately rather than as a whole (as it is the case of the accounting models developed under the TBL). Second, the cost of restoration is to be established with reference to specific scientific thresholds regarding the maintenance of different types of capital. Third, the accounting method for the natural and human capital stocks is developed on solid accounting theory basis, namely the historical cost principle, which provides all necessary methods from doing journal entries to generating balance sheet and income statement. And fourth, having had the three types of capital stocks equally presented in the books and fully integrated in the conventional accounting results, it removes the boundaries between financial management and environmental/social management, in that one and

⁸ Originally the abbreviation of its French title “la Comptabilité Adaptée au Renouvellement de l’Environnement”, could be translated as “accounting model adapted to the renewal of the environment”.

only one profit expressed in a monetary unit would be achieved. It is in this way that SA could really make a difference in challenging the nowadays rather problematic logic of economy. (Altukhova, 2013; Rambaud & Richard, 2013; Richard, 2012)

By returning to the classical historical cost accounting and further elaborating its application in SA, TDL thus represents a rather new manner of “reasoning” (Weber, 1978[1922], p. 130) under environmentalism, ideology that differs from the mainstream neoliberalism. What is further noticeable is that, quite contrary to what is believed by those well-intentioned ecologists mentioned earlier, TDL proves that the monetarisation is not in conflict with respecting physical scientific standards for sustainability: It could actually be instrumental in translating sustainability indicators into monetary terms that have direct impact on the conventional financial reports, or in other words, transform the conventional financial reports into “genuinely integrated” reports. (Rambaud & Richard, 2013) As an accounting framework, it fits the criteria that characterise the “non-substitutability paradigm”, or the “strong sustainability”⁹ and therefore constitutes the model of which the applicability is to be investigated in this study.

2.2 Real world context setting: The Chinese agriculture sector

Looking back at the history of humans, it is the development of agriculture that has greatly increased the humans’ freedom from being controlled by the environment and has allowed the humans to start to systematically manage their livelihood. (Sahlins, 1972, p. 37) Given the historical origin of the idea of sustainability as explored earlier, it is not surprising that theories, as well as practices of sustainability first manifested themselves in agriculture (McElroy & Engelen, 2011; Richard & Plot, 2014), sector of activity that has the history almost as long as that of human civilisation.

Indeed, choosing the agriculture sector as the field of study for this dissertation is above all because that it has always been the economic sector that has the closest relationship with the nature and the people, as its production process relies largely on the natural capital such as soil and fresh water, and the consummation of its products sustains human

⁹ See more in Section 2.1 of Chapter II.

life. Moreover, compared to other sectors of the economy, the high degree of uncertainty has characterised the agricultural productivity, no matter in ancient times or in today's much industrialised world. The sustainability management skills for this sector thus matters greatly and deserves to be examined with particular attention. As pointed out by Ciriacy-Wantrup (1952), agriculture is a sector that entails high degree of uncertainty where the managerial decisions can result in very large or even irreparable losses of natural capital. To avoid future disasters due to degradation of soil and destruction of species and forests, humans need to define minimum safety physical standards. (in Richard & Plot, 2014) In this regard, SA could play an important role to better inform the farm/firm as well as the whole society when such managerial decisions are to be made.

From an academic point of view, choosing this sector of economic activity as the field to study the applicability of TDL is further justified by the fact that, though relatively rare, the application of such type of capital conservation method has already existed in the domain of sustainable agriculture. (Altukhova, 2013; Richard, 2012) A typical example is the application of "IDEA"¹⁰ method in some French farms, where quantitative indicators are proposed to maintain their financial, natural and human capital separately, with reference to respective sustainability thresholds. The clear similarities between the IDEA and the monetary accounting model (such as CARE) based on TDL principle illustrate a promising perspective regarding the development of SA.

To continue this discussion from a more dialectical perspective, this dissertation zooms in on a specific geographic zone: Over the last few decades, the emergence of the People's Republic of China (PRC)¹¹ as a global economic power has drawn increasing attention of the world. Attention is paid not only to China's redoubtable consecutive years of double-digit GDP growth, but also to the way in which it achieved its growth and on its consequences. A heated discussion over China's "state-led pattern" of growth, or a "state capitalism" path has been conducted in the academic world. (see notably Henderson 1993; Huang, 2008; Lin, 2012; Rapley, 2007; Wooldridge, 2012) Meanwhile, questions such as whether the development is 'sustainable', and whether there is an overexploitation of natural and social resources have been frequently raised from domestic and overseas.

¹⁰ Abbreviation of its French title "Indicateurs de Durabilité des Exploitations Agricoles", could be translated as "sustainability indicators for farms". (see Zahm *et al.*, 2006, 2008)

¹¹ Hereinafter the term "China" refers to the PRC, and to the mainland China in particular.

(Grésillon, 2015) Indeed, long having been recognised as a resource-intensive economy, China has been experiencing rapid economic growth thanks to the efficient and large-scale exploitation of the *resources* of the country. The intensive consumption of natural resources, as well as the massive damage to the natural environment, is often overlooked in the discussion of China's ascent.

In fact, this ascent comes with major implications in terms of environmental degradation, which continuously harms the health of the Chinese people and the productivity of China's economy. (Bian *et al.*, 2010; Wei & Ye, 2014; Wen *et al.*, 2008; Yang, 2007) It is no wonder that the *China Ecological Footprint 2012* recognises that China is now in the most serious state of biocapacity deficit ever in history. (Xie *et al.*, 2012) Moreover, a large number of reports and information delivered by the Chinese authorities also suggest that the concerns regarding China's natural and human resources are not unfounded.¹² The so-called "Chinese pattern" is seriously challenged by these issues.

As an active participant in the trade and at the same time preoccupied by the development of domestic market, China faces increasingly strict environmental and society-related requirements set by foreign trade partners (for instance, the antidumping accusations launched by EU and US), as well as growing demands of Chinese people. Consequently, the Chinese government has started making considerable efforts to improve the state's environmental and social performance. Since 1994, environmental laws and regulations and labour law have been established and implemented. However, these taxes related to pollution and natural resource exploitation as well as regulations on labour protection did not seem to halt or slow down effectively the degradation of environmental and social conditions. (Jiang *et al.*, 2008)

According to the National Bureau of Statistics of China (NBSC) database, among the 1.3 billion inhabitants that reside in this country, more than 2/3 are farmers whose livelihood is directly or indirectly associated to agricultural activities.¹³ In the mean time of the rapid

¹² See notably the annual "Report on the State of China's Environment" released by the Department of Environmental Monitoring (Available at Ministry of Environmental Protection of the People's Republic of China's official website: <http://jcs.mep.gov.cn/hjzl/zkgb/>, last consulted on 12/05/2015), and the annual "Bluebook of China's Society" published by the Chinese Academy of Social Sciences (available at CASS's official website: <http://www.cssn.cn/>, last consulted on 12/05/2015)

¹³ See more in Section 1.1.2 of Chapter V.

economic growth that China exhibits to the world, the domestic agriculture sector, hidden facet of the economy, has experienced multiple challenges ranging from difficulties in conducting large scale coordinated production due to the land fragmentation, to excessively intensive utilisation of chemical fertilisers and pesticides, negligence of natural capital maintenance (e.g. substantial abandonment of damaged land), as well as massive loss of a young labour power due to the ‘naturally’ inferior profitability of the agriculture sector, and so on. (da Silva *et al.*, 2009; Gao & Luo, 2011; Gao, 2006; Muldavin, 1997; Schwoob, 2014; Wan & Cheng, 2001; Yang & Li, 2000) These problems call for improvement, or even fundamental institutional changes in terms of managerial skills both at micro/meso and at macro level, where there is a possibility that the implementation of TDL model could make a difference.

2.3 Model implementation in the real-world settings

The choice of investigating SA implementation in the Chinese agriculture sector, or the Chinese agribusinesses in particular is thus to a great extent justified by the above presented reasons. Through an exploration of the mechanisms to implement TDL in real-world settings in China, the author intends to answer, in the remainder of this dissertation, the last three questions in the list presented in the beginning of the Introduction, namely “To what extent can we implement these management skills in the real world in the hope of attaining sustainability? How does the implementation in real world settings reflect the ideological underpinnings that constitute a specific set of social and institutional context? And how can the understanding of these issues in turn help us to predict what we can achieve through the implementation of SA?”

In order to be able to gather data from past event and determinate instrumental factors that facilitate a forward-looking applicability study on TDL implementation, TDL is further decomposed into four subjects: 1) a set of *accounting rules* to be imposed; 2) a set of *sustainability management schemes* to be adopted at *national level*; 3) a set of *sustainability management schemes* to be adopted at *corporate level*; and 4) an

incarnation of the environmentalism ideology that leads to the strong sustainability¹⁴. According to this agenda, this investigation of TDL applicability is conducted through analyses over three events, namely the international convergence of accounting standards, the establishment of national ecological accounting and auditing scheme, and the sustainability reporting practices of agribusinesses. Regarding the last subject, which is the ideological aspect of the study, there is an analysis of the dynamics of the interactions between environmentalism and the ‘mainstream’ ideologies that have manifested in the investigation of the three events. It is through the analytical process designed above that the understanding over the mechanism for TDL implementation could be achieved. Further regarding the mainstream ideologies, this dissertation holds the assumption that

Within a certain geographical and historical scale of a society, especially like that of the contemporary China, a socialist country under the *de facto* state capitalism, dominant beliefs do exist, in an explicit or implicit way, and they greatly influence critical decisions regarding the whole society.

Regarding the research objectives of this study, Thomson’s (2014) insights appear to be of great interest. He deems that researches on SA should

“contribute towards sustainable transformation and reducing societies’ negative sustainability impact on our planet. [...] Accounting-sustainability research should critically: confront the unsustainable way the world is; create new accounting knowledge, processes and practices; and problematise, disrupt and engage constructively with transformation processes. The ‘so-what’ question for accounting-sustainability research articles should be: how does this article help with the resolution of the urgent and wicked problems faced by society?” (p. 15)

¹⁴ One could argue that the *sustainability management schemes* to be adopted at *international/global level* is missed in this agenda. However from a jurisprudential perspective, due to the lack of ‘genuine’ authority, the adoption of an international law, or the convergence towards a natural law, for that matter, could only be realised through a ‘soft’ way, or in other words, through agreements based on common beliefs (Napoli, 2012). Therefore the author intends to have this subject covered in the fourth category, namely “an incarnation of the environmentalism ideology that leads to the strong sustainability”.

Indeed, after having answered, and/or having proposed possible paths to explore the answers to the series of questions listed at the very beginning of this dissertation, we might well be in a better position to conduct the investigations in the following chapters of this dissertation, and might eventually be able to better predict the future of SA for a given set of social and institutional contexts. This dissertation therefore sets out to make a ‘connecting point’ between these two factors, as it intends to find out if TDL, as well as the ideology within which TDL is embedded, is compatible with the Chinese context. In other words, the central questions which this dissertation seeks to answer are –

What will be the possible conditions and resistances faced by the establishment of a ‘strong-type’ SA system, namely TDL, within the Chinese institutional context? And further, basing on this analysis, what could we expect for the future of SA development in China?

3. Outline of the dissertation

The remainder of this dissertation is organised as follows: After an introduction of theoretical, epistemological, and methodological framework of this study in Chapter II, what presented in Chapter III is an investigation on the evolution of accounting standards in China in general, with a special focus on the standards for the agriculture sector. Chapter IV further investigates two initiatives, the first on the national level and the second on the industrial level, of sustainability accounting schemes. Chapter V seeks to theorise the evolution towards the implementation of sustainability accounting in China, and also makes a proposal for promoting the idea of ‘strong’ sustainability in a broader sense. In the end, the dissertation is concluded by a summary of the discussions conducted, as well as some reflexions on the future works.

CHAPTER II. Constructing the theoretical and methodological framework

1. A review of the sustainability accounting literature

1.1 Emergence of sustainability accounting and its evolution

Whilst managerial accounting and the economic rationality it represents came into being thousands years ago for the purpose of increasing productivity and thus better ‘sustaining’ an organisation in its business (Catchpowle *et al.*, 2004; Guo, 2008; Weber, 1978[1922]), it is not long since the human society began to associate accounting to ‘sustainability’ in its broader sense, which involves the social and environmental aspects beyond the pure pursuit of economic benefits. Nevertheless, with the advent of the capitalist era and the continuous exploitation of the human and natural resources driven by the (neo-)liberal ideology, various social and environmental problems (re-)emerged and have drawn increasing concerns, especially in developed countries.

Admittedly, just as noted by Gray and Bebbington (2001), “accounting is not the most obvious place to start if one is seeking to address either environmental issues in general or the business/environment relationship in particular” (p. 13). Yet “it is equally true that without a ‘greener accounting’ many environmental initiatives will simply not get off the ground” (*ibid.*). Accounting, initially characterised by its most basic recording and reporting function, has made it possible for entities—nation states and business firms alike—to conduct systematic management regarding not only the economic and financial, but also the environmental and social aspects of its activities. The advocates of this ‘greener’ accounting have endeavoured to work in this direction ever since the late 1960s. And the discipline of sustainability accounting (SA) has become to occupy an increasingly central role in the mission of achieving sustainability at both macro and micro/meso level.

1.1.1 Evolution in the West

Economists seem to have taken an interest in the subject of sustainability way much earlier than scholars on management. As early as in 1920s, many economists such as Pigou (1920) had already started to consider a systematic integration of environmental problems into the whole set of business concerns through the internalisation of environmental “externalities”, notably by taxes. Later, other economists, notably Kapp (2000[1950]) and Ciriacy-Wantrup (1952)¹⁵ have further discussed these environmental and social concerns from the perspective of individual businesses.

The period from late 1960s to the beginning of the 1970s was remarkable for SA, as a number of seminal works that discuss the limits of growth, as well as the reforms both on national and corporate accounts were published in the academic world. Among the authors of these works, Linowes (1968) seems to be, as claimed by Mobley (1970), the ‘founding father’ of the discipline. By proposing to use the term “socio-economic accounting”, he first distinguished the idea of accounting for sustainability that we are familiar with nowadays, from “social accounting”, which has been employed to indicate a “national income accounting”, or “macro accounting” in official discourses. As to corporate SA, according to Richard (2012, p. 32), it is Müller-Wenk, with his essay entitled *Ökologische Buchhaltung, eine Einführung (Ecological Accounting: An Introduction)* published in 1972, that is seen as the earliest pioneer in the micro-economic SA literature.

What followed was a wave of academic publications that discussed the possibility of establishing ‘a new accounting system’ with an enlarged accounting scope. (see for instance, Beams & Fertig, 1971; Churchman, 1971; Dilley & Gandt, 1973; Georgesçu-Roegen, 1971; Nordhaus & Tobin, 1973; Ramanathan, 1976; Ullmann, 1976 among many others) Even though the literature of this period seems underdeveloped and a part of it is judged technicist and reductionist (Mathews, 1997), these early works have fuelled the discussion regarding the sustainability issues of economic growth, by reconsidering Pigou’s (1920) proposition of internalising the externalities and the use of classical economic theories on cost-benefit analysis. The focus of these works appears to be more

¹⁵ See more in Section 2 “Research perspectives” in the chapter “Introduction”.

on the macro level as well as the social aspects of the issue (with exception of Müller-Wenk, Ramanathan and Ullmann).

Alongside these pioneering scholars, international and national authorities have also developed an agenda that attempts to capitalise the academic efforts, especially those on improving the indicators of macro-economic growth. A typical example would be Measure of Economic Welfare (MEW) and its later form of Index of Sustainable Economic Welfare (ISEW) of the United Nations. At national level, frameworks such as *the UK Government Green Paper* (HMSO, 1977) and *Supplement to The Accounting Review 50: Report of the Committee on the Measurement of Social Costs* of American Accounting Association (AAA) (1975) were put forward in support of the idea of a more inclusive accounting, most of which however are viewed as mild persuasion and exhortation rather than proper regulations (Mathews, 1997).

As noted by Richard (2012), the history of SA is tightly linked to the dynamic evolution of economic theories and inspired by the debates between opposing schools of economists (p. 35). In the light of the development of critical perspectives on corporate accounting theories and practices in the 1980s, SA, endowed with an apparent transference of interest to the environmental aspect has emerged as an independent new discipline, based on the “political economy of accounting” (PEA) theoretical framework. By attaching importance to the broader institutional and historical context within which the accounting system functions, PEA regards accounting as a managerial tool endowed with ideological underpinnings, and therefore it looks for an improved one that could overcome the dominant marginalist ideology, under which conventional accounting system does not value entities such as natural resources and human capital as much as they deserve (Cooper, 1980; Cooper & Sherer, 1984; Tinker, 1980). Following this development in the theoretical foundation of SA, a number of academic papers were published in late 1980s to 1990s, with a much greater focus on both social and environmental accounting models at corporate level, as well as on the challenges and opportunities to their real world application (*cf.* Belkaoui, 1980; Christophe, 1992, 1989; Christophe B., 1995; Gray *et al.*, 1988; Hueting, 1987; Maunders and Burritt, 1991 among many others).

Within the same period, a working group on environmental accounting was formed on the initiative of the United Nations Environment Programme (UNEP) and four workshops

also on this subject were organised by the World Bank (Hueting, 1987). Their efforts appear to have aligned with the earlier ones that had concentrated on reforms regarding the national accounts. (Ahmad, El Serafy, & Lutz, 1989) At regional and national level, the fifth action plan of European Community entitled *Towards sustainability* published in 1993 and the French model for calculating the “social results (bilan social)” were, for instance, introduced to a bigger audience in the academic world (Christophe & Bebbington, 1992). Meanwhile, since the beginning of the 1990s, many banks in developed countries, including the International Bank for Reconstruction and Development (IBRD), and the European Bank for Reconstruction and Development (EBRD) began to conduct ecological audits of individual organisations in order to prevent the risk of their non-payment regarding the environment conservation projects they had funded (Altukhova, 2013, p. 96). This development of audit contributed also as a motivation for individual organisations to pay more attention to SA.

One can note a major change in the history of SA during the period from the late 20th to the early 21st century. During this period, the scholars greatly enriched the literature by conducting research on building appropriate accounting models and focusing on operational issues at corporate level (Bebbington *et al.*, 2001; Schaltegger *et al.*, 1996; Schaltegger & Burritt, 2000). Among these efforts, the emergence of the “Triple Bottom Line” (TBL)¹⁶, idea attributed to John Elkington (1997) and his influential consultancy, SustainAbility could be seen as the most remarkable. This theoretical framework has managed to exert great influence on corporate sustainability reporting all around the world, thanks to its institutionalisation through SustainAbility’s biennial benchmarking reports, KPMG’s triennial surveys of practice, and the Global Reporting Initiative (GRI)’s sustainability reporting guidelines, especially for CSR reporting. In general, CSR reporting under GRI guidelines calls for a standalone, mostly narrative document that records a firm’s social and environmental impacts as an addition to the main financial reports (Gray & Milne, 2012).

Another proposal which was born during this period, based on the principles of TBL, was the integrated reporting (IR) advocated by the International Integrated Reporting Council (IIRC). Unlike the above described GRI-CSR model, the IR has been seeking to

¹⁶ See Section 2 “Research objectives” of the chapter “Introduction” for an extensive review of the TBL.

communicate, in monetary terms, the integrated impact of key actions across and between social, environmental and economic spheres. However, the recent development of IIRC approach is criticised as having led to the development of IR into a direction where the focus has been shifted towards providing information for providers of capital rather than for a broader range of stakeholders (Bebbington *et al.*, 2014). Other integrated accounting and reporting measures (like the one proposed by Schaltegger and Wagner (2006) for instance) have also demonstrated this tendency.

Apart from this significant movement regarding the efforts of developing corporate SA frameworks, a series of macro sustainability indicators with specific evaluation and measurement models has also come into being. Typical examples include the System for Integrated Environmental and Economic Accounting (SEEA)¹⁷ accompanying the System of National Accounts (SNA) endorsed by the UN, and the model to calculate the “genuine saving” of a State, proposed by WB (2005, 1997)¹⁸.

Besides, with the increasingly abundant literature of SA models over time, the critical perspectives in regard with SA development have increased accordingly. (see for instance, Bebbington, 2001; Gray & Milne, 2004; Lehman, 1999; Mathews, 1997; Thornton, 2013) All these works have shown remarkable insights and greatly influence contemporary SA research.

1.1.2 Evolution in China

As regards the SA literature in China, it is not until the 1990s that this “new wave of thinking in the Western accounting theory” (Ge & Li, 1992) started to draw the attention of Chinese accounting researchers. Together with his colleague Li Ruoshan in Xiamen University, Ge Jiashu, one of the most influential Chinese accounting scholars, published in *Accounting Research*, the highest ranking accounting journal in China, an introduction to SA entitled *A new wave of thinking emerged in Western accounting theory in the 1990s:*

¹⁷ See more in Section 2.3.3 of Chapter IV.

¹⁸ See more in Section 2 of Chapter I and in Section 2.3 of this chapter.

*Green Accounting Theory*¹⁹ for the first time in 1992. As indicated in the title, this critical perspective of accounting theory was recognised as a completely imported idea within the Chinese accounting research arena. The authors claim that after “information and accounting” in the 70s and “positive accounting” in the 80s, “green accounting” was the new “trendy” subject in accounting research that was going to draw increasing attention around the world, and China was not be an exception (p. 1). This insight is in accordance with the observation made later by their counterparts in the West: It is indeed in the late 1990s that the idea of “accounting for the society and the environment” had grown substantially in the accounting research arena (Gray & Bebbington, 2001; Mathews, 1997). Many Chinese researchers agree on the fact that this paper marks the beginning of SA research in China, a milestone reached two decades later than that in the West (Geng & Fang, 2004; Tang *et al.*, 2012; Zhang, 2006; Zhang, 2013).

Despite this call for attention, the progress made in SA research was limited in China: As an “imported concept” (Geng & Fang, 2004, p. 69), the term sustainability *accounting* seems difficult to integrate with the cognitive system of Chinese accounting researchers, since from a semantic point of view and also traditionally, ‘accounting’²⁰ is supposed to be no more than a ready-to-use managerial tool that only concerns businesses; whereas in the Western context, this term naturally involves both macro and micro/meso level “counting and calculation”²¹, and the research on it calls for reconsideration of a whole series of issues such as accounting assumptions, means of measurement, and accountability. According to the authors, it is inevitable that the arrival of SA theories and practices encounter problems being adopted in China, and the future of SA remains uncertain (*ibid.*, p. 71). Indeed, research on SA seems to have stagnated for a while right after its introduction to China in the 1990s, and does not seem to have resurged until earlier in the 21st century. Nowadays, apart from papers of literature review and discussion, what could (still) be observed in SA related literature in China are three rather mutually isolated topics: first, the one focusing on adjusted national accounts (*eg.* Zhang,

¹⁹ Originally in Chinese: “九十年代西方会计理论的一个新思潮——绿色会计理论”. Unless otherwise noted, the titles and content of articles and books originally written in Chinese are translated by the author of this dissertation.

²⁰ 会计(kuai ji) in Chinese.

²¹ 核算(he suan) in Chinese.

2014); second, empirical and critical studies on CSR reporting (*eg.* Dong, 2011); and third, development of quantitative environmental impact indicators (*eg.* Feng *et al.*, 2012).

1.1.3 Summary of the section

With regard to the above presented non-comprehensive literature review, the time frame of SA development shows interesting insights: Coincident or not, the emergence and resurgence of SA researches and implementation efforts seem to correspond to the time of energy crises (1973, 1979 and 1990) in the Western world, and to the time of environmental crises in China²². What further noticeable is that, there is a significant disparity between the development course of SA researches in China and that in the West, both in terms of time and theoretical basis: With a two decades' lag on developed countries, Chinese researchers in economics and accounting have been reviewing extensively the existing literature to catch up the trend, and endeavoured to develop localised versions adapted to the Chinese context, without being able to enjoy the freedom and develop a systematic theoretical framework of SA on—and of—their own.

1.2 Multiple approaches regarding accounting for sustainability

The literature review conducted above corresponds to the observation of Antheaume and Teller (2001): There are essentially two types of research literature in the domain of SA, on the one hand applied researches aiming at the development of appropriate managerial tools and regulatory norms, and on the other interpretive researches aiming at understanding the emergence of these tools and that of voluntary disclosure of information with societal and ecological characters (p. 85). Further regarding the theoretical basis of SA, as summarised by Gray (2007), there are three major frameworks that are the most frequently used in the literature: positive accounting theory and agency theory, stakeholder and legitimacy theories, as well as the (bourgeois) political economy perspective (p. 185).

²² See more in Chapter IV.

According to positive accounting theory, a firm is seen as “a nexus of contracts” and therefore is supposed to use accounting as a tool to facilitate the formation and the performance of the contracts (Coase, 1937). When it comes to social and environmental issues likely to have an impact on these contracts, it is the job of (the accountants of) the firm to translate them into accounting transactions. Yet the self-interested (top management of) the firm which is considered as an ‘agent’ to the principal, only adopts accounting policies that benefit itself (or themselves). Drawn from the conventional accounting literature and extended to the topic of governance in its broader sense, these frameworks appear to be not only relevant when trying to understand the (usually unsatisfactory) social and environmental ‘strategy’ of individual firms, but also relevant for that of the governments, since the fulfilment of social and environmental responsibility is inseparable from public accountability (Ma & Wei, 2014; Ostrom & Ostrom, 1999; Sandbrook *et al.*, 2010).

The concerns for stakeholders and legitimacy of an entity are generally seen as originated from Freeman’s (2010[1984]) theory²³. According to him, a *stakeholder* is “any group or individual who can affect or is affected by the achievement of the firm’s objectives”. Typical stakeholders include: governments, local community organisations, suppliers, employees, customers, competitors, media, and environmentalists (Freeman, 2010[1984], p. 25). The firm, as the centre of a whole set of relationships maintained with these stakeholders of very diverse nature, cannot make its existence sustainable if it neglects these relationships, and therefore it should care for the interests of every different stakeholder (Antheaume & Teller, 2001, p. 93). In line with this notion, there is, according to the legitimacy theory, a “social contract” between the firm and each one of the stakeholders. This tacit contract obliges the firm to communicate information to these stakeholders on a regular basis, as a response to expectations of the society on corporate behaviour, in order to legitimate its activities (Antheaume & Teller, 2001; Donaldson &

²³ However, as shown earlier in the section that discusses the epistemology in the chapter “Introduction”, the sociologists, namely Bourdieu (1976, 1980) and Mauss (2002[1950]) already approached this subject from the perspective of domination realised through offering ‘gifts’ to the public composed by potential clients.

Preston, 1995; Roberts, 1992; Ullmann, 1985). It is based on these business-oriented concepts that CSR, IR, and eventually, the TBL concept have been developed²⁴.

It seems quite obvious that the two sets of theories demonstrate resemblance as well as complementarity: Since the contractual relationships recognised by Coase are extended to those with stakeholders by the social contracts, an entity (in the sense of a firm rather than a State) is supposed to use SA as a tool to communicate *relevant* information for the purpose of maintaining these relationships. And the difficulties in its accomplishment is essentially due to the principal-agent problem, where the relevance of the information provided could be affected by (the managers of) the firms, due to the fact that these ‘agents’ would choose to disclose information that only benefits them. Whilst classical agency theory demonstrates pure self-interested behaviours facilitated by the assumingly efficient markets, the enlarged concept of this theory has brought power differentials—mainly due to information asymmetries—between a firm and its different stakeholders into the explanatory mechanism (Hill & Jones, 1992).

Different from the above theoretical frameworks widely seen as “observation or acceptance of the existing social order” (Altukhova, 2013, p. 62; Antheaume & Teller, 2001, p. 91) that tend to explain the organisational behaviour, the political economy perspective of accounting²⁵, on the other hand, criticises the existing social order and attempts to impose a more relevant one through reforms. To start with, the ‘political economy’ is defined as “the study of the interplay of power, the goals of power wielders and the productive exchange system” (Zald, 1970 in Jackson, 1983). And ‘accounting’, as observed from a political economy perspective, is an “economic domain” that “cannot be studied in isolation from the political, social and institutional framework within which the economic takes place” (Gray *et al.*, 1995a, p. 52).

Further regarding the development of PEA, what is noticeable is that the literature of SA based on the “bourgeois political economy”, as categorised by Gray *et al.* (1995a), has increased substantially; on the contrary, the one based on “classical political economy”

²⁴ Admittedly, there is a slight difference between CSR and TBL, as different levels of priority are given to different ‘responsibilities’ in the former, whilst they are ‘equally’ weighted as claimed in the latter. The ultimate philosophy adopted, however, is the same, as further demonstrated in this study.

²⁵ A more extensive review of PEA is presented in Section 3.

seems less developed²⁶. Even though it is widely believed that the bourgeois variant is more helpful in understanding why firms *would not* disclose information about their sustainability related activities (Gray *et al.*, 1996 in Simpson & Taylor, 2013; Guthrie & Parker, 1990), the classical perspective is also relevant, or even fundamental, especially in normative researches that looks for *imposing* a specific accounting model within a specific context.

That being said, it is true that for SA, just as for accounting in general, “no theory is able to explain all aspects of a complex, *ad hoc*, practice which, lacking a single imposed theoretical basis, is the victim of haphazard power influences and is, as a consequence, beyond simple rational explanation at any level of detail” (Gray, 2007). In fact, as Gray *et al.* (1995) have otherwise perceived, to a greater or lesser extent, all the above mentioned theories align with each other, it is only the “level of resolution” (p. 53), or in other words, the observation scale of research focus that is different. As Cooper and Hopper (1987) put it, “any way of seeing is also a way of not seeing”. Therefore the choice of using any specific theoretical framework for a specific study would inevitably result in negligence in a sense. This is precisely the reason why diversity in the choice of theory and interdisciplinary studies are needed.

This dissertation therefore intends to adopt a theoretical framework that brings an anthropological aspect into the investigation on SA, in the hope of contributing another “way of seeing” that complements the literature (see below).

2. Definition of the key concepts involved in this dissertation

2.1 Sustainability

Compared to the term “sustainability”, the concept of “sustainable development” seems to gain wider recognition, especially after the publication of *Our Common Future* (or *The*

²⁶ See more in Section 3.

Brundtland Report), the United Nations' World Commission on Environment and Development's (WCED) well-known work in 1987. The oft-quoted definition of sustainable development made in this report is set forth as:

“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

This popularised definition was at the time backed by researches conducted by a number of mainstream economists, notably Barbier (1987), Hartwick (1977, 1978a, 1978b), and Solow (1986), among which Solow, for instance, further explains this concept by stating that:

“... the current generation is always entitled to take as much out of the common intertemporal pool as it can, provided only that it leaves behind the possibility that each succeeding generation can be as well off as this one”(1986, p. 143).

In this sense, as long as both the current and succeeding generation are equally “well off”, human society is considered sustainable. But the forms of the capital that the different generations will hold at their time to get well off remain undefined. This perspective thus assumes that, being equally treated as ‘wealth’, all forms of capital can be substitutes to each other without any limit, and therefore the total aggregate value of these forms of capital could be maintained as a whole (Altukhova, 2013; Neumayer, 2003; Pearce *et al.*, 1989; Richard, 2012). Moreover, as (Goodland, 1995) has noted, the moment the term *development* is introduced, the discussion becomes different and more ambiguous (p. 4). Indeed, ‘development’ is often linked to or even confused with economic growth (Daly, 1990; Goodland, 1995) in academic literature as well as in public discourses, which makes the emphasis of the whole concept of sustainable development fall elsewhere.

This double ambiguity in these mainstream definitions leads to an almost inevitable set of scenarios: Human society looks constantly for development, or getting well off; If in this process there is a loss of natural capital, as long as it can be immediately balanced by the creation of artificial capital of the same (present) value, the loss is tolerable; If a greater (future) value creation of artificial capital would be attained in exchange for this natural capital loss, it could even be considered as a good ‘investment’ (Hartwick, 1977). This

school of thinking of which this logic represents is categorised by (Neumayer, 2003) as the “substitutability paradigm”, or “weak sustainability” (p. 22).

In opposition to this, the “non-substitutability paradigm”, or “strong sustainability” does exist in the domain of ecological economics. Unlike the substitutability paradigm which is an “extension to neoclassical welfare economics” (*ibid.*, p. 27), this paradigm covers various academic contributions that share two points in common: All of them consider natural capital, to a greater or lesser extent, as non-substitutable and economic growth no longer as the top priority. Among them, Pearce *et al.* (1989), Daly (1991), Hueting *et al.* (1998), Ekins *et al.* (2003) appear to be representative in the evolution of this school of thinking.

After David Pearce and his colleagues of the Centre for Social and Economic Research on the Global Environment (CSERGE) published in 1989 the seminal work *Blueprint for a Green Economy*, in which they have for the first time recognised the two categories of sustainability (weak conservation and strong conservation of capital), Daly (1991) elaborated the concept of strong sustainability. He agreed that natural capital and man-made capital are not substitutable but complementary to each other. Further, he specified that for the purpose of attaining the desirable steady-state economy, the critical natural capital (CNC, see more in Section 2.3) must be preserved in all circumstances, that natural systems should be maintained as much as possible, and that renewable resources should be exploited on a sustained yield basis.

Based on a number of former works of Hueting (1980, 1990, 1992), Hueting *et al.* (1992) and so on, Hueting *et al.* (1998) have claimed again the non-substitutability of different forms of capital and approached the subject from a different angle: the valuation of sustainability. Dedicating their economic analysis particularly to the natural capital conservation, they state that sustainability is actually an objective concept and its valuation depends completely on biological sciences (Richard, 2012). Moreover, this scientific threshold based evaluation method of sustainability requires to restore and to safeguard the (potentials of) environmental functions in physical terms rather than in (market) value terms.

In the same vein as Daly and Huetting *et al.*, Ekins and his colleagues have recognised the differences between the two paradigms of sustainability, and further focused on the concept of *critical* components of natural capital (Daly, 1991), and its implication on environmental policies. Quite frankly, they have pointed out that “not all environmental functions everywhere can, or need to, be sustained” (Ekins *et al.*, 2003, p. 174). Therefore an operational strategy is require in order to identify and maintain the CNC according to the importance of the environmental functions they perform. Environmental sustainability is thus defined as the successful maintenance of this kind of capital (*ibid.*, p. 182).

The differentiation between weak and the strong sustainability thus appears necessary, since the two currents of thinking are embedded in two opposite sets of ideologies: The former calls for maintaining natural capital as ‘resources’ in (monetary) value terms, the latter for preserving the physical stock of (critical) natural capital (Ekins *et al.*, 2003; Hussen, 2012; Neumayer, 2003).

It is pointed out by Neumayer (2003) that science does not endorse either paradigm since (non-)substitutability naturally becomes an assumption and stops being a falsifiable conjecture facing the uncertainty of the future (p. 88, p. 192). Moreover, it is believed by some scholars (Hediger (2006) for instance) that, the concepts of Solow (1986) sustainability and that of strong sustainability merely coincide at some points, as the latter is only ‘a special case’ of weak sustainability. Nevertheless, Ekins *et al.* (2003) demonstrate that, if weak sustainability is assumed *a priori*, it is impossible to show *ex post* whether the assumption was justified or not. Since by making this assumption, research based on it can only show whether or not weak sustainability has been achieved and cannot shed any light on the question as to whether the assumption of commensurable and substitutable capitals was justified in the first place.

Besides, compared to its opponent, the weak sustainability school of thinking seems to be less demanding and more open to interpretations. In fact, the very reason why the use of the concept of “sustainable development” advocated by this school became commonplace is because that it entails a plurality of meanings and a plurality of underlying philosophies, and it is precisely this rhetorical posturing that has on the one hand, facilitated the communication of the concept, and on the other, created confusions when it comes to its implementation in society (Buhr & Reiter, 2006; Eder, 1996).

Based on the two points presented above, instead of sticking to the term “sustainable development” and its implications, this dissertation holds strong sustainability as the *a priori* position. The definition of sustainability that appears the closest to the positioning of this dissertation would be that of Huetting and Reijnders (1998). Having equally adopted the strong sustainability as the *a priori* position, in their paper entitled *Sustainability is an objective concept*, this notion is defined as

“the use of the vital functions (possible uses) of our biophysical surroundings in such a way that they remain indefinitely available” (p. 139).

The achievement of sustainability thus requires the achievement of an ideal status of existence by entities (States and firms alike), where the natural, human and financial capital stocks (see Section 2.3) that the entity controls are maintained separately against scientific thresholds, with no substitutability allowed. In other words, the concept of sustainability adopted in this dissertation has nothing to do with ‘development’, or economic growth: It is even the exact contrary to it, where a certain level of austerity is required. Thus unless otherwise noted, from here on, the term “sustainability” is used to refer to the “strong sustainability”, in order not only to differentiate from the substitutability-allowing weak sustainability paradigm, but also to differentiate the environmentalist positioning of this dissertation from the neoclassical school of ideology.

2.2 Accounting

Having long been qualified as “the language of business” (Lavoie, 1987; Lehman, 1992), accounting, as a fundamental managerial device of human economic activities has penetrated in many aspects of life and academic research: In fact, being fully aware of it or not, economists, sociologists and statisticians all perform accounting (Linowes, 1968). And rather than a mere “adjunct of business” (*ibid.*, p.37), accounting is an independent discipline that involves a whole set of logic, principles, assumptions and vocabularies. Yet because of it is so rich in terms of connotation, there is rarely a widely accepted definition. Marriott *et al.* (2002), for instance, to a great extent summarise the definition given by AAA as early as in 1966, and state that accounting

“... may be defined as a system for recording and reporting business transactions, in financial terms, to interested parties who use this information as the basis for performance assessment, decision-making and control” (p. 1).

In contrast to this rather technicist view that treats accounting as an objective information system, Richard *et al.* (2014) underline that the information delivered through accounting is a representation of reality. Power is exerted through this information delivering process (p. 14). They further state that accounting is actually

“... a set of subjective information systems for the purpose of measuring the value of the means and the results of an entity”²⁷ (ibid.).

Colasse and Lesage (2007) on the other hand underline the power relations in its practice and define accounting as

“... a device that is both technical and human, by which the directors of a firm (or another organisation) make the firm’s situation and performance accountable to various economic and social actors, with whom the firm maintains contractual or non-contractual relationships, where the firm’s activities could influence and be influenced by these actors”²⁸ (p. 10).

This enlarged perspective of accounting proposed by these French scholars is in accordance with Gray and Bebbington’s (2000) proposition of rethinking environmental accounting research, where it is presumed that current accounting typically adopts a set of implicit assumptions about the primacy and desirability of the conventional business agenda supported by neoliberalism; and this conventional business agenda and environmental protection—and, especially, the pursuit of the strong sustainability—are in fundamental conflict. In this sense, current accounting contributes to environmental degradation rather than protection. In line with this notion, this dissertation holds the

²⁷ Originally in French: “ensemble de systèmes d’information subjectifs ayant pour objet la mesure de la valeur des moyens et des résultats d’une entité.”

²⁸ Originally in French: “le dispositif technique et humain grâce auquel les dirigeants d’une entreprise (ou de toute autre organisation) rendent des comptes relatifs à sa situation et à ses performances aux divers acteurs économiques et sociaux qui entretiennent des relations, contractuelles ou non, avec elle et peuvent influencer sur ses activités ou être affectés par celles-ci”.

position that, rather than a static set of rules, standards, or data crunching, accounting and its dissemination constitutes a subjective concept that should be viewed as a social practice and an ideological existence, of which the essence goes beyond the “trite and trivial” routines (Lehman, 1992); and that current accounting instilled with neoliberal values should be changed in order to *account for the strong sustainability* that constitutes the main subject under discussion.

One thing worth noting at this point is that, the term “sustainability accounting” (SA) used throughout this dissertation covers all the similar concepts—such as “green accounting”, “environmental accounting”, “environmental and social accounting”, “ecological accounting” (*cf.* Hussen, 2012; Luo, 2007; Mathews, 1997; Schaltegger *et al.*, 1996; Thornton, 2013, 1993)—evoked in the academic arena. Even though almost each term is endowed with a different shade of meaning due to the fact that there is not, to date, a fixed scientific term to refer to this current of accounting research (Moblely, 1970), it is widely agreed that all these accounting frameworks hold, to a greater or lesser extent, a critical perspective as regards the mainstream financial accounting and intend to be more inclusive in terms of accounting scope. Since this “accounting for sustainability” goes far beyond the most common concept of general accounting, reporting and auditing scheme within the conventional accounting theoretical framework (Gray *et al.*, 2001; Gray, 2007), two fundamental issues should be made clear at the very beginning: First, between the input/output elements registered in their respective quantity and the translation into monetary terms, which is more appropriate measurement and calculation in SA? And second, regarding the scope of accounting, what are the entities to be held ‘accountable’ in SA framework?

Using the concept of strong sustainability, scholars in the field of management have long been working, side by side with ecological economists, ecologists as well as agronomists, in order to create and test different sets of indicators to assess sustainability. The research that they have conducted bears fruits, especially when it comes to establishing scientific thresholds through *physical* indicators regarding the carrying capacity of specific categories of natural resources: Among them, Wackernagel and Rees’ (1998) “ecological footprint” and the “IDEA” model in some French farms (Vilain, 2008) are for instance, successful attempts that represent the strong sustainability paradigm in conserving natural resources.

Meanwhile, physical indicators that take into consideration other aspects of human livelihood in assessing sustainability are very rare. Indeed, due to the fact that the ‘measuring rod(s)’ for sustainability is supposed to be both multi-dimensional and aggregated, it is extremely difficult for the world to attain a unanimous consensus on the matter (Munda, 2005).

So what kind of sustainability indicators could possibly meet these two criteria? In this regard, this dissertation holds the point that an adequate *monetary* accounting scheme would be the most promising measure to assess the sustainability of an entity. This argument is also firmly held by a number of scholars specialised in the domain of SA (cf. Altukhova, 2013; Ge & Li, 1992; Gray, 2007; Hopwood *et al.*, 2010; Richard, 2012; Schaltegger *et al.*, 1996; Zhang, 2009). Moreover, the logic of monetisation is also backed by Max Weber, one of the greatest sociologists of the 19th and the 20th century. In his seminal work *Economy and Society*, he states that

“from a purely technical point of view, money is the most ‘perfect’ means of economic calculation. That is, it is formally the most rational means of orienting economic activity” (1978[1922], p. 86).

In line with this notion, if we look for a set of indicators to measure sustainability that interests all parties involved in economic activities, then according to Weber, “money”, or as Marx put it, the “general equivalent” (1973[1858], in Foley, 2005) is to be used for measurement and calculation, in order to make the indicators both multi-dimensional and aggregated, as well as to pursue the expected (re-)orientation of economic activities through the most “rational” way.

However, many ecologists (Ciriacy-Wantrup, 1952; Labouze & Labouze, 1991; Pillet, 1998; Wackernagel & Rees, 1998 among many others) who support strong sustainability are against the idea of monetarisation. For instance, Ciriacy-Wantrup, engineer/agronomist who is also specialised in agricultural economics has insightfully pointed out as early as in 1952, that especially in the case of agriculture, sector that entails great uncertainty where the managerial decisions can result in very large or even irreparable losses of natural capital, the traditional neoclassical actuarial calculation of input-output ‘optimisation’ must be completely abandoned, including any forms of

monetarisisation. Indeed, some of the monetary accounting models, such as the carbon accounting in partnership with the International Emissions Trading (IET) (Lovell *et al.*, 2010) and so on promoted by influential global and regional organisations whose think-tanks are composed of mainstream economics are found problematic, since their monetary evaluation is conducted essentially through the pricing mechanism based on the (creation of) marketplace for trading polluting rights. It is believed that by increasing the cost for pollution, an entity would ultimately be motivated to pollute as little as possible in order to lower this cost. A typical example is the scheme for trading greenhouse gases (GHGs) emissions. This “internalisation of externalities” (Coase, 1960; Pigou, 1920), according to this ‘anti-monetarisisation’ school of ecologists, is however hardly constructive—if not dangerous—for strong sustainability. First because, the scope of its calculation only covers a little part of the natural capital; and second because, the trading price (for GHGs emissions for instance) constitutes the production cost, which the firms may have the good intention to reduce by solving the problems of pollution/emission, or seek to reduce elsewhere if it’s easier or less expensive (further exploiting labour, using cheaper raw materials for instance). Further, in the case of compensating pollution victims, this ‘price to be paid’ is merely a fee charged to polluters for damages of capital degradation, rather than an initiative for capital conservation; and by consulting the victims to determine this ‘price’ (Bebbington *et al.*, 2001), the monetary evaluation become a subjective concept (Richard, 2012).

However, the point that sustainability indicators should be based on physical scientific standards is not in conflict with monetarisisation. As Ekins *et al.* (2003) have argued, even though there are concerns regarding the “insuperable difficulties in performing the necessary monetisation and aggregation across the range of issues involved”, “strenuous efforts are being made to make it operational” (p. 168). Indeed, accounting scholars who are in favour of strong sustainability have been endeavouring to translate this philosophy into operational accounting methods. They agree that the monetarisisation that those well-intentioned ecologists are against is to a great extent the neo-classical one that dominates mainstream economics. Just as TDL presented in the previous chapter and as what is further shown in the following two sections, the monetisation could well be attained with an accounting method other than the one endorsed by the mainstream economists. In fact, the nature of the environmental and social *cost* is exactly what makes a difference: Instead of focusing on the cost of opportunity basing on the market mechanism, there is a

possibility to determine the cost according to what is needed for the maintenance of ecological potentials of specific capital stocks (Levrel *et al.*, 2012).

As to the second question, the answer is relatively straightforward, since according to Thornton (1993, 2013), when talking about environmental and social accounting, two standpoints are particularly underlined: that of the government as policy maker, and firms as the main practitioner. Besides, the existing SA literature shows that, it is indeed the State and the industrial firms who are the two major players in this game. (*cf.* Antheaume & Teller, 2001; Geng & Fang, 2004; Gray *et al.*, 1995; Gray, 2007, 2010; Milne & Gray, 2012; Odum, 1996; Schaltegger *et al.*, 1996; Yan, 1988). In this regard, what could be clarified with convenience is that, SA which this dissertation studies holds accountable both the government of a nation state and individual firms. This dissertation thus deals with the problematique both at national level and corporate level. However, as noted by Gray (2010), the “translation” of sustainability values from a global or a regional level to a corporate level “is fraught and may, in a number of particular ways, not be sensible” (p. 57). Admittedly, due to the significant differences between national and corporate accounting in theory and in practice, as demonstrated later in this dissertation, the application of a specific SA framework at these two levels differs greatly and the scenario of application varies according to the institutional context of the country.

2.3 Capital

Capital, as defined by the Oxford Dictionary, refers to “wealth in the form of *money* or other *assets* owned by a person or organisation or available for a purpose such as starting a company or investing”. Capitalism, according to the same source, refers to “an economic and political system in which a country’s trade and industry are controlled by private owners *for profit*, rather than by the State”. It seems obvious that accounting terms appear quite frequently in these rather concise definitions. Within an economic and political system called ‘capitalism’, capital stocks are treated as assets to be used for profit-making; and the *economic* use of these assets is realised with the help of monetary capital accounting (Weber, 1978[1922], p. 91). In this sense, the spirit of capitalism and its mode of regulation are essentially determined by the rationality of capital accounting.

By the same token, if we recognise this rationality in a capitalism that is (hopefully) more sustainable, then it is still the monetary *capital* accounting that is supposed to be our recourse.

It is worth noting at this point is that, in regard with the notion of ‘capital’, economists and accountants do not seem to agree with each other: whereas economists—apart from very few exceptions—see it only as an *asset* to be used (as demonstrated above), the classical school of accountants sees it as a *liability* to be maintained (Hicks, 1974). As observed by Nobes, “in accounting, ‘capital’ was originally a credit concept; and ‘capital and liabilities’ is still the caption for that side of the balance sheet” (2015, p. 413).

In today’s capitalist economy however, it is the economists’ conception that has gained ground, even in the accounting arena. The most apparent evidence is that in the IFRS, the accounting recognition and treatment of capital stocks have gradually drifted away from those of traditional accounting principles and have gotten increasingly influenced by neoliberal economists, among which the most representative would be John Hicks (*cf.* 1946) and Irving Fisher (1906) (Barker, 2010; Richard, 2015). According to these economists, an asset is to be valued as its present value of the services that this asset will provide in the future, and this value fluctuates based on the fluctuation of the expected prices of these services and on the fluctuation of discount rates in the future.²⁹ In this sense, capital is endowed with ‘value’ if and only if it is seen as an asset and generates future cash flows; the conservation of these assets, or the maintenance of capital is another story to be discussed only after capital has provided services and made profit.

As opposed to this ‘gain to maintain’ perspective of the economists, the classical school of accountants treats capital “as if it were a debt payable” (Snailum, 1926, in Rambaud & Richard, 2013), where the maintenance of capital comes before any profit-making activities. This dissertation thus adopts this latter perspective of accountants who regard capital is in accordance to the strong sustainability paradigm adopted, as

“a capacity (or asset of capacities) recognised as having to be maintained over a predetermined period” (Rambaud & Richard, 2013, p. 5).

²⁹ This valuation method is even—and has already been—applied to IFRS for biological assets (IAS 41) such as forest and livestock. See more in Chapter III.

Having been raised several times in the section of defining the term “sustainability”, the recognition of different forms of capital is undoubtedly central to the problematique regarding SA, notably the scope of accounting calculation.

Generally speaking, all kinds of accounting schemes set out to preserve (a) capital stock(s) contributed by (a) certain ‘stakeholder(s)’. Within the conventional accounting framework, the only capital stock that is supposed to be preserved is the one contributed by the investors, notably the creditors and shareholders. This capital is named as “financial capital”, “man-made capital” “manufactured capital” or “produced capital” in the literature (Richard, 2012, p. 37).

As for the frameworks of SA, the story becomes more complicated. Several attempts have been made by scholars specialised in ecological economics and sustainability management. For instance Ekins (1992, in Ekins *et al.*, 2003, p. 166), a strong sustainability advocate, disaggregates the capital stock into four different types: manufactured, human, social/organisational and natural (also called ecological or environmental) capital. Similarly, Richard (2012, pp. 37 – 38) summarises six kinds of capital stocks to be considered in SA:

- Financial capital (see above)
- Natural capital, the capital stock that assure four types of environmental functions including:
 - providing resources for production (ores, food, oil, timber, etc.);
 - waste absorption;
 - providing essential functions that ensure livelihood (production of climate, ecosystem stability, protective ozone layer, etc.);
 - providing charming things (beauty of the forests, silence, etc.)
- Human capital: all individual human capabilities
- Social and organizational capital: all networks and organisations that allow any forms of work to be realised
- Artistic capital (monuments, literary works, culture, etc.)
- Intangible capital (legal and political systems, cultural and social heritage, etc.)

From this extensive typology of capital stocks, what can be noticed is that, even though all categories of capital stocks listed above are relevant to sustainability in a broader sense, the boundaries of these categories are sometimes blurred, which lead to difficulties in terms of measurement and calculation. So what exactly are the capital stocks that are the absolute necessities for accounting frameworks that help entities to attain sustainability?

(Ecological) economists have long been looking for the answer to this question. As presented in the literature review, the earliest forms of accounting for sustainability emerged from the neoclassical ideology tend to focus uniquely on the maintenance of financial capital. By treating environmental and social impacts as (negative) externalities, this school of economists attempts to take them under control by a series of cost-benefit analysis. From the perspective of multiple capital stock maintenance, these measures were at best looking for reconciliations between the natural/social surroundings and the profitability of the entity.

Over time, the choice of fixing the three types of capital stocks, namely the financial, human and natural capital, as the ones to be ‘taken into accounts’ has been made and reached general agreement among scholars who have reoriented their focus on accounting frameworks for the maintenance of multiple capital stocks. One of the initial attempts would be those of Elkington (1994) in the paper entitled *Towards the sustainable corporation: Win-win-win business strategies for sustainable development*, which targets the corporate management as the main audience, as well as the more systematically elaborated TBL, where a macro level transition is added to the business-centred theory. Designed as sustainable strategies that “simultaneously benefit the company, its customers, and the environment” (*ibid.*, p. 90), Elkington’s works recognise the three aspects, namely economic, environmental and social aspects of a firm, as what matters in sustainable strategies for businesses. This three aspects is then developed into the “three pillars” (people, planet and profit) of the TBL.

In regard with national level SA, the works of the WB (2005, 1997) on the measurement of wealth of nations provide a clearer perspective on capital maintenance, where the valuation of three types of “wealth stock” is discussed extensively. In the 2005 report, it is clearly stated that an expanded and “truly comprehensive” notion of wealth should be determined, in order to alert an entity the risk of “running down its assets” and slipping

away from “a sustainable path”. (p. 19) Wealth, as the term used interchangeably with ‘capital’ in this report, encompasses notably *produced capital* such as buildings, machinery, equipment, and infrastructure, *natural capital* such as exhaustible resources, renewable resources, and agricultural land, as well as *intangible capital*, which includes raw labour, human capital (the stock of human skills and know-how), social capital, and the quality of institutions (*ibid.*).

At first glance, it seems that the TBL and the WB model³⁰ both have casted off the conventional cost-benefit analysing scheme that focus solely on financial capital, and have considered to conduct *equal* conservation of the three types of capital that are all recognised as essential to sustainability. Nevertheless, these presentations are misleading. To start with, in *Cannibals with Forks* that introduces the TBL to the world, Elkington (1997) himself recognises that, the ‘eco-efficiency’ that underpins the TBL model demonstrates “a growing degree of overlap between a company’s economic and environmental performance”. And in these cases, it is the financial capital (productivity of manufactory activities, the “total turnover or earnings”) that is proposed to be privileged. This preference seems self-evident as suggested in the term “eco-*efficiency*” itself. As to the WB model of SA, having admitted that “measuring capital stocks is a complex task” (WB, 2005, p. 19), the 2005 WB report has adopted not only two different—even intrinsically contradictory—methods to value produced and natural capital stocks, but also an indirect method to calculate the last category, intangible capital “as a residual, the difference between total wealth and the sum of produced and natural capital” (p. 23). Both of the two dimensions imply that the three types of capital do not seem to be valued equally and to enjoy the same ‘intensity’ of conservation, mostly due to the lack of better methods. These questionable treatments of the capital stocks appear to be the fruit of mainstream economic ideology that has been much influenced by the modern financial logic.

In fact, as insightfully pointed out as early as in the 1940s by Polanyi (2002[1944]), land, labour and money—or in other words, nature, human and the means of circulation—are the three essential components of the economy, which nevertheless have been rendered by the dominant market fundamentalism into mere commodities for buying and selling.

³⁰ See a detailed analysis of these two models in Section 2.1 of Chapter I.

Since labour and land are the most vital factors for the continued survival of human life and human community, subjecting these essentials to the market logic amounts to subordinating human society to the vicissitudes of the market³¹ (Zhong & Wang, 2014). This dissertation holds the position that, the three types of capital, namely the financial, the natural and the human capital, deserve equal conservation in SA framework, both at national (macro) and firm (micro/meso) levels.

2.4 Value

The term “value” encompasses a great range of meanings and the theories of value vary according to the different disciplines where this concept is employed. In a philosophical sense, this term is in close relation with what we call “ethics” or “morals”, in that a series of standards is required to qualify goodness in individuals through the way they *value* things. In environmental ethics, the philosophical domain that concerns SA in particular, concerns all measures seeking to expand individuals’ ethical behaviours regarding the environment. These behaviours towards other species in the surrounding of humans are essentially value-oriented, either in a manner that complies with the current socio-economic-political system based on anthropocentric values, or in a more drastic direction basing on biocentric values (Milbrath, 1984, in Norton, 1991), or somewhere in between.

In an economic sense, values are often measured in monetary terms and, as argued by neoclassical economists, linked to, or even determined by the markets of exchange. Theories of economic value, accordingly, look at the mechanism within which a certain value is, or should be attributed to particular goods and services, with the distinction between the two expressions based on whether the value attribution mechanism theorised by researchers is essentially based on a positivist or a normative approach. In other words, they look at how particular goods and services are (to be) *priced* in the marketplace. As to the domain of ecological economics, it is also believed, notably by the neoclassical school of scholars, that in order to respect nature, we should make her value—notably in the form of price—visible in the first place. However, there are some fundamental differences

³¹ See Section 4.3 in this chapter and also Section 1.1 of Chapter V.

in the ways we value nature, or in a broader sense, the environment composed by the natural and human capital surrounding our economic activities. The different valuation methods can be grouped into two categories based on the distinction between two seeming synonyms, namely the *conservation* and *preservation* of values.

The conservationist school sees natural and human capital as *resources* and therefore is concerned mainly with the ‘wise’ use of them. This school judges all questions based on the criterion of the greatest good for the greatest number “in the long run” (Norton, 1991, p. 6). By saying so, what should be noted is that this criterion does not diverge much from neoclassical economic theories, since this seemingly long-term consideration only represents the cost-benefit analysis of development and exploitative projects computed over longer frames of time, rather than a sincere concern for the future. Value, according to them, is interpreted as an aggregation of individual preferences, namely prices willing to be paid for ‘commodities’, expressed in free markets, or as a projection of potential profits from services rendered by specific capital stocks seen as ‘assets’ (Levrel *et al.*, 2012; Norton, 1991).

The preservationist school on the other hand, is committed to protecting natural and human capital stocks from significant alteration. Initially grounded in a quasi-pantheist ideology³², the preservationist school holds the position that humans exist as part of ‘a greater whole’ (namely nature) that is endowed with infinite possibilities and potentials (Norton, 1991). By preserving and studying the law of nature, the integrity of this ‘greater whole’ is respected and so is long term sustainability. In terms of valuation, preservationist school scholars emphasise that there should not be any price tag to be put on natural and human resources that take the forms of commodities and assets; instead, what should take form in the monetary calculations are the *costs* estimated according to the investment required to maintain the ecological and human potentials to deliver their respective services (Levrel *et al.*, 2012; Richard, 2012). It is through this means that the capital stocks could be truly preserved in the long run.

What is noticeable regarding this distinction between capital conservation and preservation is that, the latter is easily confused with the concept otherwise known as

³² See more in Norton (1991) the confrontation of Pinchot and Muir over the project of dam Hetch Hetchy.

maintaining the “existence value” of the environment, which is originated from neoclassical economic concerns on the continuous existence of resources. This concept, firstly introduced by Krutilla (1967, in Rambaud, 2015) and later explored by many others³³, essentially claims that the technological improvements and the accompanying irreversible economic development render resource amenities more valuable relative to resource extraction. However, as pointed out by Rambaud (2015), this concept is susceptible to be interpreted in two ways: On the one hand, according to the institutionalised interpretation (and also as intended by the author) of Krutilla’s idea, it could be formulated in a rather utilitarian ideology, for instance, as “the result of people’s willingness to *pay* for something with no expectation that they themselves” will benefit from it (UNEP, 2013). On the other, it could be understood based on the “orthodox” way as proposed by Krutilla himself, as “the mere knowledge that a resource is *preserved* or continues to exist” (Crowards, 1995; Rambaud, 2015). Apparently, it is the latter that falls into the preservationist school of thinking presented above, and is more deeply rooted in the concept of strong sustainability that this dissertation adopts.

As the instrument of monetary calculation that is supposed to keep a monetary record of economic activities and help individual entities to make wise decisions in this capitalist economy, accounting has been the incarnation of the capital conservation/preservation dilemma. Regarding the evolution of accounting, what could be noted, as by Hawken *et al.* (2013) for instance, is that “‘industrial capitalism’ does not fully conform to its own accounting principles. It liquidates its capital and calls it income. It neglects to assign any value to the largest stocks of capital it employs – the natural resources and living systems, as well as the social and cultural systems that are the basis of human capital” (p. 5). Indeed, the current accounting system entails contradictory values: Entities are driven by values imposed by the capital market that and seeks ‘sustainable’ profit-making and dividend distribution in the near future. The accounting system has been adjusted to embrace this tendency and as a consequent, drifted away from the prudence concept leading to a real long-term sustainability (Richard, 2014).

This dissertation hold the position that, compared to the ‘futuristic’ accounting perspective currently dominating both the conventional accounting theory and practice as

³³ See more in Rambaud (2015).

well as those of SA, the historical cost accounting (HCA) system is endowed with much more potential in conducting better management of natural and human capital stocks. Essentially, what this statement claims is not to “lock-up resources” (Norton, 1991, p. 8) or an overwhelmingly ‘deep green’ measure, but an *equal* treatment of the three types of capital, just as what is called up for in the TBL, because the HCA characterised by its systematic depreciation is exactly what is used for *preserving* financial capital ³⁴ (Rambaud & Richard, 2013).

As shown earlier in this dissertation in the introduction of research perspectives, TDL model adopts the HCA and the systematic depreciation equally for the three types of capital stocks. Concretely, by recording the natural and human capital in the liabilities side of the balance sheet and create corresponding items of ‘assets’ as capital use which allows the operation of depreciation, the monetary value of the natural and human capital is interpreted as accumulated maintenance costs, rather than ‘wealth’, as it is the case for most of existing SA frameworks. In this way, not only the arbitrary valuation (as in the 2005 WB report) and price tagging (as in most TBL based SA frameworks) could be avoided, the problem of uncertainty in determining the cost for environment protection (Berland *et al.*, 2009) and so on could also be largely overlooked, since the capital restoration will ultimately compensate all the losses caused by capital degradation, as long as the people who benefit from these restoration measures are the same as those who suffered the losses (Roach & Wade, 2006 in Levrel *et al.*, 2012, p. 24).

As a matter of fact, even though it is called “historical cost accounting” which implies a perspective of ‘looking backwards’, it is the accounting method that shows greater respect to the future, since it is the *value of potentials* in future that is preserved in this accounting philosophy.

³⁴ See the IFRS treatment on fixed assets and the perpetual inventory method (PIM) adopted in the WB report (2005).

3. Political economy of accounting

As the predecessor of the ‘economics’ that is widely seen as an established scientific discipline nowadays (Jevons, 1879; Robbins, 1981), the ‘political economy’ has a much longer tradition in the domain of social science. The definition of this term has evolved over time and varies according to different authors (*cf.* Hayek, 1979; Krueger, 1974; Pareto, 1971; Zald, 1970). As an explanatory framework of economic phenomena, the political economy

“... does not concentrate exclusively on market exchanges. Rather it first of all analyses exchanges in whatever institutional framework they occur and, second, analyses the relationships between social institutions such as government, law and property rights, each fortified by power and the economy” (Jackson, 1982 in Gray *et al.*, 1995a).

Based on these principles, the political economy of accounting (PEA) on which grounded the SA literature is grounded emerged in the 1980s. Initially developed by Tinker (1980) in his paper entitled *Towards a political economy of accounting: An empirical illustration of the Cambridge controversies*, PEA underlines that the currently dominant “marginalist underpinnings of accounting are deficient on logical grounds” (p. 5), in that accounting statements which are supposed to provide information about a firm’s efficiency, neglect the socio-political foundations underlying the market forces. Following in the footsteps of Tinker, Cooper and Sherer (1984) elaborated the concept of PEA, claiming that it is an research approach which “looks at the accounting functions within the broader structural and institutional environment in which it operates” (p. 11). Further, as a research approach that criticises the existing social order and attempts to impose a more relevant one through reforms, PEA also falls into the category of critical theory, since it concerns the nature of the surrounding social environment as well as its historical context (Berland & Pezet, 2000; Catchpole *et al.*, 2004; Nikitin, 1994). This research strategy has been employed and developed later by a number of researchers (See Antheaume & Christophe, 2005; Arnold, 1998; Chiapello, 2012, 2007; Christophe, 1995; Colasse, 1997; Colasse & Lesage, 2007; Hopper & Armstrong, 1991; Hopwood & Miller, 1994; Lehman, 1992; and Richard, 2012, 1980 among many others).

The essential point of PEA, as recognised by Gray *et al.* (1995a), is that accounting, as an economic domain, “cannot be studied in isolation from the political, social and institutional framework within which the economic takes place” (p. 52). This perspective is in line with the definition of accounting presented earlier, where accounting is seen as a set of subjective information systems inscribed with the traces and priorities of its institutional context and systematically biased by these traces and priorities in their working. Within SA related PEA framework, there are two variants, namely the ‘bourgeois’ and the ‘classical’ variants: The former takes an interest in addressing the micro/meso level execution of relationships between the interest groups, without explicit recognition of the way in which the forces of the capitalist system construct the self-interests as group interests; the latter tends to focus on structural conflict, inequality and the role of the government in the analysis (Simpson & Taylor, 2013; Tinker, 1984).

Since the prevalent stakeholder theory and legitimacy theory (notably in the CSR literature presented earlier in this chapter) are widely seen as two—sometimes overlapping—perspectives of the bourgeois PEA framework (Gray *et al.*, 1995), this bourgeois variant has become the mainstream approach in the recent development of SA researches. In fact, SA was introduced as a relatively new discipline and it emerged from rather pressing environmental and social problems faced by developed countries, of which the political backdrop is characterised by the “roll-back of the State under the liberal agenda” (Gray, 2007, p. 177). It has been seen initially as a promising research subject that might provide ready-to-use solutions to these problems, and thus has been studied extensively in terms of searching for (explanations of) the interactive mechanism within the relationships between firms and their stakeholders, who are explicitly (though not exclusively) bourgeois in these developed countries. However, these efforts seem to have failed to address some issues regarding the systematic construction of these relationships as well as the underlying structural inequities (Gray *et al.*, 1995a, pp. 53 – 54), especially when it comes to countries endowed with characteristics other than the free market and the weak government control.

Regarding the classical political economy, on the other hand, a holistic view is adopted when examining the relationships within an economy. By saying “an economy”, what is insinuated is a relatively complete and independent system of producing and exchanging goods and services within a given geographical location, namely a nation state. Nowadays

however, all nation states are, to a greater or lesser extent, integrated in the capitalist global economy and therefore endowed with capitalist characteristics. Among them, one salient characteristic is the fact that the production is *for the purpose of* profit generation and accumulation. Being a fundamental constitutive element in the functioning of the capitalist system of an economy, the nation state represented by its governmental apparatus plays an important role in every aspect of this capitalist system (Braudel, 1985; Morris, 2015), and in the accounting aspect there is no exception. As a mechanism through which power is exercised, the accounting systems—of recording, categorising, analysing and reporting management information—are thus perceived at once a medium and outcome of the politico-economic context in which they are embedded. They are inscribed with the traces and priorities of this wider system, and are systematically biased in their working. A specific accounting theory (and the corresponding practice) is thus the result of a historically specific mode of production (Catchpowle *et al.*, 2004; Hopper *et al.*, 1987; Hopwood & Miller, 1994); as it is the case that today’s futuristic financial accounting system is the result of our liberal market economy, where satisfying the “impatient shareholders” have become the priority for businesses (Chiapello, 2005, in Rambaud & Richard, 2013; Richard, 2014).

In their article entitled *Beyond a critique of pure reason: From policy to politics to praxis in environmental and social research*, Tinker and Gray (2003) shed interesting light on SA viewed from the classical PEA perspective. They claim that there actually could be a Marxist understanding of sustainability where ecological sustainability is seen as indispensable in the pursuit of the “emancipation of (the value of) labour” (p. 733, see also Section 2.4). Contrary to some ecologists’ fears that Marxism holds a utilitarian and instrumental view of nature, where non-human beings are considered a mere means for human fulfilment, the authors argue that environmental expropriation is one way of—as contested by Marx—repressing wage labour. They find that the naturalistic view was expressed in Marx’s writing in many occasions. For instance, in *Capital* (volume I), he states that

“Capitalist production ... disturbs the metabolic interaction between man and the earth, i.e. it prevents the return to the soil of its constituent elements consumed by man in the form of food and clothing; hence it hinders the operation of the eternal natural condition for the lasting fertility of soil ... all progress in capitalist

agriculture is a progress in the art, not only of robbing the worker, but of robbing the soil; all progress in increasing the fertility of the soil for a given time is progress towards ruining the more long-lasting sources of that fertility ... capitalist production, therefore ... [undermines] ... the original sources of all wealth – the soil and the worker” (Marx, 1977[1867]a, pp. 637 – 638, in Tinker & Gray, 2003, p. 739).

In order to emancipate the value of the nature (“soil”) and the labour (“worker”), Marx calls for identification of “a political lever most likely to dislodge a social system that brutalises human and non-human forms of life” (Tinker & Gray, 2003, p. 738). Together with other classical political economy agendas³⁵ of political and social movements, this Marxist view has inspired SA researches of the classical PEA school (although Marx himself is not at all voluntarily ‘enrolled’ as a defender of environmental causes), especially regarding the *implementation* of SA schemes in countries where the status of State (government) has not been hollowed and withered (*ibid.*, p. 740), and where a “political lever” is more likely to be pulled in order to reorient the society toward a more sustainable direction.

Nowadays, the stance that claims accounting as socially neutral, objective and dispassionate practice has been re-examined extensively. A more dynamic, interactive, socially constituted, dialectical view of the subject has gradually gained ground (Lehman, 1992, p.3). With the rise of the emerging economies and their different patterns of economic development as well as that of political and social organisation, it appears to be insufficient to restrict the political economy research to the bourgeois perspective if one is interested in studying the evolution of accounting as well as the environmental and social issues in these economies. Aiming at investigating the opportunities and resistances regarding the implementation of a specific SA model (TDL) in the Chinese agriculture sector, this dissertation adopts the classical perspective of political economy, since this perspective is seen as the most relevant in normative researches that looks for *imposing* a specific accounting model within a specific context.

³⁵ See the next section.

4. An alternative institutionalist political economy

Now that we have recognised in the previous section the adoption of the perspective that accounting systems of recording, categorising, analysing and reporting management information are *inscribed* with the priorities of a specific politico-economic context (Catchpowle *et al.*, 2004; Hopper *et al.*, 1987; Hopwood & Miller, 1994), and that accounting is a social practice that attempts “to intervene, to act upon individuals, entities and processes to transform them and to achieve specific ends” (Hopwood & Miller, 1994, p. 1); In this section, one step further is taken in the direction of theories in economic anthropology and argue that, it is the ruling power of a society that *determines* for accounting, the managerial tool of capitalist production, both its form and its content, just as what it has done for every aspect of the capitalist economic system (*cf.* Marx, 1977[1867]a; Polanyi, 2002[1944]; Sahlins, 1972).

4.1 Neoliberalism and neoclassical economics

Having been referring to the “neoclassical economics” and its underlying “neoliberal ideology” several times previously in this dissertation, it might be relevant to present briefly some specifications of these concepts before proceeding with the following discussion.

Departing from the classical theories regarding value, utility and margins at rather micro/meso level interactions, the neoclassical school of economics has developed significantly since the 1930s with its extension to econometrics and to macro level approaches, notably those of Keynes. One could notice that firstly, all these neoclassical discussions revolve around the ‘real economy’ as in actual production and market exchanges of goods and services. And secondly, compared to the (classical) “political economy”, predecessor of the economics discipline that marks its point of departure in philosophical reflections on the whole economy and power relations, the neoclassical economics starts from the assumptions on individual human rationality and decision-

making strategies as well as their fundamental role in the formation of the whole economy, including the ruling power within it; and the Keynesian thinking on government's role and policies is brought in later as a 'fix' to the failures of free markets.

The neoliberal ideology or "neoliberalism" is often linked to—and even oftener conflated with—the neoclassical economics. Undeniably, these two notions sometimes could be used interchangeably since the connotation of them both entails the function of market mechanism and a sense of democracy, as well as the "neo-" part that signifies a reorientation in theoretical developments. However, there are nuances regarding to what extent the economy is seen as relying on the marketplace, which category of democracy is concerned, and what direction the reorientation is heading. And it is these nuances that distinguish these two subjects. Neoliberalism as an ideology, involves both a political and an economic view. In regard with democratisation, whereas "the fathers of neoliberalism" (Boas & Gans-Morse, 2009) Friedrich Hayek and Milton Friedman agree upon the classical liberalism political view on civil liberties and the role of government/authorities to ensure economic freedom, they hold quite different economic views, notably on the (non-) 'management' of aggregate demand³⁶ (cf. Friedman, 1977; Hayek, 1977, 1944; Lucas, 1977). And it is the Austrian *laissez-faire* "market fundamentalism" that has gained ground and become the essence of the recent 'neo-' reorientation of liberal thinking (Stiglitz, 2009).

4.2 Heterodoxies to the mainstream ideology and economics

Today, as the dominant ideology in business and politics, neoliberalism seems to have been extremely instrumental in guiding the decision-making of individual firms and that of governments, whilst being criticised whenever a crisis strikes the capitalist world. In the meantime, being recognised as the 'mainstream' school of economics both at micro/meso and macro level, neoclassical economics has been increasingly dominated by neoliberal ideology and is often presented as in contrast with other 'heterodoxies' (Foldvary, 1996; Lindblom, 1982).

³⁶ Friedman holds the point that the aggregate demand should be managed by monetary policy through central bank; whilst Hayek takes it to the ultimate liberation and states that it should not be managed at all.

One prominent representative among them is ecological economics, within which the predominant ideology is in line with the non-substitutability paradigm and the capital preservation perspective presented in this study. As perfectly described in the introduction of the prestigious journal *Ecological Economics*, this interdisciplinary domain of research “is concerned with extending and integrating the study and management of ‘nature’s household’ (ecology) and ‘humankind’s household’ (economics)”.³⁷ Despite the disagreements over the means of valuation as discussed earlier, ecological economics is the discipline in which the non-substitutability perspective of capital conservation is grounded. It is the perspective that this study adopts.

Another remarkable one would be the institutional economics, a discipline based on the fundamental premise that economics cannot be separated from the political and social system within which it is *embedded*. It is a view that neo-classicists oppose. Several variants exist in this school: There was the so-called ‘classical’ institutional economics which originated with Veblen (*cf.* 1904, 2012[1899]), who adopted Darwinism in studying institutions as patterns and norms of human behaviour. It then has evolved into the “new institutional economics” (NIE) of which the ideology is in accordance with that of the neo-classical economics, only having extended the focus to formal institutions (namely legal norms) relating to property rights, transactions costs and so on, and seeking to establish institutions that facilitate individuals in better dealing with persistent problems in the capitalist economy (*cf.* Coase, 1960, 1937; Ostrom, 1990). As an alternative approach to the NIE, the institutionalist political economy (IPE) questions the very neo-liberal ideology that grounds both the neo-classical economics and the NIE, by returning to the fundamental point of the power relations, the “anti-market” layer and the social “embeddedness” of the economy, all of which suggest a ‘rediscovery’ of the role of the State in the economy (Braudel, 1982; Chang, 2002, 1994; Polanyi, 2002[1944]).

³⁷ Available at <http://www.journals.elsevier.com/ecological-economics/>, last consulted on 16/10/2015.

4.3 Institutional political economy of accounting

In *The Logic of Collective Action*, Olson (1965) underlines that the law and order of a society is prerequisite of all civilised economic activity. This prerequisite is further interpreted as “common or collective benefits”, which are called “public goods” in economics. Even though all economic activity practitioners (individuals and organisations alike) within a specific society need these public goods, none of them would voluntarily (help to) bear the cost for the provision of such goods. Because their individual efforts would not have a noticeable effect on the situation of society, and because they could each enjoy any improvements brought about by others whether or not they had worked in support of the provision of such goods. The State, on the other hand, has collected the compulsory payments of taxes in the first place. Therefore compared to all other kinds of organisations, the state government is the one that has the most obligations and that is the most capable to provide such goods (pp. 13 – 16).

This view is echoed by the writing of institutionalist political economists. The IPE approach, as proposed by Chang Ha-Joon (1994), refers to a theory of state intervention in relation to the process of “large-scale economic change which involves substantial changes in technology and institutions” (p. 294). This process is named as “structural change” (*ibid.*) or “institutional change” (Chang, 2002) or, to borrow Olson’s term, the provision of a new set of “law and order”. According to Chang (1994), in the conduction of institutional changes, the government of a country, or ‘the State’ it represents, is endowed with a status that is very much like that of “entrepreneur” in the economy: As the entrepreneur who is obliged to have a future-oriented, strategic vision in order to make his enterprise survive in the ever changing economic environment, the central government should also provide “the vision for the future” that guides the whole country when institutional changes are needed; and as the entrepreneur who adopts corporate governance structure and policies to manage the business, central government needs to build new institutions and manage conflicts which inevitably arise during the time of change (p. 288).

In line with the differences between the NIE and the IPE, there is a widely accepted distinction between the *induced* and *imposed* institutional change (Aoki, 2005; Chang, 1994; Lin, 1989; Roland, 2004). As demonstrated by Lin (1989) for instance, that

“whereas induced institutional change refers to the voluntary change by a group of individuals in response to profitable opportunities arising from institutional disequilibria, imposed change refers to change that is introduced by government fiat” (p. 4). The distinction is thus based on whether the ‘rules of game’ (“institutions”) are seen as if they could emerge endogenously during the playing, notably of ‘free market’, or whether as designed prior to the operational playing (Aoki, 2005). This distinction is however blurred, as it is demonstrated later in Lin’s arguments that in order to achieve the induced institutional change initiated by the “voluntary” individuals as believed by the liberals, it is necessary “to have *a system* that encourages individuals to actively seek and adopt new profitable productive income streams. Moreover, it is necessary that *the system* allows individuals who invest their time, effort, and money in these activities to reap the profits for themselves” (p. 29).

Similarly, Ostrom (2007, 1990, in Chang, 2011) demonstrates that what may look like an open-access property rights system (e.g., village forest) often in fact involves intricate rules on who can do what and when. In this sense, the induced changes are dependent—if not entirely rely on—“the system”, the only difference being whether the government has *directly* established the institution, or in other words, whether the “institutional change” conducted is the change of a part of “the system” itself. Therefore no institutional change is spontaneous, and the so-called “induced” changes are all in fact *consequences* of the “imposed” ones. In this sense, all institutional changes are directly or indirectly imposed by the ‘ruling power’, which emerges in centralised forms of coordination in economic activities (Chang, 1994, p. 7; Marx, 1977[1867]c, p. 441). Whether this centralised rule is the result of an internal mechanism where a man of prestige becomes the “chief” who acts “as a kind of capitalist” (Firth, 1959; Mauss, 2002[1950]; Sahlins, 1972, pp. 137, 255) or whether it comes from an external mechanism where strangers make sudden appearance and coordinates the production as the ‘ruler’ through compulsion (Marx, 1977[1867]c, p. 363), it is the dominating party which arose from the dynamic power of social relations that has established and maintained the economic system (Bourdieu, 1976, 1980; Polanyi, 2002[1944]). Institutions in the forms of legal and social norms of a society are established by the authorities that represent this ruling power; and if there were *supposedly necessary* institutional changes to be made, they would be imposed, directly or indirectly, by these authorities of the society. These institutional changes are judged as “necessary” also by these authorities, or the State, since it is the responsibility of the State

to provide such “a vision for the future”. In this sense, an institutional change is not a shift from one equilibrium position to a higher level one (Stiglitz, 1992 in Chang, 1994) chosen from a pre-existing choice set, it requires formulating the choice set itself basing on such a vision.

In regard with institutional changes concerning the problems of natural environment and human resources management in particular, Polanyi’s (*cf.* 2002[1944], 1957) arguments in terms of political economy drew on anthropological studies offer insights that are particularly pertinent to the arguments that have centred ecological economics (Block, in Polanyi, 2000[1944], p. xxvi; Daly *et al.*, 1989; Meyer, 2005).

First, in his well-known idea of ‘embeddedness’, he makes distinction between two meanings of the word “economic”, of which a “formal” definition is rooted in “the logical character of the means-ends relationship, as in *economising* or *economical*” based on the “self-adjusting market”; and a “substantive” definition which is rooted in “the elemental fact that human beings, like all other living things, cannot exist for any length of time without a physical environment that sustains them” (p. 4). When it comes to the attitude towards this “physical environment”, or the “commons” in most cases, the formal economic perspective—which is also the one adopted by classical economists—suggests that humans, as *homo economicus* that acts only upon the narrowly self-interested calculations, would treat it only as a resource of gaining *immediate* personal interest; whilst the substantive one suggests that the rationality that underpins humans’ economic behaviour in regard with these commons would above all be based upon a communal conception of the good, or the idea of ‘livelihood’ embedded within a set of norms and institutions that limit the use of the commons (p. 6). This substantive perspective implies that the ‘interest seeking’ human individuals and collectivities act and react within the limits set by the ensemble of institutions, traditions, and norms of the society that governs it (Booth, 1994 in Meyer, 2005). The ‘free market’ that is completely autonomous, or completely “disembedded” from this ensemble cannot exist in this sense. This substantive perspective of human economic behaviour constitutes the basis of the assumption and the premise³⁸ of this dissertation.

³⁸ See the assumption in Section 2.3 of Chapter I, and the premise in Section 5.2 of Chapter II.

Second, Polanyi also makes distinctions between “real and fictitious commodities”: whilst the former indicate “objects produced for sale on the market”, the latter—which are labour, land and money—are obviously not produced to sell and thus cannot be transformed in their entirety into commodities: As summarised by Fred Block in the introduction of the 2002 version of *The Great Transformation*, “labour is simply the activity of human beings, land is subdivided nature, and the supply of money and credit in modern societies is necessarily shaped by governmental policies.” The circulation of these three fictitious commodities cannot be completely ‘free’ in the market, as it could be the case for the true ones. This statement further demonstrates that the ‘free market’ disembodied from the social context would never be fully realised in practice, as willingly pictured by the (neo-)classical economists (Meyer, 2005). Considering what is relevant for the strong sustainability paradigm discussed earlier in this chapter, the recognition of these fictitious commodities echoes the point that our currently continuous pursuit of commodifying human and nature would necessarily threaten our livelihoods that are closely dependent upon the natural world which is ‘unjustly’ commodified. In line with this perception of Polanyi, the commodification of treating human and natural capital stocks as priced resources, regardless of whether the prices are high or low, is fundamentally defective, especially when regarding the effective preservation of different types of capital stocks as the objective of attaining sustainability.

Third, contrary to the liberals who allege that the freedom is gained through the roll-back—if not complete *laissez-faire*—role of the State, Polanyi specifies that “the *laissez-faire* itself was enforced by the State” (*ibid.*, p. 9), just as if it would have had any form of economic system institutionalised, as long as that specific system fits the interests of the group³⁹ in power of the State. This perception echoes that of Chang’s (1994): Any institutional change, including the State’s rolling back and giving way to the ‘free market’, requires a vision for the future and coordination provided “by some central agent” in order to achieve “simultaneous movement” (p. 298). Concerning the nowadays globalised ‘free market’ imposed by the nation states and the accompanying environmental and social problems in particular, increasing evidences demonstrate the causality between them: a global economy undercuts the ability of individual countries to internalise

³⁹ The term “group” here refers to a generalised concept which could indicate any collectivity of individuals that ‘dominates’ a society, for instance, a ruling political party, a ruling ‘class’ of people, capitalist firms and so on. Their power is exerted directly or indirectly through the State authorities.

environmental costs and to instead pursue a standards-lowering “race to the bottom” (Daly, 2001, p. 19), due to fear of disinvestments from outside (Mayer, 2005). In other words, the seemingly steady market equilibrium at a global scale is attained through the increasingly growing market demand and the increasingly weakening institutional expression of environmental values. In any case of imposing an institutional change that is intended to break this equilibrium, it is equally the State’s responsibility to provide this vision and to coordinate all interest groups involved.

And fourth, Polanyi predicts a “countermovement” of resistance to the institutionalised ‘complete faith in the market’ will rise “from among those whose interests, values, and livelihoods were being undermined by the process of fictitious commodification”. In the case of an “environmental resistance”, this notion rooted in democratic impulses is not only a prediction of the doomed future of the capitalist economy that threatens actual public values and practices, but also has vital normative implications as a call for awareness (*ibid.*, p. 10). Based on this agenda, the attempts of implementing SA models actually belongs to the environmental resistance called up against the “instituted process” of the ‘free-market economy’ (Polanyi, 1957). What is needed to be specified is that, this resistance is not in any way similar to the proletarian revolution against the ruling class described by Marx (1977[1867]b), the parties who have the interest to participate the resistance are more inclusive, even including some parties inside of the ruling power.

If we review the propositions of institutional economics school in association with PEA discussed in the previous section, we could notice that the widely accepted distinction between the bourgeois and the classical variant of PEA echoes that between the NIE and the IPE: The former ones both tend to include the institutional and political thinking into the efforts of continuous improvement of the market mechanism under the (neo-)liberal ideology, in the hope of solving the problems through the improved processes of exchange in the market, whilst the latter ones both tend to return to the rather classical economic theories that depart from philosophical reflections on the whole economy and power relations and seek to make institutional changes through political means. The theoretical framework adopted by this dissertation falls in the latter category and could be further elaborated as *institutionalist political economy of accounting* (hereinafter IPEA).

In this IPEA framework, accounting is an institution and the implementation of an accounting model or, a SA model for this study, is seen as an institutional change. As Catchpole *et al.* (2004) have insightfully pointed out, compared to other institutions in the society, accounting is a unique one which is “intimately bound up with capitalism and the State”: it is “part of them” and they, on the other hand, “function through it” (p. 1056). The ruling power of the State and the accounting system continuously influence each other, in that the former determines the form and the content of the latter and the latter contributes to reinforcing the former. If we look at the accounting evolution as a series of established institution changes, it is above all a political process. This dissertation thus seeks to study this political process of adopting a specific SA model in a given institutional context, in the hope of referring to the IPEA to find the political mechanism and to suggest a possibility to theorise this process.

5. Methodological framework

5.1 Methodology and data acquisition

In line with the theoretical framework of IPEA and in order to make a contribution to the development of SA by “critically confront[ing] the unsustainable way the world is” (Thomson, 2014, p. 15), this dissertation adopts the methodology inspired notably by Foucault (*cf.* 1972[1969], 1970) and Bourdieu’s (*cf.* 1976, 1991) propositions related to language and power, namely the “Critical Discourse Analysis” (CDA). As Bourdieu (1991) has pointed out, “the social nature of language is one of its internal characteristics” (p. 34) and therefore no analysis of language materials should or could bypass their social aspects, especially their social consequences. Further, a discourse in the CDA framework is viewed as a *process* rather than a product (Fairclough, 1992), or a mere representation of the social event where it is involved: According to Foucault (1972[1969]), discourses are practices that “systematically form the objects of which they speak” (p. 49); and through the social practices of discourses, these constructed ‘objects’ could impose themselves as *reality* (Berger & Luckmann, 1991[1966]).

A key concept in the CDA is that of the “discursive practice”. A discursive ‘event’, or in other words, an ‘instance’ of discourse is seen as being simultaneously a piece of text, an instance of discursive practice, and an instance of social practice. In line with this notion, the analysis of the discursive practice of a discourse, as emphasised by Fairclough (1992), entails three dimensions: the ‘text’ dimension that “attends to language analysis of texts”; the ‘discursive practice’ dimension that “specifies the nature of the processes of text production and interpretation”; and the ‘social practice’ dimension that “attends to issues of concern in social analysis such as the institutional and organisational circumstances of the discursive event and how that shapes the nature of the discursive practice, and the constitutive/constructive effects of discourse [...]” (p. 4). In short, the use of CDA allows the broader social context to be illuminated progressively by the texts. The three-layer conception of discourse within the scope of the CDA is illustrated in Figure 2:

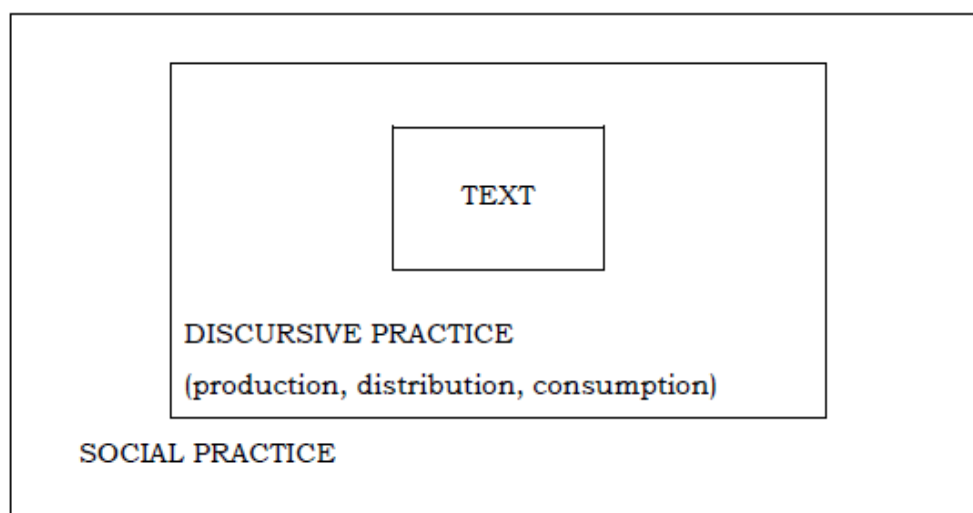


Figure 2: The three-layer conception of discourse (Source: Fairclough, 1992, p. 73)

Further regarding the discursive practice of a discourse, Fairclough (1992) proposes two sub-concepts, namely that of *interdiscursivity*, which refers to “the constitution of a text from a configuration of text types or discourse conventions” (p. 10), and that of *intertextuality*, “relations between texts” (p. 47). In line with these notions, the significance of a piece of discourse is to be examined in relation to the broader context within which it is produced by its ‘author’ (the organisation), especially how the

organisation's role in the society dictates its discourse and the way the discourse in turn constitutes the organisation's social identity(-ies).

In regard with the 'critical' aspect of the CDA, it is above all because it has most work with 'institutional' rather than 'ordinary' text and talk, and it is particularly interested in the language of the media as well as other institutionalised channel of disclosure. These preferences reflect CDA's concern with the 'hidden agenda' of discourse, namely its ideological dimension. It sets out to reveal that "the naturalised, or taken-for-granted 'reality' both results from particular actions and serves particular interests" (Cameron, 2001, pp. 129 – 130). Accordingly, a critical analysis of a particular discourse could be conducted to the three layers of discourse as follows: It sets out from the verbal elements of the discourse itself (the text or the spoken words), then investigates the process of how that particular discourse is produced, distributed and consumed in society. Finally it inspects the articulation, or "instantiation" of that particular discourse among all other social practices beyond the moment of the text or spoken words. All of these procedures are socially constructed and require particular attention to the economic, political and institutional settings within which the discourse is generated.

The critical aspect of CDA is also manifested in its special emphasis on history, or in Foucault's term, on "archives" in terms of written texts (Blommaert, 2005; Foucault, 1972[1969]). This historical method has been widely used in management research both at macro and micro/meso level, and facilitated obtaining fruitful results both in terms of theoretical exploration and empirical studies⁴⁰. As observed by Berland & Pezet (2000), what makes the historical approach particularly instrumental to management studies is that it allows researchers to follow the history in a methodological and an epistemological path that seeks to reconcile theory and action through a pragmatic strategy.

Organisations, in its broader sense that encompasses both governmental and non-governmental, both for-profit and non-profit, are important sites for the operation of discourse in its ideologically significant sense (Cameron, 2001). However, since in most cases a piece of discourse is issued to the public in the name of the entire organisation (rather than (a) specific author(s), for instance), the understanding of its forming and the

⁴⁰ See for example Berland (1999), Boyns *et. al.* (1997), Huault (1998), Lemarchand (1993, 2002) and Nikitin (1994) among many others.

underlying incentives could be difficult due to lack of traceability. Based on these concerns, the data collected through interviews with the “spokesmen” of the relevant organisations could be seen as instrumental, in that it allows the acquisition of information that has not been fully disclosed by these institutions in written discourses. The data acquired from interviews with these spokesmen could confirm or contradict the message that their respective institutions intend to deliver in written ones open to the public. This is the reason why apart from the written documents spoken discourses are also used as complementary data in this study: During a fieldwork carried out in 2013, the author interviewed several spokesmen of some of the key-players, including some government apparatus, agriculture related NGOs and agribusinesses. In total, 13 semi-structured interviews were conducted with an average duration of 1.5 hours, of which 10 conducted face to face and 3 via telephone. These materials are essentially used in Chapter IV, where investigations on two events closely related to SA—notably the establishment of the “national ecological accounting and auditing scheme” (NEAAS) and that of the CSR reporting scheme—are conducted. The information of the interviewees as well as their corresponding organisations are summarised in the Annexes.

As regards the issue of scientific rigor, what is relevant to be mentioned here is the criteria according to which the organisations as well as their corresponding spokesmen were selected. In fact, the criteria is extremely problematic- and event-focused: Having fixed the agricultural SA implementation as the subject to be studied in this dissertation, the author has first determined the three events to be studied, based on the conditions (in theory) for TDL to be applied, as well as on existing literature of SA in a broader sense. Second, based on these events, the scope of the organisations to be studied is outlined, which could be roughly described as follows: 1) directly involved in the events under investigation; 2) provide relatively high level of transparency and availability of textual information needed for CDA; and 3) eventually available for ‘dialogues’ (see below). And third, the author has made efforts to reach out as many this kind of organisations as possible and finally, it is the interviewees and their organisations summarised in the Annexes that are ‘selected’—or have agreed—to get involved in this study.

Further regarding the scientific rigor, this study does not look for any kind of ‘validation’ of its statement *per se*, generated from the three-layer CDA of the relevant textual materials of the three events investigated. Instead, it seeks to test the findings as a true

statement, by following the concept of ‘Triangulation 2.0’, according to which the research results generated from an interpretive, qualitative analysis—which is the case of the study of the three events—could be seen as having assumed the role of “catalysts for social change”, if the author is fully aware of the fact that his or her research conducted is “an interactive process shaped by the personal history, biography, gender, social class, race, and ethnicity of the people in the setting” (Denzin, 2012, p. 85). Focusing on post-positivism, the study of the three events recognises the above mentioned biases as well as their possible effects. And therefore, it is clear that they could be set only in an evidence-based way. This is also another reason why the author decided to conduct the ‘critical dialogue (discourse) analysis’ from the significant semiotic and communicative event in the first-hand record on the interviews mentioned above: In Triangulation 2.0, these elements represent the third party who are involved in the ‘critical discourse analysis’ from ‘native voices’ inspired by dialogic democracy, and thus serve to verify if the statements of this study are true statements.

The discourse analysis of this dissertation goes beyond understanding the text or the spoken words from a semantic perspective, and focuses on the second layer analysis that aims at identifying the “key-players” of discourse production in the evolution of accounting standards in general, as well as that of the initiatives of SA under discussion. It further shows how the discourses produced fit in with the producers’ interests in this process. As suggested in the existing SA literature and considering SA model chosen and the specified real world context, two main players, namely the Chinese government and the Chinese agribusinesses are identified. Other key-players involved mainly include the international organisations such as the IASB and the authorities of other countries in direct relation to accounting reforms, independent organisations such as NGOs and accounting professionals, the accounting academics and the leading news outlets. The third layer analysis contrasts the ‘reality’ that has been constructed by these key-players with what has occurred in their other aspects of social practices, in order to further demonstrate its partialities in representing and rationalising the social events presented in their respective discourses.

In this dissertation that investigates the applicability of TDL in China’s agriculture sector, the use of the three-layer analysis of CDA is to reveal how the public discourses of the events similar to TDL application are put forward by interested parties in order to

influence a favourable outcome and therefore to criticise their social consequences. These analyses are intended to enable people to be more aware of the ideologically invested discourses to which they are subjected in the event under investigation (Zhang & Andrew, 2016; Zhang, 2012). More importantly, this critical analysis of public discourses is employed in the theorisation of the evolution towards a TDL-based SA in the specified geographical and industrial context: Since the three events, or the three institutional changes are in a way or another similar to the implementation of TDL, the investigation of them through the critical analysis of their official discourses that have formed these events could facilitate the establishment of a list of favourable and unfavourable conditions concerning the expected institutional change, and therefore allow a better understanding of the mechanism within which this kind of institutional changes are conducted.

5.2 Epistemological underpinnings

Through investigations and analysis on the discourses as the ‘social construction of reality’ (Berger & Luckmann, 1991[1966]) to study the applicability of the ‘ideal’ model (TDL) or, as stated earlier in Chapter I, to get a forward-looking understanding over the mechanism for TDL implementation, this dissertation is characterised by a critical perspective, in that it challenges the *status quo* and its underlying rationality (Kincheloe & McLaren, 2002). Further, since it seeks not only to understand and to explain the phenomenon of SA implementation in this constructed reality, but also to look at the possibilities of imposing the ‘ideal’ model and (re-)orienting society towards sustainability as a whole, it also adopts a normative perspective that looks at the *praxis* of “what is to be done” (Tinker & Gray, 2003, p. 740).

Having chosen to study TDL applicability in the context of Chinese agriculture through CDA, this dissertation adopts a qualitative research approach. There are epistemological concerns revolving around the use of qualitative approaches to acquire knowledges and to theorise social phenomena. This subject has been discussed extensively in the social science literature. For instance, according to Dumez (2012), three epistemological risks are identified in qualitative research: The first one is to use the “*être de raison*”, or the

“causal entity that exists only in the mind of the researcher”⁴¹ (Boudon, 2006, in Dumez, 2012, p. 30) to explain a phenomenon; The second is that of “circularity”, where the researcher sees only elements in the empirical material that confirm a theory; And the third is to misunderstand the “phenomenon of equifinality”, which refers to the fact that a same final state can be reached from different initial states through different itineraries (Bertalanffy, 1973, in Dumez, 2012, p. 31). In order to take these risks into full consideration and to try to avoid the relevant pitfalls, two points are to be made clear before starting with the discussions in the following chapters.

Firstly, it is true that in order to explain social phenomena in qualitative researches, social relations are to be studied and, perhaps as stated by Lévi-strauss (2008 [1963]), could only be properly studied in a ‘microscopic scale’ where interactions among individual “actors” take place (*cf.* Crozier & Friedberg, 1977). However, as demonstrated by Mauss (2002[1950]), a specific social phenomenon could be explained by the *universality* of a social principle (*e.g.* reciprocity); and this universality could be studied from a ‘meso’ level, where the interactions take place among collectivities (*e.g.* tribes). Though the two different research perspectives are widely reviewed as opposing, they are consistent in substance: Whilst Mauss focuses on proving the existence of a *pattern* in order to understand the phenomenon and the dynamics behind, Strauss takes one step further and endeavours to study why and how this pattern works (Johnson, 2003). It is therefore only the scale of observation that is different (Desjeux, 2004).

As to the case of this dissertation which is mainly based on the analysis of public discourses released by the ‘key-players’, or organisations involved, it is difficult—if not impossible—to reach the exact individuals (*i.e.*, central and regional government leaderships, top executives of the firms involved and so on) who are the origins of these discourses and the real ‘actors’ of the social relations. Therefore, the analysis of spoken words and intentions, actions and interactions of individual humans at a micro level is limited, for the fact that only those of the interviewees could be used and could be only used as supplementary information. Yet the validity of using the CDA as means to study the problem of TDL applicability could still be justified, since these discourses—both the public discourses in written texts and the spoken ones acquired from interviews—together

⁴¹ Originally in French: “C’est une entité causale qui n’existe que dans la tête de celui qui y a recours.”

with the social events they have constructed as ‘realities’ are, the ‘(half-)products’, or (initial) results of the dynamic social relations and interactions at the micro level. The universality, or the patterns in the interactions within these relationships composed by individual actors could thus be observed from a meso level, based on the analysis of these aggregated results. In this sense, the actors involved would not be “abstract” – a major concern of Boudon, but act and react collectively through the vehicle of organisations; and their reasoning, or the rationality that underpins the collective behaviours lies upon the one that underpins individual behaviours, which is essentially self-interest (see below).

Secondly, it is acknowledged here that a qualitative research only makes sense when a certain level of abstraction, or theorisation is attained. (Boudon, 2006; Silverman, 2013) Meanwhile, the risks of theorisation shown earlier suggest that the simple assimilation of social phenomena into specific theories is dangerous, as the explanation of a certain phenomenon could be based on other theories other than the one mobilised initially.

A good example to be raised here would be stakeholder and legitimacy theory⁴², the most widely spread theories to explain the motivations of CSR management and reporting. Whereas it is common to have recourse to the causality between the fulfilment of the ‘social contract’ by communicating relevant information to all ‘stakeholders’ and the achievement of ‘legitimacy’, there is actually another plausible theory that could be mobilised to explain the firm’s (entrepreneur’s) ‘socially responsible’ behaviour. As observed by Mauss (2002[1950]), the “chiefs” of the tribes—who manage and lead their “vassals” just like the “capitalists” (p. 95) that we know nowadays—would generously give away their wealth on a regular basis to benefit the public (in the form of gifts to their vassals or as sacrifices to ceremonial events); And these seemingly disinterested actions is actually nothing but: the generosity of offering gifts is actually out of clientelism and domination, in that to give is to show one’s superiority in the power relations and to accept without giving (more) back is “to become client and servant” (Mauss, 2002[1950], pp. 94 – 96). This is precisely what Bourdieu describes as “‘moral’ and ‘affective’ obligations created and maintained by the exchange”; and it is through these obligations that the domination is achieved (Bourdieu, 1976). This domination is above all for practical (notably economic) reasons (Bourdieu, 1980). As in today’s context of the firms

⁴² A more detailed introduction of these theories is presented in the chapter “Constructing the theoretical framework”.

willingly practicing CSR management and providing ‘extra’ non-financial information to society, this ‘generosity’ of the corporate ‘chiefs’ could well originate from this same clientelism and domination, which implies an extremely utilitarian motive based on an alternative economic rationality⁴³, in contrast to the belief (of the stakeholder and legitimacy school) that CSR is the introspection of capitalist utilitarianism. The theorisations of phenomena in relation to the CSR thus are all subject to the risk of misunderstanding.

As for this dissertation, the strategy adopted in order to manage this risk relies above all upon the use of the CDA, through which the analysis is not an assimilation of phenomena and theory, but an extensive investigation of the verbal elements involved and an abstraction is only to be made if an “articulation” (Fairclough, 1995) is found in these elements, through its quantitative significance in terms of length and repetitive appearance, for instance. The abstraction/theorisation is thus to be brought out of the texts rather than assimilating them to a specific theory (Lévi-Strauss, 2008 [1963]). Further, instead of looking for *the causality(-ies)* that could provide full explanations to the phenomena, this study seeks to know *the mechanisms* through which a SA framework like TDL could eventually impose itself. The reference to the theoretical framework of “institutionalist political economy of accounting” (IPEA, which is introduced in the next chapter) actually solely serves this purpose, as it is a theory of institutional change. The ideological underpinnings of these mechanisms are to be discussed after the search for these mechanisms and are to be presented as propositions for further studies rather than as conclusive explanations.

To summarise the above discussions, Bertalanffy’s (1973) theory of systems, Strauss’ (2008 [1963]) perspective on micro level interaction, Mauss’s (2002[1950]) theory of gift exchange and Bourdieu’s (1976, 1980) observation over modes of domination all have shed light on the epistemological underpinnings of this study. As Simmel (1950) has pointed out, society—composed of all kinds of larger super-individual structures such as nation state, city, enterprise and civil societies—is “merely the name for a number of individuals, connected by interaction”. In line with this view and the above discussions, the author specifies that this dissertation works from the premise formulated as follows:

⁴³ It is alternative in the sense that it is different from the classical economic rationality of (relentless) surplus exploitation (*cf.* Marx, 1977[1867]c).

All institutional/organisational ‘players’ involved in this study are seen as self-interested collectivities composed by self-interested individuals, who act and react solely upon material interests, even in their seemingly ethic (heavily value oriented) decisions.

To be more specific, under this premise, if any *symbolic* interest (Bourdieu, 1980, p. 60) seems to be at stake, this dissertation would not be content with this finding and would look for the *material* interest that can further explain the significance of it. It is worth noting here that this “material interest” is by no means based on the narrowly self-interested or profit-maximisation calculations of *homo economicus* as believed by the classical economists, but is based on the idea of *survival* in a broader sense, or in other words, it is based on the pursuit of long-term livelihood embedded within a set of norms and institutions imposed by society (Olson, 1965).

6. Summary

This chapter set out to outline the theoretical framework adopted by this dissertation in five steps:

First, a review of the existing literature on SA is presented, both in time sequence and in geographical order. It shows that the emergence and resurgence of SA research seem to correspond to the time of environmental crises both for the Western and the Chinese context; and that the lag and the disparity in terms of development course of SA researches in the West and in China are rather significant.

Second, a set of the key concepts involved is defined. What could be specified is that this dissertation holds the understanding of strong sustainability under the non-substitutability paradigm, and seeks to apply to the economy a monetary accounting framework that

accounts equally for the three types of capital stocks, in the hope of preserving their potentials in the future.

Third, a review of PEA, in both its bourgeois and classical variants, is conducted. It shows that the classical PEA is especially instrumental regarding the implementation of SA schemes in countries where the status of the State has not been hollowed and withered as it has been in the Western context.

Fourth, the alternative approach entitled “institutionalist political economy of accounting” adopted as the main theoretical framework is further elaborated basing on the existing PEA and the IPE literature. The framework emphasises the decisive role of the ruling power in the society when it comes to the institutionalisation of SA.

And finally the methodological framework and the epistemological underpinnings of this study are presented in the fifth section. In the CDA, methodology adopted by this dissertation, a discourse is viewed as a *process* of (a part of) a social event *per se* rather than a product, or a representation of the event. Whilst from an epistemological point of view, the discourses together with the social event they have constructed are ‘products’ or ‘half-products’ of the dynamic social relations and interactions at the micro level. The investigation of the events of institutional changes that are in a way or another similar to the implementation of TDL-based SA framework through the analysis of the discourses that have formed these events could facilitate the understanding of the mechanism within which this kind of institutional changes is conducted.

CHAPTER III. Evolution of accounting standards in China

1. Background

1.1 Studying TDL applicability through the evolution of accounting standards towards IFRS

From the time of the industrial revolution till today, capitalism and the way it rules industrial production has experienced ups and downs. Rapid development of productive forces facilitated by technological innovations has generated enormous amount of wealth that were far beyond people's imagination. Nevertheless, recurrent economic and financial crises have also led to profound introspection. Especially since the first half of the 20th century, the arrival of financial capitalism characterised by financialisation and economic globalisation gave us the impression that it has accelerated wealth accumulation. However, problems such as financial bubbles, third world debts, environmental degradation and so on seem to demonstrate another picture (Lehman, 1992). These have prompted an increasing number of insightful people to rethink if there was something wrong with the 'wealth' that we have been so diligently pursuing and how to make it right.

Several suspects, namely the banking community, regulatory agents, career diplomats, shrewd politicians and misguided economists, have been accused for not doing their job rightfully. Yet surprisingly, the accounting profession has largely escaped notice. As contended by Lehman (1992), "in all of these transgressions, the role of the accountant—as arbitrator, as public policy maker, as legitimator, or as myth maker—deserves scrutiny and investigation. It is appropriate to ask, 'where were the accountants?'" (p. 1). Indeed, as being recognised as "the most rational means of orienting economic activity" (Weber, 2009[1947], p. 186), and as "a central and influential mechanism of economic and social management" (Hopwood & Miller, 1994, p. 6), our accounting system must have some defects that should not be passed over in silence.

Discussions regarding the role of accounting in society have been accumulating in the academic world. A general agreement has been attained that accounting is seen as both shaped by—and meanwhile contributing to shaping—the wider social processes (Chapman *et al.*, 2009). Among these discussions, the ones focusing on the convergence of international accounting standards and its implications appear to be extremely dynamic, not only because it is a major event in the development of modern accounting theory and practice, but also due to the fact that, during the real-world application of this convergence in different dialectical contexts around the world, the appeal for a set of uniformed accounting standards has been almost as strong as the resistance to it. The development of a localised yet not-too-distorted version of the International Financial Reporting Standards (IFRS) for each country (intend to be) involved in the process seems to be the current solution. The academic works on the political, institutional and cultural aspects during this process have in turn contributed to the convergence both as empirical evidence that suggests necessary revisions and as occasions to bring out critical perspectives to the issue.

From the dialectical point of view of individual countries, the IFRS convergence constitutes an institutional change, as it requires a shift from the existing accounting framework to an IFRS-converged one; and also because this process is above all political. Considering the objective of this dissertation which is to investigate the applicability of TDL in the Chinese agriculture sector, studying the institutional change of IFRS convergence is instrumental, because the implementation of a ‘strong-type’ SA requires “the introduction of a new *accounting law*”, or to be more specific, a new set of Generally Accepted Accounting Principles (GAAP) “that imposes the principle of triple depreciation”⁴⁴ (Richard, 2012, p. 232); and because studying China’s IFRS convergence is an investigation of how a set of “Global Standard Institutions (GSI)”, or a widely acknowledged “better institutions that improve governance” (Chang, 2011, p. 474), fit in a local context. This research strategy corresponds to the normative approach adopted by this dissertation, which suggests the CARE model under TDL principle as “the new GAAP” to be introduced. Further, for what appears most relevant to the accounting for sustainability, the novelty of recognising the “public welfare biological assets” in the

⁴⁴ Originally in French “... l’instauration d’un nouveau droit comptable ... qui impose le principe du triple amortissement”.

agricultural accounting section of the IFRS-converged *Chinese accounting standards* (CAS, the Chinese GAAP) seems to be a promising proposition since it recognises for the first time in CAS the value of an asset for providing environmental protecting service.

The aim of this study is not to present a complete retrospection and forecast of China's accounting development. Instead, by analysing relevant discourses, this study investigates the evolution of China's accounting standards in the context of China's spectacular economic growth and that of globalisation. This focus on the national and international contexts is mainly because, first, accounting is widely viewed as a powerful mechanism of economic and social management (Catchpole *et al.*, 2004; Cooper *et al.*, 1989; Hopwood & Miller, 1994; Tinker, 1984), and therefore it greatly influences, and is in turn influenced by a country's economic changes. Second, as claimed by Hopwood (1989) and supported by many others (see Alford, 1993; Ali & Hwang, 1999; Ding *et al.*, 2008; Richard, 1995, 2005), "[a]ccounting has never been a purely national phenomenon." In the case of this study, the international standards that China seeks to converge with could roughly be seen as initiated by the Anglo-Saxon countries and then adapted by the others around the world based on their local conditions.

Through a series of discourse analysis applied to relevant discourses delivered by the 'key-players', especially the Chinese government and accounting academics in the event of China's accounting standard convergence, we seek to know how the institutional factors of a country could sway the adoption of these GSI, and what is the underpinning ideology that have forged the attitudes of these institutions in this event of such a social change. (Fairclough, 1992) In terms of the time period under investigation, this study mainly focuses on the period of the past two decades (meanwhile referring to issues dating back to the 1970s), as it covers the time since China geared up for its "reform and opening up" policy seeking for further integration in the global economy, and the time when environment conservation began to be considered by the authority as one of the fundamental issues of the country. (Liang, 2005)

1.2 Literature review of the accounting standard evolution towards the IFRS in China

Having been officially recognised as “substantially converged”⁴⁵ with the IFRS, China’s national accounting standards went through a long journey to this stage and are still in the process of self-adaptation. However, contrary to concerns about the resistance related to the “socialist” nature of the country and its economy (Bailey, 1995; Chen *et al.*, 1997; Chow *et al.*, 1995; Hilmy, 1999; Jaruga, 1990), China’s international convergence process seems to be relatively smooth compared to other current and former socialist countries, thanks to the Chinese government’s proactive attitude towards the process. (Ding & Su, 2008; Zhang & Andrew, 2016; Zhang, 2012; also see below)

This section offers a brief review of extant literature published in Western and Chinese academic journals on the convergence of the CAS to the IFRS since 1970s. The purpose of this review is to position this thesis within the broad literature to demonstrate its contribution to knowledge.

Having experienced a long period of political instability and economic stagnation, at the beginning of 1970s, the state was up to revert to normal. Inherited from the ‘Mao (Mao Zedong) era’, public ownership and central planning were still dominating China’s economy. Accounting, at that time, adopted the model borrowed from the Soviet Union and was perceived as instrument to ensure the achievement of central plans, rather than that to inform various economic activity practitioners. (Phuong & Richard, 2011) The academic literature (see for instance Gu, 1982; Hilmy, 1999; Qu *et al.*, 1999; Ezzamel *et al.*, 2007) on early 70s confirms that political ideology and macro-economic structure as contextual factors diverted the evolution of accounting theory and practice from that of the Western countries.

The year of 1978 marks the beginning of a new era in China’s economic reform and development. Researches on accounting in the late 1970s and early 1980s (see for instance Wang, 1979; Li, 1980; Yang & Yan, 1980, 1982; Ge & Tang, 1983; Skousen &

⁴⁵ As indicated on the IFRS Foundation website (<http://www.ifrs.org/>, last consulted in 3/5/2014) and also confirmed in “Roadmap for Continuing Convergence of Chinese Accounting Standards for Business Enterprises with International Financial Reporting Standards” issued by the Ministry of Finance (2010), the mission was accomplished in 2005.

Yang, 1988) started to reorient accounting practices in the time of reform towards increasing elements that characterise a market economy. One noticeable thing regarding the discovery of the Western accounting theory and practice is that, accounting as an independent discipline was then represented as a science and a neutral technology with no national boundaries that could fit perfectly into the ‘dominant ideology’ at the time (Eagleton, 1991), which is summarised in the most famous remark of Mr. Deng Xiaoping, the “core” of the CCP second generation leadership: “Science and technology are the most important productive force”. (Ezzamel *et al.*, 2007; *cf.* Deng, 1993, p. 274) This remark has guided China’s economic reform ever since 1978. The tendency of gradually adopting Western-style management tools is manifested in this reorientation. Accordingly, many academic works such as Li (1980), Ge (1980), Yang and Yan (1980) started to emerge, exploring the adaption of the capitalist accounting framework to the socialist economy with Chinese characteristics. Meanwhile, there were researchers who still claimed themselves as loyal supporters of the pre-reform accounting theory, because according to them, the new accounting theory and the so-called ‘conservatism principle’ in particular actually distort the facts and reflect the hidden agenda of capitalism. (Wang & Lin, 1986)

After the reform, the planned economy was replaced by a limited market economy, or as the Communist Party of China (CCP, 1984) put it with ambiguity, a “planned commodity economy”. It was not until 1992 that further steps were made towards a more market oriented direction. Mr. Deng made several speeches in that year expressing his intention to create a “socialist market economy”⁴⁶. This new political climate offered motivation for more exploration on adopting the Western-style accounting framework, which was viewed as an integrated means to facilitate economic construction. Academic journals kept up with this trend and published more papers that explored the application of this instrument.

Among these explorations, research concerned with the implementation of accounting regulations for joint ventures (JVs) became particularly abundant. Noticing the increasing problems faced by the influx of foreign capital,⁴⁷ authorities sought to facilitate the arrival

⁴⁶ See more in Section 1 of Chapter V.

⁴⁷ More detailed contents regarding the problems of JVs in China could be found in Shenkar (1990). Also, an extensive discussion on the influx of foreign capital is conducted in Chapter V.

and settlement of these investments by providing explicit regulations and laws. Academic efforts were in line with this focus of interest. (see for instance Chen, 1983; Mo, 1985; Ye, 1985) On March 1985, the *Accounting Regulations of the People's Republic of China for the Joint Ventures Using Chinese and Foreign Investment* was promulgated by the PRC Ministry of Finance (MOF). This regulation provides general requirements on accounting principles, subjects and content of accounting reports, where internationally recognised methods and procedures in market economies are adopted, and the industry-differentiated features are considerably weakened. This could be seen as the beginning of Chinese accounting standards' international convergence. (Chen, 2004, pp. 33 – 34)

Another featured development in Chinese accounting literature is the studies on corporate managerial accounting, especially on the one of the state-owned enterprises (SOEs). Ding (2000), Firth (1996), Skousen and Yang (1988), Wu *et al.* (2007) and many others noticed the characteristics of the SOEs and changes in their accounting practice facing the reform. Instead of the old practices that comply with central plans, the SOEs started to have increasing autonomy in terms of decision making, which have motivated them to reduce cost and maximise profit. As a consequence, managerial accounting techniques such as budgeting, cost-volume-profit analysis, and quality management and so on became instrumental to the SOEs and developed rapidly. (Zhang, 2012) Alternatively, Islam and Kantor (2005) contended that even though SOEs in China had started to practice managerial accounting based on Western concepts, the pace of this development might slow down due to the local accountants' lack of understanding of these concepts, as well as the social and cultural influences such as the Chinese *Guanxi*⁴⁸ system. Both sides of the argument confirm the importance of contextual influences when adopting a new accounting framework.

The reform of SOEs did not change the actual ownership of the firms but restructured them to comply with a “modern corporate system”. (CCP, 1993) They were literally transformed into stock companies where a share system of ownership was introduced to guarantee their legal personality. SOEs could thereafter raise funds from the capital market. The reform of financial market is closely linked to this event. The creation of Shanghai stock market in 1990 and Shenzhen stock market in 1991 allowed the SOEs to

⁴⁸ In Chinese “关系”, indicating the personal networks that could be extremely influential in the Chinese society. (see Islam & Kantor, 2005)

diversify their sources of funding and facilitated their further conversion into stock companies. (Bergère, 2007, p. 230)

The stock market meanwhile exposed problems in the financial reporting practices of these listed firms. Since there were not any nation-wide accounting standards to unify accounting practices and accounting information disclosure, the standards adopted by the listed firms differed enormously (Sweeney, 1993), as these firms reported conforming to the explicit or implicit accounting rules of their industrial sectors, or even to the rules set by the individual firms themselves, based on their different business natures. (Biondi & Zhang, 2007; Xiang, 1998) This diversity in accounting and reporting standards and practices led to concerns in the academic world. Eccher and Healy (2000), Fu (1998), Hilmy (1999) Hu (1995) and Yin (1999) shared the point that at the early stage of the Chinese stock market's development, the information disclosure of listed firms was not satisfactory especially to the domestic investors. Winkle *et al.* (1994) found that the lack of conformity to internationally accepted accounting conventions also made it difficult for overseas investors to obtain a clear financial picture of their investments in China. Moreover, as observed by Zhang (2012), "when Chinese companies sought to list their shares overseas, their financial statements had to be translated to conform to international standards, which was an extremely labour-intensive process." (p. 34)

The multiple difficulties to which the Chinese companies were confronted in the capital markets urged authorities to further develop a market-oriented accounting information disclosure system. (Lou & Zhang, 1989; Liu & Huang, 1992; Ge, 1989; Jaruga, 1990; Lefebvre & Lin, 1990). During the year of 1992, the MOF released a series of accounting regulations including the basic Accounting Standards for Business Enterprises (ASBE)⁴⁹ as well as practical standards, aiming at standardising accounting practices in China and at reconciling them with Western financial reporting practices. (Liu & Turley, 1995) All enterprises regardless of industry or the forms of their ownership were required to comply with ASBE. Accordingly, a new set of accounting standards replaced the original mandatory accounting regulations and, as it is claimed in contemporary Western accounting theories, (in IASB, 2010 for instance) to satisfy the information needs of

⁴⁹ The ASBE is an equivalent of the "conceptual framework" in other countries. They were transformed later in 2006 as a part of the CAS, where the new CAS consists of the Basic ASBE and 38 Specific ASBEs. (Information available at the MOF official website <http://www.mof.gov.cn/>, last consulted on 22/12/2013).

various groups, including governments and non-government users such as investors, creditors and business management. (Lin & Chen, 2000)

The significance of the 1992 ASBE is widely demonstrated in the academic literature. As noted by Chow *et al.* (1995), this step and the measures afterwards “mark a dramatic turning point in China’s accounting history towards a more international Anglo-Saxon orientation in financial reporting” (p. 29). The differences between ASBE and old standards were manifested in fundamental issues such as introducing the equity capital concept, distinguishing product cost from period cost, incorporating the Western notion of the capital maintenance concept, and allowing a number of “Westernised” standards that reflected the principle of conservatism. (Chow *et al.*, 1995; Li, 1995; Ge, 1993; Hilmy, 1999) The positive effects for adopting ASBE are praised both by officials and academics. (see for example Accounting Department of the MOF, 2002; Chen, 2004, p. 35)

The defects of the 1992 ASBE and problems in its design and implementation however, are pointed out by a large body of literature. Among them, Chen *et al.* (1997) argued that the Anglo-Saxon accounting principles and standards had been developed over a long period of time in a market economy based on private ownership, and therefore could hardly be transplanted overnight in China. Ge (1996) showed concerns as regards derivative financial instruments, “self-created goodwill” and related uncertainties. Chen and Tran (1995) noticed the possible significant increase in expenses and reduction in profits for most SOEs after adopting the ASBE. The lack of qualified accounting professionals may also have impeded the reform. (*Finance and Accounting Journal*, 1995) Furthermore, as noted by Ding (2000), Lin and Chen (2000), the prolonged influence of the traditional accounting patterns developed in a previously highly centralised planned economy was likely to cause severe resistance to the practical implementation of the new standards. These concerns are closely linked to the political and social context of implementation of the standards. Bearing in mind these considerations, researchers were exploring technique aspects such as the prevention of earning management and so on (see Ge, 2000; Ren, 2004; Yu, 1994), in order to facilitate the next round of accounting reforms required by the central authority.

Although the 1992 accounting reform is seen as a significant step forward towards international convergence, it was not until the promulgation of CAS in 2006 that the Chinese accounting standards were recognised as equivalent to the IFRS. (Qu & Gao, 2006; Ding & Su, 2008; Peng & van der Laan Smith, 2010) The Chinese authority's rationale for promoting the convergence continues to mirror the stand of the IFRS proponents (notably the International Accounting Standards Board (IASB)) that have driven the establishment of internationally aligned accounting standards in the West. Both the Chinese authority and the IASB suggest that the implementation of IFRS would enhance the transparency and comparability of general-purpose financial statements across international boundaries, and that consistent financial information would reduce the costs of cross-border financial reporting for corporations and therefore facilitate the movement of funds in global capital markets. (Horton *et al.*, 2008; Tweedie, 2006a; Zhang & Andrew, 2016; Zhang, 2012) As it was proudly declared by the Minister of Finance at the high-profile CAS promulgation ceremony, China was entering a new era of globalisation in its financial reporting practices. (Ding & Su, 2008)

Alternatively, there are some different voices in the academic world that focused more on the problematic side of the new standards, especially the compatibility between the imported standards and the local conditions. As evoked by Tweedie (2006b), there are four “equally critical” dimensions—the adoption of standards, corporate governance, auditing, and enforcement by regulatory authorities—that underlie the quality of a country's accounting standards (p. 10). In the same vein, Peng and Bewley (2010) also questioned the adaptability of fair value accounting (FVA) in China: They found that China had experienced “a roller-coaster trajectory” of adopting FVA, where the eventual “aggressive” enforcement was driven by the resolution of China's standard setters rather than the “readiness of fundamental infrastructures”; and that substantial divergence between Chinese standards and IFRS still remains. (pp. 983, 1007) Similarly, Olesen and Cheng (2011) confirmed that the alignment of standards through convergence has not caused an alignment of practices, in that different treatments of financial assets and liabilities, revaluation and depreciation of financial assets, business combinations and land use rights still exist in the financial statements of 47 firms investigated that have

both A-shares and H-shares⁵⁰. Apart from technical issues in the application of new standards, other dimensions such as the cultural aspects have also been extensively investigated. (see notably Lin *et. al.*, 2005; Yapa & Hao, 2007; Chen & Cheng, 2007)

With respect to the IFRS convergence as a whole and its position in China's accounting evolution, there is a relatively small body of academic works (especially those published in Chinese) that are interested in the political influences that enabled and accelerated this process. Among them, Ding and Su (2008) provided a brief review of IFRS implementation within the Chinese context and found that the internationalisation of CAS was motivated by China's economic development towards a market-based system that facilitates international trade and investment, yet there were problems to deal with under the old accounting regulatory framework. (p. 477) Zhang *et. al.* (2009) adopted a more historical and contextual view and concluded that the shifts of political environment from Mao's anti-bourgeoisie to Deng's socialist market economy theory, then to Jiang's "Three-Representative" theory and Hu's scientific concept of development have established the necessary political environment that favoured the convergence in a fundamental way. Another big branch of studies that prevails in the domestic academic world regarding the convergence has adopted the theoretical framework of institutional change. By recognising accounting standards as an institution and therefore the international convergence of standards as institutional change, Qu *et. al.* (1999), Chen (2004) and Li (2007) explored the motivation and economic consequences of this change, especially the costs linked to it. According to these researchers, the recent IFRS convergence in China could be generally classified as imposed institutional change, where pressures are mainly exerted by the central authorities, who intend to further integrate into the global market. This current of thinking tends to see accounting standard setting as a "politicised process" (Liu, 1996, p. 2), of which the current status is the result of balance of power among "interest groups" of the society. (Scott, 1999, p. 416)

To summarise, in this review of literature it is demonstrated that there is a divergence in academic discourses regarding China's convergence with the international accounting

⁵⁰ A-shares refer to locally owned shares that are issued in Chinese mainland (Shanghai and Shenzhen Stock Exchanges) and H-shares refer to foreign owned shares that are issued in Hong Kong Stock Exchange. Companies that had both shares were required to prepare two sets of accounts under the CAS and under either the IFRS or the Hong Kong Financial Reporting Standards (HKFRS) at the time.

standards. It is rather ordinary to observe diverse points of view when it comes to a relatively new and controversial social event. What is however noticeable is that, when looking at the sources of these different discourses, the academic articles that expressed diverse attitudes towards this event could be almost perfectly grouped according to the journals that have published them. In other words, there is a coherence of stance adopted by the journals and the papers they published. For instance, the articles in *Accounting Research*⁵¹ seem to closely keep up with the value-laden official discourses (mostly made by the MOF) that speak highly of the international accounting convergence. Other works published in international journals and some “less influential” domestic journals expressed more verified points of view. This phenomenon suggests that there are distinctions between “mainstream” discourses and the alternative discourses in terms of stances adopted and the motivation behind. This study thus looks at this phenomenon through CDA in the following chapters to see if this divergence of attitude reflects Scott’s (1999) interest group proposition.

2. The discursive construction of ‘convergence’

In this part of the study, CDA sets out from the textual and oral discourses that address directly a particular event, which is the accounting evolution in the case of this chapter. Then it goes on to the second layer that aims at identifying the key-players who produce these discourses, and investigating how these discourses fit in with the producers’ interests in this process. Accordingly, the key-players identified in the event of international convergence of Chinese accounting standards mainly include: 1) the Chinese central government; 2) international organisations (such as the IASB) in relation to accounting reforms; 3) domestic and abroad accounting academics; 4) independent accounting and auditing bodies formed by accounting professionals; 5) firms; and 6) leading media outlets. For the purpose of investigating the initiation and the enforcement of the IFRS convergence in China, this part of the study mainly focuses on discourses

⁵¹ Domestic accounting journal 《会计研究》.

delivered by the first three key-players who are the most involved in this process (Zhang, 2012), in the hope of uncovering the actual roles played by them and the underpinning ideological dimensions in this event. The sources of data mainly consist of the official websites of the international and national institutions, such as that of the IASB⁵² and that of the MOF⁵³ of the PRC, the databases of ScienceDirect and the China Knowledge Resource Infrastructure (CNKI)⁵⁴, as well as international and national leading news outlets.

The use of the three-layer analysis of CDA is to reveal how the public discourses are put forward by interested parties in order to influence a favourable outcome and therefore to criticise their social consequences. The analysis is ‘critical’ in the sense of enabling people to be more critical of the ideologically invested discourses, to which they are subjected in the event under investigation (Zhang, 2012).

2.1 Government discourse: forging ahead toward convergence

China started to make efforts on converging with the international accounting standards in the late 1970s, when the state was up to revert to political and economic normality and the accounting system was accordingly to be reformed in order to inform various economic activity practitioners, instead of being perceived as book-keeping instrument to ensure the achievement of central plans (Ezzamel *et al.*, 2007; Gu, 1982; Phuong & Richard, 2011; Qu *et al.*, 1999; Yang, 2011).

As mentioned earlier, currently, the IFRS-converged Chinese accounting system includes the ASBE (became effective from 1 January 2007), which is composed of the Basic Standard, 38 specific standards and application guidance, as well as the Accounting Law

⁵² <http://www.ifrs.org/>, website of the IFRS Foundation and the IASB.

⁵³ <http://www.mof.gov.cn/>, and notably the website of its subordinate Accounting Regulatory Department (ARD): <http://kjs.mof.gov.cn/>.

⁵⁴ <http://www.cnki.net/>. As described on its “Introduction” page, the CNKI is “the most comprehensive gateway of knowledge of China” that endowed with a “monopolist status” (Zhao & Qiu, 2005). This database is mostly used to acquire academic papers of domestic researchers in this study.

of the PRC and other relevant laws and regulations.⁵⁵ As repeatedly praised by the Chairmen of the IASB, China's efforts on the convergence have been remarkable (Hoogervorst, 2011; Prada, 2012; Tweedie, 2006a), and its positive effects seem unquestionable, both in terms of attracting foreign direct investment (FDI) and of boosting international trade:

“The benefits of these accounting reforms for China are clear.”⁵⁶ The new Chinese standards that incorporate accounting principles familiar to investors worldwide will encourage investor confidence in China's capital markets and financial reporting and will be an additional spur for investment from both domestic and foreign sources of capital. For Chinese companies that are increasingly playing a global role, the acceptance of the new standards should also reduce the cost of complying with the accounting regimes of the different jurisdictions in which they operate” (Tweedie, 2006a).

Echoing the encouragement and the promising future pictured by the IASB chairmen, the positive tone is set unanimously by the MOF and other government institutions such as the Chinese Institute of Certified Public Accountants (CICPA)⁵⁷, the Chinese National Audit Office, the Chinese Securities Regulatory Commission and the China Banking Regulatory Commission in regard to further steps to be taken regarding the “continuous convergence” (MOF, 2010), for example:

“The enthusiasm of the MOF and related regulators as well as their shared efforts ensured the successful establishment and implementation of the new

⁵⁵ Available at <http://www.casplus.com/>, last consulted on 2/11/2015.

⁵⁶ Underlined by the author, same as for all the other underlined parts in the verbatim in italics quoted in the rest of the dissertation, unless otherwise noted.

⁵⁷ The CICPA is characterised by features of a government institution rather than a pure accounting professional association, according to the definition on its official website: an organisation under the guidance of the MOF and the State Council. [...]. Information available at <http://www.cicpa.org.cn/>, last consulted on 12/2/2014.

Chinese Accounting Standards which converge with IFRS” (Liu Yuting, (former) Director-General of ARD, MOF).⁵⁸

Moreover, the necessity of China’s accounting reform, as well as the “benefits” that Chinese economy has acquired from this convergence are confirmed, typically⁵⁹ by Yang Min, incumbent Director-General of ARD, as by other high-ranking Chinese officials (see more in Zhang, 2012, pp. 144 – 146):

“Along with the ‘reform and opening up’ of the Chinese mainland, the economy of the mainland has become increasingly market-oriented. Accounting information, as the common business language, has to accommodate the evolving market economy. ... In 2001, the mainland China joined the WTO, and in 2003 the central authorities made the formal proposition of “establishing a complete socialist market economic system”. These events have propelled the mainland market economy toward an era of rapid development, which demands high-quality accounting information. ... Nearly 20 years’ evolution of Chinese accounting standards demonstrates that the formulation and betterment of accounting standards have to be in accordance with the development of market economy”⁶⁰ (Yang Min, 2011).

“Within the first five years after the new CAS were implemented, we observe that these standards have played a very important role in standardising corporate accounting practice, improving the quality of accounting information, promoting capital markets regulation and safeguarding the public interest. They have laid a

⁵⁸ Comment on the publication of "Chinese Accounting Reform: Towards a principles-based global regime" issued by the Institute of Chartered Accountants of Scotland in 2010. Interview material available at <http://icas.org.uk/>, last consulted on 12/2/2014.

⁵⁹ This discourse is judged as “typical” for the reason that the speech has been quoted in leading financial and economic news outlet repeatedly.

⁶⁰ Original Chinese text: “随着大陆的改革开放，大陆经济的市场化程度逐步提高，会计信息作为通用商业语言，必须适应经济市场化不断发展的要求。……此后，随着 2001 年大陆加入 WTO 和 2003 年提出建成完善的社会主义市场经济体制的要求，大陆市场经济进入快速发展时期，迫切需要高质量的会计信息。……大陆近 20 年企业会计准则发展进程表明，企业会计准则的制定和完善必须与市场经济的发展相应。” Full speech (Chinese version) available at Chinese academic journal *Finance and Accounting*, one of China’s top journals in the domain of accounting.

good foundation for China's financial innovation and sustainable economic development”⁶¹ (Yang Min, 2012).

Indeed, being perceived as the “good foundation” for China’s financial “innovation”, the IFRS-converged CAS are presented as tools of “standardisation” and “quality control”, which are largely endowed with neutrality and which could fit in any form of “market economy” regardless of national boundaries.

2.2 Academic discourse: forging ahead without hesitation?

As to the academic world, the views are predictably much more rigorous and more problematique-focused, in that most of them refer to economic and/or accounting theories to back up their opinions, and that they address specific research questions, such as the use of FVA and earning management within the framework of IFRS.

Since the academic literature on international accounting convergence is rather abundant, here the reviewing of these discourses is divided in two groups: first, the publications in international academic journals, then those in domestic ones. This dichotomy is largely in accordance with the official discourses reviewed in the previous section and could be justified by the disparities between the two groups of literature in the following investigation. The choice of reviewing international and national academic journals on accounting in this study is to a great extent due to the fact that the periodical issuing of the journals and the comparatively short length of each article included in every issue allow us to better grasp the dynamics of the academic world as regards accounting convergence, as well as to have a more extensive review of opinions expressed by a large number of scholars. Based on the propositions of Glover *et al.* (2006), Harwing (2014), Peng (2009), Reinstein and Calderon (2006) and Zhang (2012), two journals, namely *The International Journal of Accounting* (TIJA) and *Accounting Research* (AR)⁶², are chosen

⁶¹ Original Chinese text: “在中国会计准则实施五年多的时间里，中国企业会计准则的实施对于规范企业会计行为、提升会计信息质量、促进资本市场完善、维护社会公众利益发挥了十分重要的作用，为我国金融创新和经济可持续发展奠定了良好基础。” Full speech (Chinese version) available at <http://kjs.mof.gov.cn/>, last consulted on 12/2/2014.

⁶² Original Chinese title: “会计研究”.

as the representatives of each group mentioned above, by virtue of importance: For instance, according to Peng (2009), TIJA is among the top-ranking journals on accounting and has accepted the largest number of articles involving China; and Zhang (2012) qualified AR as “the most influential among the Chinese accounting community” (p. 154), notably by referring to the ranking of Chinese Academic Degrees Committee of the State Council.

When using “convergence” as the keyword in the ScienceDirect search engine for TIJA, 109 results were found, among which 48 involve the case of China. Though a large number of them being supportive of the international convergence, alternative voices are also heard regarding this event, typical⁶³ examples being the discussions of Chen *et al.* (2014a, 2014b) and Dong (2014) on FDI; and also the discussions conducted by both Chinese and foreign researchers (Ding *et al.*, 2005a, 2005b; Hilmy, 1999; Papadaki, 2005) on cultural and historical factors that may have caused the differences between national accounting standards and the IFRS, as well as the legitimacy of these differences. Among them, the particularity of the Chinese version of the international accounting standards is recognised, for example, by Hilmy (1999) as follows:

“[The] recent accounting reform ... allows a limited number of Westernised accounting standards, mostly adapted to accommodate traditional Chinese values. Accounting forms an indispensable component of an overall economic policy.”

Other researchers have shown their reticence notably concerning the use of FVA, the most contestable issue and literally the essence of the IFRS (Cairns, 2006; Laux & Leuz, 2009), as claimed by (Mısırlıoğlu, Tucker, & Yükseltürk, 2013),

“in terms of the most challenging standards, the largest obstacles were presented in relation to FVA in the absence of benchmarks, asset impairment as a somewhat foreign concept, and the classification of financial instruments where management information systems typically do not comply with IFRS requirements.”

⁶³ The following discourses are judged as “typical” based on the number of times the articles have been cited.

As to the equivalent investigation conducted on AR, when typing the keyword “convergence” in Chinese⁶⁴ in the CNKI search engine for AR, 66 results were found, all of which are in favour of the CAS and IFRS convergence. Typical examples are:

In general, the accounting scholars believe that

*“accounting is the universal language of the entire business world. Therefore its global convergence is an irresistible trend”*⁶⁵ (Ge, 2006).

As to the case of China, they judge that

*“the new CAS system is a result of combining efforts from both the domestic accounting experiences and the development of the IFRS themselves. These efforts have been widely recognised by the international community. ... Except for some minor differences, it has substantially converged with the IFRS ...”*⁶⁶ (Liu, 2007).

Faced with these “minor differences”, they tend to set off to seek

*“... countermeasures that allow the CAS to converge with the IFRS while safeguarding our national interests, since the essence of the international accounting standards convergence is a contest of interest...”*⁶⁷ (Feng, 2003).

And concerning the use of FVA, the only opposition that was found in this part of the study is formulated as follows:

“Based on the empirical evidence from the A and B shares [of the Shanghai and Shenzhen stock market], ... we conclude that in the current circumstances where the internal and external regulation mechanisms are neither complete nor

⁶⁴ In Chinese: “趋同”

⁶⁵ Original Chinese text: “会计是国际通用语言，趋同是大势所趋。”

⁶⁶ Original Chinese text: “中国企业会计准则体系是总结我国会计改革经验、借鉴国际财务报告准则的结果，既符合中国经济发展的实际需要，又得到国际社会的广泛认同。.....除了极个别问题上存一定差异以外，准则体系已实现了与国产财务报告准则的实质性趋同.....”

⁶⁷ Original Chinese text: “会计准则国际化的本质是一场利益之争。.....我们必须在全面推进会计准则国际化的同时，积极采取措施维护本国的利益。”

effective, which allow the listed companies to have too much liberty for accounting options. This may lead to a decline in information quality, a good example being the abuse of FVA in some cases of the new CAS implementation”⁶⁸ (Wang, 2005).

Yet the author does not provide any concrete example of the “FVA abusing” firms and emphasises at the end that what is needed to be done is to

“actively create conditions for the gradual implementation of the IFRS”.⁶⁹

Moreover, the concerns are further swept off notably by Liu & Zhang (2006):

*“The new CAS have raised concerns of some people. However, we find that the appropriate use of fair value will prevent profit from being manipulated, debt being restructured, and profit being adjusted through impairment of assets.”*⁷⁰

Further, it is even foreseeable that the FVA

*“... is likely to [replace historical cost accounting and] become the measurement basis of assets and liabilities in the 21st century, thanks to its high degree of relevance”*⁷¹ (Lu, 2006).

⁶⁸ Original Chinese text: “本文运用 AB 股公司 2001 年会计准则改革前后的经验数据证实，……在我国上市公司内外约束机制尚未健全或有效的环境下，赋予公司过大的会计选择权，可能更加会造成会计信息质量下降（公允价值在一些准则执行中被滥用就是例子）。”

⁶⁹ Original Chinese text: “务实的办法是积极创造条件逐步实施。”

⁷⁰ Original Chinese text: “新准则发布后，成为人们关注的焦点，并引发了某些人士的担忧。针对这些担忧，本文分析后认为公允价值的适度运用不会成为利润操纵的工具，债务重组不会被滥用，利用减值准备调节利润空间越来越小。”

⁷¹ Original Chinese text: “总的来看，公允价值由于其高度的相关性，已受到各界的高度关注。公允价值会计极有可能成为 21 世纪资产和负债的计量基础。”

2.3 Discourse in relation to accounting for agriculture and the IAS 41 in particular

In this section, special attention is paid to agricultural accounting related issues, notably the comparison between the International Accounting Standard No. 41 (IAS 41) “Agriculture” in the IFRS framework and the Chinese accounting standards No. 5 (CAS 5) “Biological assets”.

In the academic world, from 1979 till the time before the era of IFRS convergence, papers discussing the corporate accounting systems and accounting standards have already started to increase significantly, yet most of them have discussed these issues in a generalised manner rather than having focused on specific sectors, let alone on accounting for agriculture in particular (He, 2004, p. 17). Agriculture seems to have remained the last—if not the least implicated—sector in China’s reforms both in terms of business ownership and managerial schemes. Nevertheless, there are academic journals, namely the national level ones entitled *Chinese Agricultural Accounting* and *China Township Enterprises Accounting* that are dedicated to agricultural accounting studies at least since the 1980s⁷². The subjects addressed in these two journals however largely correspond to He’s (2004) observation, in that most papers published tend to focus on accounting treatment of specific items in the book without making reference to any accounting standard, and that among the very few articles addressing the accounting standards issues tend to be content with introducing the accounting reform towards building an accounting system based on the 1992 ASBE (see Section 1.2) and the accompanying *Financial Accounting System for Agribusinesses* (FASA, see Section 3.3) to the readers, rather than further discussing their implementation in the agriculture sector, given the fact that most agricultural production ‘units’ are not seen as enterprises apart from several state farms that are later reformed into SOEs. There is a clear gap between the study of accounting for agriculture and the one of accounting standards’ implementation.

⁷² Even though these two journals started publication in 1990 and 1993 respectively, in the Editorial of the first issue of *Chinese Agricultural Accounting*, it is stated that this journal is the result of a merger of two precedent journals entitled *Economic Management for Rural Cooperatives* and *Agricultural Accounting Research*, of which the history is hard to be traced though.

The 1992 accounting reform towards the ASBE nevertheless inspired some researchers to further explore the implementation of accounting standards in agriculture. For instance, Liu and Niu (2003), Wang (2003), Zhang (2001) and Zhu (1996) all discuss “the unique path of accounting development of Chinese agricultural land reclamations (state farms)” (Zhu, 1996) toward the establishment of a more standardised accounting system, as well as their possible implementation of ASBE in the state farms. Moreover, some researchers also bring out the fact that the absence of implementing accounting standards regarding specific agricultural activities (including crop farming, animal husbandry, forestry, fisheries) in household contracted farms is problematic for the development of the agriculture sector in general since the majority of agricultural activities is conducted by households (Luan & Liu, 2003). This absence implies the lack of effective management instruments. This absence could further decelerate the development of this sector already endowed with inferiority in terms of its involvement in the current transition to the market economy (Gao, 2006, see also Section 3.3).

In 2000, the IAS 41 for ‘*agriculture*’ is issued by the IASB. It is essentially the accounting standards for *biological assets*, defined as “living plants and animals”. This set of standards of accounting for “agricultural activity”, or “the transformation of biological assets into agricultural produce (harvested product of the entity’s biological assets)” “generally requires biological assets to be measured at fair value less costs to sell”⁷³ (cf. IASB, 2000). Even though IAS 41 allows both historical cost and fair value to measure biological assets, FV is clearly recognised as the preferred measurement (Guo & Yang, 2013). In fact, as observed by Elad (2007), Herbohn and Herbohn (2006) and Rambaud (2015), the evolution of the evaluation method for these biological assets proposed by IAS 41 is increasingly based on the principle of FVA, which amounts to evaluating the future services rendered by these assets at their present value.

In February 2006, six years after the promulgation of IAS 41, the CAS 5 “Biological Assets” was finally issued and as mentioned earlier, the CAS were recognised as “substantially converged” with IFRS shortly afterwards. For the first time “living plants and animals” were required to be registered as assets in the books of enterprises in China.

⁷³ According to Deloitte: <http://www.iasplus.com/en-gb/standards/ias/ias41>, last consulted on 25/11/2015.

The most salient feature of CAS 5 is its measurement: Compared to the IAS 41's clear preference of using FVA whenever possible, CAS 5 seems to have shown reticence to it, claiming that these assets should be measured at their historical cost upon initial recognition and continue to use the HCA (including the depreciation and the provision for impairment etc.) for subsequent reporting periods, unless "there is strong and reliable evidence proving that the fair value of biological assets can be obtained continuously"⁷⁴ (MOF, 2006, Article 22). When looking further at the features that distinguish IAS 41 and CAS 5, what is also noticeable is that, apart from the consumable and bearer biological assets defined in the IAS, in the CAS 5, a third category, namely "public welfare biological assets" is recognised. It refers to "the biological assets for the main purpose of environmental protection, consisting of wind break and sand fixation forests, water and soil conservation forests, water conservation forests, etc.", according to the official discourse⁷⁵ (cf. MOF, 2006). In regard with their measurement, the official text of CAS 5 simply has dedicated two sentences to it (MOF, 2006):

*"The cost of public welfare biological assets that are created by the firms should be measured according to the expenditures of (forest) planting, tending, protection, commercial operation, testing, investigation and design, as well as the indirect expenditures apportioned over time."*⁷⁶

*"There is no (depreciation or) provision for impairment to be recognised for the public welfare biological assets."*⁷⁷

Having opted for the HCA in most of cases for biological assets' recognition and measurement, CAS 5 clearly prefers the comparatively 'conservative' method of evaluation. However, according to most of—if not all—the Chinese domestic researchers, this choice is far from being made out of conscious considerations against the dangerous

⁷⁴ Originally in Chinese: "有确凿证据表明生物资产的公允价值能够持续可靠取得的, 应当对生物资产采用公允价值计量。"

⁷⁵ Available at <http://english.mofcom.gov.cn/>, last consulted on 2/12/2015.

⁷⁶ Originally in Chinese: "自行营造的公益性生物资产的成本, 应当按照郁闭前发生的造林费、抚育费、森林保护费、营林设施费、良种试验费、调查设计费和应分摊的间接费用等必要支出确定。"

⁷⁷ Originally in Chinese: "公益性生物资产不计提减值准备。" The issue of depreciation on the other hand has not at all been raised in the articles regarding the public welfare biological assets. It is based on this absence and the analysis of the Chinese accounting researchers (cf. Wang, 2007; Xu, 2008; Yang, 2008) that the fact of no depreciation recognised for public welfare biological assets is made clear.

futuristic perspective of FVA, rather, it is judged as being the result mainly of the lack of qualified accounting professionals and of relevant accounting researches, as well as to the “backwardness” of the Chinese market economy (Hao, 2007; Qi & Zhang, 2006; Wang, 2009). For instance, Hao (2007) in his Ph. D dissertation concludes that

“... although the CAS current measurement of biological assets is based on HCA, the author believes that this is just a choice that we have to make due to the constraints of the actual level of development of China’s economy. It should be said that, given the salient features of the biological assets which naturally increase in value in time, FVA is an ideal method of measurement for these assets. It is foreseeable that in the near future, China’s biological assets are bound to be measured by FVA instead of HCA.”⁷⁸

In the same vein, Song and Guo’s (2015) article published in *Chinese Agricultural Accounting* confirms the continuous convergence towards the FVA, stating that

“... though the CAS do not fully adopt IFRS for now, we agree on the principle of the convergence. This agreement is demonstrated in MOF’s constant improvement and revision of the CAS. With China’s capital market getting increasingly mature and the continuous improvement of relative information technology, fair value measurement will gradually be adopted. At that time, we could accurately measure and disclose the value-added part through natural transformation of the biological asset.”⁷⁹

Further, for the part which appears the most relevant to accounting for sustainability, the novelty of recognising “public welfare biological assets” in CAS 5, it seems to be a promising proposition since it recognises for the first time in accounting standards the value of an asset for providing and environmental protection service. However, in terms of measurement, there is hardly any instrumental guidance for the maintenance of these

⁷⁸ Originally in Chinese: “尽管我国目前对生物资产的计量选择了以历史成本为主的计量模式，但是笔者认为这只是由于受我国现阶段实际发展水平制约而不得不做出的一种选择。应该说，单纯就生物资产的自身自然增值的显著特点而言，公允价值是非常理想的计量属性。可以预见，在不久的将来，我国生物资产以历史成本计量为主的模式必然会过渡到公允价值计量模式。”

⁷⁹ Originally in Chinese: “我国会计准则虽然没有完全采纳国际会计准则的各项规定，但是本着与国际会计准则趋同的原则，我国财政部也在不断的完善与修改准则，所以随着我国资本市场的成熟和相关信息技术的提高，公允价值计量属性会逐渐被采纳，这时我们就可以对生物资产自然转化增值的部分准确计量与披露。”

assets apart from the instruction stating that relevant agribusinesses can register these assets at their “cost” in the book. In fact, according to accounting researchers, the lack of maintenance method is either thanks to the fact that

*“the value of public welfare biological assets will increase for sure and therefore the upward trend of their value is guaranteed. This is why the account for these assets only registers cumulative growth without the accumulated depreciation and amortisation”*⁸⁰ (Xu, 2008);

or because

*“public welfare biological assets cannot bring economic benefits; the depreciation treatment is not necessary”*⁸¹ (Wang, 2007).

Overall, the measurement of the public welfare biological assets is recognised as a pragmatic choice, since

*“it is decided after having fully taken into account the existence of a large number of public welfare biological assets, and the existence of state-owned farms, which is in accordance with China's national conditions”*⁸² (Zhang, 2007).

3. Contextualising the constructed reality for the IFRS convergence

As demonstrated above, Section 2 presents the discursive practice of discourses regarding the IFRS convergence of the CAS, which corresponds to the second layer of CDA that seeks to demonstrate the *interdiscursivity* of the two sets of discourses constituted from

⁸⁰ Originally in Chinese: “公益性生物资产一定会随着公益性生物资产的生长而增值，其价值一定呈上升趋势，所以，公益性生物资产只存在累计增长，而不存在累计折旧和累计摊销。”

⁸¹ Originally in Chinese: “由于公益性生物资产并不能带来经济利益，折旧分摊并无存在的必要。”

⁸² Originally in Chinese: “我国的生物资产准则将以防护和环境保护为主要目的的生物资产单独归类为公益性生物资产，充分考虑了我国公益性生物资产数量较多、存在国有农场等实际情况，符合我国的国情。”

their respective “configuration of text types” (Fairclough, 1992, p. 10). What is found is that, whereas the convention of government discourses is generally accepted as to be produced and distributed with an agenda of mass communication, and that of academic ones is supposed to be reflective/critical regarding the current situation, these two sets of discourses in the Chinese context seem to have merged in terms of discourse conventions, especially in their unanimous conclusion on the positive effects of the event addressed.

In this section, one step further is taken to contrast the meanings that have been constructed by the Chinese government together with the domestic accounting scholars, with what has occurred in their respective social practices beyond this particular event, so as to demonstrate their partialities in representing and rationalising this event. This third layer analysis is therefore to investigate the discourse *intertextuality*, or “relations between texts” (*ibid.*, p. 47), in order to examine the significance of the above presented two sets of discourses in relation to the broader context within which they are produced by their ‘authors’, and seek to know how the Chinese government and the domestic accounting scholars’ respective roles in society dictate their discursive practices of discourse, and also the way the discourses in turn constitutes these two key-players’ social identities.

3.1 The IFRS as a technology and socio-economic infrastructure

By looking at the discourses presented in the previous sections, the tone set by the international and Chinese officials is unanimous and extremely supportive of convergence. Beside the necessity and the benefits articulated in the discourses of both the IASB and the MOF, the Chinese authority also focuses in their discourses on another point, namely the “development of market economy” in China, ever since the “reform and opening up” policy has been announced by Mr. Deng Xiaoping in the 1970s. The event of accounting standards convergence is constructed by the policy-makers as the way one must follow in order to reform China’s economy to a more market-oriented one that would gain better recognition of international institutions as well as that of the other economies, and therefore to find a better place in the global market. This point has also been made in the event of issuing the IAS-41-converged CAS 5 from the opposite side: The non-adoption of the FVA for biological assets has been ascribed to the underdevelopment of the market economy. All the discourses delivered through the mainstream channels regarding this

event could be seen as a legitimised expression of this neoliberal ideology made by the Chinese government and the domestic academics.

At this point, we share and develop the view of Zhang (2012), who has noted that the Chinese government's rationale for the convergence mirrors the theories that have driven the establishment of international accounting standards in contemporary Western societies, and that by presenting the new CAS as an important 'technology', the Chinese government intends to facilitate the establishment of this particular socio-economic infrastructure, which would allow China to further integrate into the global financialisation process. This rather neutral perception of accounting fits perfectly with the dominant ideology at the time, namely the "scientific outlook on development", which is widely viewed as created by the former Chinese President Hu Jintao who was in power from 2002 to 2013. It is the newest slogan added to the idea of "Socialism with Chinese characteristics" ratified into the CCP's Constitution at the 17th Party National Congress – the Party's highest body, which meets about every five years, in October 2007. The penetration of this thinking is clearly demonstrated in the 2011 Annual summary of ARD, entitled *Fully implemented the twelfth five-year plan and further promoted the reform and development of accounting under the guidance of the scientific development concept*⁸³: This title seems to have perfectly demonstrated what Polanyi (2002[1944]) has spent all his time to explain: The ideology of *laissez-faire* and the socio-economic infrastructures that materialise it could be enforced by the State, through the large-scale and well-coordinated "plans" in the case of China.

3.2 The close relationship between government and academia

As further regards the discourse of academics, we find that the views (of both Chinese and foreign researchers) seem to be more diverse in TIJA and less so in AR. One thing noticeable in the investigation of TIJA is that, among the authors of the 48 articles that involve China, when looking at the institutions that the authors belong to, most of them are research institutions or universities in Western countries. It seems that researchers

⁸³ Available at <http://kjs.mof.gov.cn/zaixianfuwu/wsztl/>, last consulted on 2/12/2015.

who conduct China-related accounting researches overseas tend to observe and rethink this issue with more critical perspectives, and are more willing to express these opinions. What could be deduced from this finding is that, compared to domestic Chinese researchers, the overseas researchers maintain a rather distant relationship with Chinese authorities because of geographical distance and the language used in their publications. And this might have reduced, or even avoided the influence of “dominant ideology” (Eagleton, 1991) that would otherwise be exerted on their researches.

Through the analysis of AR, we find, though, that the content of the discourses are characterised with more depth and expertise, the spirit is highly coherent with that of the government ones. It is worth noticing that, as one more keyword “MOF”⁸⁴ is added in the category of “institution of the author(s)” in order to search within the 66 results of “convergence”, 16 articles were found under these criteria, equivalent of a quarter of the total number. In other words, a quarter of the articles that support convergence are published under the names of MOF officials. The fact that Chinese government officials also publish in academic journals and that their articles are among the most cited ones may appear strange, yet as noted by Ding & Graham (2007), “academics in China often also hold positions in government” (p. 564) and “it is traditional in China for academics to support government positions” (p. 571).

What could be a good explanation for this double identity and the highly consistent tone is, as called by Bell and Li (2012), the “meritocratic system” employed in China’s leader-picking process:

“... So how should leaders be chosen at the central level? Ideally, the process should be meritocratic ... Today, universities are the main recruitment grounds for new members. Students need to score in the top percentile of national examinations to be admitted to an elite university that grooms future leaders. Then they compete fiercely to be admitted into the party (the CCP). Only high-performing students who have undergone thorough ‘character checks’⁸⁵ are admitted. ... Once they are part of the political system, further evaluations are

⁸⁴ In Chinese: “财政部”

⁸⁵ This mainly refers to a review of the person’s political affiliation, ideological and moral character.

required to move up the chain of command. They must perform well at lower levels of government and pass character tests. Then there are more position-specific exams that test for specialised skills.”

As being “fiercely competing to be admitted into the party”, the (potential) ‘cadres’⁸⁶ need not only to show their research competence, but also to continuously demonstrate their commitment to values advocated by the CCP in the “character checks/tests”. Moreover, the periodic evaluation of their progress in “specialised skills” often requires them to publish in academic journals, and to pursue “on-the-position postgraduate degrees”, a convenient solution for people (especially for government officials) to obtain graduate degrees while maintaining their current positions at work. These degrees could be obtained through participating programmes in universities, in research institutes directly attached to government bodies⁸⁷ (Lee, 1991; Song, 2003; Yoon, 2007; Zhang *et al.*, 2008), or even in Party Schools – “the highest institutions of learning charged with the task of training senior and middle-ranking leading cadres of the Party and fostering Marxist theoretical cadres”⁸⁸. As important organs directly under the Central Committee of the CCP, the Party School constitute “an important bastion for studying and publicising Marxism, Mao Zedong Thought and the System of Theories of Socialism with Chinese Characteristics and a furnace for tempering the Party spirit. It is also a research institute of philosophy and other social sciences of the CCP”⁸⁹. All these procedures suggest a reintegration in, as well as a strong influence of the government cadres on the academic world. It is questionable whether these cadres really have the time and energy to fulfil both duties of working on their important governmental positions and meanwhile, conduct their research. Moreover, it could lead to a problem of ‘inflation’ of academic degrees. Even though this system does largely guarantee the direct transmission of the dominant political ideologies to academics, and a seemingly meritocratic/technocratic mechanism to compose the leadership team in the Chinese government.

⁸⁶ It refers to CCP cadres who occupy most positions of government officials. See more in Section 2.2.2 of the chapter “Initiatives of sustainability accounting in China”.

⁸⁷ The most appropriate example to be mentioned here is the Institute of Fiscal Science of the MOF. The above cited article Wang (2005) is one of the institute’s research publications in the AR journal.

⁸⁸ According to the official website of the Party School of the CCP Central Committee. Information available at <http://www.ccps.gov.cn/>, last consulted on 16/2/2014.

⁸⁹ *ibid.*.

3.3 Particularities in accounting for Chinese agriculture sector

As Meillassoux (1975) points out, agriculture originally represents a “subsistence economy”⁹⁰. and when looking at the particularities in its management, we could find that accounting for agricultural activities differs from that for other sectors through a number of specific characteristics: First, agriculture is based on the use of land in its various forms of farmland, prairie/pastureland, forest and so on as the main means of production, even in today’s much industrialised economy. Second, economic reproduction in agriculture is closely related to the rhythm of biological processes, which implies an inevitable lag between the period of production when relative costs are generated, and the period the receipt of products, that is the harvest of crops and butchering of livestock, for instance. Third, in the majority of cases, the conditions of agricultural production including climate, weather and local biological characteristics, greatly affect the production results. The effects of these conditions constitute the seasonal nature of agricultural production, which often leads to irregular production costs, both in terms of labour and money (Altukhova, 2013; He, 2004). These characteristics have led accounting academics and professionals to pay special attention to this subject in the development of accounting standards.

In contrast to the comparatively uninterrupted development of agricultural production and management realised essentially in the form of privately owned *farms* in the West ever since the 14th century, in China, the concept of ‘farm’ or agribusiness did not make its (re)appearance until 1979, when the “reform and opening up” policy started to advocate the tolerance to more various forms of ownership. And it is not until 2013 that the concept of “family farm” was for the first time officially validated by the central government (CCP Central Committee & State Council, 2013; Zheng, 2014). Yet still, rural collective economic organisations (*i.e.*, in the forms of village and township, or in others words, the village- and town-level governments) have always been the main entities to conduct agricultural activity, even though the renowned “Household Contract

⁹⁰ Originally in French: “(une) économie vivrière”. Though it seems no longer the case for today’s industrial agriculture.

Responsibility System” was put forward as early as 1979⁹¹ (He, 2004; Lardy, 2008[1985]). Similarly, as regards accounting standards for agriculture, unlike the emergence and development of accounting rules to accompany the agrarian-to-industrial transformation of the society in the West, the Chinese ‘socialist experiment’ following essentially the Soviet Union model led to discontinuity in the matter: It is not until the 1990s that the proposition of establishing a set of unified accounting standards for enterprises (the ASBE) was first brought to discussion. The unified standards—though accompanied by sector differentiated guidance—were unfamiliar to accounting professionals before the reforms towards market economy, in that since 1949, the accounting standards in China had always been fixed according to sector and ownership structures, which had led to the fact that accounting rules followed by entities in different sectors were extremely different (He, 2004, p. 13). In accordance to the 1992 accounting reform, the MOF issued the *Financial Accounting System for Agribusinesses* (FASA) in the same year, meanwhile abolished the *Financial Accounting System for State Farms*⁹² issued in 1986, in order to facilitate the accounting reform in the agriculture sector by providing a new guidance. Even though at the time of the promulgation there was an absence of standards for activities of forestry businesses due to “lack of international references”, this event still marked the “achievement of the transformation from a planned economy model to a market economy model in agricultural accounting” (Wang, 2009, p. 39). Its implementation however remained very limited due to the fact that at the time, apart from state farms and household farmers there very few—if any—agribusinesses that are (equivalents of) business firms which we are familiar with nowadays.

Alongside the deepening of economic reforms in China in the last two decades, the domestic agriculture sector has finally become more involved in the market economy. Since the 1990s, there are not only an increasing number of state farms which are starting to evolve into state-controlled listed firms in order to diversify their financing options in the capital markets, but also an even larger increasing number of firms with mixed ownership as well as some private firms in food and beverage manufacturing that seek to build stable contractual relationship with village and town cadres and also directly with farmers. It is these market economy developments that have required a set of standardised

⁹¹ See more in Section 1.1.1 of Chapter V.

⁹² In Chinese: “农垦”, which literally means agricultural land reclamation. See more in the section discussing the case of the Beidahuang Group in Section 3 of Chapter IV.

accounting and reporting practices allowing for more efficient communication of financial information from the farm level to the firm level as well as to the level of the capital markets. And it is also in this context that the event of IFRS convergence started to affect the accounting research, policies and practices in the Chinese agriculture sector.

Facing the ‘great leap forward’ from the quasi-absence of Chinese agricultural accounting standards to the implementation of the ones under the futuristic accounting principle led by the convergence towards the ‘imported’ IFRS package, the agriculture sector in China seems to have found itself in a rather awkward situation: Before the introduction of IAS, a “double management system”⁹³ has been applied since the 1970s to all Chinese agribusinesses (including state farms, village- and town-level cooperatives led by the local governments), where their ‘employees’ (household farmers) contract a parcel of land and borrow large farm machinery from the state farm or the local governments; and therefore the ‘assets’ for agricultural activities to be registered in the book only involve land and machinery, leaving all the “living plants and animals” to be managed by individual households themselves. Whilst in some cases—as in, for instance, the one of Beidahuang (see Chapter IV)—the corporate management and control system is comparatively well established, in most other Chinese state farms this system barely exists, which leads to the fact that every household treats ‘biological assets’ as their own household belongings (which is true since they afford them with their own earnings after having paid the rental for the land and machineries). Besides, individual households are extremely numerous, which makes the census of biological assets owned by them extremely difficult. All these factors pose problems for the implementation of IAS in practice (*cf.* He, 2004; Lardy, 2008[1985]).

This situation however does not seem to have curbed the CAS convergence to IFRS in Chinese agribusinesses. It is largely because that, as demonstrated in Section 2.3 and 3.1, the convergence is imposed by the State as an enforcement of the dominant ideology: neoliberalism. Further regarding the event of adopting the accounting standards for biological assets, what is noticeable is that, the treatment of the public welfare biological assets in CAS 5 could be interpreted as a ‘win-win’ situation both for agribusinesses (especially state farms) and for the accounting authorities, since it not only allows the

⁹³ In Chinese “双层经营体制”.

recognition of these kinds of assets in the book of agribusinesses almost ‘for free’ and without any subsequent reporting or maintenance, but also facilitate the authorities’ task of rule-making: by labelling a large body of biological assets as public welfare, the solution of problems such as property right issues and FVA application could all be avoided, or at least postponed for a while. The case of the public welfare biological assets in CAS 5 is a good example of how practical arrangement is made when the enforcement of an institution under a particular dominant ideology meets difficulties in the Chinese context.

4. Reconsidering IFRS convergence

4.1 Convergence within the Chinese context

As firmly stated in the “Roadmap for Continuing Convergence of Chinese Accounting Standards for Business Enterprises with IFRS” (MOF, 2010), “international convergence of accounting standards is *the* inevitable choice of a state to achieve economic development and to adapt to economic globalisation”. The above demonstrated three-layer analysis of CDA revolving around the convergence issue indicates that the Chinese authorities’ enthusiasm on the matter, and that on the way towards full convergence, the Chinese domestic academics have been extremely supportive, thanks to their close relations, or even ‘fusion’ with government bodies.

Convergence could fit in the theoretical framework of institutional change where essentially two types of change are identified: the *induced* and the *imposed* institutional change as defined by Lin (1989). According to Chinese accounting scholars adopting this perspective, the efficient IFRS convergence in China could be classified as imposed institutional change, where the driving forces mainly come from the Chinese central authorities, who intend to promote a neoliberal ideology through this process, and to speed up China’s financial and economic integration into the global market. Indeed, the accounting standard setting is a “politicalised process” (Liu, 1996), of which the current

status is the result of power balancing among “interest groups” of the society (Scott, 1999, p. 416). As to the case of China, it seems that this game has been played at its simplified version, where the main participants only involves the international and national regulatory institutions, whilst the domestic accounting professional community, namely the academics and accounting practitioners⁹⁴ do not seem to stand as independent think-tanks (at least by appearance), nor have manifest power of influence on this matter. There are however some assessment reports on the effects of this convergence. For instance, the one of Lee *et al.* (2013) prepared for the Association of Chartered Certified Accountants (ACCA), as well as reports issued by the “big four” firms such as KPMG (2011) and PwC (2013) all confirm the value relevance of the accounting earnings presented in the financial reports of the Chinese firms under the IFRS converged CAS. However, there is no concrete evidence proving the benefit from IFRS convergence to Chinese economy as a whole.

4.2 Convergence beyond the Chinese context

Being labelled as a “government-led economy” and a “state-capitalist” country (Bergère, 2007; Huang, 2008; Hung, 2009; Wooldridge, 2012), China demonstrates its capacity and readiness to perform concerted efforts and an effective organisation of different groups of members in society so as to accomplish large scale social changes, if only the central authorities had made the decision. In the case discussed in this chapter, the efficient IFRS convergence has again proved this capacity of the Chinese authority within the national scope. Nevertheless, what currently seems absent is the voice of Chinese government and that of the Chinese academics at international level. Since the IFRS themselves are continuously evolving over time, critical perspectives and amendment proposals, rather than feedbacks of full compliance, are much needed as the IFRS being implemented in different countries: A typical example is the case of the amendment to the IAS 16 and IAS 41 originally proposed by the Malaysian Accounting Standards Board (MASB) regarding the recognition and measurement of biological assets.

⁹⁴ See more about the role of accounting practitioners on this matter in Ezzamel *et al.* (2007), as practitioner opinion is not extensively studied in this analysis.

The futuristic ‘classical’ accounting approach adopted by the IAS/IFRS does not only represent a dangerous tendency of the evolution of accounting in general (Richard, 2014). It particularly demonstrates its recklessness in its implementation in agriculture: As demonstrated in Suzuki’s (2012) case study, for instance, a palm plantation profit model (see Figure 3 below) provided by Ms. Tan Bee Leng, Technical Director of MASB (2010), shows that for the plantation company under investigation, whereas the profit curve under the traditional HCA method is quite intuitive, the one under the FVA model of IAS 41 “is just extraordinary”. This is because, the palm trees defined as bearer biological assets are to be recorded at their FV calculated using the discounted cash flow model, where the cash flow represents the expected income stream generated by these assets. At the beginning of their valuation which is the year when they are planted, their value is much higher than their original costs and an extremely high profit is registered. And since IAS 41 dictates that the trees’ fair value must be checked annually, with a profit being recorded if the value goes up, and a loss if the value goes down, the profits and losses projected accordingly over the life of the trees is exactly like the one showed in the graph, which would entail great fluctuation in the financial statements of the firm (pp. 2 – 3).

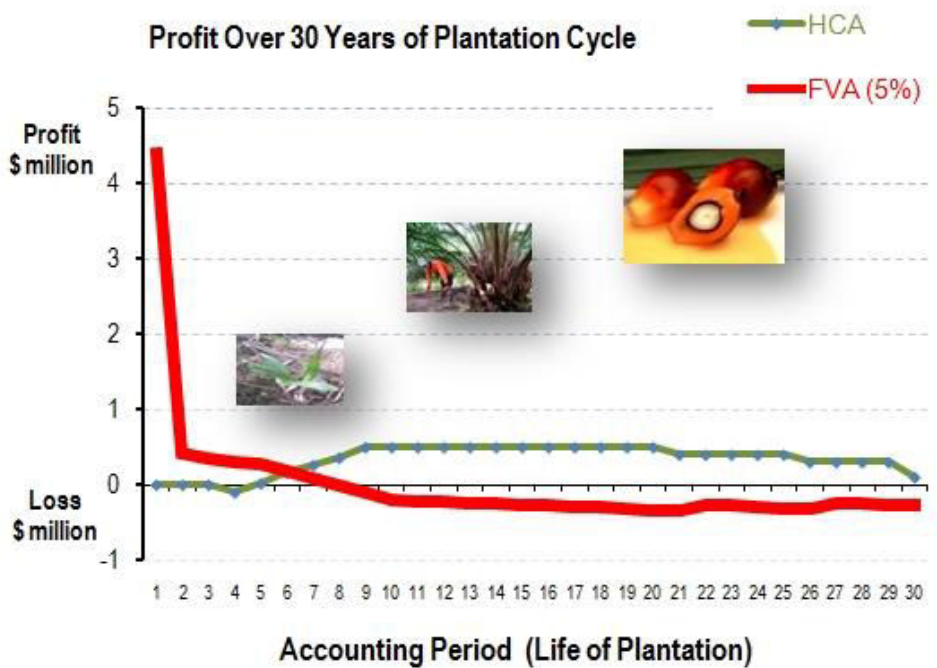


Figure 3: Palm plantation profit model (Source: Suzuki, 2012, p. 2)

Similarly, Adnan (2010) and Bhakir (2010) both record the opinions expressed by Malaysian local oil palm and rubber planters who view IAS 41 as an unfair accounting standard to the plantation and other agriculture businesses in developing countries. With the voices heard from a variety of interest groups in Malaysia, the IASB (2014) has launched several sessions of discussion and finally issued major amendments (effective for periods beginning on or after 1 January 2016) to IAS 16 (“Property, Plant and Equipment”) and IAS 41. The amendments not only have had some of the plants originally labelled as “bearer plants” removed from the scope of IAS 41 and to be put into the scope of IAS 16, but also requires that for all the biological assets accounted for under IAS 41 and IAS 16, if there is not any reliable measurement of FV, they are stated at cost *less accumulated depreciation and accumulated impairment losses*, which indicates that the return to HCA (method to account for tangible fixed assets) could be initiated by individual countries on the international-level debates. This is a great example for the Chinese accounting institutions including both the authorities and the accounting professional organisations that do not entirely agree with IFRS and look for alternative ways other than looking for full convergence.

4.3 Convergence and the applicability of TDL

The previous sections demonstrate that, in contrast to the resistance to the imposed IAS 41 and the exigence of its revision showed by the MASB, the Chinese authorities as well as the domestic accounting researchers have expressed unanimously the eager willingness to adopt the widely accepted “international practices” – a notion recurrently brought up by the Chinese authorities when it comes to the accounting reform and other questions related to differences in business regulations. This could be seen as a derivative of China’s eagerness to gain international recognition for its efforts on embracing the market-economy-related values of the West, and thus to further integrate into the global market. This is widely seen as a powerful engine that might also motivate some next-step reforms (Zhang, 2009). In the cases of any inconsistency in their adoption, it is nevertheless another notion, namely “Chinese characteristics” that very often has been brought out (Liu, 2001). The underlying mentality could be interpreted as follows: The “international practices”—or as brought out in the beginning of the chapter, the “GSI”—

are undoubtedly the ways to adopt. If they are not successfully adopted for now, it is because the market economy with “Chinese characteristics” that undermines this process; and therefore the current adoption needs to be adjusted based on the current condition, and the market economy needs to be further improved for the purpose of fully adopting these practices. Whether the international practices themselves are good or defective is, on the other hand, not so important—if not completely irrelevant—to the discussion.

In retrospect, the unprecedented ‘milestone’ step of the IFRS convergence was made in a set of circumstances which could provide a vision when looking at the possibility of implementing TDL in China. As noted by Phuong and Richard (2011), direct governmental involvement in accounting regulation in China is a political tradition that originated in the era of central planning. (p. 27). Indeed, having evolved from a closed regulatory culture inherited from the former Soviet Union, China’s move toward IFRS seems to be an interesting example of how globalisation gains support from regimes once regarded as the least likely to be interested (Ding & Su, 2008, p. 474). In the same vein, when it comes to the accounting for sustainability, it is also highly possible that as soon as accounting for sustainability is seen as *widely accepted international practices* around the world, the central authority, namely the central CCP cadres in China would make the decision to conduct SA, basing on the reasoning that the adoption of these practices would gain wider recognition and facilitate the integration in the global market, though the “Chinese characteristics” would very likely be claimed as the main reason to be solicited whenever a (temporary) disagreement arises.

What however remains to be further explored are essentially in these two aspects: first, in what way and to what extent these Chinese characteristics could sway—that is to say either accelerate or slow down—the adoption of international practices; and second, whether the implementation of SA entails flexibility in terms of choosing the accounting model, which might allow the eventual adoption of TDL in China, if given the chance. These questions are to be further looked into in the following chapters of this dissertation.

5. Summary

Overall, IFRS convergence in the Chinese context seems to echo Fairclough's (1992) theory in regard with the ideological dimension of social changes, where discourses are perceived "in terms of processes of *hegemony*" and if any, "changes in hegemony" (Blommaert, 2005, p. 30). The Chinese standards' relatively smooth convergence with the neoliberalism-engraved IFRS is constructed in the mainstream discourses as inevitable, as well as a reform that improves the market economy in China, which is in line with the international trend.

Started with a review of literature on evolution of accounting standards in China, this chapter of the dissertation first recollects the historical events in this continuing process, and regroups the views expressed through different channels. Through this review, some distinctions are spotted between "mainstream" discourses and alternative discourses in terms of stances adopted and the motivation behind regarding the international convergence of accounting standards.

The investigation continues with the relevant governmental and academic discourses, as well as with the broader context within which these discourses have been produced and distributed. Some explanations are found for the highly coherent attitude of Chinese officials and the domestic academics – they are in many cases the same group of people, or at least in the same 'camp'. Through the discourses produced by them, the convergence is constructed as the inevitable adoption of international practices in order to integrate into the global market, which is undoubtedly good to the Chinese economy and people's livelihood.

In regard with IAS 41, one of the most controversial set of standards in the IFRS package, mainstream discourses do not show much difference compared to the ones on IFRS convergence in general, with nevertheless some remarks on the backwardness of the Chinese market economy—especially the one for agriculture—that has prevented the large-scale adoption of FVA in valuing biological assets. Another novelty, namely the new category of public welfare biological assets, is widely viewed as a pragmatic solution for the treatment of the large amount of biological assets endowed pending property right issues that nevertheless fall into the IAS 41 definition.

Finally, this study on the adoption of the IFRS sheds light on the applicability of TDL, in that it confirms the intention and the underlying incentives of the Chinese central authorities regarding the adoption of the “international practices”, or the widely accepted GSI. In line with these findings, the following chapters of this dissertation further seek to answer the ‘how-question’, namely in what way and to what extent the Chinese characteristics could influence the adoption of specific SA models.

CHAPTER IV. Initiatives of sustainability accounting in China

1. Background: Studying TDL applicability in the Chinese context

Due to the fact that TDL (or a likewise method) has not been introduced in China, this chapter adopts a research strategy that is based on existing measures taken by the two major key-players, namely the State and the firms, through an investigation of the management accounting and control systems (MACS, Macintosh & Quattrone, 2010; Macintosh, 1994) both at the national level and the industrial level, for the purpose of finding the mechanism which concerns the implementation of a SA model. From this management accounting perspective, the appropriate SA framework is supposed to above all communicate the accounting information that represents the full picture of operational status to the *internal* users, notably the business owners (entrepreneurs) and managers, to make strategic decisions. The term “MACS”, though in most of the cases only concerns corporate governance, is used here in its broader sense, where policies, strategic planning, standard operating rules and procedures and informal controls of an entity are all included, regardless of their level (*i.e.*, a nation, a region, a firm or a department) of application (Macintosh & Quattrone, 2010, p. 5). This choice is further justified by the choice of using the theoretical framework of institutionalist political economy, especially the one elaborated by (Chang, 1994), who proposes to look at the role of the State from the perspective of an “entrepreneur”.

In this chapter, the CDA is conducted on discourses concerning two events, namely the advent of the “national ecological accounting and auditing scheme” (NEAAS)⁹⁵—which encompasses a scheme called “Eco-compensation Programme” (ECP) for agriculture—initiated by the CCP Central Committee, and the adoption of CSR reporting practices in agribusinesses. As stated in the section of methodology and data acquisition, apart from the written discourses chosen to be investigated, also used are the spoken materials collected during interviews with several ‘spokesmen’ of some of the key-players,

⁹⁵ Both the English term (“national environmental accounting and auditing scheme”) and its abbreviation (“NEAAS”) used in this study are the author’s interpretation of the “natural resources balance sheet” and “natural resource auditing” in The Decision of the CCP Central Committee (2013, see below). They are not the official English terms fixed by the PRC central government.

including some government apparatus, agriculture related NGOs and agribusinesses. The interviewees are not only acquired from the organisations that are directly involved in the investigation initially conducted (namely the governmental organisations involved in the NEAAS and ECP, as well as the two agribusinesses selected for the case of the CSR reporting), but also include others from organisations implicated in these two events. In total, 13 semi-structured interviews were conducted with an average duration of 1.5 hours, of which 10 conducted face to face and 3 via telephone. The details of the interviewees as well as some preliminary analysis are summarised in the Annexes.

1.1 SA-related MACS on the national level

Regarding the establishment of a SA-related MACS as a new institution that facilitates the institutional/structural change towards a sustainable society, it is clear that, due to the scale and complexity of the issue, not all entities involved in this change have the clairvoyance and the capacity to coordinate multiple interest groups and resources to implement this idea (Chang, 1994). In this regard, the central government of a country seems to be in a comparatively favourable position, since unlike the ‘by nature’ profit-maximisation-focused firms (Friedman, 1970) and variegated international governmental and non-governmental organisations, national governments are endowed with much more concrete statutory duty and power to address relevant problems (UNEP, 1972; *cf.* Burlamaqui *et al.*, 2000), especially when it comes to the wellbeing of all members in society and in the management of common-pool resources such as the water and the land of a country.

Long having been recognised as a resource-intensive economy, China has been experiencing rapid economic growth thanks to the efficient and large-scale exploitation of the *resources* of the country. Although it is widely believed that this resource exploitation mainly refers to ‘people’, or to be more specific, to the “the huge and low-priced reserves of labour” of “high quality ... in terms of health, education, and capacity for self-management” (Arrighi, 2007, p. 351), the intensive consumption of—and damage to—natural resources is often overlooked in the discussion of the Chinese ascent. In fact, this ascent comes with major implications in terms of environmental degradation, which

continuously harms the health of the Chinese people and the productivity of China's economy (Bian *et al.*, 2010; Wei & Ye, 2014; Wen *et al.*, 2008; Yang, 2007), and it appears to be a central concern of the nation's central government leadership. Also, within the international context where environmental issues are gaining increasing attention, China has been under severe international pressure to cope with emissions reduction, including GHG emissions mitigation, mercury emissions mitigation, and so on, the mitigation targets of which have been set at a series of occasions such as the *Paris Agreement*, *Copenhagen Agreement*, *Kyoto Protocol*, *U.S.-China Joint Announcement on Climate Change*, and *Minamata Convention*. The impact of international pressure on the Chinese central authority draws the broader background of the question investigated in this part of the study.

Meanwhile, facing other serious and interlinked concerns that cover underemployment, social security shortfall, political corruption and so on, the central authorities have been making great efforts to develop more effective mechanisms that facilitate institutional reform, especially after the succession of the "fifth generation of leadership" in 2012 (Harris, 2012; *Wall Street Journal*, 2014). Among these efforts, the claim of promoting NEAAS seems to deserve an in-depth study in particular.

Even though the intention of building such a scheme is officially communicated by the Chinese authorities for the first time by the CCP Central Committee in 2013, the academic as well as political efforts on this subject have been accumulating since the 1970s. Regarding the development of this scheme within the past decades in China, we notice that its evolution consists of emergence, accelerations, ruptures, continuity and re-emergence, at a pace far from steady. Through a series of CDA on relevant written texts produced by the central authorities, mainstream media and the Chinese academics, Section 2 of this chapter thus sets out to analyse the historical evolution of the institutional context in relation to the establishment of such a scheme; and further, to decipher the ideological underpinnings that have shaped this context.

To be more specific, the CDA employed in Section 2 sets out from the textual discourses that address directly a particular event – the establishment of the NEAAS. Then it goes on to the second layer that aims at identifying the key-players who produce these discourses, the channels through which the discourses are delivered, and investigating how these

discourses fit in with their respective key-players' interests in this process. The third layer context analysis, which is also the particularity that distinguishes CDA from traditional linguistics, contrasts the meanings that have been constructed by these key-players with what has occurred in their social practices beyond this particular event (Alvesson & Kärreman, 2000; Blommaert, 2005; van Dijk, 2011; Fairclough, 1992, 1995).

Due to the similarity between the event of IFRS convergence and the NEAAS establishment as both of them are central government-led initiatives of regulative and legislative reforms, the key-players identified in the event of NEAAS are similar to the ones identified in the previous chapter yet slightly different. They mainly include: 1) the Chinese government; 2) domestic academics specialised notably in economics and ecology; 3) international organisations (such as the UN and the WB) in relation to SA framework promotion; 4) the Chinese regional governments; and 5) leading media outlets. For the purpose of investigating the initiation and the enforcement of NEAAS, this part of the study focuses on discourses delivered by the first two players who are widely recognised as the most involved—the former as the 'imposer' of the institutional change and the latter as the 'think-tank' or 'scientific committee' of NEAAS design—in this process, in the hope of uncovering the actual roles played by them and the underpinning ideological dimensions in this event. In addition, those delivered by Chinese mainstream media outlets are equally carefully examined, since unlike IFRS convergence of which relevant discourses are intended to reach a specified/specialised audience rather than the general public, the discourses concerning NEAAS are intended to reach them both: It is in the meantime a call for research and administrative efforts and—perhaps more importantly—an event of mass communication conducted through the media.

In terms of the data source, all relevant policy documents and transcriptions of leadership speeches released on the official website of the Central People's Government of the PRC (<http://www.gov.cn/>)⁹⁶ are analysed in the first place; then all relevant textual discourses including editorials, communications, signed articles and so on, published on *People's Daily* and *Guangming Daily*⁹⁷, both of them being major news outlets of the CCP that

⁹⁶ According to its "Introduction" page, it is a government-run website specialised in providing governmental information and services administered by the State Council of PRC (english.gov.cn, 2014).

⁹⁷ The phonetic translation is used here since it's officially approved. The literal translation of "Guangming" is bright and promising.

play the role of guiding public opinion in China (Goldman, 1994; Shirk, 2010; Zhang, 2014). Thirdly, what I then passed under scrutiny are the academic papers addressing this subject published in Chinese “core journals”⁹⁸, an official collection of the most influential Chinese journals in China. The newspaper articles and academic papers are searched and acquired through the CNKI (<http://www.cnki.net/>)⁹⁹. The time period fixed for the texts under investigation is 2013 – 2014, corresponding to the recent wave of NEAAS establishment of which the beginning marked by the Third Plenum of the 18th CCP Central Committee in 2013 (see below). This data is complemented by the transcript of spoken materials acquired from telephone and face-to-face interviews led during the field work in China conducted in 2012, when pilot projects of NEAAS were already under preparation.

Even though most of the websites and newspapers own an English version, unless otherwise noted, the language of the texts analysed is Chinese, since it is the original editing language and therefore considered as being more faithful to the ideas that the authors intend to communicate.

1.2 SA-related MACS on the industrial level

When looking at the SA-related MACS in Chinese agribusiness, our focus is naturally shifted from the side of regulator (the government) to the organisations (the firms) that are regulated or in some rare cases, take initiatives to go beyond the legislative requirements. Accordingly, this problematique is approached through an investigation of the discourses in the sustainability reports under the CSR framework, the most prevalent ‘accounting for sustainability’ adopted by business both in China and around the world. In the academic world, analyses and empirical evidences have been accumulating as regards the “window dressing”, or “impression management” nature of firms’ sustainability reports (see Cho *et al.*, 2010, 2015; Lin, 2010; Livesey & Kearins, 2002

⁹⁸ As defined on the CNKI website, the Chinese core journal database contains all the journals that have been included in the “A Guide to the Core Journals of China” (2008 edition), which is the most commonly used criteria for judging the importance of the academic journals in China (*cf.* Zhao and Zhao, 2010).

⁹⁹ See also the endnote for CNKI in Chapter 3.

among many others). Despite the abundance of literature, very few of them were both country- and sector-based, and even fewer focused on the language employed by individual reports and its meanings.

To be more specific, this study essentially investigates SA application in Chinese listed agribusinesses. This is because the term “agribusiness” refers to all kinds and all sizes of agricultural enterprises that include family farm, state-owned farm and listed agricultural firms. The great variety in terms of their business nature and organisation would make a comprehensive study almost impossible and out of the scope of this dissertation. Among these different kinds of agribusinesses, listed firms play a central role in the organisation of agriculture production that connects numerous family farms to the rather well established corporate management system, which might also allow a SA establishment at firm-level to extend its power of capital preservation to the farm-level (Saporta, 2011, pp. 149, 182; Shen, 2009; da Silva *et. al.*, 2009, p. 7). Moreover, the existence of relatively well standardised and regulated accounting and reporting practice, as well as the better availability of data from the firms could provide a better terrain to conduct this study.

After a desktop study of the official websites and annual reports of more than 100 listed Chinese agribusinesses (as defined by the China Securities Regulatory Commission (CSRC), 2012[2001]) in terms of their existing practices in regard with sustainability, three dimensions were brought to my attention: the control of product quality, the evaluation of performance (including environmental performance) and the management of stakeholder relations.

As mentioned in previous chapters, one feature that makes the agriculture sector distinct from other industries is that, for many agribusinesses, a good control of product quality *itself* is a guarantee of a (natural-)environment-friendly mode of production. This is also demonstrated in the interviews.

The evaluation of performance refers to the performance in conserving all the three types (financial, natural and human) of capital. Concretely, it includes financial profitability, natural environment protection, human resource management and so on. This aspect could be seen as the novelty brought to the agribusinesses' MACS by the CSR initiatives.

The management of stakeholder relations mainly refers to the maintenance of relationships with their employees, suppliers (*i.e.*, farmers, wholesalers, and upstream firms and so on), distributors, costumers and regulators (*i.e.*, governmental and third-party institutions).

Through a series of discourse analysis with special attention on these three aspects, Section 3 sets out to study the sustainability reports of two listed agribusinesses, namely the New Hope Liuhe Group and the Beidahuang Group (hereinafter “Liuhe” and “Beidahuang”), and to investigate the country specific features of their reporting. As to the choice of firms, it is above all for the purpose of establishing the country- and sector-specific boundaries for the investigation. Second, the two Chinese agribusinesses share some important attributes in common: both large in size and having important market power in their respective product domain, which could to a great extent provide us with some insight concerning the Chinese agribusinesses as a whole. Third, their differences in terms of history, culture, image, impacts of their products on nature and society, and the circumstances in which their reports were produced greatly influence their annual reports regarding sustainability issues, and therefore allow us to have a better understanding of the complexity of the matter. Fourth, from a practical point of view, the facts that both firms are leading agribusinesses in their respective sector, and both are listed firms in Chinese Stock Exchanges make their financial and non-financial reports publicly available. Further, the high level executives of these two firms accepted to be interviewed by the author, which makes the collection of rather abundant interview data possible.

Concretely, in the three-layer analysis of the CDA for this part of the study, the *text* layer of discourse refers to the verbal elements of relevant corporate reports, media and policy documents, all of which being conceptualised texts in the narrow sense as referring to spoken and written language (Leitch & Palmer, 2010; Merkl-Davies *et al.*, 2011); and the *context* layer corresponds to the broader social practices effectuated by the firms, as well as the institutional backdrops for these practices. The investigation on the discursive practices of discourses is infiltrated in the research method, in that the context, or the (potentially) constitutive cultural codes under discussion are illuminated by the text, rather than pre-set and then linked to the text (as it is the case in a culturalist approach) (Livesey & Kearins, 2002). On top of the CDA, the comparative case approach is also

applied as we contrast the two firms with different corporate natures and their CSR reporting practices.

In Section 3, all the relevant reports of these two firms are analysed since the year they officially started issuing sustainability reporting (as it is the case for Liuhe), or started including sustainability related materials in a less formal manner (as it is the case for Beidahuang). All the written texts of corporate reports, media and policy documents are available on line, complemented by the transcript of spoken materials acquired from telephone and face-to-face interviews led during the field work in China conducted in 2012.

2. Investigation of a specific sustainability accounting scheme at national level: the national ecological accounting and auditing scheme (NEAAS) and its application in agriculture

NEAAS deserves an in-depth study in particular since firstly, according to the message delivered through mainstream media channels this scheme is intended to tackle at one time two critical problems facing the country, namely environmental degradation and the inadequate cadre¹⁰⁰ appraisal system, which is an ambitious proposal deserving further examination. Second, from an academic point of view, the implementation of environmental accounting and auditing schemes has been widely seen as a promising and, perhaps the most concrete measure to assist an entity to finally achieve sustainability (*cf.* Altukhova, 2013; Ge & Li, 1992; Gray, 2007; Hopwood *et al.*, 2010; Richard, 2012; Schaltegger *et al.*, 1996; Zhang, 2009). Therefore it would be of great interest to investigate the implementation and the primary results of such a scheme at national level in China, the world's second largest economy.

¹⁰⁰ As mentioned earlier in previous chapters, it refers to CCP cadres who occupy most positions of government officials. See more in Section 2.2.2.

For the agriculture sector, the development and implementation of the ECP in the NEAAS framework is under close scrutiny in this section. Because it seems that by definition, the ECP demonstrates potentials to be (re-)oriented towards TDL, by conducting the assessment of the monetary compensation through an estimation of “the investment required to maintain the ecological potential of ecosystems to deliver their services” (Levrel *et al.*, 2012), for instance, rather than estimating a price to pay for ecosystem services as implied in its communication made by the relevant scholars.¹⁰¹

In the remainder of this section, a synthesis is provided regarding the discourses of the key-players involved, namely the central government, the CCP media outlets and the academics in China. What accompanies is the analysis on how these discourses represent their respective institutions in the event of establishing the NEAAS, which includes the implementation of ECP.

2.1 The discursive construction of the NEAAS

2.1.1 Government’s view

The recent wave, or the resurgence¹⁰² of the NEAAS establishment is marked by the milestone CCP document *The Decision on Major Issues Concerning Comprehensively Deepening Reforms* (Communist Party of China CCP Central Committee (CCP Central Committee), 2013)¹⁰³ issued in November 2013, and the accompanying *Explanatory notes of “The Decision on Major Issues Concerning Comprehensively Deepening Reforms”* (Xi, 2013), issued three days later, authored by the General Secretary of the CCP, Mr. Xi Jinping (equally known as the PRC President, and the Chairman of the PRC Central Military Commission). As alluded at the beginning of *The Decision*, the issuing of this document at the close of the Third Plenum of the 18th CCP National Congress has honoured and inherited the spirit of “reform”, thirty five years after the famous Third

¹⁰¹ See more in Section 2.1.

¹⁰² See more in Section 2.2.1.

¹⁰³ In general, the issuing of this document (though might carry different titles each time) at the Third Plenums have historically been the events at which Chinese leaders have presented their long-term visions for the country’s economy and for the development of the society. (Phillips, 2013)

Plenum on of the 11th CCP National Congress in 1978, pivotal CCP meeting that inaugurated the “reform and opening up” policy.

The Decision is composed by 60 detailed “decisions” (articles) covering 16 aspects (sections) of important issues in society. What is noticeable is that, for the first time a whole section entitled “speeding up of the construction of an ecological civilisation system”¹⁰⁴ is entirely dedicated to the natural environment conservation. At the very beginning of this section it is emphasised that

*“in order to achieve ecological civilisation, the most crucial task for us is to establish a series of institutional mechanisms ... and use these mechanisms to protect the environment.”*¹⁰⁵

In line with this notion, four decisions (Article 51 – 54) are made: Article 51 focuses on centralised planning based on census of natural resource stock, suggesting that the relevant authorities should

“... improve the property rights system for natural resources and the administration of their use; Register natural resources, such as water, forests and prairie bodies in the property rights system, ... Establish a spatial planning system that sets boundaries for land and space occupation for industry, human livelihood as well as the livelihood of other species. ...”¹⁰⁶

Article 52 further proposes the concrete measures to be taken for the purpose of conducting a better management of natural resources by suggesting to

“... draw a ‘red line’ for ecological protection. ... Build monitoring and warning mechanisms for the carrying capacity of natural resources and environment. End the GDP performance assessment for poverty-stricken areas with fragile ecosystems. ... Try to establish a national natural resource balance sheet and

¹⁰⁴ Originally in Chinese: “加快生态文明制度建设”

¹⁰⁵ Originally in Chinese: “建设生态文明，必须建立系统完整的生态文明制度体系……用制度保护生态环境。”

¹⁰⁶ Originally in Chinese: “健全自然资源资产产权制度和用途管制制度。对水流、森林、山岭、草原、荒地、滩涂等自然生态空间进行统一确权登记。……建立空间规划体系，划定生产、生活、生态空间开发管制界限。……”

*conduct natural resource auditing to cadres on their departure of current posts. In this way, a lifelong accountability system for ecological environment damage will be established. ...*¹⁰⁷

Article 53 moves towards a variety of ‘mainstream’ solutions advocated notably by neoliberal economists in the West, and suggests to

*“... establish a mechanism where the consumption of natural resources are paid and compensated. Accelerate reforms of natural resources commodities pricing. ... Gradually levy taxes on all use of natural resources and spaces. ... Increase the price for industrial land use. ... Develop markets for environment protection and facilitate the trading mechanism for pollution discharge, carbon emissions and so on. ...*¹⁰⁸

And finally in terms of regulatory and supervising measures, Article 54 proposes to

*“... make sure that all kinds of pollutant are monitored and regulated by independent environmental regulation and law enforcement authorities. ... Timely release corporate environmental information to the public and improve the reporting system in order to strengthen the social supervision. ... Responsible persons for environmental pollution must compensate for the damage and criminal responsibility shall be investigated according to law.”*¹⁰⁹

Regarding the detailed measures listed in these four decisions in relation to environment conservation issues at national level, we note that they actually could be roughly grouped into two categories – the first one mainly addressing the management of physical resources, whilst the second emphasising the assignment of responsibility. In the former

¹⁰⁷ Originally in Chinese: “划定生态保护红线。……建立资源环境承载能力监测预警机制，对限制开发区域和生态脆弱的国家扶贫开发工作重点县取消地区生产总值考核。……探索编制自然资源资产负债表，对领导干部实行自然资源资产离任审计。建立生态环境损害责任终身追究制。……”

¹⁰⁸ Originally in Chinese: “……实行资源有偿使用制度和生态补偿制度。加快自然资源及其产品价格改革，全面反映市场供求、资源稀缺程度、生态环境损害成本和修复效益。……逐步将资源税扩展到占用各种自然生态空间。……提高工业用地价格。……发展环保市场，推行节能量、碳排放权、排污权、水权交易制度。……”

¹⁰⁹ Originally in Chinese: “……建立和完善严格监管所有污染物排放的环境保护管理制度，独立进行环境监管和行政执法。……及时公布企业环境信息，健全举报制度，加强社会监督。……对造成生态环境损害的责任者严格实行赔偿制度，依法追究刑事责任。”

category, it seems that the central CCP leadership shows great openness towards all relevant propositions, regardless of whether it tilts towards central planning/intervention (“registration and administration of their use”, “space-planning”, “levy taxes”) or market instruments (“paid and compensated”, “pricing”, “pollution discharge trading”), which to a great extent reflects the CCP’s pragmatism when tackling problems in society ever since 1978. In the latter, we notice that four kinds of ‘responsible persons’ are recognised – “cadres”, corporations (“corporate environmental information”), “independent environmental regulation and law enforcement authorities” and the whole society (“social supervision”), among which only the first one is “accountable” for environmental conservation, or to be more specific, for its failure (“damage”). And in order to assign responsibilities to these cadres, as well as to make the above mentioned management measures operational, a “mechanism”—that is the NEAAS (“national natural resource balance sheet”, “auditing”)—is needed. The core status of Article 52 containing the NEAAS establishment among all these decisions appears to be rather obvious (Wang & Wei, 2014).

From a semantic point of view, the statement of Article 52 could be interpreted as assuming that the NEAAS is to be established *in order to* function as an instrument that keeps records of the cadres’ performance in relation to ecological environment conservation. The records would cover the cadre’s environmental performance when they are ‘in service’ on a certain post, and ultimately it is for the purpose of conducting this kind of auditing of these cadres when they are leaving and even after leaving (“a lifelong accountability system”) their current positions, either for changes of posts (normally a promotion) or for retirement.

Accompanying The Decision, The Explanation addresses firstly the process of the “decision”-making, then communicates the General Secretary of the CCP, Mr. Xi Jinping’s understanding of The Decision. With regard to ecological civilisation, The Explanation starts with a statement clearly admitting that

“there are some prominent problems in China’s ecological environment protection. To some extent, it is due to institutional problems, one of them being that the natural resource assets are under ownership by the whole people whilst

*the rightful owners are not in place to exercise their rights. As a consequence, the rights and interests of the owners are not implemented.”*¹¹⁰

And in order to solve this problem, Mr. Xi emphasises that the CCP Central Committee decides to

*“fully implement the ownership rights under the principles of ‘separating the owners and the managers’ and ‘one project managed by one department’, and assign the responsibilities to specific departments that manage, on behalf of the owners, the assets owned by the whole people.”*¹¹¹

At first glance, what seems redundant is that, “the owners and the managers” of natural resources (which is regarded as collectively owned assets) are already “separated” by law, in the sense that the managerial power is delegated to Party cadres or in other words, to the “public servants”¹¹², according to the PRC Constitution. Xi’s ‘reclaim’ on the matter suggests the poor implementation of the law. Further, what seems to have greater significance in terms of novelty raised by the head of state is the ‘one project managed by one department’ principle, clarifying that the accountability is to be built on the “resource-project-department-cadre” basis. This part of the document thus explains the reason why the cadres, among the all four kinds of responsible persons, are the only ones “accountable” and supposed to be “audited” within the NEAAS under the precondition that China is a socialist country: If we see the PRC as a publicly owned firm with all natural resources within its territory as its ‘assets’, then every Chinese citizen owns a ‘share’ of the ‘firm’ and the CCP cadres are literally the ‘managers’ of the firm’s different departments. They are supposed to act in the best interest of the ‘shareholders’ interest and are responsible for the righteous use of the assets as well as the consequences linked to the use. And their ‘performance’ is to be evaluated based on a series of ‘accounting results’ under the NEAAS framework. This scenario appears to be in perfect accordance to the logic of classical principal–agent problem that has been extensively studied in the

¹¹⁰ Originally in Chinese: “我国生态环境保护中存在的一些突出问题，一定程度上与体制不健全有关，原因之一是全民所有自然资源资产的所有权人不到位，所有权人权益不落实。”

¹¹¹ Originally in Chinese: “按照所有者和管理者分开和一件事由一个部门管理的原则，落实全民所有自然资源资产所有权，建立统一行使全民所有自然资源资产所有权人职责的体制。”

¹¹² As stated in the *Constitution of CCP*, “Party cadres are the backbone of the Party’s cause and public servants of the people.”

domain of economics and management, especially in regard with audit schemes (*cf.* Adams, 1994; Mitnick, 1973; Watts & Zimmerman, 1983).

Regarding the development of the ECP in the scope of NEAAS, though very little official information is available, interviewee Mr A (Ministry of Agriculture, MOA), leader of the group of ECP application in prairie areas, states that the ECP was discussed and approved by the Standing Committee of the State Council—China’s highest ruling council—in 2010, and was formally put into implementation in 2011.¹¹³ Before this, it was the China Council for International Cooperation on Environment and Development (CCICED), “a high level non-for-profit international advisory body composed of *high level Chinese and international figures* and well-known experts in the field of environment and development”¹¹⁴ that had initiated the research on the programme as early as in 2005 (Liu *et al.*, 2008). This project is reintroduced to the centre of the political discussions by The Decision, as Article 53 clearly nominated the ECP as one of the ‘solutions’ to China’s ecological problems that is to be popularised as soon as possible.

According to the expert group formed by the CCICED together with the National Development and Reform Commission (NDRC, the macroeconomic management agency under the State Council, which has broad administrative and planning control over the Chinese economy), the ECP refers to

*“a mechanism or arrangement designed to adjust the economic interests among conservers, beneficiaries and damage-doers by employing financial, taxation, market and other instruments, which are developed on the basis of evaluating the ecosystem services and costs of conservation, damage and development opportunities, with a view to maintain ecosystem integrity and promote harmony between nature and human beings” (Liu *et al.*, 2008).*

¹¹³ Hereinafter the spoken discourses are quoted as such, with the organisation that interviewees represent briefly noted in the brackets (see full information in the annex), and without the original Chinese texts in the footnote, though available for reference in the author’s fieldwork note.

¹¹⁴ Available on the “About Us” page of the CCICED official website <http://www.cciced.net/>, last consulted on 10/12/2015. The “high level Chinese and international figures” include notably Zhang Gaoli (“Chairperson”), who is the current first-ranked Vice Premier of the PRC and a member of the Politburo Standing Committee of the CCP, and Xie Zhenghua (“Vice Chairperson”), who is also the Vice Chairman of the NDRC.

Though almost equally lacks of clarity as how this term is employed in The Decision (2013), it seems that by definition, the ECP regards the scientific evaluation of the ecosystem as “the basis”, and the “maintain” of its “integrity” as the purpose of the scheme, which is in line with the strong sustainability perspective that this dissertation adopts.

2.1.2 Media’s view

When searching with a set of NEAAS descriptive keywords (“ecological” in the “must contain” case and “accounting”, “auditing” in the “contain either” case) in the CNKI’s advanced search engine for newspapers and searching for content in the *People’s Daily* and *Guangming Daily* within the period from January 2013 to December 2014, 156 results are found.¹¹⁵ Occupying the highest proportion, 65 articles among them focus on the issue of changing the current situation of using GDP as the only criteria to evaluate the economic performance. A typical example is the trilogy named “Comprehensive Understanding of GDP” in the “Economics Weekly” section of the *People’s Daily*. In this trilogy, the authors suggest that

“some regional officials attach great importance to GDP, because it is a number that is easily manipulable and could be extremely persuasive as an indicator of their political achievements. As long as this number is delightful, their promotion is guaranteed. Reforms, on the other hand, bear fruit very slowly: Efforts of changing the structure and growth pattern are often made by the leadership this term, and it is the next term’s leadership that enjoys the benefit. Who would buckle down to this ‘stupidity’? ... The GDP worship is harmful and unsustainable. ... Rather than solely pursuing the rapid GDP growth, we should pay more attention to improving the employment capacity of each percentage point of GDP growth, to increasing technological content and input-output

¹¹⁵ The exact Chinese words for the search are “生态”, “核算” and “审计”. We have obtained the number of 156 after a manual screening from the original search results, in order to sort out the articles that address ecological issues in the sense of natural environment conservation from those addressing solely political or economic ecology, as well as other irrelevant articles. The search for academic papers in the next section follows the same principles.

efficiency, as well as to reducing resource consumption and environmental damage costs”¹¹⁶ (Tian & Wu, 2014); Article entitled *Do not name ‘heroes’ simply according to GDP*).

“... More importantly, since the weighted score of GDP is too high, in many provinces, GDP performance indicators become a ‘trump card’ that links directly to the promotion of cadres. ... Bidding farewell to the practice of naming ‘heroes’ according to GDP, the first thing to do is to reform the ‘GDP supremacy’ in the cadre appraisal system. ... In the appraisal system, we should increase the weight of the achievements of improving people’s livelihood, as well as that of the development in relation to cultural and ecological civilisation. Meanwhile, what’s needed is to reduce the ‘bonus’ items related to GDP growth in cadre appraisal, in order to avoid the overwhelming status of the GDP indicators”¹¹⁷ (Xu & Wang, 2014).

To avoid overcorrection, the second article of this trilogy nevertheless emphasises that

“during the 30 years after the ‘reform and opening up’, China has undergone historic changes, but has not yet fundamentally changed the identity of underdeveloped country and is still endowed with distinct features of the primary stage of socialism. ... [Therefore] China’s economic growth rate... should guarantee that the economy is running within a reasonable interval: Its ‘lower limit’ is to make sure steady growth and employment rates, whilst its ‘upper limit’ is to prevent inflation. ... This is very much needed for the purpose of adjusting

¹¹⁶ Originally in Chinese: “一些地方官员看重 GDP，是因为它能‘一年一变样’，又代表政绩，政绩光鲜自然能步步高升。而转方式、调结构是慢功夫，这一届费力气，收效的是下一届，谁会去干这种‘傻事’呢？……搞 GDP 崇拜不仅害莫大焉，而且不可持续。……与其刻意追求 GDP 高速增长，不如提高每个百分点经济增长率的就业容量、科技含量和投入产出效益，并降低资源消耗和环境损害成本。”

¹¹⁷ Originally in Chinese: “……更重要的是，由于 GDP 分值权重过高，因此在不少地方，GDP 指标成为绩效考核的“王牌”，与领导干部的升迁直接挂钩。……告别以 GDP 论英雄，首先要打破唯 GDP 考核。……在考核评价中，应增加民生改善、文化建设、生态文明建设等方面的权重，同时弱化对 GDP 增速、增量的加分项，避免 GDP 指标在考核体系中占有压倒性地位。”

economic structure, promoting stability and increasing public confidence”¹¹⁸ (Du & Cheng, 2014).

As we can notice from the above quoted excerpts which are highly representative among the discourse content of all the 65 articles found in this category, it seems that, as being interpreted by the two newspapers, the central authority has not only decided to reconsider the calculation of the ‘wealth of the nation’ and “*end[ing] the GDP performance assessment for poverty-stricken areas with fragile eco-systems*” (CCP Central Committee, 2013), but also intends to generalise the reduction of the weight of GDP in performance evaluation for *all regions*, since the CCP sees the change of ‘GDP supremacy’ as the key to the reform that tackles both problems of environmental pollution and inadequate cadre appraisal system. Moreover, the term “structural adjustment” makes repetitive appearance in these discourses, which suggests that the reform of GDP supremacy is also seen as the key to achieve a more sustained economic growth.

Again, from a semantic point of view, in these articles the main ‘object’ under discussion is “some regional officials”, who “worship” GDP and “manipulate” the numbers in order to show their “political achievements” that allow them to get “promotion”. Those officials who have been doing this are often judged as “heroes”, but in fact, or at least from now on, they are not. It seems that in this time of change, those CCP cadres who stay the old way are no longer the “public servants” that *we*, the CCP and the Chinese people that the CCP ‘represents’¹¹⁹, would appreciate. What *we* need however, is not giving up on pursuing GDP growth rate, but to continue pursuing the rate of much higher quality (“improve ... costs”) “within a reasonable interval”.

The reason why the issue of cadre appraisal has been repeatedly pointed out in this wave of NEAAS establishment actually could be explained by an excerpt of another article in this category:

¹¹⁸ Originally in Chinese: “改革开放 30 多年来, 我国的面貌发生了历史性变化, 但还没有从根本上摆脱不发达状态, 仍然带有社会主义初级阶段的明显特征…… (因此) 经济增速……应当使经济运行保持在合理区间: 其“下限”就是稳增长、保就业, “上限”就是防范通货膨胀。……这是调结构、促稳定、增信心的需要。”

¹¹⁹ As stated in the famous “Three Represents” socio-political theory of the CCP, the CCP “always represent the requirements for developing China’s advanced productive forces, the orientation of China’s advanced culture and the fundamental interests of the overwhelming majority of the Chinese people”. (18th CCP Central Committee, 2012)

*“For a long time, problems of production safety and environmental protection is ascribed to regional government officials, ... rather than to the regional Party leadership. ... Some environmental problems are due to illegal pollutant emission that the relevant government facilities fail to detect, whilst others are caused by the local Party leadership who have made the decision to introduce the wrong kind of industry to the region regardless of local environmental capacity in the first place. If these decision makers are not held accountable, it is difficult to convince the public”*¹²⁰ (Wu, 2014; Article entitled *Make sure that the Party and the Government take equal responsibility in environment conservation issues*).

Apparently, the specialty of the dualist organisation structure within Chinese authoritarian institutions is considered as problematic in the mainstream discourses: the two sets of cadre structure have left a gap in the system in the system of tracing a cadre’s accountability, which appears to be another problem in China’s cadre appraisal system.

Apart from the above mentioned articles mainly discussing GDP indicators and cadre evaluation, the second largest number (57)¹²¹ of articles address rather directly the problematique in relation to NEAAS. And a good part of them address particularly the scientific/technical aspects of this scheme. For instance, a review of China’s “green development” after the 18th CCP National Congress in the *Guangming Daily* put forward that:

“there is a Kuznets Curve in environmental economics – various indicators of environmental degradation tend to get worse as economic growth occurs until average income reaches a certain point over the course of development. On this ground, some people think that when China’s economic development reaches a certain level the environmental problems might ‘naturally’ be resolved. But it is not true. ... This turning point could only be attained by taking effective legal,

¹²⁰ Originally in Chinese: “长期以来，安全生产、环境保护出了问题，被问责的多为政府部门领导……鲜见地方党委领导因为同一问题而担责。……有的环境问题是企业违法排污产生的，有的环境问题则是决策不当导致的。比如不顾当地资源禀赋和环境容量，未经科学论证和严格环评，引进高耗能、高污染和资源消耗型企业，在许多地方是由书记拍板决定的。这些项目隐藏着巨大的污染风险，其危害显现之后，如果决策者不被追责，很难服众。”

¹²¹ The articles counted are not strictly mutually exclusive, same as for all the other article counts below.

*administrative, economic and social measures and by conducting great changes in the institutional system for environmental conservation”*¹²² (Feng, 2014).

And also in the *Guangming Daily*, an article announces the news of “China’s first attempt for conducting ‘Gross Ecosystem Product (GEP)’ accounting”¹²³, and reports the comments of a researcher attached to the Research Centre for Eco-Environmental Sciences, Chinese Academy of Sciences as follows:

*“The concept of GEP fills the gap in the existent research on accounting methods and indicators for ecological assets, both at home and abroad. ... To take the case of Kubuqi Desert as an example, if we follow the GDP accounting system, the totality of the 20 years’ investment of the Elion Resources Group’s 5000-square-kilometer greening project amounts to 2.334 billion yuan¹²⁴ [without any visible output], which could be hardly regarded as a profitable project. However, if we conduct the GEP accounting that takes account of ecological supply value, ecological regulation value, ecological support value, ecological cultural value and so on, the ecosystem service value of the Kubuqi desert could amount to 300 billion instead of the negative growth calculated earlier. Not to mention the value added of large-scale land reclamation and carbon sequestration”*¹²⁵ (Jin, 2013).

Similar to the above two brief lessons of environmental economics and ecological accounting, articles entitled *Environmental responsibility accounting: Theoretical basis and path of adoption*, *Development of innovative assessment mechanism of forest ecosystem services*, *How to improve the pollutant emission trading mechanism in China*, *Circular economy: the pursuit of utility maximisation*, *Strategic measures for constructing China’s carbon accounting system*, *Ecological compensation: How did the*

¹²² Original Chinese text: “环境经济学中有一条“库兹涅茨曲线”——在经济发展初期，随着人均收入增加，环境污染由低趋高，到达某个临界点或拐点后，随着人均收入进一步增加，环境污染又由高趋低。有人以此为由，认为当我国经济发展达到一定水平，面临的这些环境问题可能会‘自然’解决。其实不然。……只有采取法律、行政、经济、社会等有效措施，推动环保制度的巨大变革，才能迎来拐点。”

¹²³ Originally in Chinese: “我国首次研究生态系统生产总值核算” (subheading of the article)

¹²⁴ Approximately 376 million US dollar.

¹²⁵ Originally in Chinese: “生态系统生产总值概念的提出，填补了目前国内外对自然生态资产核算指标的空白。……如果沿用 GDP 核算体系的话，由亿利资源企业 20 多年累计在库布其沙漠 5000 多平方公里的面积上的绿化投入是 23.34 亿元，这应该算是一笔不划算的投资。如果从生态供给价值、生态调节价值、生态文化价值、生态支持价值等方面进行科学系统量化评估，库布其沙漠的生态系统服务价值，则可能由 20 年前的负数增长，变为目前的 300 多亿元。这还不包含大规模的土地改良和碳汇等价值。”

*city of Suzhou proceed*¹²⁶ and so on in both *People's Daily* and *Guangming Daily* have been published. Along with other articles in these two papers that address mainly the legislation issues of the NEAAS, the articles in this category are endowed with a strong academic orientation. Using a variety of means including theoretical reasoning of experts and case studies in real world, these articles are engaged in introducing the NEAAS, the “institutional mechanisms” that the central authority seeks to establish, to the whole society in order to increase the public awareness of, and perhaps more importantly, the public confidence on decisions made by the central authority.

In regard with the ECP in particular, the media discourses in *People's Daily* and *Guangming Daily* demonstrate a shift of focus from the pre-The-Decision to the pro-The-Decision era, as the discourses before 2013 mainly concentrate on the reason why certain regions need to be compensated, which entails the problem of inequality among different regions; whilst those after the 2013 mainly focus on the ‘how’ questions, namely how the institution regarding the compensation is to be established, and how the sums of the compensation is to be distributed and used by the relevant regions. For instance, within the pre-The-Decision era, an article entitled *Ecological compensation can no longer be delayed*¹²⁷ made its appearance in *People's Daily* as early as in 2000. In this brief report of a fieldwork effectuated in the forest of Dayao Mountain in Jinxiu county, Guangxi province, after listing the sacrifice and the monetary input made by the government of Jinxiu county, the author notes that

“... *the county however does not get any other compensation apart from the annual funding for forest protection and the subsidies to the foresters from the State. It's a common phenomenon that the upstream areas make efforts to protect the ecosystem and the downstream areas benefit. But those upstream areas tend to be the poorer parts in China, and at the time of implementing ecological projects, the problems of funding, immigration, stability and even the villagers' livelihood all have to rely on the local government to resolve. The difficulties can easily be imagined. ... This is why the term 'ecological compensation' appears so*

¹²⁶ Originally in Chinese: “环境责任会计：理论基础与优化路径”“创新发展森林生态系统服务评估”“如何完善我国排污权交易制度”“循环经济——追求效用最大化”“我国碳会计体系的构建策略”“生态补偿——苏州如何破局”

¹²⁷ Originally in Chinese: “生态补偿不能拖了”

often in the discourses of the cadres in the regions like Jinxiu, Chuanxi and Dianxi”¹²⁸ (Zhang, 2000).

In these pre-The-Decision media discourses, it seems that the “conservers, beneficiaries and damage-doers” as raised in the officially acknowledged academic definition (*cf.* Liu *et al.*, 2008) is concretised in the media discourses as *administrative regions* that are at the upstream/downstream of the natural resource exploitation/consumption or, to put it in simpler terms, as the worse-off and better-off regions.

Alongside the more than a decade exploration in terms of institutional efforts and pilot projects, the two newspapers have been tracking the development of this scheme with close attention. From the year of 2013, the beginning of the pro-The-Decision era, there is a significant increase of the exposure of the term “Eco-compensation” in the two papers: In April 2013 for instance, *People’s Daily* published an article entitled *The establishment of the ECP bears initial results*¹²⁹, with reference to the State council’s report dedicated to the matter. In August, *People’s Daily* go further into the implementation details of the scheme by underlining the point that a scientific evaluation is to be done in order to determine the amount of allocation, and this compensation is supposed to be used exclusively for eco-system restoration and conservation:

*“Some principles are needed to be respected in this scheme: ... on the basis of scientific evaluation, the compensation standard should be classified according to social, economic, and ecological categories respectively. ... There should be quantified mandatory requirements for concrete measures to be taken. By doing so, it could be guaranteed that the allocation is directly used to ecological restoration. Meanwhile, an effective monitoring system should also be in place”*¹³⁰ (Zhang & Wu, 2013).

¹²⁸ Originally in Chinese: “.....但金秀除了每年得到国家一些保护经费和林农补贴外, 没有得到其他补偿。上游地区花力气保护生态, 下游地区受益, 这一现象普遍存在。然而那些上游地区往往是中国比较贫困的地区, 在实施生态工程的时候, 资金问题、移民问题、安定问题甚至农民的口粮问题, 都要靠当地自己克服解决, 困难之大, 可想而知。.....于是, “生态补偿”这词儿, 就经常挂在金秀、川西和滇西等地方领导的嘴边。”

¹²⁹ Originally in Chinese: “生态补偿机制建设成效初显”

¹³⁰ Originally in Chinese: “明确生态补偿应坚持的原则:在建立科学的生态价值评价体系前提下, 分别制定生态补偿标准补偿标准应按社会、经济、生态分类, 细化为一个指标体系。.....生态补偿制度安排中应有量化的刚性要求, 使一部分补偿直接用于修复生态。同时, 还应有使用的有效监督制度。”

And in December 2013, *Guangming Daily* published an article authored by a research fellow in the Institute of Zoology of Chinese Academy of Sciences, discussing the possible “market-oriented approach of the ECP”¹³¹ (Xie, 2013). Xie further comments that

*“in the current implementation of the ECP, we note that problems such as unclear range of compensation, unscientific compensation standard, relatively simple compensation mode, lack of funding sources and underdeveloped policies and regulations still exist. Therefore, we need more ‘non-government-led exploration’ on the matter.”*¹³²

What followed several days later was a discussion to it, entitled *Legislation efforts regarding the ECP are in urgent need*¹³³, emphasising that the market-orientated approach proposed by Xie (2013) “is far from enough” (Hai, 2013); and in response to Xie’s proposition of “non-government-led exploration”, Hai claims that the problems listed by Xie

*“... manifest themselves in real world implementation as compensations distributed only by the central government with relatively low standards to qualify the beneficiaries, and the lack of regulation regarding the use of the funds, which is precisely why the legislative efforts of the central government are the most needed.”*¹³⁴

Regarding the two CCP newspapers’ presentation of the NEAAS and the ECP, we note that these discourses could be seen as rather loyal reproduction with some complementation to the idea expressed in The Decision. These articles of the mainstream media have constructed and concretised the seemingly abstract idea of NEAAS and the ECP for the broader society. There are some features that seem noticeable regarding the mainstream media discourses: Firstly, compared to the central government’s discourses

¹³¹ Originally in Chinese: “生态补偿的市场化方式”

¹³² Originally in Chinese: “我国生态补偿机制还存在着补偿范围不明确、补偿标准不科学、补偿模式比较单一、资金来源缺乏、政策法规体系建设滞后等问题。因此，有必要在生态补偿方面，作更多的“社会探索”。”

¹³³ Originally in Chinese: “生态补偿亟待立法”

¹³⁴ Originally in Chinese: “其实这些问题的表现形式为：补偿方式单一，标准偏低，补偿资金使用不规范，缺乏有效监督考核体系。这就是生态补偿立法的渊源和本意。”

that hold the *department* cadres accountable for the management of natural resources as collectively owned assets, the mainstream media has reoriented the discussion and specified that it is the *regional* cadres that should be held responsible, which has untangled the actual conflict between central and regional leadership groups, when it comes to institutional reforms. The discourses on the ECP—especially those delivered before 2013—confirms this conflict as they have uncovered some ‘complaints’ of some regional cadres concerning the precariousness of funding and the central government’s other decisions on ecological issues (“compensation apart from the annual funding ... and the subsidies ...”, “... cadres in the regions like Jinxiu, Chuanxi and Dianxi”). Secondly, the openness demonstrated in the government’s view regarding the actual measures to be taken has transformed into a mild debate, with the preference to a government-led mode over the market-oriented one (“we need more ‘non-government-led exploration’” versus “... efforts of the central government are the most needed”). And thirdly, these newspaper articles have unanimously decided *not* to expose the ‘wrongdoers’ when condemning certain practices (“Some regional officials ...”, “in many provinces ...”, “Some environmental problems ..., whilst others ...”), but have always provided details when talking about successful cases (“Suzhou”, “Kubuqi Desert”, “Elion Group”). This practice is hardly unbiased and to a great extent gives off the mainstream media’s mission of “convincing people”, or to be more specific, their role of propaganda instrument of the CCP.

2.1.3 Academics’ view

As the same keywords were used to search in the CNKI’s advanced search engine for academic journals and to search for content in the “Chinese core journal” database within the same period, more than 6000 results can be found. This perfectly reflects the lively atmosphere in this domain of research in mainland China lately. Considering the time lag between academic publication and the social event under discussion (Björk & Solomon, 2013), especially when compared to the timeliness of policy document and newspaper articles, the author decides to add “The Decision”¹³⁵ in the set of keywords for the search,

¹³⁵ In Chinese: “全面深化改革若干重大问题的决定”.

in order to increase the comparability of the discourse material for the three types of views. 202 academic papers are found in this manner.

At first glance, we can easily notice that compared to the government and mainstream media discourses that are characterised by their rather apparent intention of informing and convincing the public, the academic papers searched and acquired are intended for a difference audience: The focus of the papers is quite specialised in terms of research domain and in all, these papers involve a much bigger variety of subjects. Nevertheless, they could still be categorised based on their subjects, and characterised by the following features.

To start with, the most salient feature of the academic view is that unlike the policy documents and newspaper articles that focus on the pragmatic facets of the NEAAS, the academic publications involve a considerable number (29) of papers that attempt to conduct pure theoretical exploration, notably in the sense of trying to integrate the NEAAS into theories of public governance and Marxism macroeconomics, as it is stated by Li (2014) in her paper entitled *State governance modernisation and accounting reform*:

*“‘Accounting is the basis of governance.’ ... Among various initiatives of reforms, the construction of ecological civilisation is attached to an unprecedented importance: ... [citation of sentences related to the NEAAS in The Decisions]... all the detailed decisions above have placed enormous demands to accounting professionals, and deserve in depth study in terms of theoretical exploration for accounting researchers. ...”*¹³⁶

Similarly, *A research of the concepts, necessity and countermeasures regarding the national ecological environment governance, State governance modernisation and the national audit: Retrospect and prospect* and *Constructing the state governance system under the Marxist Theory*¹³⁷ and so on all agree that the establishment of the NEAAS

¹³⁶ Originally in Chinese: “‘天下欲治计乃治’.....精辟论述了会计与国家治理的关系。在全面深化改革的重大举措中，生态文明建设被提到前所未有的高度：.....（以上所引用的《决定》中）每一项具体任务都对会计工作提出了很高要求，都足以成为会计理论研究的一个重要课题。.....”

¹³⁷ Originally in Chinese: “国家生态环境治理现代化的概念、必要性及对策研究”，“国家审计与国家治理体系现代化：回顾与展望”，“马克思社会结构理论视角下的国家治理体系构建”

contributes greatly to the current institutional reform aiming at improving the current public governance structure.

Secondly, since all the papers under this investigation include “The Decision” in the content, it is not surprising to find that 70% of these papers clearly find the origin of the subject discussed in The Decision. For instance, articles entitled *Some thoughts and policy recommendations regarding the delineation of ecological ‘red line’ for prairie protection*, *Theoretical reflections on natural resource auditing of cadres on departure of post*, *Environmental cost accounting for coal enterprises from the perspective of ecological compensation*, *Construction and innovation of institutional mechanisms to attain ecological civilisation: From ‘institutional trap’ to ‘institutional dividend’*¹³⁸ and so on, all take one or two concepts mentioned in The Decision, express the authors’ understanding and develop this understanding into a more academic and rigorous manner. These papers could be further grouped into two categories: On the one hand, the search of ‘the most appropriate’ accounting framework is prioritised. For example:

“... *The Decision requires the establishment of the national natural resource balance sheet. After a careful review of relevant information and literature, especially those related to environmental protection from developed countries, the author believes that the concept the closest to the one evoked in The Decision is the Environmental-Economic Accounting: Central Framework 2012 (SEEA 2012) recently revised by the United Nations and the World Bank. ... In the seven natural resource accounts of the SEEA 2012, ... the identity of the balance sheet is ‘asset source = asset utilisation (occupancy)’.* ... As an inseparable part of the System of National Accounts (SNA), the Chinese SEEA should be prepared by government statistical agencies and follow the identity indicated in the SEEA 2012”¹³⁹ (Geng, 2014).

¹³⁸ Originally in Chinese: “草原生态保护红线划定的基本思路与政策建议”, “关于自然资源资产离任审计的理论思考”, “生态补偿视角下的煤炭企业环境成本核算”, “中国生态文明制度体系的构建与创新——从“制度陷阱”到“制度红利””

¹³⁹ Originally in Chinese: “.....《决定》要求建立自然资源资产负债表。在仔细阅览了相关的资料与文献,特别是环境保护领域的相关国外资料后,笔者认为,与我国这种称谓最相近的业务类型应当是联合国和世界银行等组织近期修订的《环境经济核算中心框架体系》。.....SEEA 2012 由七个自然资源资产账户组成,.....以“资产来源=资产使用(占用)”的恒等式展开。.....笔者认为,自然资源资产负债表不能脱离国民经济核算表而存在,由政府统计机构负责编制,资源资产表格的核心就是资产来源=资产运用(占用)。”

“Currently, all countries that have been exploring the preparation of the natural resource balance sheet adopt the SEEA (2012), with consideration of the actual situation of their countries.... The biggest difficulty in preparing the balance sheet is the measurement of the natural resource assets. ... As for the preparation of the balance sheet, on the assets side, we propose to group and list the assets according to their nature; ... on the liabilities side, we propose to include the costs of pollution and pollution treatment, which should not only reflect loss caused by the damage that has already been done, but also the possible damage in the future, as well as the costs for restoration”¹⁴⁰ (Wang & Jiang, 2014).

And on the other, a good number of papers focus on the conception of the mechanism that facilitates the assignment of leadership responsibility in relation to the natural environment conservation, for instance:

“Environmental responsibility is a part of social responsibility, which is inseparable with ‘public accountability’ based on the principal-agent relationship. ... The author believes that the government-led environmental auditing is essentially an instrument for controlling the behaviour of the cadres who act on behalf of the government when it comes to environmental exploitation. The logic is to ‘personify’ government behaviours, so as to audit the environmental responsibility of the government under the leadership of (a) specific cadre(s). The idea of oversight and accountability of ‘the person’ is highlighted”¹⁴¹ (Ma & Wei, 2014).

From the above quoted excerpts which are highly representative among the papers of this category, we note that the Chinese domestic researchers have set out to figure out the CCP central leadership’s intention and endeavour to concretise this intention. The SEEA is indisputably targeted as *the* framework to adopt since it symbolises the mainstream

¹⁴⁰ Originally in Chinese: “目前，各国都是在 SEEA 中心框架（2012）下结合本国实际情况探索编制本国特色的自然资源资产负债表。.....编制报表的最大难点是如何量化自然资源资产。.....对自然资源的资产和负债并按照一定的标准进行基本分类：如资产方按其性质分类，.....负债方则主要包括污染成本，治理成本等。负债方反映的项目不仅是已经造成的损失，还应当包括未来可能仍将产生的损失，以及为了治理污染或恢复原样而需要付出的代价。”

¹⁴¹ Originally in Chinese: “环境责任属于社会责任的一部分，而社会责任与公共受托责任密不可分。.....笔者认为，政府环境责任审计本质上是控制和创新领导干部政府环境行为的管理工具，将政府环境行为人格化，审计领导干部个人承担的环境责任，突出了对人的监督和责任追究。”

theory and the set of practices the most widely accepted internationally. However, the implementation of SEEA in China is endowed with ‘Chinese characteristics’, in that the ‘reformed’, or a more empowered environmental accounting and auditing scheme is envisaged to render the *persons* in charge accountable, rather than the relevant organisations. Further, all the authors acknowledge the measurement of natural resources as the biggest difficulty. Therefore, even though all the researchers choose to follow the same widely accepted SEEA framework, their propositions of measurement differ a lot. And what seems to be the mainstream idea is the one proposed by Geng (2014), whilst the researchers of ‘ecological liabilities’ school being a minority in this domain.

Another point worth noting is that, the two main subjects addressed in academic writings are in perfect accordance to the government view of NEAAS presented earlier, namely the management of physical resources and the assignment of responsibility. Moreover, except for pointing out the great difficulties facing the establishment of this scheme, alternative views such as suggesting an accounting framework other than SEEA (using ‘less authoritarian’ indicators such as the genuine progress indicator (GPI)), or dissenting voices do not exist at all. In other words, all the prestige Chinese academics who have published their articles on this topic in the core journals are unanimous, not only in choosing to fully support the central authorities’ decision, but also in supporting the adoption of the same framework that seem to have been suggested in The Decision. This high degree of consistency exists in policy documents and academic writings could be explained by the close relations, or even the ‘fusion’ of Chinese domestic academics and government bodies (Wang, 2016), which is to a large extent due to the fact that academics in China often also hold positions in government, and therefore it is “logic and traditional” for academics in China to support government positions (Ding & Graham, 2007).

As to academic publications related to ECP, the focus on the establishment of scientific thresholds is once again underlined by the scholars, especially scientists specialised in ecology. Apart from this, the discussions are on the one hand in straight line with relevant ‘international practices’, namely the “payment for ecological (or environmental) services” (PES) and the theory of externalities, stating that in theory, the ECP is supposed to be implemented according to the PES principles. For example:

*“In economic sense, Eco-compensation is defined as charging for (or compensate) the damage (or protection) of the environment in order to increase the costs (or benefits) of the respective actions and to encourage the respective actors to reduce (or increase) the external diseconomies (or external economies) for the purpose of protecting the resources”*¹⁴² (Chen, 2013).

*“At present, there are very few researches on Eco-compensation in agriculture. We are still in the exploratory stage both in terms of theory and practice. ... The Agro-Eco-compensation emphasises the compensation for agricultural ecological functions. It should also be in line with the international practices of the PES, following the ‘beneficiary pays’ or the ‘polluter pays’ principle”*¹⁴³ (Zhang *et al.*, 2012).

On the other, given the several years’ experience of pilot projects, the academic discussions (and especially those recent ones) over the ECP tend to be ‘introspective’ concerning the last few years of ECP implementation, and intend to further distinguish the Chinese ECP from the ‘traditional’—or in other word, ‘Western’—PES practices under the “polluter pays principle (PPP)” and the use of market mechanism of charging the ‘beneficiaries’ or users, which do not seem to have curbed environmental degradation at all. The ‘Chinese characteristics’ of the ECP are presented, again, as the use of government intervention. For example,

“Fiscal policy is an important means to adjust and control the economy. Its economic interests can induce the changes in development mode of a region and the whole society. In China’s current fiscal system, the transfer payment system

¹⁴² Originally in Chinese: “经济学意义上的生态补偿定义为通过对损害（或保护）资源环境行为进行收费（或补偿），提高该行为的成本（或收益），从而激励损害（或保护）行为的主体减少（或增加）因其行为带来的外部不经济性（或外部经济性），达到保护资源的目的。”

¹⁴³ Originally in Chinese: “目前国内关于农业生态补偿的研究相对较少，理论与实践均处于探索阶段。……农业生态补偿的概念，强调对农业生态功能的补偿，与国际上通行的生态（环境）服务功能付费原则相一致，体现的是“谁受益、谁补偿”或者“受益者付费原则”。”

and the 'special fund' policy play an important role for the establishment of Eco-compensation mechanism¹⁴⁴(Wan et al., 2005).

“(Compared to market environmentalism,) non-market environmentalism claims that the 'subject' of the Eco-compensation should be representatives of specific regions, namely the regional governments. This setting could avoid two key issues, the first being the problem of the failure of expressing the consumer preferences regarding the ecological environment seen as public goods, the second being the problem of conducting the large-scale time-consuming negotiation due to differences of consumer preferences once expressed. ... The 'object' of Eco-compensation under the non-market environmentalism should still be regional governments, since after having been compensated, the governments can be supervised as a whole by the society, during the entire time of using this fund to improve the ecological environment; unlike in the case under the market environmentalism where numerous individual objects are to be supervised separately. In this way, the efficiency of Eco-compensation is improved and the costs of supervision are economised”¹⁴⁵ (Chen, 2013).

2.1.4 Reflexions on the discursive practice of the three key-players

To summarise the above presented government, media and academic discourses from a CDA perspective, these discursive practices of discourse constitute the socio-cognitive dimension of text production and interpretation in regard with the social event of establishing and implementing the NEAAS and the ECP (Fairclough, 1995), where the 'power' in the sense of political economy is exerted to the society (Hopwood & Miller, 1994), especially in the public communication of the relevant political ideas.

¹⁴⁴ Originally in Chinese: “财政政策是调控整个社会经济的重要手段，主要通过经济利益的诱导改变区域和社会的发展方式。在中国当前的财政体制中，财政转移支付制度和专项基金对建立生态补偿机制具有重要作用。”

¹⁴⁵ Originally in Chinese: “（相对于市场环境主义，）非市场环境主义补偿的主体应该为辖区的代表者，一般情况下是政府机构。这就避免了两个关键性的问题，一个是对生态环境这个公共品消费者偏好表达失灵问题，一个是因为偏好表达不同进行大规模的谈判问题，因此提高了生态补偿效率。……非市场环境主义的补偿的客体依然是政府机构，接受生态补偿手以后，能够降低合同执行的监控成本，因为将政府作为一个整体做的监督对象，与市场环境主义的众多个体分别监督不同，直接提高了监控效率，最终使得政府将生态补偿金用于生态改善活动。”

Under the guideline of Fairclough's (1992) proposition regarding the discursive practice of a discourse, it is found that the discourses released by the three different key-players not only show significant interdiscursivity. A high level of homogeneity is observed in the above examined three different sets of texts which are supposed to be constituted of rather heterogeneous discourse conventions; but also demonstrate extremely high levels of intertextuality, especially in the communication of the NEAAS and the ECP by the media, where both government and academic discourses are heavily quoted and commented. Through the three institutions' highly consistent constructive presentation from different angles, NEAAS, together with ECP, is *constructed* as a revolutionary political change that represents China's highest central authority (the CCP Central Committee)'s resolution, and the latest research results (SEEA and PES) of the world's most authoritative institutions (the UN and the WB). It is further expected that as the localised version of SEEA, NEAAS will tackle at one time two critical problems facing China and facilitate the 'modernisation' of the country. This clear preference to the international practices, or the so-called Global Standard Institutions (GSI)—even though having already been internationally criticised by the academics (as it is the case for PES)—echoes almost perfectly the observation made in the previous chapter concerning the event of the IFRS convergence. Further, what is equally noticeable is that, the boundaries among these discourses issued by the government, mainstream media and domestic academics are largely blurred, in that within the much centralised system of state governance, these three seemingly independent sectors of activity are either directly or indirectly controlled by the central authority, through various channels.

2.2 Contextualising the social construction of reality for NEASS

In this section, the third layer of CDA is conducted in the hope of providing a better understanding on the discourses delivered by the above mentioned three key-players regarding the NEASS and the ECP. As Blommaert (2005) puts it, "'understanding' ... is the result of contextualisation processes in which text ... are indexically 'made to fit' a particular (set of) context(s) by participants in the interaction." (pp. 42 – 43) As further regards the discursive approach of CDA, it is important that the context is illuminated by the text, rather than pre-set and then linked to the text (Livesey & Kearins, 2002). In line

with these notions, this part of the study sets out to contextualise the NEAAS/ECP first by bringing out the context from the text, and looking for the social reality that is manifested in real world practices beyond the realm and the time of NEAAS/ECP establishment; then by contesting this broader social reality with the meaning of the NEAAS/ECP that has been constructed and further demonstrating the way the latter fits the former.

2.2.1 Media censorship as institutional context in the NEAAS/ECP related communication

As mentioned in Section 1.1, *People's Daily* and *Guangming Daily* are both major news outlets of the CCP, and play the role of 'guiding' public opinion in China. In fact, the reason why these two papers are considered to have this power of 'guidance' is the probably widely known fact that the media censorship is a significant institutional factor that conditions the discursive practice of the relevant discourses, especially in the dimension of discourse distribution. Through censorship, the centralised control over mass media restricts the coverage of events, which have the capacity to influence the audience and its broader expectations (Boden, 2008; Brady, 2006; Goldman, 1994; Shirk, 2010; Zhang, 2014). When it comes to the establishment of NEAAS and other major decisions in society, the two newspapers demonstrate constant efforts in explaining the spirit of the central authority and therefore in constructing *people's* thinking: here the word "people" is used since it is not only the thinking of their direct readers, namely the CCP members, but also the thinking of the general public that is influenced in this way, because the discourses of these two newspapers are always (being asked to be) 'appreciated', reproduced and spread by other major news outlets in mainland China (Zhang, 2012, p.153).

As underlined in the discussions over the methodology chosen by this dissertation, the critical aspect of the CDA entails the revelation of this kind of political and ideological hegemony, as well as the investigation of the historical evolution on the matter.

Before "the pre-reform era" as labelled by Shirk (2010), China had no journalism as we know it, only propaganda. The mass media was "the throat and tongue of the party" that

spoke loud for the CCP policies; and the Chinese public were used to receive all of its highly homogenous information from a small number of officially controlled sources: Up to 1979, there were only 69 newspapers in the entire country, all run by the Party and the government (p. 7), among which *People's Daily* and *Guangming Daily* were way on the top of the ranking for the amount of readers reached, since all workplaces were required to have subscriptions and it was a ritual for people who go to work to read newspapers at the workplace every morning. Both deeply engraved with characteristics of propaganda instrument, the image built by these two papers are slightly different: Whilst the former is engaged to promote its authoritativeness by delivering first hand political information, the latter claims itself as “a spiritual homeland for intellectuals” (*ibid.*), which to a large extent explains the implicit differentiation—with the former tilting into political issue and the latter academic discussions—in terms of the style of articles published in these papers examined earlier.

The media reform in the early 1980s following the 1978 “reform and opening up” was conducted under the guideline of marketisation, in the sense where the news outlets in the forms of newspapers, magazines, TV stations and so on were receiving cuts in their government subsidies and were driven to find their own way to make money, through the increasingly loosening control on selling advertisement and on retaining the profits from these sales (*ibid.*). Though having gained partially their financial independence, the media institutions did not gain any independence in any other domain. Until today, the CCP maintains almost complete control over the nation’s 358 TV stations and 2119 newspapers which constitutes the primary media available to more than one billion Chinese citizens (Zhang, 2012, p. 138). And it was not until 2003 that the CCP eliminated mandatory subscription of the two newspapers mentioned above (Shirk, 2010). Even with the rise of internet media, the media censorship of the State is not undermined in any substantial way. As observed by Zhang (2012), “in many ways, the new technology has actually helped authorities tighten their censorship of the media, rather than liberating the information exchange” (p. 138).

Equipped with the ever developing technologies used for censorship as well as with the administrative mechanisms inherited from the pre-reform era, the State retains operational power to implement its laws and regulations on journalism. For instance, under the *Law of the PRC on Guarding State Secrets* promulgated in 1988, many issues including

military affairs, projects for economic and social development, technological development, criminal investigations by national security agencies, or other subjects determined by state institutions are secret in nature (Article 8 and 20). Similar restrictions are imposed by *Provisions on the Protection of Secrets in News Publishing* (1992), which states that journalists are required to consult with the relative government agencies and acquire relevant permission prior to publication, whenever in doubt about the status of information sources (*ibid.*). Moreover, censorship extends extensively to the access to information published outside mainland China, especially when critics or dissident voices are published by foreign medias (see a recent example in Feng, 2016). Therefore today, as qualified authoritarian information sources, *People's Daily* and *Guangming Daily* still play the role of setting the official tone—and of setting that of the domestic intellectuals—in the public communication regarding major social events in China.

Due to these historical legacies and the current status of the Chinese mass media, not only the central- and regional-level CCP cadres (government officials), but also all the people who work with the government—within which domestic academics occupy an important proportion—are used to read the official press between the lines and to track policy trends in these papers. This point is otherwise demonstrated in Stockmann's (2010) survey research case conducted in China. It also to a large extent echoes Section 2.1.3, which demonstrates that the academic publications on NEAAS/ECP seem to have been in high consistency with the official discourses.

2.2.2 The central authority's several attempts to improve environmental management

As mentioned earlier in Section 2.1.1, even though it is in 2013 that an unprecedented importance was attached to the establishment of NEAAS, the central authority's intention of promoting the idea of environmental conservation is not new. In fact, the slogan of “We do not follow the ‘pollution first, treatment later’ development course of the West” was put forward by the CCP Central Committee as early as 1978, even before the official establishment of any government department or law dedicated to environmental protection. This is the first time the CCP Central Committee provided instructions

concerning environmental protection issues ever since 1949 when the CCP took power (Qie, 2008). Armed with the first *Environmental Protection Law of the PRC* issued the following year, the PRC's persistent fight against environmental degradation in the meantime of the spectacular economic development has marked its beginning.

The slogan was repeated for more than two decades. However, real actions against environmental degradation were limited. Whilst environmental degradation could be seen as an unavoidable side-effect of rapid economic growth, the degree of the degradation reflects the government policy choices (Wu *et al.*, 2014). Apparently, in the trade-offs between economic growth and environmental conservation, the former has gained ground, since after so many years of underdevelopment, the pursuit of 'delightful' GDP growth rates has been for a long time the priority of the CCP, the central and regional governments, as well as the Chinese people. Meanwhile environmental degradation did not show any sign of slowing down, but quite the opposite, it has speeded up due to the rapid industrialisation of the country. Numerous relevant 'natural' disasters, such as sandstorms and acid rains made their appearance more and more frequently in various regions, which drew domestic and international attention (*cf.* Jiang *et al.*, 2008; WB, 2007).

It is not until the succession of the "fourth generation of leadership" in 2002 that the systematic management and control schemes in regard with the environment were finally again put on the agenda. On the "Symposium on Population, Resources and Environment of the Central Government" held in 2004, the President at the time Hu Jintao further explained his "scientific outlook on development"¹⁴⁶ and stated that:

"We should conduct research on green national accounting methods and explore how to include resource consumption, environmental damages and benefits into the evaluation system of economic development. By doing so, we could establish

¹⁴⁶ This ideology is widely viewed as created by Hu Jintao, who was in power from 2002 to 2013. It is the latest notion added to the ideology of "Socialism with Chinese characteristics" ratified in the CCP's constitution at the 17th Party Congress in October 2007 (See more in Section 3.1 of Chapter III).

and maintain a relatively balanced relationship between man and nature”¹⁴⁷ (Hu, 2004).

Compared to The Decision where explicit instructions (“improve the property rights system”, “establish a national natural resource balance sheet and conduct natural resource auditing”) are given, the terms used in Hu’s discourse seem to be endowed with more symbolised (“*green national accounting*”) and exploratory flavour (“conduct *researches ... and explore ...*”). Under this guidance, Wen Jiabao, the Premier at the time, announced in the same year that a “green GDP index” (GGDP) would *replace* the current GDP index as the performance measurement mechanism for government and party officials at all levels (Wang, 2013).

Convened by the central authority, a group of researchers started to work on the trial project of the first GGDP accounting report for the year of 2004 using the SEEA (the 2003 version). After two years of exploration, a 15-page report (public version) was finally published in September 2006, in which the financial loss caused by pollution was estimated at 511.8 billion yuan (82 billion US dollar), or 3.05% of the nation’s economy (Sun, 2007; Wang *et al.*, 2006; Wang, 2013). This appears to be an extremely conservative estimation due to the lack of data from many sectors and provinces (Jiang *et al.*, 2008), and also because of the fact that, apart from the relatively straightforward financial losses such as costs of sewage treatment and loss in agricultural and fishery harvest, the financial losses resulted from environmental degradation related harms to human health are difficult to be taken into account.¹⁴⁸

The 2004 GGDP report is the fruit of the PRC’s first and till today the only attempt to apply a national level sustainability-related accounting scheme, since the government withdrew its support for the GGDP methodology and suppressed the 2005 report, which had been due out in March, 2007. The reason is estimated that later, it became clear that the adjustment for environmental damage had reduced the growth rate to politically unacceptable levels, nearly zero in some provinces, which put the country in an

¹⁴⁷ Originally in Chinese: “要研究绿色国民经济核算方法，探索将发展过程中的资源消耗、环境损失和环境效益纳入经济发展水平的评价体系，建立和维护人与自然相对平衡的关系。”

¹⁴⁸ According to Mr Wang Yuqing, former deputy director of the State Environmental Protection Administration. (Information available on the People’s Daily website at: <http://politics.people.com.cn/GB/1027/17365248.html>, last consulted on 2/3/2016)

“awkward situation” (Kahn & Yardley, 2007). As analysed by Ma (2007) after interviews with the convened experts, the collapse of this project was due to “major disagreements between the environmental protection and the statistics departments” of the central and regional governments, who were reluctant to conduct such calculations, and especially, to communicate the results to the public. Thus the GGDP, the ‘hot topic’ at the time, had gradually faded out of people’s sight.

What is considered as directly related to this sudden suspension of the GGDP project are the issues raised in another report entitled *Cost of Pollution in China* (2007), produced by the WB in cooperation with the State Environmental Protection Administration of China¹⁴⁹ in the same year. The Chinese government who had taken the initiative to approach the WB to conduct such a study jointly, has ‘forced’ the WB to ‘doctor’ the report by removing the part (nearly 1/3 of the report) containing notably the statistics showing that around 750,000 people die prematurely in China each year because of pollution, before its official issuance.¹⁵⁰ The reason for this cutting-down of the public version of this WB report is similar to the one for which the GGDP was suspended: the number was too shocking to be released by—or even simply to be known by—the Chinese government itself.

The environmental degradation does not seem to slow down the environmental degradation afterwards. In fact, its consequences have turned from recessive to dominant. Taking the case of air pollution as an example, the smog ‘weather disasters’ have become increasingly frequent and severe. According to an evaluation of a single month’s smog in China, the direct economic loss caused is evaluated at 23 billion yuan (3.7 billion US dollar), and the damage for the acute health effects amounts to 22.6 billion yuan (3.6 billion US dollar), which is twice the amount of a ‘non-smoggy’ month (Mu & Zhang, 2013). Meanwhile, what should be kept in mind is that air pollution is only one aspect among all kinds of severe environmental degradations in China, thanks to its immediate visibility. It is in this context that, as stated in session 3.1, the just-gained-power fifth generation of the CCP leadership decided to give a second chance to the account-for-the-

¹⁴⁹ Predecessor of the Ministry of Environmental Protection of China.

¹⁵⁰ Information available from the *Statement from World Bank China Country Director on ‘Cost of Pollution in China’ Report* at <http://www.worldbank.org/en/news/press-release/2007/07/11/statement-world-bank-china-country-director-cost-pollution-china-report>, last consulted on 12/12/2015.

environment attempt, only incarnated this time in a more complete and sophisticated proposal.

What seems interesting is that, the CCP leaderships' succession of power in China occurs every 10 years, which is a practice implicitly regulated by the PRC constitution (Li, 2009; National People's Congress, 2007; Wang & Anastas, 2012; Wang & Zheng, 2012). Coincidentally or not, the rhythm of two SEEA/NEAAS attempts not only matches that of the SEEA reversion, but also matches almost perfectly that of the two latest CCP leadership successions. This might well be interpreted as the new leadership's intention to impress the public, or to be more specific to reassure the Chinese people that, armed with the (improved) 'solution' provided by the UN and the WB, the most 'authoritative' institution in the world, the new generation of leadership would no doubt (better) tackle the environmental problem that has been harassing the Chinese people's livelihood for a long time.

There is an interesting fact to notice here – It is in 2007, just about the same time when the GGDP was officially pulled off, and it is at the CCP 17th National Congress chaired by Hu Jintao, predecessor of President Xi, that the concept of “ecological civilisation”, the core ideology of the NEAAS, made its formal debut appearance. In the 16th CCP Central Committee's report (prepared and announced by Hu) to the 17th CCP National Congress, it is stated that the PRC is to “build an ecological civilisation and a model of growth and consumption, as well as industries, which are frugal in their use of energy and resources and protect the environment” (Ma, 2007). This proposition of Hu was kept rather low profile at the time of its debut, and has been promoted strongly ever since the current PRC president Mr. Xi took power. It seems that the tribute is paid to the latter rather than to the former. This phenomenon demonstrates the continuous efforts of the central authorities in terms of reorienting the 'dominant ideology' of the country, as well as a clear trace of inheritance and development in terms of the national governance philosophy within the generations of top leadership.

2.2.3 Persistent problems in the CCP cadre appraisal mechanism

Before entering the discussion regarding the novelty of ecological audit, we could first take an interest in China's state governance structure. Though it is claimed in the official discourses that the CCP and the Chinese government are two different political organisations, and the respective administrative systems are different, it is to be noted that in practice, the leadership group (or at least the absolute majority of the leadership group) of all the workplaces, especially authoritarian institutions such as national and regional governments, media outlets and universities, is composed by CCP 'cadres' who are essentially senior and loyal CCP members (Walder *et al.*, 2000).

In the state governance system, the hierarchy in the executive branch could roughly be described as follows: The State Council, equally known as the "Central People's Government", is currently composed of 35 members including a 7-member standing committee, and posits directly under the President. It forms one of three interlocking branches of power, the others being the CCP and the People's Liberation Army. As the President of the PRC, General Secretary of the CCP and Chairman of the Central Military Commission, Mr. Xi Jinping is currently the top leader of the central government, the party and the military force in China. Below the State Council are top cadres of China's provinces and four "province-level" municipalities (Beijing, Tianjin, Shanghai and Chongqing). Beneath these are, in descending order, top cadres of cities, counties, and townships or villages. Despite a relatively stable composition of leadership on the top level, most cadres are rotated—reassigned to new positions, perhaps in new locations too—every three or more years. Conditional on a 'harmonious' political attitude, a cadre's past performance, evidenced by having overseen high tangible economic development outcomes, is shown to augment their odds of promotion. This arguably 'merit-based' promotion system is thought to induce competition between regional governments to produce tangible 'evidence' of economic development, which is the delightful GDP index numbers, throughout the hierarchy (Maskin *et al.*, 2000; Wu *et al.*, 2014).

Apart from this hierarchic system in the government structure, there is also a CCP hierarchy that exists both independently and integrally within the central and regional governments: Take the above presented governmental hierarchy at the central and

provincial level for instance, it is the cadres of the CCP Politburo (25 members) alongside other CCP Central Committee (205 full members and 171 alternate members ‘elected’ on the latest 18th Congress¹⁵¹) that occupy the apex of power by holding the above mentioned top positions as government officials. Broadly speaking, all government officials are CCP members, whilst the CCP system assigns its own cadres at each level of the leadership to oversee administrative and political matters. This “elite dualism”, as observed by Zang (2001), was once characterised by a significant personnel overlap between the two institutions in the early years of the communist regime, and after the 1978 reform, by an alleged ‘division of labour’, where there are two separate hierarchies of authority from the bottom to the pinnacle of power. Concretely, at the central level, the ‘top leader’ (currently Mr. Xi Jinping) oversees all the activities of the country, notably in the governmental, political and military aspects, as demonstrated by the official titles of Mr. Xi mentioned earlier. Beneath him, the central government takes care of national economic activities and administrative affairs, whereas the CCP central organisations manage Party affairs, political propaganda, and personnel matters (Lampton, 1987). At provincial level, there is a provincial government and a provincial CCP committee, with the former running administrative affairs and the latter providing guidance and policies. The provincial CCP leaders are the ‘bosses’ who make ultimate decisions.

This elite dualism exists because the CCP needs a government system composed of personnel with technical credentials to manage the economy, and in the meantime a Party hierarchy composed of members endowed with high political loyalty to retain political power (Zang, 2001, p. 192). Nevertheless, as pointed out earlier by Wu (2014), the two sets of cadre structure within the PRC authorities have left a gap in the system to trace a cadre’s accountability, especially when it comes to environmental problems, since very often, it is the Party cadres who decide to introduce the pollutant industry to the region in order to boost the regional economy, whereas it is not them, if anyone, who’s held accountable for the ensuing environmental degradation. This is indeed the ‘Chinese characteristics’ of the already complex state governance problems regarding environment issues, where in addition to the classical agency dilemma and the unclear property rights for the collectively owned natural resources (*cf.* Ostrom, 1990), the governments’ accountability is even more weakened by this two-fold bureaucracy.

¹⁵¹ Namely the 18th National Congress of the CCP held on November 8, 2012.

For what is relevant to the discussion of the NEAAS, it is found that in this governmental and political system, the cadres in the regional governments take the GDP as the scores obtained at their periodical exams that signify their achievements and determines their ‘awards’ – the promotion. As shown by a quantitative study conducted on 283 of China’s 287 city-level governments from 2000 to 2009, if the cadres of these city-level regions had accelerated the region’s GDP growth rate as compared to their peers in the previous term, the probability for them to get a promotion would increase by 8%. Under this traditional incentive scheme, not surprisingly, it has become a tradition that the sum of the GDP figures reported by the country’s 31 provinces and regions adds up to more than the national total. In 2013 For instance, the sum of provincial GDP was 11% higher than that of the national one (Keohane, 2014), which implies that nearly all regional cadres have been providing exaggerated numbers. In contrast, the regional governments’ spending on environmental improvements is at best uncorrelated with the cadres’ promotion odds, if not negatively correlated (Wang, 2013; Wu *et al.*, 2014), which to a great degree has statistically proved the existence of the ‘GDP worshipping’ cadre appraisal mechanism, as well as its negative impacts on regional governments’ motivation to protect the environment.

From this perspective, we could say that the NEAAS featured by the audit aspect is set out to tackle the environmental problems through improvements of the current incentive mechanism of the cadres. By monitoring the use of natural resources and other efforts on environment protection, and by integrating relative indicators into the cadres’ performance auditing, the pinnacle of power in China expects that, as the true heads of the regions, the CCP cadres would attach more importance to environmental issues on top of pursuing GDP growth of the region, especially when they want to ‘score high in the evaluations’ in order to get a promotion. Essentially, the NEAAS is built to target specially the top CCP cadres at different levels of the power system, since policy was released at the CCP National Congress, the most influential Party member meeting in China. The top leadership’s confidence in tackling environmental problems through a cadre incentive scheme implies the overwhelming decisive role of the Party cadres in determining the economic and social conditions of the country. Along with other items proposed in The Decision’s reform package, the NEAAS challenges powerful, deeply entrenched interest groups, such as state-owned enterprises and regional party cadres, who are extremely reluctant to implement these decisions (Shambaugh, 2015).

2.2.4 Particularities in implementing the ECP to the agriculture sector

The features of China's agriculture, especially the difficulties in relation to systematic management of agricultural activities have already been presented extensively in Chapter III, when discussing the implementation of the IAS 41 in agribusinesses. Instead of conducting similar desktop analyses on the problematic issues in policy implementation, this section focuses mainly on interview data acquired from the fieldwork. By contrasting them with the written materials used in previous sections, more elements worth noting could be brought out, whereas they could probably be missing in the written discourse analyses.

As mentioned earlier in Section 2.1.3, in terms of funding, though having been contested by several, the Chinese scholars' support for government intervention—especially that of the central government—in the ECP implementation is rather obvious. This is further confirmed by several interviewees, who hold the position of specialised researchers in governmental institutions. When asked to present this programme and measures for its implementation, they state that

“the implementation of ECP depends mainly on the form of transfer payments, complying with the “Regulations on Recurring Transfer Payment”. We (the ECP Bureau of the NDRC) assess comprehensively every relevant county in accordance with its size in terms of land and population to determine the amount to be allocated. Apart from the compensation to be determined for mineral activities, all the ECP funding is directly transferred to us and the ECP bureau in MOA; then we allocate the funding to local governments and they in turn distribute appropriate sums to individual households”(Mr P, NDRC).

“Eco-compensation is envisaged as a long-term project rather than a temporary one. The advantage of having the allocation for the project directly from the central government is that, once the project is established and approved, the money is guaranteed, and generally there wo not be any interruption. This is

extremely important especially for the environment conservation projects”(Mr P, NDRC).

“The central government invests (on environmental projects) more and more every year, because now we are fully aware of the importance of environment protection. Eco-compensation could be seen as a large infrastructure project, yet it is different from the other large infrastructure projects: Projects like the ECP has a direct bearing on people’s livelihood thus should rely completely on government investment; on the other hand, projects such as road and railway construction could rely on the power of the market since the impact on people’s livelihood is less direct”(Mr A, MOA).

However, this reliance on fiscal policy to resolve the problem is otherwise questioned by another interviewee, Mr H, environmental economist who works in the Ministry of Environmental Protection (MEP). He is concerned that this ECP would finally turn into another set of environmental taxes that do not seem to have functioned as they should have in environment protection:

“We have studied the ECP lately. In terms of the source of funding, I have the impression that essentially, it is much like our existing environmental taxes that are nothing but variants evolved from sewage charges that have long existed. Even if these taxes are levied, the impact on businesses will not be too great. For example, in 2010, nearly 490,000 firms across the country paid sewage charges that amount to 18.8 billion yuan, which was only less than 1/400 of that year’s fiscal revenue.”

Either being supported or contested in researches, it is true that the actual implementation of the ECP relies heavily on the support of the central government, which appears to have partially—if not entirely—drifted away from the ‘imported’ theoretical framework, namely the market-oriented “payment for ecological service” as claimed in the government and academic discourses initially. What remains to be further looked into is the part of “how the fund is used”. Of course, the whole picture on this issue is difficult to be acquired; however one could take a good guess based on the details given by the MOA officer interviewed:

“The compensation was implemented in 2011 but the research on it had already started in 2009. And since then the National People’s Congress has treated this project as one of the priorities on their agenda. A lot of research projects were launched and many specialists at home and abroad were consulted in order to establish a complete evaluating standard based on scientific measurement such as the carry capacity per acre of the prairie. ... Of cause, the eventual amount of the compensation payment is determined largely by the balance of central government budget for 2010. At the end of 2010, we had 13.6 billion yuan of fiscal surplus, and the government decided to use all this money on the Eco-compensation project. The eventual payment standard was actually a proportional allocation of the 13.6 billion according to the prairie area owned by each province.”

And in regard with the actual standard for allocation,

“the measurement of the compensation amount is uniform across the country. As long as the land is qualified to receive the compensation, regardless of the status of the land, we count 6 yuan per acre, with 10 yuan more per acre as performance incentives, plus 500 yuan production grants per family. We calculated according to this uniform standard and send money to the province. In the province, they can ‘fine tune’ the actual allocation to individual households with this total amount, with reference to their specific local conditions such as the farmer's economic conditions and the quality of pastoral prairie.”

Finally, rather than an eco-system conservation project,

“This ‘compensation’ is actually endowed with a nature of poverty alleviation. It is much like that the government is issuing wages to the farmers.”

In short, within the first few years of implementation, it was the total amount of money available that has defined the “standard”, rather than the standard determined the amount of allocation which is supposed to be put aside for this project. With regard to this inconsistency in written and spoken discourses on the matter, it is necessary to recognise the role played by the above mentioned institutions (in charge of the ECP management) in

the society. As prestigious government institutions that represent the central authority, the MOA and the NDRC are obligated to present a well-defined policy—though might not be well implemented for the moment—in their official discourses including the ones delivered through mainstream media outlets, rather than just claiming that the central government is giving all the money left by the end of last year to the farmers as a subsidy. This public communication strategy reflects the central government’s intention to construct the NEAAS together with the ECP as an instrument basing on rigorous scientific researches and methods that could concretely facilitate the claimed large-scale institutional reform, in order to legitimise its actions and to reassure the public. On the other hand, the lack of publicly communicated information in regard with the actual implementation of the ECP reflects the biased communication strategy employed by the central authority.

This rather ‘distorted’ implementation of the ECP is, again, largely due to the inferiority of this sector compared to the others. This inferiority is reflected in the fragmented organisation of production and distribution, in the aged and less educated agricultural activity practitioners, and in its low profitability, which is to some extent resulted from the former two factors. For instance, after having provided the case of ECP for prairie areas, Mr A (MOA) underlines that

“The huge difference in terms of natural endowment of the prairie across the country has resulted in diverse forms of organisation, including scattered grazing in areas endowed with poor prairie, intensive livestock feeding in others, and the mixture of both, for the livestock production. This raises great difficulties for us to develop a proper compensation plan for each region and each form of production. Meanwhile, the problem of prairie degradation is rather urgent. That why for the moment we adopt a pragmatic and simplified evaluation standard to determine the amount of payment.”

Similarly, in regard with the farmers’ living condition and the environment protection projects, Mr P (NDRC) claims that

“Although the farmers indeed rely on the land they contracted, and over the long run, the over-exploitation does affect their livelihoods, but there is no way to put

this in tangible terms. Moreover, since the general price of crop and livestock products is very low, the farmers are not allowed to think for their future if they could not manage to make ends meet. They have no choice but to maximise the output of their land. ...The inferiority of agriculture is exactly the reason why the State allocates this compensation in such massive scale. As for the use of this allocation, we cannot require the farmers to use it particularly for protecting natural resources, since they are all low income households. We intend to help them improving their living conditions for starters, and in the meantime advocate the environment awareness among the beneficiaries. You know, without substantial monetary subsidies, the persuasion and education alone will not make the farmers abandon the extensive mode of production.”

As confirmed by Barclays (2012), da Silva *et al.* (2009), European Commission (2010) and Gao (2006), the profitability of agriculture sector is comparatively low, and the improvement of the farmers' livelihood is indispensable to rural sustainability. Judging from the implementation of the ECP till now, we observe that it starts as an ordinary poverty alleviation programme, however, might well end up as a real mechanism for eco-system conservation, given the importance attached to the ultimate objective of eco-system restoration. However, this importance would not have any actual effect if there is no clearly defined policy and operational instructions intended to 'upgrade' this scheme. Therefore the next step measure should be the development of a complete evaluation system, where the investment of maintaining natural and human capital could be properly registered, and through which a budget could be built and the exact amount of money could be preserved exclusively for this project.

2.2.5 Summary of the section

As noted by Auer (1996), literally everything can become a context for a given event. What interests us here is how “becoming-a-context-for-something is accomplished” (p.20). From a CDA point of view, this is accomplished by the time sequence of the events, and more importantly by the *text* itself, because the text is formulated as such to cause an uptake close enough to the authors' desired contextualisation (Blommaert, 2005).

In this regard, we could say that the above presented three aspects of social context are the ones purposely illuminated by the textual discourses. The three key-players in this event are incarnated by the most influential institutions that represent the central authority in China, and their NEAAS/ECP related discourses have formed the mainstream social cognitive pattern for this scheme. The highly consistent tune-setting and heavily value invested discourses suggest that the central government, mainstream media and Chinese domestic academics share the same ideological underpinnings when it comes to policy making and implementing. The obstacles in regard with the reform they expected consist above all of structural and historical aspects of China's economy and politics.

2.3 Reconsidering the NEASS evolution within the Chinese context

According to the above analysis, it seems clear that the central authority is convinced that by motivating and mobilising the top CCP leaders at all levels, the GDP worship will end and structural changes towards a 'greener' economy will be induced. Yet as the world's second largest economy that has been enjoying a 10% annual GDP growth rate on average for more than 20 years (as shown in Figure 4), China might well find it difficult to adopt NEAAS, especially when it comes to the question of giving up these delightful numbers, reorienting the economy and maintaining the stability of society at the same time. Because there are intrinsic problems revolving around NEAAS, and the social consequences of this reorientation are beyond the level of complexity we can understand.

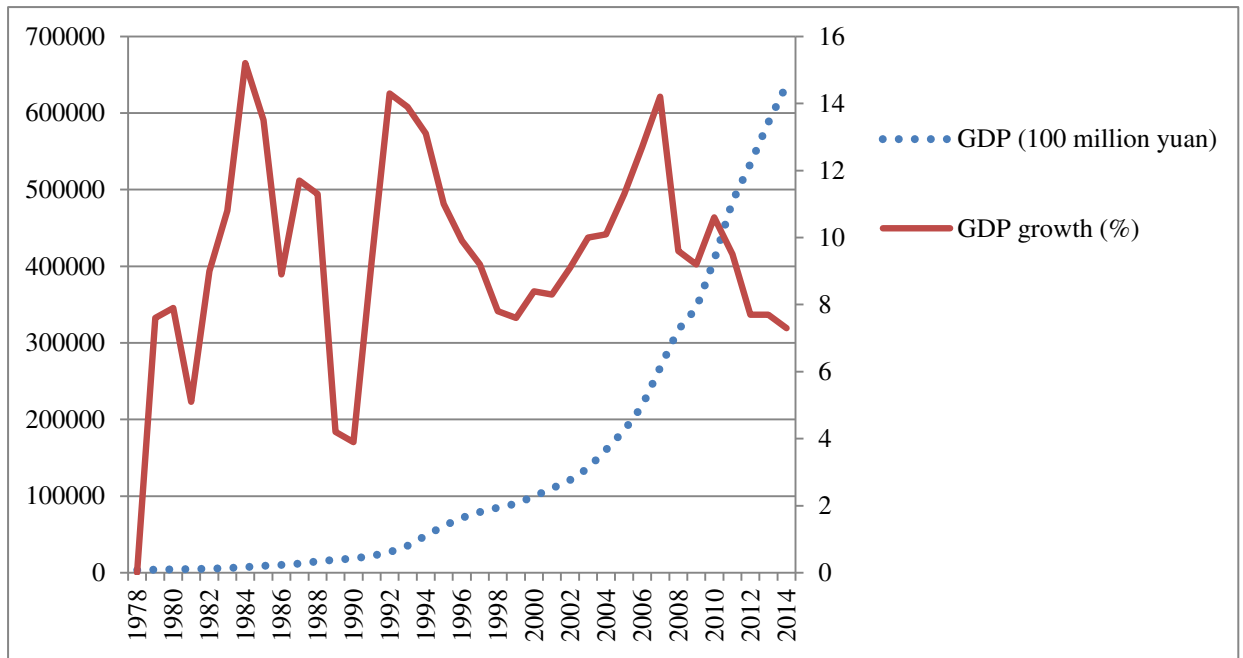


Figure 4: China’s GDP and GDP growth index 1978 – 2014 (Source: website of NBSC, <http://www.stats.gov.cn/>)

2.3.1 Motivating cadres by ecological performance, what comes next?

In the conversation with Mr H (MEP), he referred to the event in the winter of 2011, where the city of Linzhou stopped suddenly collective heating in order to complete the target of “energy conservation programme” for December. The city successfully attained the targeted emission threshold for December, yet ironically, a sharp increase in respirable particulate matter and sulfur dioxide occurred, which resulted in a severe degradation of air pollution in the following months. The reason was quite simple: The residents in Linzhou were obligated to find their own solutions by using stoves, electric heaters and small boilers which have a much lower heating efficiency. He then summarises that

“when it comes to environmental governance, the current “target assessment mechanism” that simply ‘distributes’ the pressure of the central authority to each

level of local governments has led to huge problems: Attaining some rigid pollution reduction targets as the local governments' political achievements have resulted in the effect of "sudden braking", which is a synonym of short-sighted measures."

Indeed, the logic of counting the regional CCP cadres' incentive to tackle environmental problems is flawed, or at least insufficient judging from former experiences. At the risk of oversimplifying the issue, the case of China's photovoltaic (PV) industry development is demonstrated here as an example. Solar PV energy is recognised as one of the most important remedies of China's double malaise in relation to energy and environment pressure, especially at the beginning of the 21st century. Since 2000, the Chinese government has launched a series of policies and regulations that actively promote the solar PV industry R&D, production and application. In 2009 in particular, the central authoritarian institutions including the National Energy Board and the Ministry of Finance launched the programme entitled "the Golden Sun", which is essentially a heavily subsidised scheme that intended to further encourage the development of the solar energy industry (Ru *et al.*, 2012).

Stimulated by the domestic policies and the demand of the international market, the regional governments were extremely motivated and all of them had announced their own ambitious plans regarding the introduction or expansion of PV related plants. However, as it almost always happens with interventions of the 'visible hand' to the economy, the scenario is different from (if not worse than) what the central authority had expected. Indeed, the nationwide competition had borne fruit: The manufacturing of PV module in China had increased about 1000 times, from 3 MW in 2000 to 23 GW in 2012, of which over 90% was intended for the overseas market (Sun *et al.*, 2014). The central authoritarian institutions' encouragement of *solar* energy development had been thus interpreted by regional cadres as encouraging PV industry in particular, and the focus had been subtly diverted into blind expansion of PV module manufacturing. Consequently, severe pollution related to polysilicon production, as well as high carbon energy consumption became commonplace. Therefore in the mid-2000s, 'the Golden Sun' was suspended (Guo *et al.*, 2009).

Admittedly, the above described failure of attaining environmental protection targets and that of fostering new energy utilisation through the cadre incentive scheme does not necessarily condemn the future of the NEAAS and that of the ECP, since the NEAAS itself is engaged in reforming the GDP worship that had ‘forced’ the CCP cadres at all levels to misinterpret the meaning of development encouraged by the central authority. Still, the effectiveness of the NEAAS is debatable, because it is after all an incentive mechanism that relies greatly on cadres, rather than on proper management of natural resource stocks.

2.3.2 A “structural adjustment” without social consequences?

Even though the cadres as well as the regional economy they control could be evaluated against the new set of criteria, and therefore the structural changes of the economy would be attained, the accompanying complications are not to be overlooked. In fact, using the term “economic structural adjustment” could be very tricky in the Chinese context, because to the Chinese people, especially to those who were in their 40s or 50s in the 1990s, this term resembles greatly to what “corporate restructuring” sounds to common English speakers’ ears. After nearly 20 years of rapid industrialisation since 1978, the Chinese central government announced the first structural adjustment of the economy in 1990s. The term “xia gang”¹⁵² was closely associated to this policy. This is a Chinese expression dedicated to the central government’s policy of cutting staff in state-owned enterprises for the purpose of improving work efficiency. The closest English translation of this term would be “to be laid off”, since according to official discourses, the group of people who had to experience xia gang was only cut from their present position temporarily, and they could get reemployed in other private or state-run enterprises after being trained and after they had acquired more skills (Chen, 2010; Yu, 2008). But of course, no one had become ‘skilful’ enough to win back their former post once laid off.

This “transitional unemployment”, as put by Gu (1999), had generated an enormous number of laid-off workers: There were only about 5.5 million in 1995, and the figure

¹⁵² In Chinese: “下岗”, literally means “off-post”.

rose to about 8 million in 1996 (Zhang, 1996, p. 409). The situation deteriorated rapidly in 1997, and, by the end of the year, the figure had rocketed up to 11.5 million (Gu, 1999). The definition and statistical treatment of laid-off workers is: workers leave enterprises and go home due to troubles in production and management while they still maintain nominal labour relations with their work-units. This also means that laid-off workers do not, or are not required to register themselves as unemployed, which means that these numbers were not calculated into the official unemployment rates that varied from 2.6% to 3.1% at the time (*ibid.*, p. 282).

Unemployment and social instability always go together, and this is definitely a situation that any government would want to prevent from happening at any cost, if having foreseen it coming. In fact, as stated at the very beginning of Tian and Wu's article (2014) analysed earlier, the context of publishing the trilogy "Comprehensive Understanding of GDP" in the *People's Daily* is that

*"over the past few years, with the increasing downward pressure on the economy, the ups and downs of the GDP growth rate have aroused concerns of the society."*¹⁵³

Out of prudence, the official tone set by mainstream discourses in China in regard with this reorientation emphasises the "reasonable interval" of growth rate, and directly associates it with employment rate, as mentioned earlier in the article of Du and Cheng (2014) as well as in that of Tian and Wu (2014). Thus, this obsession of public discourses towards a reasonable GDP growth rate could be explained as the central authority's efforts to show that the drop of the growth rate since 2008 is not like the one in 1990s, when the Chinese economy experienced a similar situation (as shown in Figure 4).

However, what is missed in the discussion is that, there is a general misunderstanding regarding the relationship between GDP growth rate and economic development – the decline of the growth *rate* is not necessarily a decline of the economy. As illustrated in Figure 4, the GDP growth rate did a decline, yet at the same time the curve of the GDP in monetary terms was apparently going upward, even with a slope gradually getting steeper.

¹⁵³ Originally in Chinese: "过去几年, 随着经济下行压力的加大, GDP 增速的起落备受社会关注。"

In fact, as a set of straightforward numbers that shows the collective performance of a region or a nation, the GDP concept itself is not so much to criticise: It is useful to have a measure of an entity's total net output, and its changes over time. It is only the actual use of this concept in public discourse that is frequently misplaced and abused (Philipsen, 2015).

2.3.3 Fully adopting the SEEA, what's missed?

SEEA, as the product of the cooperation among several prestigious international organisations including the European Commission, the International Monetary Fund, the Organisation for Economic Co-operation and Development and the World Bank, sets out to take into consideration the degradations of *natural capital* at national level. From this starting point, it is obvious that the maintenance of human capital is missed in this system by definition, which is insufficient as the framework designed to adjust and to complement the national accounts. Further, when taking a closer look at its mechanism of evaluation, the underlying rationale seems to be clearly aligned with the neoliberal ideology, which is in contradiction with strong sustainability: According to the SEEA (2012), monetary measurements are seen as instrument to value the “earth” as well as its “degradation and depletion”, and are employed to facilitate trade-offs in economic activities. In this monetary valuation mechanism for resources, the priority is given—in descending order—to market price whenever it exists, or to “value in use” based on the “resource rent”; for the damages done, the valuation is based—also in descending order—on estimations of relevant experts, on “willingness to pay” of consumers, or on prices that indirectly reflect “consumer preferences” through “hedonic pricing” and “travel cost method”; and as “last resort”, the valuation could eventually be achieved through an estimation of “costs” when there is no other solutions. It thus seems obvious that this design of valuation mechanism and its use in practice is based on the classical Ricardian rent theory where the ‘value’ of a resource equals to the economic advantage obtained by using this resource in its most productive use, which is almost identical to the valuation mechanism of the WB model presented in Section 2.1.1 in Chapter I. Similarly, the damages are evaluated through ‘fictive’ prices basing on the same theory (Richard, 2012).

As observed by Thiry and Roman (2014), SEEA, as one of the most influential macro-level accounting systems that include the environmental dimensions into the calculation by quantifying capital stocks, is getting increasingly widespread and consensual among policymakers and researchers. But some central questions are still to be answered, notably: 1) Who ultimately monitors, and for whom? 2) Who makes sense of these gathered raw information, and for what purpose? (p. 14)

When looking at the SEEA-based NEAAS in China, the answer to the first question seems to be rather straightforward compared to the one in the Western context: For China that officially claims itself as being ruled solely by the CCP¹⁵⁴, it is the relevant central governmental apparatus (MOA and NDRC) that monitors, for the central authority—that is the CCP—to maintain its rule.

As to the second question, it seems much more difficult to reach a conclusive answer. For the “purpose”, what could be acquired at this stage of the analysis are some speculations: If, as claimed by the official discourses concerning to the NEAAS, the scheme is intended directly to “register natural resource stocks”, “conduct effective planning of resource use”, “set boundaries” and “draw ecological red lines”, then it would be essential—if not the only thing that matters—that the measurement and calculation of the natural resources (“ecological assets”) are reliable enough; and this reliability, in the technicist perspective implied, could only be gained from *scientists*. This term *per se* indicates a group of people with rather heterogeneous natures, in which scholars in both natural science and social science (notably economists) are included. And in the case of depending on the latter discipline, the artificial (if not meaningless or dangerous) calculus proposed by the mainstream economists, as demonstrated repeatedly in this dissertation, could hardly be seen as reliable. If, as demonstrated in Section 2.3.1, the NEAAS is established for the purpose of eventually boosting a ‘greener’ development by reforming the cadre appraisal mechanism in order to motivate the cadres to pursue the GGDP, just as GDP-centred cadre appraisal mechanism has worked for China’s regional economic growth nowadays,

¹⁵⁴ Though there is a “United Front” composed by 8 “Democratic Parties” apart from the CCP, the 8 parties are all managed by the United Front Work Department of the CCP Central Committee and are assigned to “work with the CCP in a cooperative manner”, which means that they hold no real power independent of the CCP. This relationship, as well as the absolute leading role of the CCP, is clearly stated in the “Preamble” of the latest version of the PRC Constitution. (Clarke, 2009; National People’s Congress, 2004)

then the reliability of the ecological assets measurement and calculation is to be put at a less important place, where scientists are not necessarily the ones to make sense of the information gathered. And this second scenario deviates even further from the meaning of developing a sustainability indicator. Moreover, the political environment within which this SEEA-based NEAAS is to be installed is widely considered as problematic.

To start with, according to the official website dedicated to the SEEA, the SEEA “contains the internationally agreed standard concepts, definitions, classifications, accounting rules and tables for producing internationally comparable statistics on the environment and its relationship with the economy. The SEEA framework follows a similar accounting structure as the SNA and uses concepts, definitions and classifications consistent with the SNA in order to facilitate the integration of environmental and economic statistics.”¹⁵⁵ Apparently, the SEEA and SNA are of the same strain, with the latter as the basis of the whole system. However, this core system of national accounts has not been established in China: Even though there were also researches conducted by the Chinese academics in the 1980s and trial projects of establishing national and regional assets and liabilities accounts (balance sheet) since 1996, all the attempts were suspended in 2007, the same year the second GGDP report was suspended; only left the GDP, ‘essence’ of the SNA, as a simplified and optimistic measurement of the economy. In this regard, the attempt of establishing the NEAAS without the presence of other national accounts looks like trying to build castles in the air. However, recently, several SNA projects endorsed by the central authority have re-emerged and have managed to conduct tentative census of major financial capital stocks and national balance sheets (*cf. Li et al.*, 2013, 2015). This might be a signal for the further development of the SEEA implementation in its full version.

Moreover, as noted by Zhang (2012) and agreed by the academic discourses reviewed earlier, one of the central challenges regarding the environmental national accounts in general is that environmental goods and services need to be measured in monetary values, of which the evaluation (or estimation) varies greatly, and very often endowed with a wide range of errors. Thus, although seemingly straightforward for policy makers and the general public, as a single index that consists of relatively accurate GDP number and

¹⁵⁵ Available at <http://unstats.un.org/unsd/envaccounting/seea.asp>, last consulted on 4/4/2015.

environmental values with large standard errors, the ecological accounts based on the SEEA would not be able to deliver credible information on sustainability (pp. 12–13).

According to SEEA (2012), in addition to the ordinary national accounts listed in the SNA, there should be

“seven individual components of the environment that are considered environmental assets in the Central Framework. They are mineral and energy resources, land, soil resources, timber resources, aquatic resources, other biological resources (excluding timber and aquatic resources), and water resources. These individual components have been the traditional focus for the measurement of environmental assets through the development of specific asset or resource accounts” (p. 134).

In terms of measurement, apart from the monetary supply and use tables used for the recording of flows of products in monetary terms just as in the SNA, physical supply and use tables should also be established in order to track the physical flows of the ecological assets (p. 13). And they are to be presented in the balance sheet following “the supply and use identity” (p. 16) both in monetary and physical terms.

Consequently, the NEAAS that China seeks to establish will adopt the form of SEEA described above, and will not include the concept of “ecological liabilities”, since it is not compatible with the SNA or the SEEA framework, and more importantly because it is, as believed by many accounting researchers, too complex and almost impossible to measure the degree of degradation of the ecosystem and to build the accounts payable registering ecological restoration and maintenance costs (Geng *et al.*, 2014). Indeed, whilst in traditional accounting liability accounts effectively serves the purpose of recording the allocation of obligations in terms of asset restoration (which is precisely the objective pursued by the CCP top leadership), it is difficult to have it established in the NEAAS due to constraints in practice. This fact demonstrates a gap of applying accounting techniques to micro-level accounting model, as well as to sustainability accounting models in general¹⁵⁶. As noted by Yan as early as in 1988 and agreed by Geng (2014), up

¹⁵⁶ Of course, this is otherwise adopted in some other promising sustainability accounting models such as TDL-CARE.

to now, most social and environmental accounting frameworks such as the SEEA are all developed from macroeconomic theories and cover a much wider range of accounting content. Their data sources mainly consist of statistical methods such as census and sampling. The accounting methods are only applied to the data aggregation stage, and for most cases it is only for the purpose of better presenting the results. The accounting methods are only applied to the data aggregation stage, and for most cases it is only for the purpose of better presenting the results.

Therefore, for the case of SEEA application in China, instead of focusing on accounting and auditing methods to be used in the NEAAS, what should be put in the first place is to build a solid and continuously evolving data base for the purpose of a better management of ecological assets. This point appears repeatedly in the discourses of the interviewees when asked about the biggest obstacle in the ECP, which constitutes a good part of the NEAAS conception:

“I think that the problem of ‘accuracy’ is currently the major issue in the ECP allocation for the prairie areas: these areas are too vast and too scattered for a truly comprehensive detection and census of the pastureland quality. Besides, the local governments do not seem to have done their proper job in terms of acquiring accurate statistical data on local condition. There should be many qualified herders who are not yet included in the scope of the ECP” (Mr A, MOA).

“I’m currently engaged in a research project that seeks to improve the ECP. I propose to build a system that draws elements from ‘The UK eco-system assessment (2011)’ and China’s Geographic Information System, through which we could grasp the up-to-date status of different types of land resources and make in-time assessment based on local conditions. By doing so, the allocation of the compensation should have solid scientific basis” (Mr P, NDRC).

And still, regarding the functioning of this data base, it is further debatable whether it would be another macro- and top-down initiative, or whether it would be a bottom-up approach to appreciate something intrinsic in nature and to register the changing values of the natural resources.

Further, whether the SEEA itself is SA framework to adopt is another discussion: Even if the SEEA could be fully adopted in China's recent SNA attempt, the framework is, as observed by Dietz and Neumayer (2007), *by design* not meant to provide clear guidelines for the purpose of measuring sustainability in either its weak or strong version (p. 617). Further exploration in terms of adopting a more appropriate theoretical framework is needed in future researches, if the major reason for the central government to conduct the NEAAS reform is genuinely to protect the environment, rather than to look for more recognition in the global market by solely adopting the most widely accepted 'international practice'.

3. Investigation of a specific sustainability accounting scheme at corporate level: the corporate social responsibility (CSR) reporting

"CSR" nowadays is a very much popularised concept. In this section of investigation, the CSR report, or sustainability report, refers to all sustainability-related non-financial reports, which could take the forms of mandatory or non-mandatory stand-alone CSR report, often under the Guidelines of Global Reporting Initiative (GRI), as well as various kinds of integrated financial and non-financial annual reports (KPMG, 2005; SynTao Co., 2007).

As argued by Buhr and Reiter (2006), disclosure of individual companies could "contributes to and reflects the broader discourse of environmentalism over time" (p. 1). A series of CDA on the sustainability related non-financial disclosures of two large Chinese agribusinesses, namely "Liuhe" and "Beidahuang", is conducted, as well as on relevant media and official discourses that have shaped the institutional contexts in which they are embedded. As mentioned earlier, the choice of these two firms is explained above all by their rather fundamentally different corporate nature (see below). The contrast of their sustainability reports would constitute an interesting research topic, as judged by the author. Moreover, from a practical point of view, the availability of data, both in terms of the sustainability reports *per se* and in terms of interview data, is also the

principle reason why these two firms are chosen: The facts that both firms are leading agribusinesses in their respective sector, and both are listed firms in Chinese Stock Exchanges make their financial and non-financial reports publicly available. Further, the high level executives of these two firms accepted to be interviewed by the author, which makes the collection of rather abundant interview data possible.

Through this analysis, this part of the dissertation reveals *how* the two major key-players involved, namely the firms and the government, are engaged in the struggle to shape the social reality in a way that serves their own interests in this event (Merkl-Davies *et al.*, 2011), and perhaps also, *why*, or in other words, the formation of their respective attitudes. For this purpose, the recent evolution of this matter is examined, in the hope of exploring the material conditions and ideological aspects that underpin the actions and reactions of the two key-players, as well as the checks and balances of their respective interests and power. Similar to Section 2, apart from the written texts, oral discourses acquired from interviews with the department heads of these two firms as well as with other interviewees from relevant institutions are also used as complementary data, which could be seen as having additional explanatory power.

3.1 Discursive construction of the CSR: A comparative case study of two agribusinesses and their sustainability reports

3.1.1 New Hope Liuhe Group

3.1.1.1 Profile

Liuhe's background is rather ordinary. Built and run by the family of Liu as a private enterprise since 1982, went public in 1998 and completely took over the runner-up firm of the animal feed and livestock sector in 2010, it is the biggest listed group company of animal feed and livestock in China. The relationship between Liuhe and the authorities is also rather ordinary: the firm as economic activity practitioner, whilst the authorities, notably the regional ones, as regulator. As Ms C, chief accountant of one of Liuhe's subsidiaries has confirmed, with 95% of their business based on the domestic market and

5% on exports, the recognition of their brand and product among Chinese natives appears to be extremely important to the firm.¹⁵⁷

In regard with the firm's sustainability reporting, in the year of 2008, Liuhe ("New Hope" at the time, until 2011) issued its first stand-alone Corporate Social Responsibility (CSR) report alongside its annual report. As proudly stated in the first CSR report and on its official website¹⁵⁸, "New Hope ... is the first domestic enterprise in China which publishes an annual CSR report", though this is not exactly true as a number of other firms, both private and state-owned, had already started publishing their CSR reports earlier than Liuhe (New Hope). Ever since however, Liuhe has kept its promise and been issuing this report so far every year. However, the framework under which the reports were prepared was not clearly defined until 2010. In total, Liuhe has published two reports (2008 & 2009) without specified framework, two reports (2010 & 2011) prepared under the *Social responsibility guidelines of listed companies of Shenzhen Stock Exchange (SZSE)* with reference to the *Social responsibility reporting guidelines for Chinese enterprises* of the Chinese Academy of Social Sciences (CASS), and two reports (2012 & 2013) under guidelines of CSRC and the SZSE, with reference to the G3/G3.1 Guidelines of Global Reporting Initiative (GRI) and the CASS-CSR1.0, which is the formal version of the CASS guidelines of 2010.

3.1.1.2 Presentation of the reports

According to the frameworks under which the six reports were prepared, the structural, visual and textual presentation, the reports of Liuhe could also be categorised into three stages.

The 2008 and 2009 reports count 16 and 24 pages respectively, presented in plain text in black and white. Both reports are divided into 4 sections: First, a brief introduction of the challenges set by the macro-economic environment (mostly covering the aftermath of the

¹⁵⁷ Information also available on the firm's website <http://www.newhopeagri.com/>, last consulted on 24/10/2014.

¹⁵⁸ Different from the one mentioned earlier, the official website consulted here is <http://www.newhopegroup.com/>, the one before the 2010 acquisition. (last consulted on 24/10/2014)

'Melamine scandal'¹⁵⁹, the "Wenchuan (county) earthquake" and the global financial crisis) of the year and the firm's attitude towards them; second, the "Summary of *progress and achievement* of the firm's major CSR issues" within the reporting year; third, a section entitled "*Fulfilment* of the firm's other social responsibilities", mainly covering the maintenance of the relationship with "Shareholders and creditors", "Employees", "Suppliers, customers and consumers", as well as efforts in natural environment conservation and social welfare; and finally, a section called "Problems in terms of social responsibility fulfilment and corrective action plans", containing a half to 3/4 page of critical analysis and proposition for future works. Though scattered throughout the reports, what occupies most of the space is the food safety control issue, accounting for 6 and 8 pages respectively in total.

Similarly, the 2010 and 2011 reports are also presented in plain text in black and white, counting 27 and 25 pages respectively, and endowed with a much clear structure. The content of both reports starts with one page of "Description and Declaration of the Report", indicating the disclosure cycle, the organisations concerned, the time range, the source of data, the guidelines referred to and the disclosure channel. Then it's followed by a "Preface", stating the firm's CSR value and CSR reporting history. The main parts (from page 4 to page 27 and 25 respectively) of the content contain firstly a five-page "Overview" of the firm's main business, its CSR value conception, and a summary of the "The CSR annual *Achievements*", exhibiting its rise in several corporate rankings, some CSR-related (judged by the report preparers) prizes won, as well as several lines of product awarded or certified by local governments and industrial associations during the reporting year. The second main part of the report is entitled "A detailed disclosure of the firm's CSR *fulfilment/practices*¹⁶⁰". It informs the readers of the firm's stakeholder (in three sections just like previous years) relationship maintenance, efforts in natural environment conservation and social welfare, as well as a half page of critical analysis and proposition for future works, which is very similar to the 2008/2009 ones in general. Released from the aftermath of the dairy product incident, the firm has not increase the proportion of food safety control disclosure, yet this issue remains the central subject of the content.

¹⁵⁹ See more in Section 3.2.

¹⁶⁰ "Fulfilment" (in Chinese "履行") as it is in the 2010 report and "practices" (in Chinese "实践") in 2011.

The 2012 report is no doubt a great leap forward: There are significant improvements in terms of volume (46 pages) and aesthetics; and these elements are kept and further improved in the 2013 report (58 pages, also with a more reader-friendly typesetting). Apart from the aesthetically designed cover, these two reports contain also a title page, where the firm's "mission", "vision", "dream", "value" and "business philosophy" are presented in concise slogans. Instead of the title "Description and declaration" used in the exploratory stage, these two reports have changed it into "About this report", where the content remains unchanged. The main report starts with a "Preface" in 2012, replaced by a "Message from the president and the CEO" in 2013, the content however remains essentially the same, which is to state the macro-economic environment of the year and the firm's resolution to deliver great performance. Then it is followed by a page of "About Us", an introduction of the firm's history and its significance in the industry nowadays, as well as the corporate governance structure of the firm. What makes the 2013 report look more complete is the fact that the "Corporate culture" and the "Social responsibility management" are added to this section. The remainder main parts of the content, counting 34 and 43 pages respectively, are entirely dedicated to the stakeholder relationship maintenance, where the report preparers have devoted more than 50% of the length to the issue of product quality control. Both reports end with a page of "Contact us", providing the firm's official website and email address of the office of the board.

3.1.2 Beidahuang Group

3.1.2.1 Profile

Compared to its counterpart Liuhe, the case of Beidahuang is a bit unusual, as it has a double identity: It is equally known as the Heilongjiang (province) Land Reclamation Bureau, the concept of which is close to that of municipality. It went public in 2002, and it has been the biggest listed agricultural conglomerate that manages the biggest state-owned farm, under direct administration of the Ministry of Agriculture.¹⁶¹ This firm is actually a unique kind of economic and semi-military governmental organisation that was

¹⁶¹ Information acquired from the official website: www.hacl.cn/ (last consulted on 24/10/2014) and the 2007 annual report.

designed by the central authority back in the 1950s to carry out farming activities in regions endowed with severe natural environment conditions. In short, as interviewee Mr N, Beidahuang's director of trade department and director of the regional bureau of commerce put it, today,

“Beidahuang is essentially both an administrative region and a group company. The organisational structures and the set of leaderships are exactly the same for the region and the firm. The group company's status is rather autonomous, in that the group is not subject to the management of the Heilongjiang province, nor supported by provincial finances. It is basically an SOE under direct management of the Ministry of Finance (MOF).”

Further according to Mr N, as one of the most important national commodity grain base, the firm does not seem to have to worry too much about its sales channels, as the State purchases a good proportion of the harvest every year.

To date, the Beidahuang Group does not provide a stand-alone sustainability report. Instead, from 2012 onward, they have started to include 3 pages of “Active fulfilment of social responsibility” in the Directors' Report of its annual reports. The framework under which the content is prepared is however not clearly defined. What seems to be relevant is that in the beginning of chapter the report preparers state that this chapter is an achievement of the firm's “social responsibility management system”, established in 2012, according to an official “Notice” of the regulators.

3.1.2.2 Presentation of the reports

Before the 2012 report, information concerning the social performance of the firm was not completely non-existent: It was actually in the 2008 annual report that Beidahuang for the first time included a paragraph of “Active fulfilment of social responsibility” in the Directors' Report. This paragraph containing only 3 sentences generally states the ‘fact’ that the firm cares about the environment and society and it is engaged in social welfare

services, a point supported by an example of a charitable donation (of rice) after the 2008 Wenchuan earthquake.

For the following three consecutive years, this paragraph did not make its appearance in the annual reports. Instead, there was one sentence in the Corporate Governance section stating that the firm “does not disclose any internal control self-assessment report or social responsibility report” (p. 25); and in the 2011 annual report another sentence was added: “The company and its subsidiaries do not have any major environmental or social security problem, and are not included in the ‘*List of heavy polluting enterprises*’ released by national and regional environmental protection departments” (p. 27).

The 2012 annual report is a breakthrough in terms of Beidahuang’s sustainability reporting, as the sustainability issues related chapter reappears in it and occupies three whole pages of volume. As a part of the annual report, this chapter is presented in plain text in black and white. After a brief introduction to some relevant policy, the firm’s intention to better inform stakeholders and corporate governance issues, the chapter is divided into two main parts. The first half entitled “Information regarding the social responsibility *fulfilment*” accounts for 90% of volume. The disclosure is organised into 5 subjects. Visibly, these 5 aspects of information are far from equally weighted: Occupying more than 30% of the total length of this part, “Product quality control” is no doubt the subject where the firm has the most to say. Other more or less equally weighted subjects are “*Safe production*”, “*Environmental protection and resource conservation*” and “*Promotion of employment and employee rights protection*”, leaving one sentence of length for “*Tax obligation fulfilment*” at the end. The second half entitled “Information regarding the environment conservation of the listed company and the subsidiaries categorised by the environmental protection departments as ‘heavy polluting industries’” accounts for 4 lines of length. It discloses that there are two subsidiaries, a paper mill and a fertiliser plant are, according to the Environmental Law of China, “heavy polluting industries”. And in 2012, they both perform well, with the former having received the rating “fully met the standards” and the latter “excellent in environmental performance”. What we can deduct here is, a firm categorised as in the “heavy polluting industry” is not necessarily included in the ‘*List of heavy polluting enterprises*’ of the authority, and therefore does not have any obligation to disclose any information in relation to its environmental issues.

In terms of the sustainability related information disclosure, the 2013 annual report does not change much compared to the previous year. Except for that the writing style for the “Introduction” has turned to mention more about the firm’s business philosophy and its resolution to undertake more social responsibility. The first half of this chapter is nearly a copy-paste of the content from last year, with 50% of the sentences remaining the same, the biggest different being that the subject of “Tax obligation fulfilment” is replaced by “Other social responsibility fulfilment”, covering an event of a flood in the region and the firm’s efforts in fighting it. Apart from disclosing information related to the two subsidiaries mentioned last year, the second half of this chapter also includes some corporate governance issues related to environmental management.

3.1.3 Comparisons of the two series of reports in terms of subjects covered

At a first glance, we note from the description above that in contrast to the two almost identical Beidahuang sustainability reports since the firm started including them in the annual reports, those of Liuhe’s seem to have evolved greatly over time, especially in terms of structure. Even though not specified at the beginning in 2008, the reference to the GRI guidelines is quite obvious, as the stakeholder focus has been reflected in all the 6 reports of Liuhe’s; whilst the guidelines against which Beidahuang prepares its reports have not been clear enough. And through the 3-stage evolution, Liuhe’s disclosure has become increasingly well-organised and more equally weighted for all the chapters dedicated to specific stakeholder groups.

Further regarding the evolution of the two series of reports, we also note that the quantified information disclosure has increased. However, the usefulness of this information disclosed is uncertain: In both series of reports, there is hardly any information concerning the effectiveness of the numerous measures taken by both firms claimed as “CSR fulfilment”. Specific numbers are provided, however unanimously in terms of ‘input’, with hardly any ‘output’, or results of the measures taken. Since the quantified information disclosure is not mandatory, this phenomenon could be interpreted as either the impact of a certain measure is too difficult (at least too difficult for the firm itself) to describe and measure due to lack of operational standards and measurement, or

the report preparers consider that the performance is too poor to present in a sustainability report, since they do not have any obligation clearly defined by laws and regulations to disclose anything in it that might make the firms appear as if they have failed to fulfil any of their responsibilities.

Another similarity is that, though both of the firms claim to have “established a social responsibility management system” (Liuhe, 2014; Beidahuang, 2013), none of their sustainability reports has passed third-party verification. This is otherwise in accordance to the general practice in China, since as demonstrated in SynTao’s well researched annual reports on the current CSR reporting in China, more than 95% of the sustainability reports released by Chinese listed firms from the period 2008–2013 were not independently audited by a third party (2013, p. 7). This phenomenon could be understood again since there is no compulsory requirement from the authorities for this kind of verification. On the other hand, this is also related to the fact that there are very few, if any, eligible institutions that propose this service; and hardly any uniformed standards, or at least widely accepted guidelines for the third-party institutions to follow when they are engaged in sustainability report verification.(Ma, 2014; Shen *et al.*, 2010). This lack of third-party verification is actually linked to the lack of proper measure to show the effectiveness of the ‘CSR fulfilment’ mentioned earlier, since according the experiences of some multinational corporations, the verification of specialised third-party institutions could not only increase credibility of the reports, but also could serve as measures to better describe effectiveness (Livesey & Kearins, 2002, p. 239; *cf.* SynTao Co., 2013).

As to the writing style, we find that the positive attitude and affirmative tune could be easily spotted in both series of reports, notably for the fact that, in the 6 stand-alone and 2 integrated annual sustainability reports under investigation, there is hardly any difficulty reported regarding the preparation of these reports, such as lack of instrumental and uniformed guidelines, difficulties in terms of quantitative measurement, let alone any critical thinking, such as reflexions on the value conflicts among stakeholders and so on. It seems that overall the introduction of CSR into these firms’ reporting practice is without any obstacles, or at least not at all worth disclosing in the reports, which is quite the opposite comparing to the reports from all around the world, even in those of the most

experienced sustainability reporting practitioners like The Body Shop (*cf.* Livesey & Kearins, 2002).

The positive attitude is also clearly reflected in terms of wording (for instance “progress and achievement”, “active fulfilment”, “promotion” and so on in the chapter titles of the reports presented above). What worth noticing at this point is that, for Liuhe, whilst its 2010 report follows its two previous reports using the word “*fulfilment*” in the title of the second main part, for exactly the same section, its 2011 report however changes this word subtly into “*practices*”, a word endowed with more neutrality. Over time, there have been several similar changes of this kind in Liuhe’s reports, which suggests that its report preparers have intended to improve their CSR report by means of using less biased words and less affirmative tune to make the reports (look) more rigorous. Meanwhile, Beidahuang continues to prepare the report in a rather perfunctory manner, without much effort made even in terms of wording.

Moreover, as we zoom in for a more close-up inspection of the detailed disclosure content, we find that on top of the ‘good deed only’ reporting principle, the information that has not been disclosed in both series of reports is also highly self-interested, as presented below from three aspects.

3.1.3.1 Product quality

From the years (2009 and 2013 respectively) when both firms started publishing their sustainability reports till 2014, both firms have dedicated the biggest proportion (around 30 – 40 percent) of the content to product quality control, and have repeatedly recognised this part of their social responsibility as the most essential one as an agribusiness. For instance, Liuhe considers that

*“the firm has always given the highest priority to food safety and always been focusing on quality control from the very beginning of the industrial chain”*¹⁶²

(Liuhe, 2009, p. 2).

And in terms of concrete measures taken, Liuhe further emphasises its efforts on industrial chain management by giving a series of numbers concerning the significant amounts of investment in equipment, technical experts and other human resources, and states that

*“as an agribusiness that involves the biggest and the most scattered farming industrial chain in China, ... we see ourselves as an industrious ‘servant’ of the whole producing process, who’s engaged in providing a series of reliable services including supplier selection, technical tutorship, quality and drug residue verification and so on, in order to ensure the safety of our food and livestock feed products at every stage of the process”*¹⁶³ (Liuhe, 2014, p. 14).

Indeed, according to Ms C, as a privately run firm that owns very few farms of its own, Liuhe deals with a good number of individual family farms and village-level agricultural cooperatives on top of other suppliers of seedlings, chicks and farm chemicals; and this have no doubt complicated the task of product quality control. This is probably the reason why the report preparers have decided to stress on this issue and to place the firm in a rather humble and powerless position (“servant”) instead of picturing the firm as an entity that is fully responsible for its food product (un-)safety, especially when there are rumours circulating concerning the loose quality control of Liuhe’s contracted farms¹⁶⁴.

Beidahuang, on the other hand, addresses this matter from a different angle. It is stated at the beginning of the product quality control section that

¹⁶² Originally in Chinese: “公司高度重视食品安全，一直注重从产业链源头加强质量监控。”

¹⁶³ Originally in Chinese: “公司目前虽是国内农牧产业链的最大企业，……我们是农牧产业链的“服务员”。……作为一个综合服务平台，公司还为农户提供了担保和金融、技术、市场、食品安全的支持，每个点都有非常完善的食品检测措施，检测设备、技术服务体系全国联网。”

¹⁶⁴ See more in the article entitled “New Hope Liuhe’s extensive expansion: The so-called ‘company + farmers’ model is only a piece of meaningless paper?” on the National Business Daily website, available at <http://www.nbd.com.cn/articles/2013-01-22/708997.html> (in Chinese, last consulted on 14/12/2014).

*“Nowadays as the food safety problem gains growing concern nationwide ... and Beidahuang, the state farm entitled ‘The Big Barn of China’, has undoubtedly been paying increasing attention to this subject ... and acting as a pioneer in China’s ‘green agriculture’ reform”*¹⁶⁵ (Beidahuang, 2013, p. 21).

Right afterwards, the report preparers enumerate a number of quality verifications their products have passed, and then emphasise that

*“we have established a food safety traceability system that closely controls the whole life cycle (species selection, planting, storage, processing and distribution) of our products. We regard our crop fields as the first workshop of production. We plan the producing process of our farms as a whole and we manage the process in a highly standardised and uniformed manner: unique source of seeds, unified arrangement of crop variety, unified funding management, unified planting model, and unified operating standards”*¹⁶⁶ (ibid.).

As we have noted, the firm’s confidence on its product quality seems to be unquestionable, even in the time of food safety crisis where the grain production, Beidahuang’s main business, is also under the spotlight¹⁶⁷. We note as well that the idea of ‘control’ is repeatedly demonstrated in the following descriptions of their quality control system (“traceability”, “closely control”, “plan ... as a whole”, “highly standardised and uniformed”). It appears reasonable for the report preparers to stress on the firm’s strong controlling power as its biggest strength that proves its product safety: As confirmed by the corporate governance section of the annual reports and by Mr N in the interview, Beidahuang as a state-owned farm, does have a much centralised and highly effective control in every domain of its activities; And this is largely because of the centralised distribution of the farmland (directly owned by the firm) in the region and

¹⁶⁵ Originally in Chinese: “北大荒是当之无愧的中国的“北大仓”。……随着经济发展水平不断提高，在基本解决粮食安全问题的情况下，食品安全问题日益凸显。……北大荒正在超越自己，不断创新绿色农业现代化，建设食品安全基地。”

¹⁶⁶ Originally in Chinese: “我们建立了从原料产地、品种选择、种植过程、收获仓储、稻米加工、市场销售全过程的食品安全追溯体系。把田间作为生产的第一车间，实行“五统一”的规范化模式管理：统一供种、统一品种布局、统一生资管理、统一栽培模式、统一作业标准，促进基地向优质高效农业发展，保证原料的安全。” Also stated on the firm’s website, available at <http://www.china-bdh.com/Item/Show.asp?m=1&d=1606>, last consulted on 14/12/2014.

¹⁶⁷ It refers to the 2011 heavy metal polluted rice scandal. See more in the section of “Social practice: the institutionalisation of discourse”.

its special status of ‘quasi-regional-autonomy’, which avoid the firm from dealing with possible constrains set by regional governments. In addition, though equally large in scale, unlike its counterpart Liuhe, according to Mr N, Beidahuang’s business involves a much shorter industrial chain, where almost every part of the chain is actually a part of the Beidahuang Group and every individual household farmer is an employee of the firm. And it is this direct ‘ownership system’ that allows such vertical and centralised management and control systems to function.

3.1.3.2 Natural environment and resources

With regard to the composition of every individual report of the two firms, we note that the section concerning the natural environment protection and rational use of natural resources constantly occupies the second-most-significant length of the content. For this subject, both Liuhe and Beidahuang have reported increasingly detailed and quantified information concerning the investments in clean energy and pollution control, and both firms have provided a number of successful cases in their farms and subsidiaries, for instance,

“... We are engaged in finding effective solutions to farming pollution problems in order to produce safer food in a cleaner environment. ... A good example is our Xushuidawu hoggery: ... For the hog manure disposal, we separate the dry hog manure from the wet and sell the dry manure as farm fertiliser to local farmers at very low prices. Meanwhile we invested 30,000 yuan¹⁶⁸ and built biogas digesters for wet manure treatment. The treated water is used for farmland irrigation. This is a typical example of our efforts both on livestock hygiene and on pollution control”¹⁶⁹ (Liuhe, 2012, p. 22).

¹⁶⁸ Approximately 5,000 US dollar.

¹⁶⁹ In Chinese: “.....我们充分认识到资源的稀缺性与环境保护的必要性，在生产经营中持续加大技改力度和投入，节能减排。.....如公司下属的徐水大午猪场地，.....猪场对猪粪尿进行干湿分离，干粪以很低的价格卖给农户作田间肥料，同时投资新建沼气池处理养殖废水，处理后用于农田灌溉，较好的解决了猪场的环保问题。”

*“Liuhe is committed to producing environment-friendly, safe and ‘green’ food. On this basis, the firm is engaged in on the implementation of a sustainable development model, ...”*¹⁷⁰ (Liuhe, 2014, p. 49).

*“The company has introduced to the farms advanced biotechnologies such as ... and so on. ... The use of these technologies has improved the effectiveness of fertilisers in the soil and thus has reduced the quantity of fertiliser input, degraded the pesticides, fertiliser residue and heavy metals in the soil, and improved the immune system of the crop plants. The wide use of these technologies has greatly reduced the impact of farming activities to the soil and ensured the food product safety of Beidahuang as the national grain base”*¹⁷¹ (Beidahuang, 2013, pp. 20 – 21).

As shown above, we notice that efforts claimed as pollution control and environment conservation are clearly linked to the subject mentioned earlier: food safety. This is not surprising since one salient feature of agribusinesses is the fact that, unlike the firms in other sectors of the economy, agribusinesses have a much tighter link to the natural environment, as the quality of their products to a large extent, if not entirely, relies on that of the natural environment that conceives the (raw material of) products. The repeated linkage between environment conservation and food safety made by the report preparers has again showed the priority of convincing the readers about the safety of their food products.

3.1.3.3 Social aspect

A large variety of information is categorised as reporting the social aspect of the firms’ performance. First of all, what both firms seem to agree upon is that they have both devoted considerable length to philanthropic activities. The main subjects are charitable

¹⁷⁰ In Chinese: “新希望六和在致力于生产环保绿色的安全食品的同时，更加注重推行绿色 环保的可持续发展模式，……”

¹⁷¹ In Chinese: “引进现代生物技术，提升农产品质量。……通过现代生物农业技术可提高土壤中的化学利用率，减少化肥投入；有效地降解土壤中的农药、化肥残留、重金属污染；提高作物植株免疫系统抗性，减少农药污染。”

donations that are tightly linked to some major events in society, notably natural disasters of the respective reporting year. Others involve efforts on social welfare, such as donations to primary school construction in rural districts and organisation of cultural activities. This kind of content occupies on average 20% of the length in the reports, with nevertheless a visible decline on Liuhe's end: 7 pages over 16 in the 2008 report compared to 9 pages over 58 in 2013. In fact, the tendency of (over-)emphasising charity information is a kind of 'tradition' for the sustainability reports of Chinese firms, especially when comparing with the report composition with the CSR reports of firms in Western countries. (Lin, 2010; SynTao Co., 2013) This is understandable since a firm would naturally intend to communicate this information to embellish the firm's image, particularly when it is expected, or in some cases required to prepare a 'sustainability report' without much specific standards to follow. This phenomenon has reduced the usefulness of the reports and therefore needs to be changed, notably by legislative efforts of the authority (SynTao Co., 2007). In fact, as what could be noted regarding the evolution of Liuhe's reports over time, this situation does have been improved alongside the increasingly complete guidelines released by the authorities.

Second, apart from philanthropic activities, the two firms report from quite different perspectives regarding the wellbeing of society. Whilst Beidahuang has focused on the safety and wellbeing of their employees (sections entitled "Safe production" and "Promotion of employment and employee rights protection"), Liuhe seems to have recognised a larger variety of relevant interest groups ("Shareholders and creditors", "Suppliers, customers and consumers" and "Employees"). This phenomenon could well be resulted from the large disparity in terms of the form and volume of the two series of reports: Liuhe's stand-alone reports would after all cover more issues compared to Beidahuang's 3 pages of annual-report-integrated ones. Nevertheless, it also echoes the point discussed earlier, which is the different positioning of the two firms in their business. For Liuhe, a private firm owning very few farms of its own, it does have to maintain a rather complex relationship with multiple groups of people, especially that with individual farmers, since they could be on the one hand its raw material (grain, meat and milk) supplier, and on the other its customer (of livestock feed). We could say that Liuhe's contribution to the wellbeing of the society consists largely of maintaining a harmonious relationship with the farmers. Whilst for Beidahuang, things are much simplified since as the 'owner' of all the farmland of the firm's farming activities, the

farmers are recognised only as one kind of stakeholders: the employees. Therefore for Beidahuang, taking care of its employees already includes the meaning of enhancing the wellbeing of farmers and rural livelihood at large (Note of interview with Mr N; Shao *et al.*, 2011). It seems that Beidahuang has to a great extent ‘internalised’ the social problem thanks to the special nature of the firm.

3.1.4 Summary of the section

Still, in the context where companies that disclose CSR reports have only occupied around (or less than) 25% of the total number of Chinese listed companies over the past decade¹⁷², Liuhe and Beidahuang represent already the ‘good examples’. The comparison of the two sets of reports is presented in Table 1. After a review of the detailed disclosure in the two series of reports, we could note that first, the different corporate nature of the two firms has greatly affected their respective positioning in the business, as well as their attitude towards sustainability management and reporting. Second, the composition of stakeholder group for the two firms is different, which is again linked to their different corporate nature. And third, if we relate the three aspects of information disclosed in the reports to the fundamental conceptual framework of sustainability reporting: the famous ‘Triple bottom line’ (TBL), it seems that the central part of all the reports (the part of “food safety”) represents the financial aspect of sustainability; and that the ‘bottom lines’ have been set quite low in the sense that producing safe food is recognised as the most essential competence that guarantees the firm’s economic viability and ethical values. This is very likely due to the vulnerable nature of the agricultural industry itself in terms of its comparatively low profitability (da Silva *et al.*, 2009; Gao, 2006; Saporta, 2011), and due to the broader socio-economic context in China as well. In the next section, we intend to discuss the evolution of the reporting and that of the social settings in China and decipher the interplay of these two elements.

¹⁷² Information available at <http://money.people.com.cn/stock/n1/2016/0824/c67815-28661814.html>, last consulted on 3/10/2016.

Table 1: Comparison of the two sets of reports

		New Hope Liuhe Group			Beidahuang Group, and Heilongjiang Land Reclamation Bureau	
Firm feature		Private enterprise, biggest listed group company of livestock and animal feed			Biggest agricultural conglomerate under direct management of MOF, biggest state-owned farm	
Mandatory report		Yes, since 2008			Yes, since 2012	
Stand-alone CSR report		Yes, since 2008			No	
Third-party verification		No			No	
Volume of the reports		16 (in 2008) – 58 (in 2013) pages of full report			2 – 3 pages of a section entitled “Active fulfilment of social responsibility” in the annual report	
Stages		2008 – 09	2010 – 11	2012 – 13	2012	2013
Guideline		None	SZSE, CASS	CSRC, SZSE, GRI, CASS-CSR1.0	None	None
Subjects involved	Food safety	Efforts on industrial chain management (dealing with individual farmers); “ <i>servant</i> ”			Verifications obtained; traceability; controller	
	Natural environment and resources	Increasingly detailed and quantified information concerning the investments in clean energy and pollution control; successful cases provided; closely linked to food safety				
	Social aspect	Philanthropic activities; concerns for a much larger variety of interest groups			Philanthropic activities; wellbeing of employees	

3.2 Institutionalisation of the agribusinesses’ discourse

The above presented three aspects of the two firms’ sustainability reports have mirrored the three major issues—among many others—in the Chinese economy, namely food

safety, degradation of natural environment and social security shortfall. Facing the questioning voices of society, the central government seems to intend to assimilate the stakeholder theory and the idea of *shared* social responsibility, ideology advocated recently notably by Western capitalist countries (Wang & Juslin, 2011): Since 2000s, the authorities have been delivering an important message through various channels, and emphasise that that problems in product quality control, natural environment protection and human wellbeing at large could not be solved if relying solely on supervision and regulation of the government, and therefore the whole of society, especially firms should take their part of responsibility and communicate their efforts, or the lack of effort, on the matter (CASS, 2009; He *et al.*, 2013; Lin, 2010).

To do so, the government has started to take a series of regulatory measures, notably within the realm of stock exchanges, in order to encourage sustainability reporting of listed firms (Noronha *et al.*, 2013). In December 2008, the Shanghai Stock Exchange (SSE) issued the *Circular about Disclosing Social Responsibility Reports and Internal Control Self-Evaluation Reports for Listed Companies in 2008*. This document required three types of listed companies, including those issuing A and H shares, those in the corporate governance sector and those in the financial industry to disclose CSR reports alongside their annual reports and also encouraged other companies to follow this practice voluntarily. In the same year, the SZSE issued the *Circular about Disclosing Annual Reports of 2008 for Listed Companies*, which required listed companies constituting the “SZSE 100 Index” (which includes Liuhe) to disclose their CSR reports and also encouraged other companies to follow this practice voluntarily. In 2012, another *Circular* entitled *Implementation of a standard internal control system in main board listed companies within the year of 2012* was released by the Ministry of Finance, who required all the firms listed in the main board of SSE (which includes Beidahuang this time) to conduct a pilot test of social responsibility reporting, if have not been practicing it already.

In these documents, it is repeatedly stated that the promulgation of the CSR related regulations are for the purpose of concretising the ‘caring’ for stakeholders, concept imported from the West. For instance, in the SSE Circular in May listed above, the text starts with the paragraph as follows:

“In order to advocate for the active commitment of the listed companies to fulfil social responsibility, to concretise the concepts of sustainable development and scientific perspective of development, to promote the caring for interests of corporate stakeholders including employees, creditors, customers, consumers and the community stakeholders whilst concentrating on the firm's own economic interests, now we make the following requirements to companies listed in the SSE regarding the fulfilment of CSR.”¹⁷³

With the Circulars, Guidelines as well as a series of laws and regulatory documents issued from various authoritarian institutions, the Chinese government plays an important role in *guiding* the discourse of sustainability reporting of Chinese firms. However, these imported concepts of sustainability and CSR communicated by the numerous government documents do not seem to be comprehended by the firms in an undifferentiated manner, as when some of the firms understand them in the way as they are intended in the Western version, the others could easily confuse the term with the idea of SOEs as social services and benefits providers in the context of socialist Chinese economy. (Lin, 2010) The lack of widely agreed conception of sustainability and CSR as well as the lack of uniformed and mandatory *standards* have resulted in the uneven level of reporting practice among the firms, just as demonstrated in the previous sections: Even though both Liuhe and Beidahuang are required to prepare sustainability reports by the authorities, their reports are quite different in terms of volume, form and content organisation, whilst both of them are short of quantified information provided under specific standards, and therefore lacks comparability and usefulness.

This section goes deeper into the analysis of the three major issues uncovered by the sustainability reports of the two agribusinesses. Interview data are used in this part of the study both as evidence from the terrain and as indicative factors that reorient the investigation depending on cases.

¹⁷³ Originally in Chinese: “为倡导各上市公司积极承担社会责任，落实可持续发展及科学发展观，促进公司在关注自身及全体股东经济利益的同时，充分关注包括公司员工、债权人、客户、消费者及社区在内的利益相关者的共同利益，促进社会经济的可持续发展，现就本所上市公司社会责任承担工作做出如下要求。” Information available at http://www.sse.com.cn/lawandrules/sserules/listing/stock/c/c_20120918_49642.shtml, last consulted on 12/12/2015.

3.2.1 Food safety issues

The increasing food safety problems in China have greatly affected the two firms under discussion and the policy making of the authorities as well. In 2008, the ‘melamine scandal’ burst out in Chinese milk industry: An enormous quantity of milk products, infant formulas and other food materials and components adulterated with melamine was spotted in the market. Infants who had taken this kind of formula milk could develop kidney stones and if affected seriously, the consequences could be fatal (Noronha *et al.*, 2013). This event is probably the most shocking product quality scandal that ever existed in China, not only because the damage was bad and this time it was the newly born and children who were the main victims, but also for the fact that the most exposed firm was Sanlu, a well-known group company specialised in dairy product. The social consequences of this event were extremely extensive, especially in terms of public confidence: People have started to seriously question the business ethics of the whole food industry and the proper function of regulatory authorities. This pressure from the public is seen as the main accelerator of the Chinese government’s efforts on promoting sustainability reporting of the firms (CASS, 2009; Noronha *et al.*, 2013; Shen, 2009; Wu, 2008). Nevertheless, the scandals in the food industry did not stop making their appearance since then; and the questioning voice of Chinese people has been even louder. On 18 December 2012, an exposé on CCTV, China’s national broadcaster, claimed that poultry product suppliers (Liuhe among the major ones) to KFC and McDonald’s had been doing force feeding and had stuffed their chickens with excessive antibiotics. In May 2013, a large quantity of rice containing excessive levels of cadmium (a kind of heavy metal) was found in markets notably in the southern part of China, which suggested severe heavy metal pollution of China’s rice crops produced in the south.

Facing these challenges, the firms have made their moves, and as it is usually the case, much quicker than the government. It was in April 2009, less than one year after the melamine scandal that Liuhe released its first annual stand-alone CSR report. Directly (though slightly) affected by the scandal since the firm has several small scale subsidiaries producing dairy products, Liuhe claimed that all of their products “have passed strict inspection conducted by the national authorities and no melamine was

detected”¹⁷⁴; and that in future the firm will “*strengthen* the quality control and *continue* to perform strict milk quality control”¹⁷⁵ (Liuhe, 2009, p. 2).

Similarly, in Liuhe’s 2012 CSR report, the ‘fast-growing chicken’ issue was raised. As the firm that was directly exposed by CCTV this time, Liuhe claimed in the report that “*right after* seeing the exposé, an investigation team composed by the main leaders of the firm *rushed* to the farms in Pingdu (County), *sealed* all inventories of raw materials and products and *thoroughly checked* the quality control system ...”¹⁷⁶ Afterwards the firm “paid the contracted local farmers the total sum of the orders anyway to ensure their livelihood”¹⁷⁷. And the firm expressed “the deepest *apologies* to the consumers”¹⁷⁸ and promised “*complete rectification*”¹⁷⁹ (Liuhe, 2013, p. 36).

What is noticeable is that regarding both events in which the firm was involved, Liuhe’s reports have addressed these issues in a rather direct manner, in the hope of rescuing the firm’s image, either by ‘pleading innocence’ (as in the former case) or by showing prompt action of damage control and caring gestures (as in the latter). In fact, if we look at the trajectory of Liuhe’s reporting development, we could find that the years of the firm’s ‘milestone’ reports correspond perfectly to the time points of crisis, which to a great extent proves that the main motivation for Liuhe to begin and to improve their sustainability reporting is used as a tool for (re)establishing legitimacy to rescue the corporate image (Cho & Patten, 2007), and this is ultimately driven by profit.

As to Beidahuang, the national grain base situated in the far north and specialised notably in rice production, the rice scandal in the southern provinces does not seem to affect the firm’s sustainability reports at all. The reports ‘naturally’ have not mentioned anything concerning this event since the firm’s image is not at all damaged. Rather, after the burst-

¹⁷⁴ Originally in Chinese: “经国家权威部门的严格检查，本公司所有乳品企业和饲料生产企业未有的产品均未检测含有三聚氰胺”

¹⁷⁵ Originally in Chinese: “公司强化质量控制，持续加强奶源基础建设，严把产品质量关”

¹⁷⁶ Originally in Chinese: “公司知悉该情况后，第一时间成立由公司为主要领导的调查小组赶赴现场，全面接手平度工厂；检查、复核内控体系；封存所有库存原料及产品，积极配合政府相关部门的全面检查”

¹⁷⁷ Originally in Chinese: “鉴于此次事件可能会给当地农村养殖户造成一定困难，为了维护他们的利益，降低他们的经济损失，平度工厂对所有养殖户的剩余款项给予先行全额支付。”

¹⁷⁸ Originally in Chinese: “六和集团郑重向社会与广大消费者表达深深的歉意”

¹⁷⁹ Originally in Chinese: “深刻的整改措施”

out of this scandal, Beidahuang’s rice has gained increasing popularity, especially in the south, since the consumers in the southern provinces who had been accustomed to local rice for decades are now obligated to purchase rice produced in the north due to safety concerns. As a matter of fact, this scandal has to a large extent acted as a free advertisement for Beidahuang. Nevertheless, the report preparers of Beidahuang have still chosen to lay stress on its effective product quality control in order to reinforce the firm’s image.

Figure 5 summarises the sequence of social events and the two firms reporting practices in order to make the timeline clearer. Three food safety scandals (among many others) mentioned above are listed in the first line whilst the relevant policies are listed in the second, the colour of the asterisks on top of each event and each policy matches the font colour of the firm implied. We can notice that, the introduction of policies on gradually institutionalising CSR reporting among listed firms, matches the rhythm of major food safety scandals in society, and the CSR reporting practices of the two firms under investigation has been an act of compliance with laws and regulations. The introduction of these policies is tightly linked to these food scandals, which have led people to seriously question the business ethics of the whole food industry and the proper function of regulatory authorities. This pressure from the public is widely seen as the main accelerator of the Chinese government’s efforts on promoting sustainability reporting of the firms, and in turn as the main reason that has driven the agribusinesses to conduct this kind of reporting.

	2008	2009	...	2012	2013
Events	'Melamine' milk*			Fast-growing chicken*	'Cadmium' rice*
Policies	SZSE*/SSE Notice			MOF Notice*	
Liuhe		(First standalone report for 2008) "Strengthen and continue to perform strict milk quality control."			Quick reactions; farmers' livelihood; "deepest apologies"; "complete rectification"
Beidahuang				(First disclosure for 2012)	(No particular reaction)

Figure 5: sequence of events and the two firms reporting practices

This incentive for advocating the good product quality in the firms' sustainability reports under social pressures is pointed out and also acknowledged repeatedly not only by the interviewees such as Ms C (Liuhe) and Mr N (Beidahuang), but also by the executives of other agribusinesses and governmental and non-governmental institutions. It seems that this 'window-dressing' nature of the sustainability report is acquiesced in the society. When it comes to the essence of 'true problem-solving' concerning the food safety problem in China, there is again, a consensus among the interviewees claiming that the State is the one—if not the only one—that is responsible. For instance, regarding the 2013 scandal of Liuhe's substandard products, Ms C points out that these products were spotted and exposed by the media rather than the authorities. She then states that

“our firm has always paid to the government for their so-called periodic inspections. However, every time when it comes to a product quality scandal, it is always us, the firms who are the only one to be blamed. But let's make it clear that if we do commit anything 'scandalous', it is only because we have known that the inspectors will never come and check. ... You know, due to the State's policy, we as a firm cannot contract land in large scale for our production. Therefore around 90% of our raw materials are purchased from middlemen whilst only 10% are produced on the firm's own contracted farm, which is actually an independent subsidiary dedicated to exportation. Whilst the production in the latter part could be directly supervised by the firm's management, the quality control for the former 90% through the extremely long and scattered industrial chain is difficult. That's why it is the State's, rather than individual firms' responsibility to supervise the product quality of this industry.”

Compared to the privately owned Liuhe which is obligated to deal with small household farmers and workshops, Beidahuang's unique highly centralised management seems to have saved the firm from many troubles in terms of quality control:

“In the semi-military management system of our state-owned farm, every household is distributed a certain amount of cropland and the land is 'collected' and redistributed at the end of the year. Every single product produced by a household 'farm' is traceable through our management system. This traceability is highly centralised therefore extremely powerful and efficient. For instance, the

seedlings, as well as the fertiliser and pesticide are all distributed by our company (the municipality) and their usage is closely supervised. I believe this is the most efficient way to guarantee the quality of food products. However, it is equally true that the case of Beidahuang is extremely rare and hard to be popularised nowadays in China.”

As to the cases other than those of the two agribusinesses discussed above, take the case mentioned Mr F, sales manager of the Slaughtering And Meat Processing Company of Jinan (province) for another example:

“As far as I know, many so-called firm-owned hoggeries of Chinese pork processing firms are false. In fact, there are just some small empty parcels of land of a few square meters. When the inspection department comes (which is already extremely rare), the firm would put a few pigs there for a ‘show’, and then move them away when the inspectors are gone. 99.9% of the pork products are acquired from middlemen. The so-called quality control on the hog breeding process at farm level is totally out of the question.”

Given the analysis made by Mr N, it seems that the ownership structure and the loose authoritarian supervision are the two major institutional problems that have resulted in the poor control of agricultural product quality and, for lack of successful model to be copied immediately, will probably linger for a while. In this institutional context, the privately owned agribusinesses are obliged to work their own way out. For instance, Mr S (Emerald Bay Sustainable Farm), young farm owner specialised in organic vegetables and livestock products claims that

“we do not define our farm as an organic farm in a strict sense, since we do not have any supervision or certification from the authorities, because you know nowadays official certification for organic food is a poorly-regulated market. Basically we regulate ourselves, and are supervised by our consumers. After all, this is a very small farm. Many factors such as groundwater quality and the pesticides carried over by wind are out of our control. Also, the chicken manure that we use as fertiliser is not from organic farms. What we can do is try to make

our information as transparent as possible to our consumers and let them judge the quality of our products.”

Similarly, Mr W (Chincell-Town Honey), manager of a firm specialised in organic honey products recalling the firm's experience in its own sector and reveals the reality of the industry and their own motivation of self-regulation by saying that

“the loose control of honey quality standards is actually resulted from historical issues. There was a word called “the supply system” in the old days: All the honey across the country was supplied through this system. In other words, it is the collectively-owned enterprises that monopolised all the channels of supplying and selling honey. Though not often mentioned nowadays, it still affects this industry. In fact, the national honey product standards that we are using today are inherited from that system. In the monopolistic economy, the standards were not so strict with the purity of honey. ... All of our competitors are producing impure honey, or even extracting ‘pure’ rice syrup to produce ‘honey’ in accordance with these standards, which are not even able to distinguish between real and fake honey. ... In this environment, we can do nothing but conduct self-regulation. In fact this is a compromise that we made between our belief and the survival in this upsetting market. ... We did not and will not obtain any official certification, because the certification market is a mess inside. We have found on our own the Qinhuangdao Entry-Exit Inspection and Quarantine Bureau, one of the two most authoritative inspection bodies specialised in honey products. They generate very objective and digitised reports which are more reliable than any other official certifications. ... It is only through a thorough reform of this system that the product quality and safety problem can be solved.”

It seems that in this poorly regulated environment for food safety, extra efforts on quality control are made mainly thanks to entrepreneurs' ‘good conscience’, rather than the respect to laws and standards made by the authority, according to the owners of agribusinesses. Meanwhile, as one of the representatives of government apparatus, Mr Q (CFNA), high level executive in the chamber of commerce of foodstuffs, largely confirms the above points made by the agribusiness executives, and stresses that it is extremely important to develop a well-established verification system run by the relevant authorities:

“Regarding the recurrent food safety crisis, the Certification and Accreditation Administration (CNCA) of the PRC has promoted a “System of Honesty Certification”. I heard that it’s a real sophisticated mechanism and I was intrigued. ... However, in the end, I found it ridiculous to generate a score for ‘honesty’, especially the honesty of a firm. I think we’d better try to localise some already well developed and more operational framework such as the GLOBAL G.A.P.¹⁸⁰ and the ISO26000¹⁸¹ from the West, rather than inventing something out of nowhere by ourselves.”

Given all the interviewees agree on the point that problems concerning product quality control are mainly due to the government’s negligence, or if not, to its poor ability at making and implementing laws and standards, it could be concluded that the food product safety, basic *corporate* responsibility for agribusinesses that is closely linked to their economic viability is widely recognised in the Chinese context as a responsibility that should be taken by *the State*.

3.2.2 Natural environment and resources for agribusinesses

As it is demonstrated in the discourses of the firms’ sustainability reports, efforts claimed as pollution control and environment conservation are closely linked to food safety, since the economic activities of agribusinesses do have a much tighter link to the natural environment as the product quality relies on the natural environment that conceives the (raw material of) the products. This linkage is confirmed by the interview data from different angles. For example,

“The product quality and the environment protection actually are inseparable. For example, recently there is a huge problem of smog in Northeast China, caused by the straw burning after the harvest of wheat. In Beidahuang however, we choose not to burn the straw, but to chop it and bury it back into the soil. In

¹⁸⁰ G.A.P. stands for Good Agricultural Practice – and GLOBAL G.A.P. is the worldwide standard that assures it. More details available on http://www.globalgap.org/uk_en/.

¹⁸¹ ISO standards for social responsibility. More details available on <http://www.iso.org/>.

this way, the air pollution is avoided. Besides, it could serve as organic fertiliser in the soil, therefore reduce the use of the chemical ones and their residues in the crops. The problem remains that this method is not yet promoted in other regions due to various reasons” (Mr N, Beidahuang).

“the honey industry itself actually is fully compliant with standards for sustainable agriculture. It does not consist of large-scale industrial processes; it’s just keeping bees and collecting the honey when the bees finish collecting it from flowers. The processing is actually only to filter impurities. From the production, to the processing and to the selling there is no pollution” (Mr Z, Chincell-Town Honey).

“For us, the principle is not to produce beautiful and uniform sized products in large quantity, but to grow real vegetables and fruits, and to do our best to create a harmonious eco-system in our farm. Thus the product quality control here equals to the adherence to a sustainable mode of production” (Mr S, Emerald Bay Sustainable Farm).

The “various reasons” claimed by Mr N are later specified by Mr N himself, and are echoed in the analysis of Mr M, China regional director of Solidaridad, international NGO (based in the Netherlands) specialised in agriculture and rural development:

“I can confidently say that we’re doing well in environment conservation, since the central government and we ourselves have always known that as ‘China’s big barn’ that products 60% of the country’s total grain output, we have to ensure a good natural environment in order to ensure the food safety of the country. For example, heavy industry plants are not authorised to be built in our region. ... Differently from other regions where the environment conservation projects are supervised and funded by regional governments, this kind of projects for Beidahuang are a part of the “state plan” supervised by the NDRC, and the funding for these projects is directly issued by the MOF. This direct management from the central government has effectively implemented numerous projects such as the wetland and prairie restoration.”

“I think that the most fundamental issue of sustainability is who should bear the cost. Since at the beginning there certainly should be an additional input. However, it’s unfair to let the farmers bear all this cost. When talking about food safety and land degradation problems, we always say that it is the unconscientious farmers who are to blame. They are indeed the direct cause of the problems, but others who are involved in the market also have their responsibility. What we as an NGO do is not simply to correct farmers’ certain behaviours such as the abuse of fertilisers, but to help them to improve progressively the quality and productivity in a scientific, eco-friendly way”(Mr M, Solidaridad).

Indeed, the most fundamental reason for the (in-)effective implementation of environment conservation project is always the funding, and of course, the adequate use of it. It seems that quality control and environmental conservation projects carried out directly by the central authority (as the ones for the state farm) seem to be more effective than the ones led by local governments and by private agribusinesses mainly due to incentive reasons. Either way, for agribusinesses, a good control of product quality is to a great extent the guarantee of an eco-friendly mode of production. In this regard, the agribusinesses are motivated not only to report their environmental efforts in words, but also to conduct these efforts in action. Yet as pointed out numerously by the interviewees when it comes to product quality control and environment protection, it is the way the agricultural activities are organised that poses a problem: the ownership structure that allows—and almost only allows—land for agricultural use to be contracted by scattered households makes it very difficult for an effective management and control system to be implemented.

According to Mr Q (CFNA) who argues in the place of the agribusiness owners, the central issue in sustainable agriculture is the absence of a rural land circulation market:

“In China, the agribusinesses do not have the right to keep the land for long time, therefore are not motivated for long-term land maintenance. ... The president of a garlic export firm in Shandong (province) talked to me about their hesitation for obtaining the organic certification of their privately-run farm contracted from the local county. They told me that if doing so, the cost of each acre of this land would increase about 400 yuan (50 US dollar). Whilst being exposed to the

international market uncertainty, they are not sure if they can have all this investment would be paid back only by selling garlic. It would be way much easier for him to make decisions if there is a market of land circulation and therefore this investment could also add value to this land once put on the market.”

The negative effects of limited and unstable land ownership structure on the firms’ environment-friendly investments are confirmed by Ms R, administrative director and chief accountant of an NGO named Global Environmental Institute (GEI), and are contrasted from the reverse side as Mr N (Beidahuang) proudly describes their advantages in terms of environment protection:

“During 2004 to 2009, we had registered a company in Yunnan province, which is dedicated to a 1340-acre organic vegetable farm. The whole domain was certificated as organic farm. We planted vegetables there and then shipped them to and sell them in Beijing. At that time, there was hardly any organic vegetable in the market, so basically the profitability was good. Yet in 2009, the business suddenly stopped due to a compulsory land acquisition by the local government.¹⁸² They wanted the land back for commercial development. At that time we had appealed against this decision for two years because we had invested quite a lot in obtaining the organic certification of that land: We had bared all the cost of the first three years of the “conversion period” before the land could be certificated as organic farm, and within this period the land was emptied for recovering from former exploitation. But in the end it did not work. After all, the land was sub-contracted from the local households and the local government had every right to have it back. The government paid a certain amount of compensation to the farmers yet we’d got nothing” (Ms R, GEI).

“Beidahuang is a nearly unparalleled case in China: It managed to achieve a modern enterprise system and contiguous planting while the natural environment remains well conserved. This is mainly because there are relatively abundant land resources in our region, and so the problem of arable land shortage is less

¹⁸² See more in Section 1.1.1.3 of Chapter V regarding the land acquisition.

prominent. Another reason is that, as a state-owned farm, there is not any problem of land circulation. In other words, we do not have to worry about the tenure of our contracted farms: It almost is the equivalent of eternity” (Mr N, Beidahuang).

Further regarding the tenure of land for agriculture use, the relevant government official states that,

“The State’s policy does not encourage industrial and commercial enterprises to participate directly in agricultural production, since if so, the low profitability of this sector could make these firms convert the agricultural lands into other more profitable uses. They are generally supposed to function as food processing companies in the downstream of the industrial chain, while the upstream, such as the cultivation and the grazing activities are carried out by farmers or cooperatives” (Mr A, MOA).

However, this cautious attitude of the central government does not seem to have curbed the blind, profit-driven conversion of arable lands into those for commercial use, as demonstrated in the case of the GEI, not by the agribusinesses but by the regional governments who retain the eventual right of land distribution.¹⁸³

As shown in the above discourses issued by the government officials and agribusiness practitioners, there is a dilemma regarding the rural land tenure for agribusinesses. Both views of the central authority and the businesses demonstrate their different standpoints in the economy. The land value recognition is in the centre of their concerns. Indeed, within the current accounting framework, the “investment” on land maintenance is only registered as a “cost” of production. In the current institutional context where ownership policy for land, or in more general terms, for natural capital stocks, are supposed to be exploited and maintained without being owned by the ordinary agribusinesses (unlike Beidahuang), it seems clear that the firms would not readily—and, according to the policy, are not able to fully—assume the responsibility of guarantee its product quality and

¹⁸³ See more in Section 1.1.1 of Chapter V.

environmental protection. These two aspects of responsibility involved in natural capital maintenance in regard with the agriculture sector falls, again, on the shoulder of the State.

3.2.3 Relationship between agribusinesses and agricultural activity practitioners

As raised earlier in the analysis, the two firms under investigation report from quite different perspectives regarding the wellbeing of the society, with Beidahuang focusing on the safety and wellbeing of their employees and Liuhe focusing on ‘stakeholders’ as defined in the mainstream CSR theory. And this is largely resulted from the different positioning of the two firms in their business and in the economy. Further regarding their relationships with the agricultural activity practitioners including both the farmers in the fields and all other kind of corporate employees, whilst Beidahuang is able to conduct effective ‘HR management’ on all relevant agricultural activity practitioners through the integrated industrial chain that links the upstream farming and the downstream agricultural product manufacturing and trading thanks to its rather unusual corporate nature, Liuhe is obligated to treat the farmers as suppliers and clients, where the controlling power over the farmers is out of the question.

The fact is, apart from the rare cases like Beidahuang, the organisation and management of human resource involved in agricultural production in general is comparatively loose, or even arbitrary. For the purpose of dealing with this problem, “agricultural cooperatives” at village and/or county level are enthusiastically advocated by the government, especially in the early 90s, however with little success mainly due to issues of bureaucracy and conflicts of interests in its implementation (Ma, 2006). Therefore, as Mr Q (CFNA) continues with the case of the garlic exportation firm mentioned earlier, he notes that

“... most of the time, the agribusinesses actually need to deal with individual farmers. ... Since the firm has very limited right to contract land for its own use, the farmers remain its main supplier. The absence of a well organised cooperative results in a very unstable relationship between the firm and the

farmers. The contract signed with individual farmers could be easily breached by the farmers after the harvest, since they would always try to sell in the market at a higher price. This instability makes it difficult for the firm to perform an effective supply chain management, for the purpose of promoting the organic food certification, for example. ... This difficulty in forming an effective cooperative is largely because of the human capital loss in the agriculture sector, where young, strong and educated people from rural area would not inherit the agricultural activities from their senior generations.”

Mr Q’s analysis is largely supported by Ms R (GEI) in the rest of the story of their organic farm:

“...in our subcontracted land in Yunnan, the farmers who had worked on the land were the actual owners of the lands. What we did is sending over our agronomist to arrange the planting, so that the farmers could have improved their practices and meet our standards. After the harvest, it was us who had purchased all the vegetables, at a price that had covered all the costs of planting plus a considerable part of the profits. By working with us, the farmers had greatly increased their household incomes. But us, we were under great financial pressure. Because we had paid both for the land tenure and for all the vegetables produced, and what's more, we were to find a market for them on our own. If anything had gone wrong we would completely go bankrupt. ... After the land confiscation in Yunnan, we returned in Beijing and found a piece of land that we would like to subcontract in Yanqing (in Beijing's suburbs), where the conditions of water, soil and air quality are all good. We sent sample vegetables that we grew for tests and it turned out that they all meet organic food standards. But the only problem was that local farmers are not motivated. They think it takes too many efforts to grow vegetables in the way we asked. We also found a local retired agronomist and let him help us do the promotion. He was happy to help at the beginning, but then he found his folks are not willing to accept this idea and he just quit. Although the farmers clearly know that if working with us they would definitely earn more money, they did not want to, because they are all in their 70s and do not want too much work, whilst all the main labour force of the rural households works in the city.”

In the rapid urbanisation process of the Chinese economy, it seems inevitable that the rural areas would suffer both from massive human capital flight and from the unbalanced regional economic development, where these two factors form a reciprocal causation. This ‘vicious cycle’ seems to be the biggest enemy to the “industrial upgrade” for Chinese agriculture in terms of mode of production (from the intensive and arbitrary one to a better-informed, better-coordinated one and the organic farming, for instance). With reference to what has already been discussed regarding the IAS 41 implementation in the Chinese ‘farms’ in the previous chapter, what is noticeable is that, the lack of proper management and coordination at farm level, the upstream of the industrial chain, greatly affects the functioning of the MACS of the downstream agribusinesses specialised in agricultural product manufacturing. This is above all stated repeatedly by the interviewees of agribusinesses. For instance:

“Generally speaking, our animal feeds are wholesaled to, and our raw materials (livestocks) from the middlemen, because the household farms are extremely numerous and scattered. Besides, they do not have sufficient funds and therefore can only purchase each time a small amount of the feeds from the middlemen. In fact, our company has been making efforts, such as trying to provide financial services that aim at helping the farmers smooth out their cash flow, and to bypass the middlemen to reduce transaction costs. But till now these do not seem to work out: a lot of farmers default their payments, or do not comply with the wholesale contract. And also the local middlemen are not so easy to bypass. ... It does not seem that we’re in a good position to initiate anything in terms of services to improve their financial or environmental performance for the farmers, since we do not have a stable relationship with them” (Ms C, Liuhe).

The impossibility for the firms to have the individual household farms integrated in their MACS seems to have to a great extent ‘forced’ the firms to pass onto the State. Moreover, due to the unstable relationship between the firms and the household farmers as well as the existence of middlemen in the supply and distribution chain in the agriculture sector, the socially responsible behaviour of the listed agribusinesses—if ever truly intended for the reason of improving corporate image or whatever—could hardly extend its power of influence to the suppliers (and consumers) at farm level.

With reference to what is stated by Mr A (MOA) earlier in this chapter regarding the State's discouragement of enterprises' direct participation in agricultural production, it seems that there is always an awkward distance lies in between the household farmers and the downstream agribusinesses: If the household farmers are too involved into the market and allowed to trade freely with the firms, the low profitability of the agriculture activities would drive them to abandon their agricultural activities, notably by turning the land they contracted into more profitable commercial uses, as what concerns the State according to Mr A (MOA); and if they are left too far from the agribusinesses, the organisation of agricultural production—in terms of quality control, natural environment production and human capital conservation—is rendered far from efficient, which in turn undermines the profitability of the agriculture sector and the livelihood of the farmers who continue to conduct agricultural activities, as it is the case according to many other interviewees cited above. It seems that in this circumstance, what the firms could do at best, according to Mr Z (Chincell-Town Honey), is to

“let the consumers know what good honey really tastes like and sell more good honey products in the market. If the profit is good the firm can offer higher acquisition price for the honey to the middlemen, then let the middlemen offer higher price to the beekeepers in order to improve the beekeepers living conditions.”

What need to be specified is that Chincell-Town is a relatively small scale private company endowed with a Buddhist corporate culture initiated by its firm owner, who is a devout Buddhist. Needless to say, these beliefs in virtuous cycle and in clientelism through the (initiation of) generous behaviours to its social environment come from this rather religious motivation, of which the discussion goes beyond the scope of this dissertation (see next chapter). Further, as Mr Z expressed later in the interview, the gap between this idealistic vision and reality is inevitable due to particularities of the Chinese agriculture sector and the border historical and institutional context.

3.2.4 Possibilities for the agribusinesses' CSR fulfilment

The above presented three aspects of the problems as well as the sharing of responsibility prove that, for the two agribusinesses under investigation and for the interviewees from different institutions, no matter if it is the problem of corporate product quality, environment protection, or social relations, it is always the State that is supposed to take the responsibility, or at least the biggest part of it. Clearly endowed with the neoliberal ideology, what Ms C (Liuhe) claims seem to be able to represent the voices of the firms:

“The standpoint of the government and that of the firms are definitely different. What the firms need to do is to achieve maximum benefits within the scope of government regulations; and what the government needs to do is to make this regulatory and supervising systems work. There must be such a clear division of responsibility.”

Under the guidance of this principle, the agribusinesses' high degree of dependence on the State to fulfil the three dimensions of corporate responsibilities presented earlier appears to be more understandable: Given the multiple restrictions exerted throughout the industrial chain and the nature of low profitability that characterises the Chinese agriculture sector, the mere compliance with laws and regulations already takes great efforts to be attained.

Further regarding this compliance with regulations, Mr Q (CFNA) proposes a possible track to be followed in order to change the current situation through the promotion of international trade:

“65% of our food exportation faces the markets of developed countries, which definitely require high standard products, especially for food products. In order to enter these markets, our products must meet all their standards. Objectively speaking, this has caused the phenomenon that the quality of exported food products to foreign food is way much higher than that of domestic ones. ... Studying and obtaining these certifications in the Western countries is extremely important. Because in the Global G.A.P. and other relevant international trading certifications proposed by the US, the UK and Europe, standards of labour force

protection, use of environmental resources and pollutant emissions etc. are all included, not to mention those for the product quality. Therefore in the pursuit of achieving these certifications, the concept of sustainable development would naturally be integrated. Our government has seen these certification standards as something negative that hinders our international trade. But in fact we can strive to meet these standards in order to improve the quality of export products, and then to apply these standards to domestic products, and therefore achieve our own sustainable development goals.”

Indeed, the food products for exportation have long been recognised as equivalence to products that meet higher standards in quality and environmental requirements. This is also echoed by Ms C’s (Liuhe) in her words presented earlier regarding Liuhe’s contracted farm dedicated to exportation. However, apart from the quality control standards which are directly testable through a set of well-developed quarantine procedures, the way how the verifications on environment and labour protection could be done is still questionable. As recalled by Ms J, administrative assistant of the Slaughtering And Meat Processing Company of Jinan, during a meeting with a French customer that she participated in accompanying the representatives of her company, after having negotiated the terms and operational details for the quality control, when the French side asked whether there are measures taken to meet the carbon emission restrictions in their contract, the Chinese representative simply answered “There will not be a problem!” with a smile, and finally the contract was signed ‘without a problem’, even though no operational detail regarding the carbon emission was specified in the negotiation, let alone any field inspection having been demanded or exercised by the French partner.

Within the scope of a market economy or, a ‘socialist market economy’ as formulated in the Chinese context, it seems that the CSR fulfilment—and especially that of privately-run Chinese agribusinesses—relies above all on the firms themselves, which are motivated either by ideological reasons or moral standards (according to Mr Z and Ms R), or by rather utilitarian reasons, notably to guarantee the clientele through meeting exportation standards (according to Ms C and Mr Q); though it is possible that the former category of motivation eventually also falls into the latter one, given the argument that profit is what the firms are after.

4. Reflexions on the two events in regard with TDL applicability

Facing the increasing environmental and social pressures, it seems that China is reaching a point at which it becomes imperative to shift the dominant ideology to a more sustainable one, in order to reorient the logic both for the state governance and for the businesses. For a state like China that refuses the multiparty system and separation of powers (Goodman, 2011), the ideological aspect is indeed important both for the State and for individual businesses, especially in times of crises when institutional reforms are needed. Still, what is more important is to find the most proper instrument to facilitate these reforms and this transition of ideology.

Regarding this transition and accompanying reforms on the national level, the discourses presented in Section 2 demonstrate that, as the instrument claimed by the central government to realise this transition in ideology, the NEAAS goes far beyond the environment protection in terms of its meaning, in that this scheme constitutes a fundamental institutional reform that the central CCP seeks to conduct. From the “reform and opening up” to the “scientific outlook on development”, until today’s “ecological civilisation”, what have been shown is the central leadership’s strong intention of reorienting the dominant ideology, though not as drastic as “from a neoliberalism to environmentalism” but rather mild as from simply encouraging development (at all cost) to the quest of a ‘scientific’ and ‘civilised’ development course.

Yet what is evident is that the reform advocated by the central CCP leadership meets increasing number of obstacles, on the one hand due to the considerable difficulties to reorient such a sizable economy; and on the other, due to the interest groups that have been continuously deepening their roots during the past decades: The almost 30 years’ practice of state capitalism does not seem to have reinforced the power of the State, but has benefited the vested interest groups, notably those of the departmental and regional cadres, who have been building their own power and network over time and developed opposing interest against the central authority.

Further regarding the operational aspect of the reform, it is noted that the NEAAS based on the SEEA 2012 together with the ECP based on the PES/PPP principles is both labelled as widely accepted GSI with a set of scientific calculation methods, and is expected to function as a truly powerful one that tackles the two major problems at one time as expected. Future observations could be made from the below perspectives on the development of the sustainability accounting at the national level in China: First, as the instrument chosen by the central CCP leadership to facilitate the reforms needed, the NEAAS might function as a truly powerful one that tackles the two major problems at one time as expected, especially in the recent context where the Chinese authorities have officially acknowledged China's entering in the "new formal" economy, where economic growth (allowed to be reported as) mildly declining in the recent few years. The effectiveness of its application might well depend on the technical aspects (quantitative measurement, scientific threshold setting etc.), and also on transparency in terms of relevant information disclosure. Second, if we look at some latest advances in the political structure under the leadership of president Xi, we could easily notice that ongoing anti-corruption movement, the first and so far the most impressive campaign conducted by Xi, echoes perfectly the NEAAS' focus on improving the cadre appraisal system, since it aims precisely at destroying the vested interests groups especially at departmental and regional levels (*cf. ChinaFile*, 2016; Fenby, 2015). It seems that the SEEA-based NEAAS has been elaborated into a scheme intended for reforms concerning anti-GDP-worship and anti-corruption, a 'localised' version of SEEA of which the signification goes far beyond the environmental protection. Third, it seems that, apart from the NEAAS framework that seeks to account for the natural environment in general, the carbon accounting and trading based on the SEEA framework has achieved particularly noticeable development, probably due to the international pressure on carbon emission.¹⁸⁴ However, in time it would more likely tilt towards the improvement of the cadre appraisal system, rather than the ecological environment protection, since it appears to be more operable for the former than the latter. And fourth, it seems that the recent evolution in China show that central government has chosen to reinforce the control over Party cadres in a relatively strict manner as a way to better enforce in departments and

¹⁸⁴ See, for instance China's several carbon trading pilot projects on provincial level and its plan for starting up the national carbon-trading programme in 2017. Information available at <http://www.bloomberg.com/news/articles/2016-01-22/china-plans-to-include-eight-industries-in-carbon-trading-market>, last consulted on 2/3/2016.

regions the decisions from the highest level. The anti-corruption campaign is one aspect of this move towards a tighter control of the behaviours of Party cadres. This poses a classical challenge of trying to find the right balance between strict obedience to top level directives and encouraging local level initiatives from people who best know what the local conditions are.

In terms of initial reactions of civic society in response to the NEAAS establishment, it is above all noticed that, rather than emphasising the environmental issues, “the core issue at hand [is] growth”, and also the accompanying problems related to the regional cadre promotion scheme – as testified, for example, by Laurence Brahm, global activist, when serving as senior adviser to the MEP in drafting the policy blueprint for ecological civilisation (Brahm, 2016). Moreover, observers of Chinadialogue.net, a renowned independent, bilingual website on China’s environmental issues demonstrate that, based on interviews with relevant academics and top-level officials, the pilot projects of evaluating provincial officials are indeed the first few concrete steps taken by the authorities so far (Zhang, 2015). These preliminary responses from civic society echo the findings of this part of study. The actual results however remain to be evaluated, and further evidence is called for in future works on this subject.

The actual intention of the CCP top leadership to promote the SEEA-based NEAAS, however, could only be deduced based on the broader context. Is the central authority of the PRC implementing the cadre appraisal system reform merely for the purpose of ‘PR’ (public relations), under the pretext of pursuing an ‘ecological civilisation’? Or is the scheme implemented as an instrument that facilitates the reinforcement of the centralised control of the top leadership? Or, in probably the worst case, is it implemented due to the fact that the CCP top leadership is under the illusion that the SEEA-based NEAAS is *the* perfect initiative for sustainability?

As a ‘state-entrepreneur’ that is concerned about its own performance and eager to conduct a better management both on its high-level ‘executives’ and on the physical stock of natural and human resources, the Chinese central authority perhaps need an alternative accounting framework which differs from the mainstream one (the SEEA) and which represents a much ‘stronger’ level of sustainability (*cf.* Hueting & Reijnders, 1998; Richard, 2012).

On the industrial level, in the context of China's spectacular economic growth and the accompanying environmental and social crisis, the two agribusinesses initially investigated in Section 3 do not seem to draw enormous attention, since they are absolutely not among the firms delivering the highest economic performance, nor among the ones acting the most poorly in terms of environmental conservation and labour protection. Nevertheless, according to the content of their reports, what seems to be the top priority for these two firms, and also very likely for the whole food industry as implied later by the interviewees, is the food safety, the very basic corporate responsibility for an agribusiness which is not supposed to occupy such an overly significant length in their CSR reports for so many years.

After an analysis of the discourses in these CSR reports, we could find that through these texts, the firms are engaged in constructing a reality serving the (only) purpose of improving corporate image, rather than report substantial and well quantified information against a set of scientific thresholds set by relevant authorities: On the one hand they do report the sustainability related issues under pressure from the authorities and the public, nevertheless only reporting the 'bright side', and in a less rigorous manner; on the other, they would still choose to emphasise what they consider as worth reporting for the firms—that is their product *safety*, over many other issues equally important to society. These findings echo those of Cho and Patten (2007), Cho *et al.* (2015), Colleoni (2013), Farache and Perks (2010), Zhao (2012) and many others, who argue that in general firms use environmental disclosures as tools to respond to public pressure, and thus to create or maintain their legitimacy in the eyes of the society.

The fact that firms produce CSR reports for the betterment of corporate image *per se* has nothing wrong. What appears to be a true concern is that the content of these reports serves *only* this purpose. As demonstrated earlier, the existence of administrative loopholes (such as the fact that a firm categorised as in the "heavy polluting industry" is not necessarily included in the 'List of heavy polluting enterprises' of the authority, and therefore is not obligated to disclose any quantified information on its environmental issues) suggests that, firms are not reporting beyond their specific administrative obligation in their CSR reports. Yet this kind of disclosure is however expected by the (potential) investors as they would need to evaluate the environmental impact of the firms, and especially that of the agribusinesses in our case of which the profitability is so closely

linked to their natural environment. It could be also expected by the governments and the general public due to the fact that China has now entered an era when environmental and social sustainability has become a central concern for almost every sector of the economy.

In regard with the sustainability reporting practice of the two firms, what is further noticeable is that, reporting according to different legislative documents mentioned earlier, both firms could have chosen to start this practice at any moment (before 2006 as ‘voluntary’ reporting, after 2006 as ‘encouraged’ practice of reporting, or as what they have done, after 2008 as ‘mandatory’ reporting). Yet coincidentally or not, both of them did not start to prepare this report until mandatory requirements were announced, which, again, is for the purpose of fulfilling their basic corporate responsibility by complying with the laws and regulations as publicly listed firms. This confirms Zhao’s (2012) observation that the State has been a key driver of CSR practices across developed and developing countries. Still, their drastically different attitude and the incentives behind suggest that, the adoption of sustainability reporting for Chinese firms is endowed with another dimension of the problem: all the Chinese firms do not have the same ‘nature of the firm’ as defined by Coase in 1937, especially the ones in the agriculture sector, where is left a much heavier package of historical legacies.

When looking at the regulatory measures taken by relevant authorities of various departments and levels, we note that the intention of the Chinese government to promote the ‘Western style’ corporate social responsibility reporting is obvious. The inclusion of firms for mandatory reporting has been expanded and the guidelines have been increasingly detailed and informative. However, to date, there are still no mandatory rules, especially those for concrete measurements of performance, but only guidelines that generally define the content of the report. Further, there is still lack of third-party verification and pressure groups that are engaged in this matter. These factors leave too much liberty to the firms when preparing their reports, and therefore reduce the comparability among the reports and their usefulness. More observation in future would be needed in order to better judge if the measures taken by the government are mainly for the purpose of shirking its proper responsibilities as supervisor and regulator of economic activities, or if they are genuine efforts on promoting sustainability and a ‘harmonious society’ through innovative approaches imported from the West.

What we can draw from the analysis of in Section 3 is in accordance with the diagnosis made by Adams (2001), Adams *et al.* (2004) and Synnestvedt (2001) more than ten years ago based on the Western context: While there is an increased volume of disclosure, there are no parallel gains in their quality or the level of accountability discharged, which calls for greater legislation efforts, and for the so called “context-based sustainability management” (McElroy & Engelen, 2011). Though having been repeatedly stressed over time, the lack of concrete measurement in scientific terms is still prominent (Peterson, 1997, in Livesey & Kearins, 2002).

Regarding the two sets of investigation on the initiatives of SA in China, it is worth noting that in both cases of NEAAS/ECP and CSR, all the responsibilities in regard with food safety, natural environment protection, human resource conservation and so on fall ultimately on the shoulders of the State, despite the claimed responsibility sharing with firms and society at large. And as compared with private businesses, the State seems to be more ready—and capable—to take on these responsibilities of maintaining all the financial, natural and human capital stocks in society (Chang, 1994). This is also above all because of the “Chinese characteristics” of the market economy: On the one hand, the Western neoliberalism that encompasses essentially the idea of ‘market fundamentalism’ is imported and promoted only in the economic scope of society, whilst the implementation of the political aspect of this ideology is strictly restrained. This is notably because of the fact that in China natural resources including land, water and so on are all state property; and farmers, the majority of human capital involved in the agricultural activities, form extremely numerous individual household ‘farms’ and are largely out of the scope of the corporate management system. On the other hand, all the schemes formally introduced in China to conduct management and control on financial, natural and human capital stocks at national and industrial level are imported from the West, where these schemes (notably the SEEA and the CSR, as well as the IFRS discussed in the previous chapter) are developed within the context within which both the economic and the political aspects of neoliberalism were implemented. Regardless of whether these schemes are truly efficient in tackling the environmental and social problems that have arisen in the Western context, their imposed implementation in China is inevitably confronted by the misalignment of the targeted problems and the institutional context that has resulted in these problems. Facing this misalignment, or these schemes’ lack of adaptability in the Chinese context, the Chinese central authoritarian institutions

together with the firms seem to have managed to implement these two schemes into a more ‘localised’ version, where the SEEA-based NEAAS has been elaborated into a scheme intended for reforms concerning anti-corruption and anti-GDP-worship, and CSR (reporting) has been used, notably by agribusinesses, as instrument to improve corporate image mainly by emphasising their product quality, a basic corporate responsibility directly linked to the ‘economic pillar’ of the CSR.

Moreover, in the two events under investigation, what seems prominent is the call for an appropriate MACS consisting of scientific-limits-based standards and of calculation/registration of quantified information, in order to concretise the projects on natural and human capital maintenance. In the absence of such a MACS both for the State and the agribusinesses to properly take into account the value of these capital stocks, both of these two key-players have (chosen) to adopt the most widely spread ‘international practices’, notably the SEEA and the CSR, as the frameworks to conduct SA at national- and firm-level. The official discourses for the promotion of these frameworks not only underline the fact that they are widely accepted concepts and practices as Global standard institutions (GSI) in the West, but also emphasise the point that they are all based on ‘scientific’ theories, notably the mainstream theories on externalities, stakeholders and organisational legitimacy. They have constructed a reality where the adoption of these GSI is the equivalent of ‘following the laws of science’. The emphasis on the scientific facet of these GSI also makes its repetitive appearance in the official discourses, notably by referring to concepts in ecological economics such as carrying capacity (“ecological red line” raised in the NEAAS documents for instance), and those in agronomy such as organic farming (in the CSR reports and corporate websites for instance). Yet when it comes to the discourses concerning their implementation, these concepts are reduced either to rather abstract terms that are difficult to be measured in quantified terms, or to some ‘labels’ of which the use is easy to be abused. In either case, concrete scientific thresholds in terms of capital restoration/conservation, resource consumption, emission of pollution, use of chemicals and so on do not seem to occupy a significant part—if any—in these key-players’ public discourses. Whilst this might well be resulted from the fact that the technical details are considered as difficult to be understood and therefore more likely to be used in academic publications and internal information exchanges, rather than in disclosures intended to reach the general public, the communication of these standards and the results of the assessment against these standards is not only essential based on the

principle of information transparency, but a prerequisite for the real sharing of responsibility among different parties in the society. This task of quantifying the relevant assessment against scientific thresholds and finding the method that properly communicates the results should be assigned above all to the scientists and researchers on management and economics.

What to be highlighted here is that, there is quite a big contrast between the relative ‘success’ of IFRS convergence shown in Chapter 3, and the relative ‘failure’ of introducing sustainability accounting in China, both at national level and at industrial level (or at least in agribusinesses). Chapter 5, to which we come later, gives more insights as to the reasons of this relative failure.

5. Summary

In this chapter, discourses on two initiatives of SA implementation in China, namely the NEAAS at national level and the CSR at corporate level are examined through the three-layer discourse analysis.

Section 2 focuses on the establishment of NEAAS at the national level. The discourses of the central government, mainstream media and the academics in relation to the accounting and auditing scheme are analysed, with special attention paid to the Eco-compensation, project within the scope of the NEAAS and closely related to the agriculture sector. When considering in association with the central authority’s previous attempts to improve the environmental management of the country and with the persistent problems within the centralised leadership and the broader society, what could be noted is that the signification of NEAAS goes far beyond the environment protection, in that this scheme constitutes a fundamental institutional reform that the Communist Party of China seeks to conduct, especially after the succession of the “fifth generation of leadership” in 2012.

Through a series of critical discourse analysis on the sustainability related non-financial disclosures of two large agribusinesses, and on relevant policies of the authorities in China, as well as the broader social context constructed with reference to interviewees from a variety of relevant institutions in China, Section 3 reveals how the two key-players, namely the firms and the government, are engaged in the struggle to shape the social reality in a way that serves their own interests. The findings indicate that, firstly, the sustainability reports share a common understanding of “responsibility” –product quality control, which is probably the case for most Chinese agribusinesses. And secondly, the two series of reports appear to have different perceptions of the term “stakeholder”, which is largely resulted from their different corporate nature. Both the similarities and the differences in their sustainability reports are tightly linked to the broader social and institutional settings in China.

Further regarding these two sets of investigation, what is found is that either in NEAAS or CSR, it is the State that has taken initiative to promote these schemes, and the responsibilities in regard with food safety, natural environment protection and human resource conservation are widely considered as to fall ultimately on the shoulders of the State, despite the claimed responsibility sharing with the firms and the broader society. This is above all due to the “Chinese characteristics” of the market economy. Moreover, it is clear that even though the “scientific” facet of these schemes are repeatedly emphasised in the written and spoken discourses under investigation, when it comes to the discourses concerning its implementation, the scientific concepts are reduced either to rather abstract terms that are difficult to be measured in quantified terms, or to some ‘labels’ of which the use is easy to be abused. In either case, quantified scientific thresholds do not seem to occupy a significant part in the information disclosed to the general public.

CHAPTER V. Theorising the evolution toward sustainability accounting implementation in China

Having conducted the CDA over the three events, namely the IFRS convergence of Chinese accounting standards, the establishment of NEAAS and the sustainability reporting practices of agribusinesses in the previous two chapters, this dissertation demonstrates the way the social mechanisms in China function for imposing a set of accounting rules, and for ‘assimilating’ the mainstream sustainability management schemes both at national- and corporate-level. This chapter thereafter sets out to address the last subject raised in the research objectives¹⁸⁵ for the TDL implementation, which are the dynamic interactions between environmentalism and the mainstream ideologies in the Chinese context. Further, through the theorisation of the three sets of institutional transition investigated earlier in the dissertation, we could look at “what is to be done”. In all, the analysis in this chapter is conducted in the hope of answering the central questions of this dissertation – What are the necessary conditions and possible resistances faced by the establishment of TDL in China? And what could we expect for the future of SA development in China?

1. Deconstructing the “socialist market economy”

Socialism, as referred to in Marx’s materialist conception of history, is the mode of production where man produces rationally of his own will in an associated, non-competitive way, instead of being ruled by any system of production or by any ruling power behind. It is the transitional phase before achieving complete human emancipation and reaching the establishment of a communist society (Marx, 1977[1867]c; Marx & Engels, 1969[1848]).

¹⁸⁵ See Section 2.3 of Chapter I.

A market economy, as defined by Polanyi (2002[1944]), is “an economic system controlled, regulated, and directed by market prices; order in the production and distribution of goods is entrusted to this self-regulating mechanism”, and it “derives from the expectation that human beings behave in such a way as to achieve maximum money gains”. (p. 71) Similarly, according to the Oxford dictionary, the term “market economy” or “free market economy” refers to “an economic system in which production and prices are determined by unrestricted competition between privately owned businesses”, which is a quasi-equivalent description of “capitalism” which, according to the same source, refers to “an economic and political system in which a country’s trade and industry are controlled by private owners *for profit*, rather than by the State”. If we agree upon these definitions in principle, we could easily get confused when the word “socialist” is added to this term as an adjective. Nevertheless, the term “socialist market economy” invented by Mr. Deng has been the official description of Chinese economic system since 1992. Widely seen as an oxymoron, it is nevertheless *a*—or perhaps the only—plausible rhetoric to be employed in official discourses for the purpose of legitimising the “reform and opening up” strategy put forward as early as 1978 and all the policies under this slogan inaugurated by the central CCP leadership ever since.

The rationale of this socialist market economy is that, in the “preliminary stage of socialism” (which is based on Mao’s ‘development’ on Marxist theory), China has to adopt capitalist *techniques* to thrive, by walking its own way to achieve the “socialism with Chinese characteristics”. Appeared for the first time in the CCP document entitled *Some decisions on Party historical issues since the founding of the PRC* in 1981, this term was used in the *CCP Central Committee’s decisions on the guidelines for the construction of socialist spiritual civilisation* (1986) to further clarify the nature of Chinese economy and the corresponding guidelines as follows:

“China is still in the preliminary stage of socialism. Therefore we have to implement the ‘distribution according to work’ principle, to develop the socialist commodity economy and competition mechanism, to encourage the development of various economic ownerships with the dominating status of the public ownership, and to encourage some people to get rich first under the condition

*that the ultimate goal is to achieve the common prosperity. We also have to bear in mind that China is to be in this stage for a long historical period.*¹⁸⁶

Even though this socialism-capitalism combined ideology seems to have managed to provide a logical explanation to be presented in official discourses, it creates widespread misconceptions in China about the relationship between capitalism, market economy, and economic development; and these misconceptions are as much theoretical as they are practical (Arrighi, 2007). With reference to some theoretical propositions, the following sections set out to investigate these misconceptions from two dimensions of the Chinese practices, namely the ‘commodities’ (capital stocks for trade) and the key-players involved in this socialist market economy, in the hope of uncovering the dynamics in the institutional changes that have taken place ever since the 1978 reform in China.

1.1 Overheated market for ‘fictitious commodities’ in the socialist market economy

A commodity is, as defined by Marx (1977[1867]a), is “an object *outside* us”, “a thing that by its properties satisfies human wants of some sort or another” (p. 27). According to Marx, labour force is obviously not—or should not be—considered as commodity since it represents the exact opposite of what this definition describes: In fact, labour *is* us. Polanyi (2002 [1944]) goes further by pointing out the commodity fiction in our economy not only concerns labour, but also concerns land (nature) and money (credit), because none of them are produced for sale on a market. We could say that at this point, Polanyi’s argument is in line with Marx’s definition of commodity, as they both refuse to include the objects that are not to serve utilitarian purposes by their own “properties”.

Putting aside the scope and degree of which the capitalist techniques are allowed to be adopted under this guideline, the socialist aspect of the so called “socialist market economy” of China implies above all the State’s strong intervention of the seemingly

¹⁸⁶ Originally in Chinese: “我国还处在社会主义的初级阶段，不但必须实行按劳分配，发展社会主义的商品经济和竞争，而且在相当长历史时期内，还要在公有制为主体的前提下发展多种经济成分，在共同富裕的目标下鼓励一部分人先富裕起来。”

self-regulated markets of ‘fictitious commodities’, as named by Polanyi (2002[1944]). This state intervention, as summarised by Fred Block in the introduction of the 2002 version of *The Great Transformation*, is realised in the manners described as follows:

“The State must play the ongoing role of adjusting the supply of money and credit to avoid the twin dangers of inflation and deflation. Similarly, the State has to manage shifting demand for employees by providing relief in periods of unemployment, by educating and training future workers, and by seeking to influence migration flows. In the case of land, governments have sought to maintain continuity in food production by a variety of devices that insulate farmers from the pressures of fluctuating harvests and volatile prices. In urban areas governments manage the use of the existing land through both environmental and land-use regulations” (p. xxvi).

By doing so, the State is placed “inside three of the most important markets”, which rejects the liberal perspective where the State is, or should be put outside of the economy. Indeed, whereas there was a long period when “money had yet hardly developed into a major element of industry”, labour and nature have always been “the factors most vital to the continued survival of human life and community” (*ibid.*). The (group of) humans holding the ruling power of this “community” that takes notably the form of nation-state in modern society, would logically do anything in their power to prevent these essentials from being subjected to the grasp of *the market*, a true ‘rival’ to their rule, no matter in ancient times or today. But what if the State does not do its job of limiting the circulation of these fictitious commodities?

As we are to find out in the following three sections, the strong intervention of the fictitious commodity markets conducted by the Chinese authorities in the claimed socialist market economy does not seem to work in the spirit described by Block or in the way explicitly expected by Polanyi as demonstrated above. Rather than being restricted, the free circulation of these fictitious commodities in China is greatly facilitated by the state intervention; and this is precisely the main cause of the environmental and social crises that China faces today. In accordance to the previous chapters, the emphasis is placed on land and labour, as they represent the two subjects—namely the preservation of

natural and human capital—focused by the discussion of this dissertation, whilst the money (credit) issues are also discussed in this section.

1.1.1 Land

Land, in its narrow sense, refers to all the open fields that are not covered by water on the earth. For an economy, as much as our discussion is concerned, land is roughly divided into three categories, namely the sparsely populated areas like deserts and mountains, the arable land in rural districts, and the ‘ordinary’ land in both urban and rural areas assigned for usages other than agricultural activities. In its broader sense, land is “subdivided nature”, or as considered from an environmentalist point of view, a quasi-equivalence to the natural environment—with the exception of water—when taking into consideration of all the attachments on its surface (Meyer, 2005; Polanyi 2002[1944]). Since humans are fated to live mostly on this surface of the earth and since all the material aspects of human cultures involve above all “the provisioning of human purposes by the technological interaction and transformation of nature” (Stanfield, 1980), it is not surprising to find that the ownership of land has not only been the chief source of power in human history, but also the subject of fierce ideological controversy (Ellickson, 1993): Defenders of private ownership of land tenure, such as North and Thomas (1973), hold that the freehold of land by private sectors “promotes individual liberty, political stability and economic prosperity” (Ellickson, 1993, p. 1317); whilst there are others, such as Marx and Engels (1969[1848]), who believe the exact opposite.

These opposing ideologies have been widely seen as having underpinned the legal frameworks that are fundamentally different regarding the land ownership structure around the world. In most countries under the common law framework, land is characterised as real property, and property is defined as “a bundle of *rights*” (Demsetz, 1967). The most common property right over land is “freehold” (or “fee simple”), which “gives persons an estate of indefinite duration that can be freely transferred”. Under this framework, “how land is acquired, used and disposed of is significantly controlled” by individual entities, and “transactions are generally not restricted by governments” (Zhang & Andrew, 2010, p. 61). The civil law system, in contrast, acknowledges above all the

land ownership, which is defined as “an absolute jural relationship between a person and *a thing*” (Gray & Gray, 1998, p. 16). From this perspective, for countries under the civil law system, the land ownership is naturally regarded as the absolute and supreme right vis-à-vis land and therefore the ultimate ‘owner’ of land is recognised as the State, since it is “the sovereign or supreme law-making authority” (Ho, 2001; Zhang & Andrew, 2010, p. 61).

In practice, countries—especially the Western ones—under these two sets of legal framework do not seem to make such clear distinction between ‘property’ and ‘ownership’ in land laws: In most cases, the ‘ownership right’ under the civil law system are conceptualised as property right just like the common law system, which allows for more flexibility to cope with analytical and practical issues regarding the land in various circumstances (Ho, 2001). When it comes to the case in China, however, this distinction seems rather necessary, since the current Chinese land ownership structure appears to conform to the civil law logic in an extremely ‘tangible’ manner, as implied by the land ownership evolution demonstrated below.

1.1.1.1 Before 1978

Historically, as a large agricultural country, China was familiar with the concept of private farms, as it had long existed and evolved since ancient times till the ‘pre-civil war era’ in 1940s. After the CCP came to power and claimed the establishment of “a new China” in the name of “the PRC” in 1949, the private ownership of farms (and other properties) had been accused as one of the major instruments of class domination that the CCP’s revolution sought to overthrow. A series of direct and indirect central planning in agriculture production thus took place successively, which was essentially a continuation of the prohibition of private farms (Ding, 2003; Lardy, 2008[1985]). This early stage of land reform laid the foundation of the state ownership of land, yet is widely considered as “hate-filled”, “violent”, and as having “provoked class divisions in rural society” (Coase & Wang, 2012, p. 5). This is not only due to the fact that the parcels of land ‘freed’ from the old landlords were soon collectivised/nationalised by the State instead of being given to the poor peasants as promised, but also because that right after the reform, the prices

for agricultural products were artificially depressed by the authorities, and that the little profits generated in agriculture had been diverted to subsidise industrialisation through savings forced upon the rural population (*ibid.*, p. 46).

Similarly, before 1949, private land ownership existed and land transactions were quite frequent in cities. Whilst in the same wave of land reform right after the CCP came to power, the State confiscated land and proclaimed state ownership in the urban districts, then allocated the land-use rights free of charge for an indefinite period to the “socioeconomic units” (“dan wei”). Since these ‘units’ were also state owned, land-use rights and land ownership were institutionally inseparable and land transactions were considered unconstitutional (Ding, 2003). The location and amount of land allocated to a ‘unit’ depended on its political connections as well as the political environment in which socioeconomic functions and productions were planned and organised (Wong & Zhao, 1999). The lack of economic and administrative channels for the transfer of land-use rights and the ill-defined property rights not only resulted in land-use deficiencies but also created social conflicts and land disputes (Ding, 2003).

1.1.1.2 The 1978 land reform

As mentioned in Chapter III when discussing the particularities in accounting for Chinese agriculture sector, in China, the concept of farm or agribusiness did not make its reappearance until the late 1970s, when Mr. Deng’s “reform and opening up” policy started to advocate the tolerance to more various forms of ownership, and a new wave of land reform was put forward as a part of the implementation of this policy (He, 2004; Lardy, 2008[1985]). According to Article 2 of the *Land Administration Law* (2004[1986]), the first land law promulgated in an *ex post* manner as it came out almost a decade after the launching of Deng’s reform, the PRC

“practises socialist public ownership of land, namely, ownership by the whole people and collective ownership by the working people. Ownership by the whole

people means that the right of ownership in state-owned land is exercised by the State Council on behalf of the State.”¹⁸⁷

And further regarding the distinction between the “ownership by the whole people” and the “collective ownership”, Article 8 specifies that

“Land in the urban areas of cities is owned by the State. Land in rural and suburban areas is owned by peasant collectives, except for those portions of land belonging to the State as provided for by law; house sites and private plots of cropland and hilly land are owned by peasant collectives.”

Although they came in an *ex post* manner, these articles of the law are loyal descriptions of the land ownership structure that the CCP sought to construct within Deng’s 1978 reform. In rural districts, the nominal collective ownership referred to in the articles is represented by township, villager committees or villager-groups (in other words, the village- and town-level governments), which are essentially representatives of the State. And the land-use right is allocated to household ‘farms’ as private plots through a “household responsibility system”. Concretely, in this system, individual households sign a contract with local village or town cadres and are held responsible for the profits and losses of their contracted land after having paid the ‘rental’ in terms of harvest (fixed in the contract) to the government. Farmland is assigned to each household on the basis of family size, and farmers have been given the right to hold the contracted land, initially for 5 years, then extended to 15 in 1984 and to 30 years on top of the original contract period in 1993, and it was not until 1993 *Land Administration Law* revision that the farmers were for the first time issued individual, standardised and notarised contracts (He, 2004; Ho, 2001; Hu, 1997; Lardy, 2008[1985]). As observed by Hu (1997), this system can be regarded as a kind of tenant-farming system, in which the collective ownership of land is combined with private ownership of capital and household user-rights of land.

On the one hand, when looking at the degree of realisation of expected outcomes, this reform in rural land policy has been a success, since it managed to restore the incentive scheme that motivates the farmers to return to the fields and to work hard, after many

¹⁸⁷ This last sentence was added to the previous versions of the law in the 1998 amendment, in order to reaffirm the state’s rights and to control local government’s control over land. (See more in Ho, 2015)

years of practicing the “people’s commune”¹⁸⁸, whilst having legitimised and preserved the State and collective ownership by law. The reason that the reform was successfully conducted, as argued by Coase and Wang (2012), is that relaxing the ban on private farming was already an irresistible trend as it had been secretly adopted in many places across rural China on the eve of Deng’s reform, and that the CCP top leadership finally made the right decision to compromise—rather than to reinforce the ban—after a massive internal disagreement on the matter. On the other hand, when looking at its effects regarding the improvement of people’s livelihood in rural districts, the incentive scheme restored by the reform has indeed managed to re-motivate the farmers to work hard in order to live a better life; yet the profitability of farming activities was soon proved to be way much lower than working in cities, which means that the land reform was not a success in terms of preserving the human capital in rural districts.¹⁸⁹

For land in urban districts, the status of state ownership remained unchanged. Nevertheless, the ‘open door’ policy announced in 1978 had a strong influence on the administrative aspect of land-use rights in practice. Deng’s reform not only ended China’s decades-long political isolation from the West, but also improved the political and economic environments. Since then, FDIs and the number of foreign-capital enterprise (including JVs) has increased exponentially (Jiang *et al.*, 1998). The surge in foreign business challenged the land-use tenure system as the demand for access to land increased. The old land allocation system thus conflicted with the ultimate goal of Deng’s reform, of which the purpose was to introduce market mechanisms in resource allocation in order to improve economic efficiency, to correct government failures in land allocation, and to minimise negative consequences of the land tenure system (Ding, 2003). This had also inevitably led to the fact that the CCP governments—which represent the State—were not be able to benefit financially from this strong demand for the land owned by them, neither at national nor at regional level.

This is largely the reason why in July 1979, the CCP Central Committee and the State Council jointly decided to progressively allow the foreign investments’ access to China—especially to land in China—by establishing ‘Special Economic Zones’ (SEZs). In these

¹⁸⁸ See notably Lin (1990), Nolan (1983), O’Leary & Watson (1982) and Riskin (1987) for the history of the people’s commune in rural districts and its consequences such as the hampered agricultural productivity.

¹⁸⁹ See more in Section 1.1.2.

SEZs, “the market economy becomes the dominant law of value” (Zhang, 1997, p. 187), yet the operation of the market is restricted to a limited scale. Out of prudence, Shenzhen and Zhuhai were designated as the first two pilot SEZs; and if all went well Shantou and Xiamen would be the next (Xinhuanet, 2009). In the 2009 editorial of Xinhuanet¹⁹⁰ to commemorate the 30th anniversary of Deng’s 1979 Shenzhen speech that inaugurated the beginning of the SEZ establishment, Deng’s attitude toward the proposition regarding the SEZs is presented as follows:

*“The CCP central authority has no money, but can give you (top cadres of regions where SEZs were to be established – author’s note) some policies, which allow you to take initiative and blaze a new trail on your own”*¹⁹¹ (*ibid.*).

The liberalist spirit of decentralisation and deregularisation was thoroughly expressed in this statement. The market-value-centred ideology from then on has entered people’s mindset, and has been even deeply implanted in the mindset of the regional CCP cadres who run the individual regions. Thanks to the SEZ project, the SEZ governments had gained incredible margin of manoeuvre provided by the central authority regarding regional policies, especially in terms of the land-use tenure system. For instance, in November 1981, Shenzhen began to levy a land-use *fee* (rather than *tax* as a tax should only be levied on owners rather than users); and in the following year a *Tentative Regulation on Land Management in Shenzhen SEZ* was introduced. By the end of 1987, the land-use fees raised more than 40 million yuan (7 million US dollar) revenue for the Shenzhen government (Zhang, 1997). Based on the Shenzhen experience and that of the other SEZs, in the 1986 *Land Administration Law*, the fee-levying policy is acknowledged and is roughly fixed as follows:

“... No units or individuals may encroach on land or illegally transfer it through buying, selling or other means. However, the right to the use of land may be transferred in accordance with law.”

¹⁹⁰ Online news service of Xinhua News Agency, the official press agency of the PRC government and the largest source of information and press conferences in China. Xinhua is an institution of the PRC State Council and reports directly to the CCP Public Information Department.

¹⁹¹ Originally in Chinese: “中央没有钱，可以给些政策，你们自己去搞，杀出一条血路来。”

This practice was thus officially allowed to be extended to all the urban districts of the country and it has spread out quickly thanks to its significant effect on increasing local revenues. However, the land-use fees still seem to be too low to reflect the land value, in that even after the local governments have levied the fees, most of the land benefits went to land users instead of the ultimate land owner – the State (*ibid.*).

After several experiments of allowing land-use rights transfer in the SEZs, in 1988, the *Land Administration Law* was amended for the first time, where the land leasehold market for urban land was formally established, and it is from then on that the land-use rights are officially separated from the land ownership (Hsing, 2010). What is noticeable is that the 1988 amendment of land law once again came in an *ex post* manner, as the flexibility regarding land-use rights in urban districts had already been given through the State's authorisation of establishing the SEZs and pilot institutional changes (*eg.* Shenzhen's land-use fee) had already been applied to both national and regional levels. To be more specific, this lease of state-owned land for a fixed period of time is realised through a "land-use grant payments"¹⁹². Land was first charged an annual land-use fee; subsequently, users were granted 40 to 70 years of land-use rights depending on the land use in exchange for the payment; and it is effectuated by the land-user to the *local government* in a lump sum at the beginning of the lease (Du & Peiser, 2014; Ho, 2015). This is because that according to Article 5 of the law,

"the land administration department under the State Council shall be in charge of unified administration of and supervision over the land throughout the country. The establishment and duties of the land administration departments of local people's governments at or above the county level shall be decided by people's governments of provinces, autonomous regions and municipalities directly under the Central Government in accordance with the relevant regulations of the State Council."

In the light of Deng's economic and political decentralisation, this revenue goes directly to the regional government treasury.¹⁹³ The governments in cities were motivated more

¹⁹² In Chinese: "土地出让金", also translated as "land transaction fees" in literature.

¹⁹³ See more in Section 1.2.2 on the tax-sharing system.

than ever to encourage the land-use right transaction. Several documents such as the *Circular of the State Council Concerning the Administration of Income from the Compensated Assignment of Rights to Use State-owned Land* (1989), the *Interim Implementation Measures for Management of Income from the Compensated Assignment of Rights to Use State-owned Land* (1989), the *Interim Provisions for Some Fiscal Issues Concerning the Income from the Compensated Assignment of Rights to Use State-owned Land* (1992) and the *Circular of the State Council Concerning Strengthening the Collection and Administration of Income from the Compensated Assignment of Rights to Use State-owned Land* (1993)¹⁹⁴ were promulgated in the following years for the purpose of regulating the land use grant payments.

According to these Circulars and the Interim Provisions, whereas the ‘payments’ for lands designated to real estate exploitation is decided by the market, those for special projects such as affordable housing, low-income housing, ‘industrial parks’ and ‘high-tech zones’ do not entirely rely on market, rather, they could be fixed by the local government. In either case, the regional governments are allowed to collect the sale of land-use rights as local revenues. Consequently, the increase in local fiscal revenue has been eye-popping: It is way much higher than the increase brought by the “land-use fee” before the creation of the land-use grant payments. Yet the high profitability inevitably leads to abuse of power.¹⁹⁵ Further, as we can notice here, all relevant regulatory measures are entitled by terms like “circular” or “interim provisions/measures”, which gives the impression that these measures are a political expedient rather than engaging policies that lead to legislative efforts to concrete recognition of the users’ rights.

Whereas the 1988 version *Land Administration Law* together with the Circulars and the Interim Provisions allows urban land-use rights to be leased at a profit for a fixed period of time, it is restated that rural land belongs to village collectives and cannot be legally leased out for profit. This institutional change thus has managed not to affect the bifurcation of land in China into urban and rural categories established at the beginning of the CCP’s rule, nor did it overturn the state ownership of land enshrined in the PRC

¹⁹⁴ In Chinese respectively: “国务院关于加强国有土地使用权有偿出让收入管理的通知”, “国有土地使用权有偿出让收入管理暂行实施办法”, “关于国有土地使用权有偿使用收入若干财政问题的暂行规定” and “国务院关于进一步加强对国有土地使用权有偿使用收入征收管理工作的通知”.

¹⁹⁵ See more in Section 1.1.1.3.

Constitution and the principles set by the 1986 version (Hsing, 2010). Nevertheless, as the local governments in urban areas have become the custodians of the state-owned land, and the rural governments the custodians of land owned by their respective collectives ever since, in time, the regional governments have become the actual governors who hold the control power over the land. In short, regardless whether it is the State or the rural collectives that are claimed as the nominal owners, the actual controllers of land in China are the regional governments.

1.1.1.3 Effects, ‘by-products’ and results (consequences) of the reform

To summarise, the 1978 reform along with the series of legislative efforts started with tackling land issues in rural districts, by allowing privatisation and decollectivisation of agricultural activities notably through land contracting, and then expended to the urban districts, by loosening the state control of urban land utilisation. In practice, however, the land reform policies—especially those for urban districts—were taken as an instrument for regional governments to collect fiscal revenue in order to support regional economic development (Du & Peiser, 2014). The local application of this decentralisation policy seems to have been realised in a rather arbitrary manner, especially when it comes to the ‘pricing’ for the land-use grant payments. Up to now, China has still not completed land titling and it is not expected that the titling can be accomplished in the near future (Ho, 2015). It is rather unimaginable that the Chinese ascent has occurred without secure, transparent, and formal property rights of land clearly recognised by law¹⁹⁶ (*ibid.*). As further demonstrated below, land has been commodified in the cities and the countryside since the 1970s, though its ownership is not privatised under either category (Hsing, 2010). This large-scale commodification of land has laid the basis of China’s spectacular economic growth that we witness nowadays.

¹⁹⁶ The *Property Law of the PRC* was finally promulgated in 2007, after having started the drafting in 1993 – a fact that implies the problematic nature of the promulgation of such a law in China. Its inconsistencies with the *Land Administration Law* and a number of other incomplete aspects have been extensively discussed in the literature. (See notably Deininger & Jin, 2009; Tian, 2008; and Zhang, 2008 among many others)

For the rural districts, it is above all worth mentioning that despite the ban in the 1986 *Land Administration Law* and the following 1988 amendment, a significant black market for rural land has taken shape in highly industrialised areas like the Pearl River Delta and the Lower Yangtze River Delta, which means a *de facto* commodification of urban land (Hsing, 2010). Apart from the economic profit drawn from this informal/illegal market, the effect of poverty reduction of the land policies launched since the 1970s has been remarkable, thanks to the enhanced productivity stimulated in agricultural activities; and also, unexpectedly or not, in a rural non-agricultural industry, or the industry composed of “township-village enterprises (TVEs)”, one of the most important ‘by-products’ of the urban land reform and Deng’s growth-centred policy.

As having discussed extensively in the literature (see notably Byrd & Lin, 1990; Chen & Davis, 1998; Ho & Lin, 2003; Kung & Lin, 2007; Li & Rozelle, 2003; Luo, 1999; Oi, 1999; Perotti *et al.*, 2014 among many others), TVEs composed of villagers in the neighbourhood have always existed in towns and villages and were designated to provide inputs (fertiliser, bricks to be in irrigation control and services such as repairing machinery and tools, for instance) to their local collective agricultural production. Whereas before 1978 they did not have access to the market, they have been allowed to do so ever since Deng’s authorisation for regions to “blaze a new way out on their own”. What deserves special attention here is the fact that TVEs are allowed to participate to market competition just like all the ordinary private enterprises/entrepreneurs, yet they have a unique advantage – they do not have to carry out the large sums of land-use grant payments since the rural land is owned by the township-village collectives. In other words, TVEs can use the land for free.

Apart from this great advantage, TVEs are further motivated by the local government cadres notably through financial incentives, as they are allowed to retain the profits for reinvestment and for local communities’ development, which is directly linked to the livelihood improvement of all the local villagers. Being privileged to benefit from all these favourable policies, TVEs all around China had managed to deliver an incredible economic performance, by making their appearance in a great variety of sectors including mining, material processing, chemical, machine part and garment manufacturing and so on. Moreover, their channels of finance and sales have also been variegated, since they are also allowed to bring in FDIs and to participate to foreign trade through export. This

phenomenon later became the “TVE miracle”: According to Perotti *et al.* (2014), in 1995 for instance, TVEs produced nearly 30% of China’s GDP and employed 135 million workers ‘freed’ from urbanisation (see below). Yet as the market competition evolves, the abilities of TVEs appear to have been constrained in terms of addressing revenue and employment imperatives; meanwhile local governments’ sales-oriented growth strategies have further exacerbated the intrinsic problems of TVEs (Kung & Lin, 2007). The ‘fleeting glory’ of TVEs thus had lasted for nearly two decades, leaving only the severe environmental problems caused notably by water and soil pollution stemming from the reckless mode of production, which constantly haunt the rural livelihood nowadays, and even have turned many TVE sites into “canner villages” (Chang & Wang, 1994; Jiang, 2009, 2010; Xinhuanet, 2006; Yu, 1989).

As for cities, thanks to the 1988 land law amendment, land rents are officially authorised by law, which, on one hand, has greatly facilitated the emergence and development of domestic private businesses and those from broad, as well as an enormous number of foreign-capital-involved enterprises. Gradually, these forms of businesses began to outpace the collective enterprises and SOEs. The economic viability of cities has been improved in an unprecedented manner and so has the livelihood of urban residents. On the other hand, since land has become a key instrument for local governments to promote economic growth, subsidise infrastructure development and compete for external investment (Ding, 2003; Hsing, 2010; Zhang, 1997; Zhang & Andrew, 2010), the regional governments—or to be more specific, the CCP cadres in charge of the region—are endowed with an enormous power to use this instrument to promote local economic growth (which does not prevent them from pocketing some illicit gains by making biased decisions)¹⁹⁷.

According to Hsing’s (2010) numerous interviews with regional CCP cadres around the country concerning the unceasing municipal projects of constructing the so-called large-scale ‘industrial parks’ and ‘high-tech zones’ devoted to commercial housing, restaurants, resorts, and amusement parks, it is a pure fact that for the local governments, revenues from land lease sales far exceed the income derived from industrial taxes. The former category of revenue has thus become the major incentive for the cadres to authorise such

¹⁹⁷ See more in Section 2.2.3 in Chapter IV for the CCP cadre appraisal mechanism. See also Section 1.2.2 for the anti-corruption campaign.

construction projects whenever a piece of land with ‘suitable’ size is *available*. And the ‘creation’ of available land plots is directly linked to the problematique of urbanisation (see below). To put it in another way, the land-lease revenue is so big that even the fiscal revenue from the GDP-boosting industries becomes less dazzling. It is thus not surprising to find it become one of the most important sources of revenue for the regional governments ever since the 1990s (*ibid.*, p. 5), nor it is unexpected to see that the regional cadres have greatly strengthened and even abused their power of land-use right allocation.

1.1.1.4 Urbanisation

After years of rapid economic development in both rural and urban districts, here comes the inevitable and the most problematic part: the urbanisation. The process of urbanisation entails above all the expansion of urban land, and this expansion has been happening at an alarming speed in China (Deng *et al.*, 2010, 2015; Gao *et al.*, 2015; Gibson *et al.*, 2014; Wang *et al.*, 2012; Wei & Ye, 2014; Zhang, 2000). The satellite remote sensing mapping of China's urban sprawl from 1990 to 2010 (Figure 6) produced by Wang *et al.* (2012) could provide a more intuitive presentation of this process.

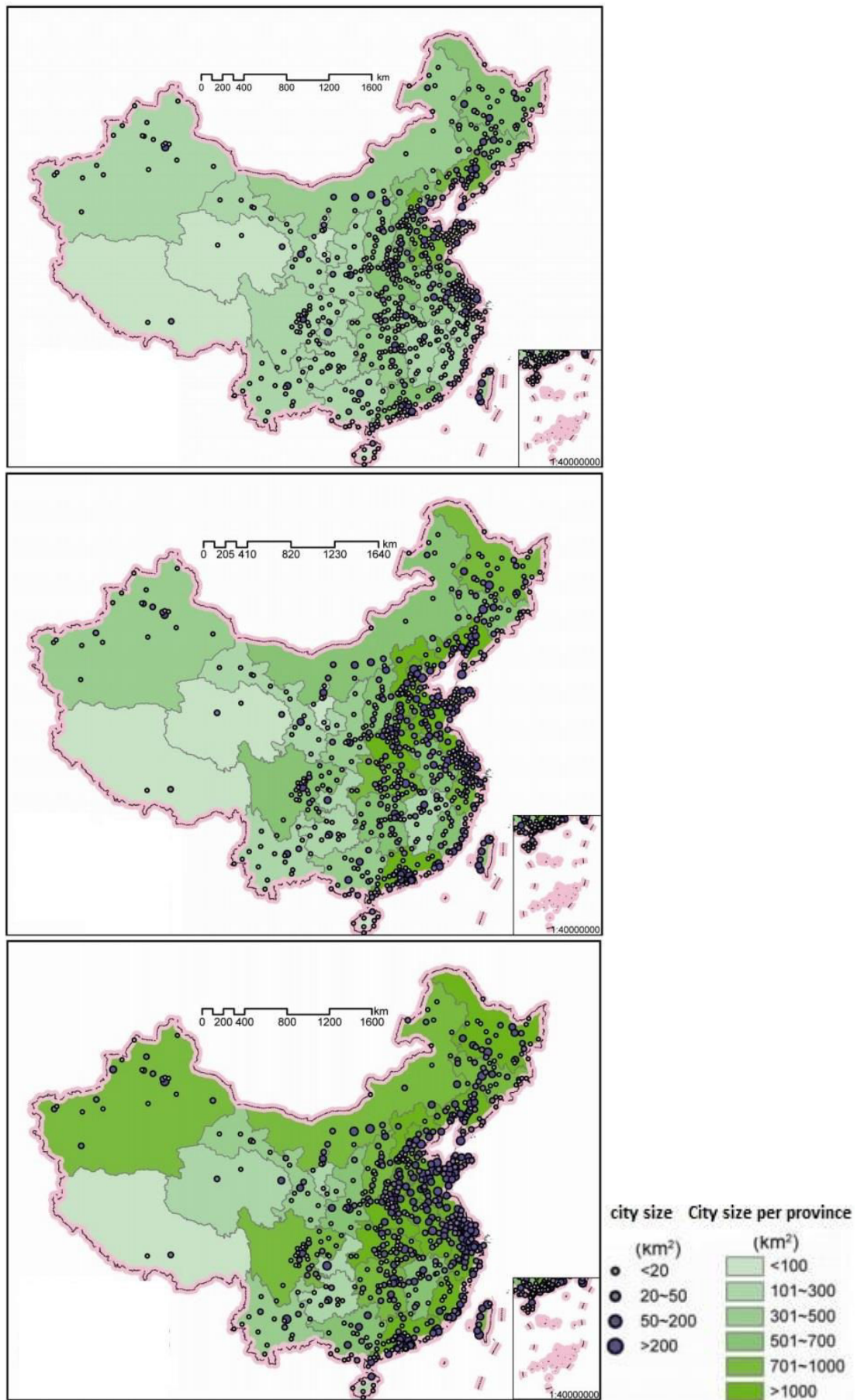


Figure 6: China's urban sprawl from 1990 to 2010 (source: Wang *et al.*, 2012, pp. 1393 – 1394)

As demonstrated in Figure 6, the three images show respectively the statistical results of 1990, 2000 and 2010 regarding the urban built-up areas classified both according to categories and according to provinces. In 1990, there were only 4 cities of which their individual urban built-up area was greater than 200 km². There were 44 cities in between the size of 50 – 200 km², accounting for 7.24% of the total city number. Back then there was only one province (“province-level” municipality)—that is Beijing—had more than 1000 km² urban built-up area, whilst it was only because that the statistical results for Beijing had taken into account all the neighbouring inhabitable areas. In 2000, the number of cities of which urban built-up areas were greater than 200 km² increased to 14; and the number of cities in between of 50 – 200 km² increased to 71, accounting for 12.82% of the total city number. The number of provinces that had more than 1000 km² urban built-up area increased to 7, most of them being southeast coastal provinces. In 2010, the number of cities of which the urban built-up areas were greater than 200km² increased to 43; and that of cities in between of 50 – 200 km² increased to 129, accounting for 25.94% of the total city number. The number of provinces that had more than 1000 km² urban built-up area increased to 13, which means the urbanisation have quickly spread to the originally less developed mid-west areas (Wang *et al.*, 2012).

The consequences of this drastic urbanisation process have been brought up earlier in this part of analysis. What deserve to be (re-)emphasised here are two issues: First, since within the territory of a nation state, the urbanisation is obviously a zero-sum game, this process has placed a great tension within the bifurcation of land in China, notably due to the rather widespread practice of land acquisition (Chan, 2003; Ding, 2003; Mullan *et al.*, 2011). And second, based on the above mentioned events in China’s recent land reform, we can see that the expansion of urban land is inevitably accompanied by transactions regarding rights to exploit and, even to *pollute* the land, most of which originally belongs to rural areas.

In Section 3.2.3 of Chapter IV of this dissertation, Ms R who was running an organic farm in Yunnan province for her NGO in 2009, demonstrates that their business was suddenly put to an end due to a compulsory land acquisition by the local government – “They wanted the land back for commercial development.” Knowing the fact that the government only pays a certain amount of compensation to the relevant household farmers whilst their NGO was not going to get any compensation whatsoever, Ms R and

her colleagues “had appealed against this decision for two years” since they “had invested quite a lot in obtaining the organic certification of that land”. But finally, “it did not work”, since, as analysed by Ms R herself, “after all, the land was sub-contracted from the local households and the local government had every right to have it back.” The experience of Ms R echoes the point that land acquisition has indeed been an extremely widespread practice in China, especially when considering the probability for this to happen to one of the few interviewees that the author had contacted for this research. This is not surprising since the rapid urbanisation would inevitably lead to great demand for land for infrastructure and property developments. Indeed, in order to obtain more developable land, the state government has implemented various measures including compulsory land acquisition, or as put it by Chan (2003), “compulsory land resumptions” to recuperate the land ‘for public good’. It further legitimates this practice by claiming itself as the ultimate land owner, as Article 10 of the PRC Constitution (2004[1978, 1993]b) clearly states that

“the State may, in the public interest, requisition land for its use in accordance with the law.”

In the spirit—and under the authority—of the Constitution, the *Land Administration Law* confirms the land ownership of the State as shown earlier in this study. Moreover, the *Urban Buildings Demolition Relocation Administration Regulations* promulgated in 2001 states that “*buildings* on land covered by a city plan may be compulsorily acquired”, which further clarifies the fact that in addition to the land, all ground attachments in cities are likely to be affected by this kind of acquisition. As for rural land, the *Land Administration Law* (1998[1986]) states that “farmland may be compulsorily acquired for construction purposes” (*cf.* Article 43); and before any acquisition, approval for converting farmland to construction land has to be obtained from the government.¹⁹⁸

Meanwhile, compensation schemes have also been developed in these two laws, though exceptional favourable arrangements and violent land expropriations both exist, and their occurrence vary according to the estimated project ‘profitability’ and to the levels of

¹⁹⁸ In most cases from regional governments, with exceptions for “basic farmland, arable land other than basic farm and more than 35ha, and all other land exceeding 70ha”, which are to be approved by the State Council (Chan, 2003).

acceptance/resistance of the ‘acquirees’ involved (Sargeson, 2013). By appearance, this compulsory acquisition of land is required in the name of the State and compensations are to be given to local farmers; yet in practice, the ‘deals’ regarding the land transactions are sealed after ‘business negotiations’ involving local government cadres, contracted constructors and real estate developers (Hsing, 2010), leaving the local farmers poorly informed before the deal was closed. Thus they have no choice but to accept the compensation allocated to them. In other words, it is the State’s seemingly centralised control of land that has greatly ‘liberalised’ the transactions of land-use rights by restricting the democratic decision-making process and by facilitating the capitalist manipulation on the matter.

The phenomenon described above echoes Ho’s (2015) observation concerning the lack of secure, transparent, and formal property rights in China. Many scholars have criticised this arrangement of land by pointing out its severe social consequences and its resemblance to the Enclosure Movement (*cf.* Du & Peiser, 2014; Liu *et al.*, 2010; White *et al.*, 2012; Xu *et al.*, 2011). Nevertheless, the State’s ‘liberty’ to ‘resume’ its land is seen by some domestic researchers as an unparalleled advantage for China to achieve its economic miracle: For instance, in He Xuefeng’s well-known thesis *The Logic of Land Right: Exploring the Future of Chinese Rural Land System*¹⁹⁹ (2010), it is stated that the acquisition of land

“... allows China to expand its urban areas and to construct infrastructures at low cost, which has laid the basis for China’s economic development. [...] It is this land system with Chinese characteristics that has provided our country with this advantage. [...] It is the state government’s entire possession of land revenue that has allowed the state government to provide large-scale transfer payments to most of the farmers of the country”²⁰⁰ (p. 324).

His observation in fact suggests that this Chinese version ‘Enclosure Movement’ reflects almost perfectly the state-capitalist nature of the Chinese economy: It is the local

¹⁹⁹ Originally in Chinese: “地权的逻辑：中国农村土地制度向何处去”。

²⁰⁰ Originally in Chinese: “中国可以以较低的成本扩展城市和建设基础设施，从而可以为中国经济发展提供基础条件。……（这得益于）中国特色的土地制度。……国家正是占有了土地收益，才有能力为全国大多数农民提供大规模的转移支付”。

governments of the State who have been acting as the big capitalists in the farmland Enclosure and who accumulate land resources as capital through a *legal process*. It is clear that China's recent economic development is indeed built on the exploitation of rural resources, though whether this practice is to be advocated is another question.²⁰¹

Concerning the second issue, in the manuscript entitled *Critical Moment: Ecological Crisis in China*²⁰² (2011), Jiang Gaoming, a renowned senior researcher from the Chinese Academy of Sciences' Institute of Botany, systematically discusses the ecological crisis by bringing up a large variety of subjects such as garbage disposal, disappearance of biodiversity, massive pollution of air, groundwater and arable land and so on. Moreover, in the beginning of his thesis, he clearly points out the problematic nature of the regional governments' "investment-attracting initiatives"²⁰³, policy strongly advocated as soon as Deng's economic reform was launched, which intended to intensively absorb FDIs in manufacturing, in order to promote local economic development. The investment-attracting initiatives were first put into practice by the coastal cities. The eye-catching economy-boosting effects had lured regional government cadres from all over the China to follow the 'good examples'. To put it plainly, it is to take advantage of 'the foreigners' brand, financial capital, technology, and sales network, whilst to let them take advantage of China's local resources, manpower and energy, for the purpose of achieving a 'win-win situation'. Moreover, in order to attract as many investors as possible, the Chinese regional governments were busy competing with each other, notably in terms of creating a 'favourable environment' to 'score high' in the eyes of foreign investors. Typical measures taken include the creation of "super-preferential policies"²⁰⁴ for foreign businesses and JVs, where supervision and regulation were reduced to minimum. This point is otherwise echoed by many observers of Chinese economy, who attribute

²⁰¹ There has been a heated debate revolving the rural land privatisation, where the proponents (like He) and antagonists (like Zhou Qiren) of the "land system with Chinese characteristics" oppose each other regarding the direct beneficiaries of appreciation of land value. (cf. <http://politics.people.com.cn/n/2015/0608/c70731-27121410.html>, last consulted on 3/3/2016)

²⁰² Originally in Chinese: "中国生态环境危急".

²⁰³ Translated by the author of this dissertation. Originally in Chinese: "招商引资".

²⁰⁴ Originally in Chinese: "超国民待遇", as opposed to the term "national treatment" proposed by the WTO, since the inviting Chinese regional governments had created for the FDIs conditions way much favourable than those applied to local businesses. It was not until 2010 that the PRC State Council decided to abolish the super-preferential policies in terms of tax, though those in other domains as well as their consequences still exist and remain unattended. (cf. <http://finance.people.com.cn/GB/13360980.html>, last consulted on 3/3/2016)

unanimously the term “matchmakers” to the role played by regional cadres who helped building local JVs (Arrighi, 2007 p.351; Fukasaku *et al.*, 1994; Lardy, 1991). Spoiled by the various super-preferential policies, these foreign businesses as well as the JVs had opened numerous manufacturing plants—most of them built in the ‘newly developed’ urban areas granted by regional cadres—with hardly any pollution treatment (Jiang, 2011). Further, their collaboration with the TVEs discussed in Section 1.1.1.2 has also allowed this practice to expand to rural areas. As pointed out by Jiang, it is this FDI-attracting policy that is to be recognised as having marked “the beginning of the import of foreign capital accompanied by environment pollution, as well as that of the ‘blood stained GDP’ pursuing in China”²⁰⁵.

If we say that the early stages of the land-use right reform under the much advocated market-value-centred ideology were destined to (re-)vitalise the *existing* local economy (without changing the designated urban/rural bifurcation) by valorising the *local* resources (both in terms of natural and human capital stocks), we can above all notice that the accompanying by-products and the following consequences have gone far beyond the scope of individual regions and have manifested themselves in much less predictable ways. The eye-popping scale and pace of urban expansion came at the expense of farmland. As noted by Hsing (2010), a frenzy of land conversion from agricultural to non-agricultural uses between 1987 and 2003 reduced China’s already limited farmland by 10 to 12 million hectares, about one-tenth of the country’s total. And between 1990 and 2007, farmland conversion and inner-city redevelopment have displaced between 60 and 75 million people in both urban and rural areas. The ‘Chinese logic’ of urban expansion seemed to be based on dispossession, which triggered increasingly explosive and widespread social unrest (*ibid.*, p. 2; also see next section).

With reference to Domergue’s (2012) analysis of urbanisation and its encroachment on agriculture in France, we can notice that even though the nation states—France and China alike—have introduced laws (such as the Grenelle II in France and the PRC Constitution) as well as relevant regulatory measures to protect farmland from urbanisation, the fact that urbanisation is nibbling our precious farmland seems inescapable, both in France and in China alike. Moreover, mixed signals seem to have always been sending at policy level,

²⁰⁵ Originally in Chinese: “招商引资，引进了资本，也引进了环境污染，这是中国“带血的 GDP”的开始。”

as in the meantime laws to protect farmland from the trend of urbanisation are being promulgated, the expansion of cities is constantly being encouraged by the government, through a great multitude of policies such as low (even 0) interest loan for construction projects, and other financial incentives to attract private investment into real estate development in ‘cheaper’ and ever-expanding peripheral areas around the cities; and again, this practice is prevalent both in France and in China alike (*cf.* Xu *et al.*, 2009).

This similarity is sad and ironic at the same time, for it demonstrates the inevitableness of such a destiny for farmland in today’s capitalist world, despite the (claimed) completely different nature of their respective economy. However, there might be a small—but important—factor that is indeed different in these two sets of political systems that concerns urbanisation: As described by Charmes (2011), a typical urban expansion process in French suburban areas unfolds as follows: In a first stage, the nearest rural districts of cities, administered by elected farmer representatives (“*élus agriculteurs*”), are to host the first urban households looking for individual housing outside the expensive city centres. The farmland in these rural districts next to cities is re-classified as constructible on this occasion and its landowners would reap an immediate benefit from it. Secondly, these newly moved-in peri-urban households would become the majority in the town and would *vote* to stop the new construction project on the farmland to prevent the arrival of new populations (just like them in the first place), who would cause the degradation of their living standard. The second wave of new households looking for accommodation ‘of good value for money’ thus are obliged to move further from the city, looking for other rural areas where they could reproduce the same process. And in order to break this cycle, civil societies concerned about environmental issues (such as the Climate Action Network (“*Réseau action climat*”), and the farmers’ trade union FNSEA in France have started to demand that ‘urbanisation’ no longer be defined only at municipal level, but should be done at intercommunal level; and it is in this way that we can make better long-term plans regarding the control of urban density and the preservation of farmland. Since in China’s socialist market economy under the one-party rule this ‘buffer’ of democratic procedure does not exist at all, the capitalist ‘invasion’ of rural land has been progressing in extremely favourable conditions, and thus greatly accelerated the urbanisation process all over the country.

Based on the above analyses, we could say that the urbanisation in China, driven by rapid industrialisation both in cities and in countryside alike, has greatly suppressed the Chinese agriculture—and the Chinese economy in general—by an over-exploitation of natural and human capital facilitated by the State. (see following sections)

1.1.2 Labour

In a market economy, labour, together with the other two kinds of fictitious commodities namely land and money, is priced just like other produced goods and services and being sold and bought in the market. Its price is called “wage”, or “salary”, depending on the ‘nature’ of the occupation.²⁰⁶ As a socialist country ever since the CCP took power, the PRC is endowed with a rather extraordinary labour force market. Its particularities are pronounced especially when looking at its course of evolution.

1.1.2.1 The 1978 reform and the reallocation of human capital

The evolution of labour composition in China is tightly linked to the land reform discussed earlier. The recent waves of urbanisation not only lead to the expansion of urban land, but also to drastic changes in the composition of population. As mentioned in the beginning of this dissertation, more than 2/3 of the 1.3 billion Chinese people—that is nearly one billion—is composed of farmers. This number seems impressive. Yet when taking a closer look at this number provided by the NBSC, we could not help noticing an obvious incoherence: whereas the “2010 rural population” registered in the subcategory of “rural households and rural population” under the category of “agriculture” is 966.19 million, the number for exact the same category (“rural population”) is 674.15 million

²⁰⁶ For simplicity, this dissertation uses the word “salary” to indicate all kinds of remuneration, if applicable.

(whereas urban population being 665.57 million), according to the 2010 (latest) population census also conducted by the NBSC.²⁰⁷

The official explanation for this incoherence is provided nowhere. Nevertheless, one can easily make a good guess that it might be due to an (or another) extraordinary phenomenon of China: the migrant farmer-workers. Whilst migrant worker is a phenomenon that exists all around the world (*cf.* Fitzgerald, 2007; Griffith, 2009; Piper, 2006; Shivani & Tineke, 1999), the case in China is a little different, as there is no national boundary for these workers, but only the “household registration system” or, to put it in a more familiar term, the system of ‘internal passports’ (“*hu kou*”) as the only administrative constraint for their mobility.²⁰⁸ It is the two “status”, or categories of registration, namely the agricultural *hu kou* and the non-agricultural *hu kou*, that have created the urban-rural duality in the Chinese population. In this regard, the 300-million difference of the two numbers with the same title represents precisely the persons who are registered as habitants/farmers in rural area (and therefore are entitled to farmland assignment), whilst living and working in cities at their own expense.

The functioning, characteristics and influences of this household registration system have been discussed extensively in the literature (see Chan & Zhang, 1999; Cheng & Selden, 1994; Mullan *et al.*, 2011; Murphy, 2002; Wong *et al.*, 2007; Zhao, 1999 among many others). What are to be further examined in this part of the study are its effects on China’s labour power allocation in urban and rural areas.

Historically, as for a country that has always been an agriculture-based economy, the allocation of labour in China was tightly connected to land (Meng, 2000; Tawney, 1932), which confirms Marx’s (1977[1867]c) and Polanyi’s (2002[1944]) observation on the inseparable relation between land and labour in history. Even till quite recently, that is, after the CCP’s came-into-power and before 1978, there was no labour market in the conventional sense, and labour mobility was non-existent, or to put it bluntly, forbidden: In urban area where industrialisation was strongly promoted by the CCP as early as in

²⁰⁷ On top of this confusion, there is a third set of data in the category of “total population”, indicating that the rural population is 671.13 million and the urban population 669.78 million for the year of 2010, still without any explanation for the difference. Data available at the NBSC database for public access (<http://data.stats.gov.cn/>, last consulted on 25/03/2016).

²⁰⁸ Terms originally in Chinese: “户籍制度” and “户口”.

1949, “skilled workers”—where before long the scope had extended to all urban industrial employees—were privileged by being allowed to hold the ‘iron rice-bowl’, fashionable expression at the time to describe their job-for-life arrangement and cradle-to-grave welfare protection (Warner, 1996). In rural area, even though suffering from the extremely low prices for agricultural products that are deliberately fixed in order to ‘subsidise’ the industry in cities, farmers were ‘fated’ to be farmers and were completely excluded from favourable employment arrangements implemented in cities, since rural-urban migration was severely restricted through the *hu kou* system (Meng, 2000; Bowlus & Sicular, 2003; Chan & Zhang, 1999; Zhao, 1999). The farmers who insisted to come to cities were labelled as “blind flows” of migration that were likely to cause social instability and were to be sent back to their registered permanent residence on their *hu kou* (Yan, 2008).

It is not until the liberal reform started in the late 1970s that the restriction was loosened in order to “liberate the productive forces” (Deng, 1993). One of the most convincing evidence for this change of mentality is reflected in the 1978 amendment of the PRC Constitution. In order to break the egalitarianism set by policies applied both in urban and rural districts, the 1978 Constitution for the first time made a clear statement regarding the distribution system:

“The PRC applies the socialist principles of ‘one who does not work should not have any food’, and ‘one should do his/her best to work and to get paid according to his/her work’” (Article 10).²⁰⁹

According to this “no work no food” principle, as long as an individual wants to work and to get paid according to his/her work in order to survive (“to have food”), his/her behaviour should be considered as in compliance with the Constitution. It is worth noting here that, as a statement of the important principles of the socialist market economy, this part of content is still in use (after two amendments in 1982 and in 2004) in the latest version of the PRC Constitution (National People’s Congress, 2004b), though with a much milder phrasing:

²⁰⁹ Originally in Chinese: “国家实行“不劳动者不得食”、“各尽所能、按劳分配”的社会主义原则。” Information available at http://www.npc.gov.cn/wxzl/wxzl/2000-12/06/content_4365.htm, last consulted on 2/4/2016.

“The State ... keeps to the distribution system in which distribution according to work is dominant and diverse modes of distribution coexist” (Article 6).²¹⁰

In this spirit, the restriction of *hu kou* is no longer supposed to exclude the rural population from providing its labour power to any sector of economic activities, and thus should not prevent the agricultural *hu kou* holders from working in cities. Nevertheless, the agricultural *hu kou* holders are still excluded from a series of basic rights, notably that of contributing—and getting the enterprises they work for to contribute—to their own social security account. Undeclared work is taken for granted (if not encouraged) by policy (Ngai *et al.*, 2009; Sun *et al.*, 2012; Tao, 2008; Wong *et al.*, 2007). And this is still a major pending issue that threatens the wellbeing of the numerous migrant farmer-workers after nearly 40 years of the 1978 *hu kou* reform (Zhuang, 2014). In this regard, we could say that the loosening of household registration control launched in the framework of Deng’s liberal reform has allowed the over-exploitation of human capital in China, and especially that of the rural districts, by ‘liberating’ the farmers who want to work in cities from their agricultural household (thus also from their land), and by giving them the choice to sell their labour extremely freely in the labour markets where hardly any regulation (such as social protection or ‘minimum price’ for labour) is applied. (also see next section)

What is worth mentioning here is the fact that the social security is poor in China in general, and that the situation of ‘authentic’ urban inhabitants is only less unfavourable than the migrant farmer-workers since at least they all have an account whilst most migrants do not even have one (Li, 2006; Tao, 2008). Despite the unfavourable conditions, there are an enormous and still increasing number of rural habitants who choose to become and to remain their social status as migrant farmer-workers, since there are still rural households consider that this is still much more profitable than staying at home and farming, even after the implementation of the liberal reform package of the household responsibility system in rural districts. (see Section 1.1.1.2) This rather desperate choice of the farmer households seems to be an even worse scenario than what is criticised in

²¹⁰ Originally in Chinese: “中华人民共和国的社会主义经济制度的基础是生产资料的社会主义公有制，即全民所有制和劳动群众集体所有制。社会主义公有制消灭人剥削人的制度，实行各尽所能、按劳分配的原则。”。 The cited English version is available at http://www.npc.gov.cn/englishnpc/Constitution/2007-11/15/content_1372963.htm, last consulted on 2/4/2016.

Marx's (1977[1867]c) writing concerning the capitalists' exploitation on (originally rural) labours working in factories, since rather than being deprived of land to cultivate on, they 'voluntarily' made the choice to leave the land. It to a great extent confirms the inferiority of agriculture compared to any other sector of economy.

As claimed by He (2010), nowadays in China, there is no longer a homorganic population that could be simply categorised as "farmers". This population should be further subdivided into four categories: "households of 'veritable' farmers, households that diversify their economic activities whilst keeping farming as the main business, households that diversify their economic activities with farming as a side business, and farmer households that no longer farm but earn a living by working in cities"²¹¹ (p. 29; Sun *et al.*, 2004). According to the NBSC database, among the one-billion farmer *hu kou* holders, there are 532.44 million "economic activity practitioners" (working population), within which 276.95 million—that is only a half—of them who "work in planting, forestry, animal husbandry and fishery"²¹². In this sense, we could estimate with a rather high degree of confidence that the farmer households fall into the last two categories are at least as many as those in the first two; and that the other half (more than 250 million) of the rural working population represents the migrant farmer-workers, which corresponds more or less to the 300-million difference of the two sets of data provided by the NBSC stated earlier.

However, as demonstrated above, this 300-million labour power from rural areas is not a surplus of labour as would have concluded in conventional views of economics notably in the dual-sector model (*cf.* Lewis, 1954); rather, it is 'squeezed' from the already labour-scarce localities where farmland is fragmented (since small plots are allocated to individual households) and farming activities are still organised in traditional labour-intensive ways (Bowlus & Sicular, 2003). When taking a closer look at the gender and age structures of the rural working population as well as their evolution (basing on the four population censuses conducted ever since the launching of Deng's reform, as demonstrated below in Table 2 and Table 3), what is above all noticeable is that, not only

²¹¹ Originally in Chinese: "纯农户、以农业为主的兼业户、以农业为次的兼业户、外出务工经商不再兼业的农户"

²¹² Data of 2010 is also used here to keep consistency. The year of 2010 is chosen as the reference since it is the year when the latest population census was done, which provides relatively more reliable and completed data.

the percentage of the agricultural working population over the total working population has decreased significantly and continuously, but the agricultural working population has also greatly aged and feminised over time.

This “human capital flight” phenomenon in Chinese agriculture sector is brought up several times by different interviewees in this dissertation.²¹³ The significant and continuous loss of young, strong, male and educated labour power in agriculture indicates that this population has been reoriented to other sectors of activities, notably by going to the TVEs nearby where they originally live or, in more common cases, by leaving the countryside and work in cities as migrants (Guo, 2011, 2013; Guo *et al.*, 2014; Li & Zhao, 2009; Mu & Giles, 2014; Song, 2004). Multiple dimensions of consequences are caused by this phenomenon: First, it is a disaster for agricultural productivity, as numerous plots of good farmland have been abandoned, and agricultural products of poor quality with too much chemicals have been produced, due to the lack of labour power (Burkitt, 2016; Lardy, 2008[1985], p.101; *cf.* Huang & Cai, 2006; Walker, 1982; Xi *et al.*, 2012). Second, it is a disaster for the rural society, as there have been ever increasing numbers of “left-behind children” and “empty-nest elderly” in rural areas, an alarming phenomenon for the livelihood of the rural community and for the future of this people (Chang *et al.*, 2011; Liu & Guo, 2007; Zhou *et al.*, 2005). And third, the massive human capital inflows into cities together with the continuous population growth in the context of China’s recent economic slowdown inevitably lead to the unemployment problem in industries (Magnier, 2016; Wei, 2015).

²¹³ See notably Section 3.2.3 of Chapter IV.

Table 2: Changes in agricultural working population demonstrated in the four population censuses since 1982

Items	Year of the census			
	1982	1990	2000	2010
Working population in agriculture (million)	375	458	434	326
Percentage of total working population (%)	71.93	70.79	61.64	45.55
Male (million)	201	240	224	166
Female (million)	174	218	210	160
Sex ratio (males per 100 females)	115.75	109.77	107.19	103.20

(Source: Chinese population census data of 1982, 1990, 2000, 2010, in Yuan & Liu, 2015)

Table 3: Proportion of agricultural working population according to age groups (%)

Age group	1990			2010		
	Total	Male	Female	Total	Male	Female
15/16 ~ 19	13.85	48.59	51.41	3.01	54.51	45.49
20 ~ 24	17.76	50.37	49.63	8.73	49.15	50.85
25 ~ 29	14.02	50.28	49.72	7.84	49.24	50.76
30 ~ 34	11.10	51.33	48.67	8.04	49.28	50.72
35 ~ 39	12.07	50.58	49.42	11.29	48.58	51.42
40 ~ 44	8.89	51.33	48.67	13.98	48.13	51.87
45 ~ 49	6.70	53.30	46.70	12.60	48.16	51.84
50 ~ 54	5.69	57.71	42.29	9.98	50.82	49.18
55 ~ 59	4.66	62.03	37.97	11.09	52.54	47.46
60 ~ 64	2.93	69.07	30.93	7.01	56.37	43.63
65+/ 65 ~ 69	2.34	76.38	23.62	3.80	60.42	39.58
70 ~ 74	-	-	-	1.69	63.49	36.51
75+	-	-	-	0.95	61.19	38.81

(Note: The 1990 census data starts from the 15 to 19 age group and ends at 65+.

Meanwhile, the 2010 census starts from the 16 to 19 and ends at 75+. The missing data is marked as “-”. Source: *ibid.*)

1.1.2.2 Price system in China's labour market

As mentioned earlier, in urban areas where industrialisation was strongly promoted by the CCP in the 1950s, urban workers held the 'iron rice-bowl', where all wages were centrally fixed by the government. As claimed by the CCP when it came to power, an individual was his/her own employer and one could not 'sell' his/her labour to anyone. In other words, labour was not considered as a commodity and wages were not perceived as being the price of labour (Meng, 2000, p. 3). This politically guaranteed privilege only for urban workers obviously would not hold water since it devastates productivity. Perhaps more importantly, this privilege was not able to last long through the simple and crude prohibition of rural-urban migration (the "blind flows"). This social context at the time essentially explains why 'market' was introduced (or allowed to come back) to the Chinese economy when the 1978 reform was launched.

'Self-regulated' as it might appear, the market, together with its pricing system for labour, does not immediately fix a price for labour solely basing on supply and demand in its simplistic version. As Meillassoux (1975) pointed out in the chapter discussing the making of the cheap labour power ("la main d'œuvre bon marché"), concerning the salary of every individual employees in the society, there are

"...two kinds of remuneration: the direct and the indirect salary. [...] The first kind is paid directly by the employer to the employee, basing on the number of hours of work provided by the employee. It covers at least, but not necessarily more than the amount needed for, the sustenance of the employee. It ensures the recovery of the labour power. The indirect salary, on the other hand, is not realised within the contractual employer-employee relationship, but is redistributed through a social agency. It represents the amount of remuneration calculated, partially or entirely, according to the specific income levels, the amount of social products required for the maintenance and the reproduction of labour power at national scale. This indirect salary is not calculated based on

the number of hours of work provided by individual employees, but is calculated strictly according to the cost of maintenance and reproduction of every individual employees, and precisely based on his/her marital status, number of children, number of days of unemployment or illness, etc."²¹⁴ (p. 155).

Similarly, in Marx's (1977[1867]a) value theory and his critiques on the capitalist exploitation of surplus value on labour, the 'ordinary salary', or in other words, the price to purchase labour power in the (capitalist) market, actually has already taken into consideration of these "social products" raised by Meillassoux.²¹⁵ In this spirit, we could say that even though in a self-regulated market of labour force, a (minimum) social security ("the amount of social products required for the maintenance and the reproduction of labour force at national scale") is contained in the price, and therefore a minimum salary is set by the market, in an implicit manner as described by Marx, or an explicit manner as it is the case in most welfare states nowadays, where more "social products" such as right to vacations are added.

As further regards this part of Meillassoux's (1975) argument, the "social agency" that issues ("redistribute") the "indirect salary" is supposed to be the (capitalist) State, or a statutory agency that manages the social security fund, for example. Yet according to him, this scenario could only happen in industrial production process within the territory under the legitimate governance of the State. Because when this 'state-capitalist' goes outside its home territory and *colonises* 'countrified' regions where all the aboriginals work essentially for their own "sustenance" (hunting, gathering, and cultivating etc.), it does not have to pay the labours as they do at home, especially in terms of the indirect salary: No matter if it is during the short period of the "forced recruitment" (which is more

²¹⁴ Originally in French: "... deux sortes de rémunérations : le salaire direct et le salaire indirect. Le premier est payé directement par l'employeur au salarié, sur la base du nombre d'heures de travail fournies par le salarié. Il couvre au moins, mais pas nécessairement plus, la sustentation du travailleur. Il assure la reconstitution de la force de travail. Par contre, le salaire indirect n'est pas payé dans le cadre de la relation contractuelle qui lie l'employeur au salarié, mais redistribué par un organisme socialisé. Il représente, partiellement ou totalement selon la tranche des salaires considérée, la fraction du produit social nécessaire à l'entretien et à la reproduction de la force de travail à l'échelle nationale. Cette fraction n'est pas calculée sur le temps de travail, mais *strictement selon le coût d'entretien et de reproduction de chaque travailleur considéré individuellement* et en fonction *précise* de sa situation de famille, du nombre d'enfants, du nombre de jours de chômage ou de maladie, etc." Terms marked in bold represent those in italics marked originally by Meillassoux in his writing.

²¹⁵ To provide a precise citation, Marx writes, "... the mechanism of capitalist production provides beforehand, by converting the working class into a class dependent on wages, a class whose ordinary wages suffice, not only for its maintenance, but for its increase" (p. 411).

common place than the simple and crude expropriation) at the very beginning of the colonisation, or after this period when the law of “minimum salary” is to be applied to the *colonies* just as it is at home, it is not the state-capitalist coloniser, but “the domestic mode of production” on the colonies that takes charge of providing this necessary ‘social product’, which constitutes precisely the “conditions of the over-exploitation of labour” by the state-capitalist (pp. 139 – 149). In other words, the law of supply and demand is practically not at all relevant when it comes to fixing the price of labours in the labour market of the colonies, since the indirect salary is largely ‘paid’ through domestic solidarity, thanks to which the labours ‘squeezed’ from their original subsistence economy and their households could make through during the forced recruitment; and things do not have to change much as long as they are ‘under control’.

If we return to the discussion over the price system in China’s labour market after the 1978 reform, we could find that the above presented labour-pricing system in colonies is extremely relevant to the Chinese context: It is the same kind of household solidarity characterised by the auto-exploitation and auto-deprivation of the rural labours, or rural households themselves that has greatly contributed to the fixing of extremely low minimum price for labour. The only—though not a minor—point that subtly differentiates the Chinese labour price system from the one of the colonies is the fact that, the rural households are not directly ‘forced’, under military pressure, for instance, to send their young and strong labour power to work in urban sectors, but *indirectly forced* by their extremely unfavourable working conditions and low profitability if that labour power stays at home and farm. As long as they notice that the salary—though only containing the “direct salary” that covers “the sustenance of the employee” in cities—issued by city employers is much higher than their original *per capita* household incomes, they would find it advantageous to send that labour power to work in cities. In reality, since the city salary is indeed much higher than the ordinary earnings from farming, the rural households are, either persuaded by the fact (considerable amounts of remittance sent back by the migrant workers, for instance) or simply under the illusion that having squeezed out young and strong labours and having had them work in cities makes far more considerable financial returns (Shi & Yang, 2012; Tong, 2014; Bowlus & Sicular, 2003), whilst ignoring the fact that they are actually covering the part of the indirect salary by themselves.

As discussed in the previous section, the agricultural working population has greatly aged and feminised over time. This phenomenon reflects the fact that the over-exploitation of workers in cities—of which a large proportion composed by young and male migrant rural labours—has extended its damages to the agriculture sector. The commonplace practice of excessively utilising chemical fertilisers and pesticides also reflects the rural households' auto-exploitation of strong labour power and their auto-deprivation of leisure time (retirement). In other words, both the input of aged and feminine labour power in the labour-intensive farming activities, and the excessive input of chemicals in farmland are precisely for the purpose of compensating the absence of the migrant workers: These inputs represent precisely the “indirect salary” with which the rural households provide themselves. As long as the aged and feminised rural labour power and the chemicals compensate the absent rural labours and ‘guarantee’ a harvest that could feed the whole population, the *entirely* market-set minimum labour price will be accepted. Yet this is hardly the case: Though according to the NBSC database China’s grain production has been near record levels as government policy aims to encourage production to feed the world’s largest population, there has been a continuous increase of China’s food imports, as reported in the WB database.²¹⁶ Together with the environmental crises in China as well as the issue of global climate change, the self-sufficiency of food becomes increasingly challenging. (*cf.* Wang *et al.*, 2008; Wang, 2014)

Another point worth noting is that, this household solidarity not only exists in rural China, but also in cities. Being more strictly enforced in cities than in rural districts, the famous one-child policy has not only greatly changed the demographic composition of the Chinese population (and thus that of the working population), but also reinforced the already deeply rooted mentality of household solidarity. In cities, young job seekers as well as young employees would also accept the low salaries, especially for their first few years of employment (whilst expecting a better future afterwards, of course), because they are offered by their family a variety of help, notably in terms of free housing (living with their parents) and direct financial supports (Pun & Chan, 2013; Xie *et al.*, 1996). However, the low salary is getting increasingly hard to bear both for urban and rural households, especially in the recent few years. The increase of salary does not seem to

²¹⁶ Information available at <http://data.worldbank.org/indicator/TM.VAL.FOOD.ZS.UN?locations=CN>, last consulted on 25/10/2016.

match that of living expenses in China (Gao *et al.*, 2014; Huang *et al.*, 2014; see next section).

When looking at the role of the State on the matter, we note that since the 1970s, the State of China has positioned itself much like the state-capitalist described by Meillassoux. The loosening of *hu kou* control and the “no work no food” policy reflect the State’s *laissez-faire* attitude regarding the newly formed labour market, especially at the beginning of the liberal reform. This attitude does not seem to have changed much, since the social security scheme for the migrant workers is still problematic. Together with other unsettled issues concerning labour protection in general that are closely related to this price system (*cf.* Leung, 2003; Pun & Chan, 2013; Reutersward, 2005; Tam *et al.*, 2004; Wei, 2015; and also see below), it seems not very likely that this system in China’s labour market could be ‘reset’. Nevertheless, a number of political and legislative efforts (such as the promulgation of the *Labour Law* (1994) and the *Labour Contract Law* (2007)) have been made, and a number of civil societies (such as NGOs specialising in protecting the rights and interests of migrant workers) have emerged. Both facts suggest government- and non-government-led adjustments of this system, which have shed promising light on this prospect.

1.1.2.3 Labour rights, unemployment, and trade unions

Since the CCP came to power, it has repeatedly advocated in the official discourses that, “industriousness”, “the most important traditional Chinese virtues”²¹⁷ has always been (and should continue to be) the guarantee of China’s solid economic growth (as reported by Chen (2014) in *Guangming Daily*, for instance). Though it is difficult to judge whether this virtue is truly in the blood of Chinese people, it is rather easy to understand the motivation for them to work hard ever since the 1978 reform: After so many years of ‘eating from the same big pot’²¹⁸ and watching some privileged ones holding the ‘iron rice-bowl’, people—originated from rural and urban areas alike—have hardly anything to

²¹⁷ Originally in Chinese: “勤劳是中华民族的第一传统美德”

²¹⁸ A literal translation of the famous Chinese term “吃大锅饭”, an expression that describes the way of organisation in people’s communes in Rural China back in 1950s.

complain when they are simply allowed to take the initiative to work as much as they want in order to better his/her life.

As having been brought up on several occasions in this dissertation, foreign investors/enterprises together with the massive FDI influx to a great extent have changed the landscape of Chinese economy since the 1978 reform. Even though as observed by Chen *et al.* (2011), there has been no consensus on the impact of FDIs on the local economy, it is generally agreed that China's recent opening-up has been in tune with the trend of low-end-industry delocalisation from the developed world, and that it is the major cause for China's more than 20 years spectacular economic growth (Arrighi, 2007; Fukasaku *et al.*, 1994; Shirk, 1993; Wang & Zheng, 2012).

The motivated labours and the foreign enterprises looking for delocalisation have formed, in the just-opened-up China, a market with abundant supply and demand of labour, an important sign of a massive economic boom. Indeed, endowed with a large reserve of industrious labours, China has been building its labour-intensive manufacturing industry depending essentially on export, and thus enjoying a flourishing economy thanks to the status of "the world's factory". The foreign enterprises do business with this world's factory by purchasing the goods manufactured and/or by delocalising their own producing lines to the Chinese territory. In either case, they would find themselves being offered with extremely 'cost-effective' labour: As demonstrated in Section 1.1.2.2, for their local suppliers and/or they themselves as factory owners, the only obligation they face in terms of employee remuneration is the minimum salary fixed according to the amount of the "direct salary", which covers only the necessary expenses for the sustenance of the employee in cities, thanks to the Chinese government's 'roll-back' position in managing and regulating the payment of the "indirect salary", and thanks to the fact that this indirect salary is spontaneously covered by local households. On this basis, the firms are free to compete in the labour market; however, since the labour supply is abundant, the firms would not really have to bid high in order to compete with each other and get what they need.

Nevertheless, the market dynamics would never leave things as they are as always. As the labour force comprises the consumers that form the domestic demand of an economy, the majority of Chinese people, again, in urban and rural areas alike, find that the low salaries

get increasingly hard to bear, since the increase of salary, or that of household income in general hardly seem to match the increase of their living expenses. This is demonstrated in a number of empirical researches on Chinese household income. For example, using a large repeated cross section household survey from 1986 to 2000, Meng, Gregory, and Wang's (2005) study demonstrates that, although the urban Chinese has experienced spectacular income growth, the growth of rural household income has been seriously hindered by the deregulation of grain prices. It also shows that there are significant reduction in social welfare provision, and increases in income uncertainty and inequality in China. In short, the majority of industrious Chinese labour does not comprise the first or the most important beneficiaries of China's so many years' economic growth.

The equilibrium becomes even more fragile when the world's factory starts to look for ways to upgrade its industries after decades of handling the low-end manufacturing and selling low value-added products and services. As discussed in Section 2.3.2 of Chapter IV, after nearly 20 years of rapid industrialisation since 1978, the Chinese central government announced a "structural adjustment" of economy in 1990s, and this is when the term "xia gang" (to be laid off) was invented. In this wave of "transitional unemployment", the figure of laid-off workers had rocketed up to 11.5 million by the end of 1997 (Gu, 1999). Meanwhile, the official unemployment rates only varied around 3% at the time (*ibid.*), which otherwise reveals a 'tradition' of not reporting accurate unemployment numbers in Chinese official statistics. As shown in Figure 7 (which is generated on the basis of Figure 4), over more than 30 years, "the registered urban unemployment rate", the most cited and the only official unemployment rates communicated through official channels, has remained almost unchanged, which is hardly credible.

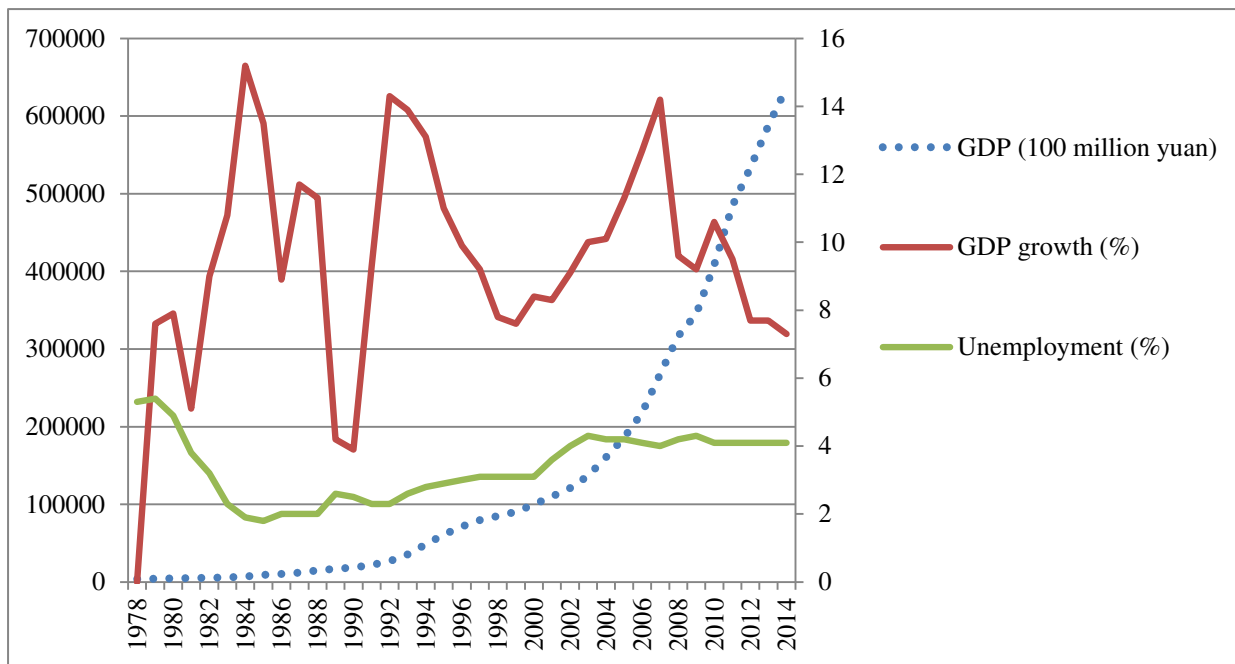


Figure 7: China’s official unemployment rates, GDP and GDP growth index 1978 – 2014
 (Source: website of NBSC, <http://www.stats.gov.cn/>)

Indeed, since this “registered urban unemployment rate” does not take into consideration of the cases for rural labour, migrant farmer-workers, male labour above 50 and female labour above 45 years of age, the xia gang workers, or any unemployed person who does not take the initiative to get registered in the system, this number hardly reflects the actual situation. Recently, estimates are made by (domestic and overseas) media, national- and international-level think-tanks, and they range from 6.4% to 30% (cf. CIA, 2013; Li, 2010; Ru *et al.*, 2011). In any case, the actual unemployment rate is much higher than what is indicated in official numbers, which is an alarming sign for the economy, and thus implies the central government’s urgent need of, and strong dependence on, the ‘big suppliers’ of employment opportunities.²¹⁹

As shown above, either in times of ‘quasi-full employment’ based on the labour-rights-abusing salary scheme, or in times of massive unemployment, the State does not seem to have stepped up and managed the “shifting demand for employees by providing relief in

²¹⁹ See more in Section 1.2.1.

periods of unemployment, by educating and training future workers, and by seeking to influence migration flows” (Polanyi, 2002[1944]). Rather, it even initiated the xia gang in the SOEs, in the name of structural adjustment for the purpose of industrial upgrading. And curiously enough, in both cases, there is a ‘key-player’ that seems to have always remained silent – the trade unions.

The All-China Federation of Trade Unions (ACFTU), the CCP Central Committee directly managed organisation and the leader of all trade unions in China²²⁰, claims 280 million members (ACFTU news, 2013). As observed by *The Economist* (2008), the ACFTU is a “trade union monopoly” that is “deeply intertwined with China’s government and Communist Party”.²²¹ After the political/economic depression during the 1950s and 60s, the ACFTU under the CCP leadership was “revived” in the 1978 reform, and has been engaged in promoting labour laws and “collective contracts”, as well as in establishing tripartite institutions to mediate in individual disputes ever since (Metcalf & Li, 2005). However, as demonstrated by Chen (2003b), no matter it is for renegotiating salaries or it is in times of large-scale structural adjustment, whenever the labours need to express their contentions, they do it in a rather spontaneous way, by “seeking to frame claims that are somewhat linked to the rhetoric of the past and the old concept of ownership” (p. 259), rather than in a more organised way initiated by workplace trade unions.

Similarly, as demonstrated by a large number of qualitative and quantitative studies in the literature, whereas the labour market has become officially established in China after the introduction of labour contracts by the 1994 *Labour Law*, there is no evidence of a parallel development in functioning unions, and therefore the Chinese labours have never had a proper organisation to represent for their interests (*cf.* Chan & Hui, 2012, 2012; Ding *et al.*, 2002; Metcalf & Li, 2005; Ngai *et al.*, 2009; Wong *et al.*, 2007). It implies that despite the large membership, trade unions in China are likely to remain nugatory in

²²⁰ Information in Chinese: “全国总工会是各地方总工会和各产业工会全国组织的领导机关。全国总工会由中共中央书记处领导。” Chinese-only information available at the official website of the ACFTU (<http://www.acftu.org/>), last consulted on 1/5/2016.

²²¹ Article entitled “Trade unions in China: Membership required” (Available at <http://www.economist.com/node/11848496>), last consulted on 1/5/2016.

labour relations (Metcalf & Li, 2005). It seems that this state-led trade union system generally fails its job as claimed in its *Constitution*²²².

This failure is to a great extent caused by the double institutional identity of the trade unions in China. As a state apparatus that *governs*, and meanwhile a labour organisation that is supposed to *contest* the policies when needed, the trade unions are endowed with an identity that is extremely contradictory. This awkward position of the trade unions is inherited from the socialist tradition, where their representation function was absorbed by the paternalist state (Chen, 2003a). After the 1978 reform when the State retreats from socialist paternalism, the unions seem to have reoriented their activities to be more like a state apparatus that serves the state corporatism (*ibid.*). And for the foreign and domestic private enterprises and JVs, the unions are more like a “business partner” that to be consulted whenever they conduct corporate changes that concern the labours (*The Economist*, 2008). And as it is the case for ordinary business negotiations, ‘deals’ could always be made if the negotiators—rather than every individual they represent—are happy with the ‘offer’. As estimated by Chen (2003a), this malfunctioning of the trade unions would probably lead to more spontaneous protests of labours and/or force the labours to seek independent organising outside the ACFTU framework, both of which seem to have become increasingly true in time (Chan, 2012).

1.1.3 Money

Being recognised by Marx (1973[1858]) as the “general equivalent”, and by Weber (1978[1922]) as “the most ‘perfect’ means of economic calculation”, money is central both to the daily functioning and to the understanding and monitoring of an economy. Yet all these could become meaningless if the State fails to “play the ongoing role of adjusting the supply of money and credit to avoid the twin dangers of inflation and deflation” (Polanyi 2002[1944]).

²²² Chinese version available at <http://www.acftu.org/template/10041/file.jsp?cid=807&aid=42622>, last consulted on 1/5/2016.

Before starting the discussion, one thing to bear in mind is the fact that China has the world's biggest commercial banks, all of which are owned by the State. According to the 2015 Forbes Global 2000, list of the world's best publicly traded companies, China's 'Big Four' state-controlled banks—Industrial and Commercial Bank of China (ICBC), China Construction Bank, Agricultural Bank of China, and Bank of China—rank the top 4 in the list. Regarding the supply of money/credit and the State's role on the matter, there are two issues that are particularly relevant to the theme of this dissertation: the problem of nonperforming loans (NPLs) and the examination of 'loan eligibility' in a broader sense.

Concerning the first one, statistics together with a large number of empirical studies have been conducted and their results show alarming signs. For instance, Reuters (2016) has estimated earlier in the year of 2016 that Chinese banks' new bad loans are likely to be more than doubled in 2015. Not surprisingly, according to the latest (2015) annual reports of the 16 listed commercial banks in China, compared to the 662.56 billion yuan in 2015, the total amount of NPL has surged to 994.2 billion yuan (165 billion US dollar), among which the Big Four 'contributes' 689.3 billion yuan (114 billion US dollar) (Zeng, 2016; Zhou, 2016). Further, basing on a quantitative study of the Chinese GDP index and the NPLs of Chinese commercial banks over the period of 2005 – 2012, Xiao (2014) demonstrates the decades-long and ever increasing NPL pressure on China's banks owing to its SOE customers. He also finds that contrary to the theoretical predictions stating that the GDP growth rate and commercial bank NPL ratio are supposed to be negatively related, a positive relationship is observed in the case of China. This result gives away the fact that the many years' of high GDP growth rate in China is largely based on the rapid credit growth of Chinese commercial banks, and that the overwhelmingly rapid credit growth has caused the drastic degradation of credit quality.

These findings are echoed by many active observers of the Chinese capital markets. As noted by Balding (2015a, 2015b) for instance, not only the Chinese commercial banks have been rolling over loans and capitalising unpaid interest, but also been counting the unpaid/capitalised amounts as interest revenue. In other words, by refusing to recognise a bad loan and counting the capitalised unpaid loan amount as higher revenue, unrecognised NPL growth is contributing *positively* to revenue and thus to China's GDP growth. Considering the gigantic size of the Chinese banks and the scale of their NPLs, the credibility of China's GDP numbers becomes particularly questionable.

The causes of this phenomenon are multiple and deserve in-depth investigation. However, there is an undebatable fact that should be seen as one of the most important causes of the above discussed issue: In China, the price for credit has been overwhelmingly low for decades. As demonstrated by Patrick Artus (2008) in his book chapter entitled *The central objective of economic policy in China: To grow as fast as possible*²²³, in 2007, for example, the 10-year (benchmark) lending rate was approximately 8%, whilst the GDP growth in value (rather than in volume) was nearly 15%. This problem of “ridiculously low” interest rate compared to the economic growth rate (p. 19) has obviously drawn attention of the country’s top leadership, and corresponding countermeasures have started to be placed ever since the resolution of slowing down the economy was made, though with little success (*ibid.*, p. 22).

The second problematic issue is to a large extent related to, or even could be seen as another one of the most important causes of the first one. As mentioned above, the overwhelmingly rapid growth of credit supply has been generously provided essentially to the SOEs, who get loans under institutional arrangements, and whose repayment ability has not been examined under proper criteria (Cull & Xu, 2003). This practice was widespread in the first two decades of the reform since late 1970s (*ibid.*), and it is still the case after the 1995 introduction of the *Commercial Bank Law* that marked the banking sector deregulation of the Chinese government.

Further, the ever since more market-oriented credit market has been tightly linked to the commodification of land: On top of the SOEs, it is the local governments, together with the real estate developers, that have become the most important beneficiaries of the credit-control loosening (Ding, 2007; Liang & Cao, 2007). The most common practice is that the land users (mostly real estate developers) could assign land rights as collateral to obtain bank loans; and in reality, the mortgaged land accounts for nearly 90% of total land under transaction and circulation in the 2000s (Lin & Ho, 2005 in Xu *et al.*, 2009). In other words, the deregulated credit market has greatly facilitated the exploitation of land. In the case of infrastructure projects, the numerous local government financing platforms (LGFPs) ranging from provincial level to municipal, or even county-level, are always spoiled by the banks eagerness to sell their credit, and obtain too easily loans that

²²³ Originally in French: “L’objectif central de politique économique de la Chine: croître le plus vite possible”.

they do not even bother to repay – a fact that contributes greatly to the Chinese banks’ NPL problem nowadays (*cf.* Lu & Sun, 2013). And in the cases where the land developing projects are for building ‘industrial parks’ and ‘high-tech zones’ where the labour-intensive factories are to be built, it also contributes to the exploitation of labour (*cf.* Hsing, 2010).

What is otherwise worth noting is that, though the loosening of credit control is a common—but temporary—practice in modern economies, especially when there are tendencies of (and/or in times of) economic downturn, it has been practiced in China continuously in the recent decades, which has, accordingly, facilitated and accelerated the non-stop exploitation of land and labour.

1.2 The ‘key-players’ in the socialist market economy

As demonstrated in the previous analyses of this dissertation, the use of CDA requires the identification of key-players who produce relevant discourses regarding the subjects under discussion, and who are, as recognised by the CDA theorists, participants in the discursive practices of constructing the ‘objects’ they talk about. In Section 5.1 of Chapter II where the methodological framework is introduced, two key-players, namely the Chinese agribusinesses and the Chinese government are identified as central to the analysis of this dissertation. In this section however, the scope is enlarged and in the meantime the categories are more disaggregated, as we zoom out by looking at the firms on the Chinese territory in general, and further break down the notion of “Chinese government” into the central government and its departmental and regional heads.

1.2.1 The State as regulator and the firms with heterogeneous natures

In the Forbes ranking for “The World’s Largest Companies in 2015”²²⁴, among the 2000 largest publicly listed firms in the world, the PRC (mainland and Hong Kong) ranks the

²²⁴ Information available at <http://www.forbes.com/global2000/>, lasted consulted on 30/01/2016.

second after the U.S. (579) with 232 firms and having just surpassed Japan (218) for the first time, which matches almost perfectly with China's renowned label as the world's second largest economy. Among the 232 firms, we can easily notice that more than 200 are SOEs. With 50 companies on the list, the construction industry earned more spots than any other industry, despite China's gloomy real estate outlook. Banking and diversified financials trail with a total of 38 members combined, followed by materials (20), many of which have a close relationship with the construction sector (Chen, 2015). Moreover, apart from these publicly listed Chinese SOEs that are under the spot light, there are still some "hidden heavies" that stand in the forefront of the country's political and economic priorities yet rarely known by the world (Ni, 2015).

Endowed with a long history of running SOEs, it is nevertheless not until 2014 that the Chinese government released for the first time the official statistics on the matter: China has more than 155,000 SOEs, employing tens of millions of people in all sectors from banks to hotels and airlines to oil refineries (Zheng, 2014). Whilst the vast majority are managed by local governments, there is a core of more than 100 large nationally strategic groups, including for instance ICBC, the world's biggest bank, and PetroChina, the world's biggest firm in oil and gas (Bland, 2015; Tao, 2014; Zheng, 2014). Accounting for less than 1% of the total number of enterprises in the PRC, the Chinese SOEs own 30% of the total assets of the country, and their share in China's GDP is estimated from 40% to up to more than 75% according to various sources (Lelyveld, 2015; Ouyang, 2012; Wheeler, 2012).

These state-owned giants could be a great asset for a booming economy, yet could also be an enormous liability when it comes to the "structural adjustment" that the State looks to achieve for years.²²⁵ In line with the decades of 'adjustments' made by the previous generations of CCP central leaderships and by his own, President Xi Jinping further clarifies in the 2016 National People's Congress that a "supply-side reform" is to be conducted, for the purpose of further stimulating the economic growth (*Xinhua News Agency*, 2016b; Yang & Ma, 2015). To be more specific, the supply-side reform refers to the government initiatives to lower barriers to production, particularly through tax cuts. The expected outcome is that, instead of spending their earnings immediately, the

²²⁵ see notably Section 2.1 and 2.3.2 of Chapter IV.

“wealth-owners” (or big capitalists in more common terms) would be more enticed to invest in new businesses, innovative goods and services that increase new supply (Xinhuanet, 2015). Emphasising also the aspect of deregulation, this reform is widely recognised as echoing Reagan and Thatcher in the 1980s (Buckley, 2016). But who exactly are the big “wealth-owners” standing on the “supply side”? The answer seems obvious if we take a look at the Forbes ranking.

The fact that the overcapacity is a time bomb that is likely to severely undermine China’s economy is a well-known issue, and this “supply-side” is widely interpreted by medias, both domestic and abroad, as referring to the industries that are most implicated in this issue (*cf.* Cheng, 2015; Ma & Yap, 2013; Mitchell, 2016; European Union Chamber of Commerce in China, 2016). Accounting for almost a quarter of the places occupied by the Chinese firms in the ranking, the SOEs in the construction industry seems to be the first to bear the brunt. Indeed, in the *Guidelines to Resolve Severe Overcapacity Problems*²²⁶ issued by the State Council in 2013 clearly states that “steel, cement, electrolytic aluminium, flat glass and shipbuilding are identified as priority sectors in which existing projects would potentially be re-evaluated and proposed projects would be blocked” (European Union Chamber of Commerce in China, 2016, p. 6). Yet since all these firms involved are SOEs, this reduction of overcapacity means reining in the reach of the State, especially to curtail state companies’ privileged, often monopolistic, access to loans, resources and customers (Buckley, 2016). Further, the experience in the 1990s of the xia gang wave and that of the social instability coming with it make the central leadership think twice when making decisions for real to shut or pare down state-supported industries to true market levels and to cut millions of jobs (*ibid.*). Moreover, since the majority of these firms are not even directly run by the State but by the regional governments, and since the regional governments still have the mentality of GDP competition²²⁷, the outcomes expected of this reform seems not easy to be achieved.

Among the Forbes biggest firms in China, private sector companies have on the other hand started making their appearance especially after the year of 2000, in part thanks to a heated IPO market both at home and overseas. The e-commerce giant Alibaba Group, for

²²⁶ Available at http://www.gov.cn/gongbao/content/2013/content_2514934.htm, last consulted on 6/5/2016.

²²⁷ See more in Section 2.2.3 and 2.3.1 of Chapter IV, and also in the next section.

instance, debuted at No. 269 after scoring in 2014 the world's largest IPO in history in New York Stock Exchange (Chen, 2015). Apart from the phenomenal Alibaba, the rise of private firms is observed above all in the sector of telecommunication (Huawei, ZTC, Xiaomi etc.) and IT (Baidu, Tencent, Xunlei, Jinshan etc.) (Pilling, 2015), which seems in line with the central government's strategy of "upgrading" the labour-intensive-industry-dominated economy to a more technology-intensive one (*Xinhua News Agency*, 2016a).

In the meantime when Mr. Xi talks about the plan of supply-side reforms, Prime Minister Li Keqiang, "the economist" of current CCP central leadership, seems to have another emphasis in his discourses regarding the next-step economic reforms. For instance, According to the official website of the Central People's Government of the PRC (<http://www.gov.cn/>), at the December 2015 "Forum of Chinese Experts on Economic Work" held by the central government cadres, Mr. Li says that the supply- and demand-side reforms are both needed in order to promote the structural reforms, and to achieve long-term, stable, and healthy development.²²⁸ In his first "thematic lecture" on "innovation" for the state council in March 2016, he further explains his ideas by underlining that in the environment of deregulation and free competition, new technologies, new industries, and new businesses are more than ever welcomed.²²⁹

In fact, Li's endorsement of private entrepreneurs goes way back: As soon as the fifth generation of leadership came to power in 2012, Mr. Li has made a number of appearances in the media, showing his support for private entrepreneurs, and particularly for Taobao, consumer-to-consumer online shopping website under Alibaba (*cf.* Ding, 2015; Feng, 2013; Gao, 2015; Luo, 2013). Moreover, Mr. Li Yuanchao, Vice President of the PRC, praised the "highly cost-effective products" he personally bought on Taobao, together with Mr. Li Keqiang at the 2016 World Economic Forum in Davos (Ding, 2015; Zhi, 2016).

²²⁸ Article entitled "Li Keqiang chaired the Forum of Chinese Experts on Economic Work: supply- and demand-side reforms are both needed to promote the structural reforms and to achieve long-term, stable, and healthy development (李克强主持召开经济工作专家座谈会：供需两端发力推进结构性改革 促进经济长期平稳健康发展)". Information available at http://www.gov.cn/guowuyuan/2015-12/03/content_5019572.htm, last consulted on 6/5/2016.

²²⁹ Article entitled "Li Keqiang hot word No. four: 'New' (李克强大热字之四：新)". Information available at http://www.gov.cn/xinwen/2016-03/01/content_5047797.htm, last consulted on 6/5/2016.

The reason for which the Chinese top leaders pay such attention to one single private firm is to a great extent because of the fact that this firm has become a critical pillar of the economy. Accounting for more than 90% of China's e-commerce total sales (which is 10.1 trillion yuan (1.5 trillion US dollar) in 2013), the total sales on Taobao is estimated to equal that of today's online shopping market of the United States, Japan, the United Kingdom, Germany and France combined by 2020 (Gao, 2015; Jiang, 2015). Apart from the pure money aspect of its business, this e-commerce platform has created (and maintained, from another point of view) an enormous number of jobs, ranging from manufacturing, e-shopkeeping, warehousing, delivering and so on: It is reported that only in the year of 2013, the direct employment created by Taobao is more than 280 000 in rural 'Taobao villages', and the indirect employment opportunities created are more than twelve million (Xi, 2013). This has (re-)vitalised the TVEs and millions of family workshops in rural China by greatly shortening the distance between them and the end consumers, as they are now able to open their own e-shops online (Ding, 2015). The social benefits are particularly valuable, perhaps even more valuable than its pure monetary contribution to the economy, given the current pressure of employment issues in China. (see Section 1.1.2)

Indeed, this two-fold contribution made by the private firms in China is the most important bargaining chips held by these firms when it comes to times of negotiation, notably with the State. As in the case of Taobao, for instance, even though there is no direct evidence clearly showing that it benefits from such-and-such privileges, the fact that it has absorbed the large number of otherwise jobless working individuals both in urban and in rural areas, and cultivated more than two hundred of 'Taobao villages' in rural China, does seem to have an impact on the State's attitude towards this firm, since the regulatory issues it faces are truly reduced to minimum: The State seems to have turned a blind eye to its pending issues such as tax evasion, the lack of a proper social security management system, the circulation of counterfeit goods and so on.

However, even though there could be some 'grassroots giants' who seems to have had some margin, as long as they become large and important enough, the absolute majority of private sector entrepreneurs in China are obliged to answer far more directly to the (one) party in power, at national, regional, and departmental levels, who sets rules, censors content and can, if necessary, shut them down (Pilling, 2015). The claimed

deregulation and support for entrepreneurship seem to have only facilitated (again) the big “wealth-owners” in the private sector. This situation has urged the firms, both SOEs and private ones alike, to look for *ad hoc* support by developing some kind of close ‘personal relations’, either with the State (as demonstrated in the case of Taobao), or with regional governments (as it is the case for the majority of SOEs managed by local governments; see below).

1.2.2 State entrepreneurship v.s. the regional entrepreneurs

As mentioned in Section 1.1.1 of this chapter when discussing the land policies in China, and in Section 2.2 and 2.3 of Chapter IV when contextualising the NEAAS, the conflicts in terms of interest between the central government and departmental/regional cadres have been drawing increasing attention within the scope of China’s economic and political landscape. This part of analysis intends to further explain the formation of these conflicts. What are probably the most relevant elements to this discussion are the fiscal and tax reform since 1978, and the 1994 reform of the “tax-sharing system” in particular.

Right before the launch of the “reform and opening up” policy, the central finance had been, as an article on *Outlook*²³⁰ puts it, “on the edge of the cliff” (Zhao, 2003). As mentioned earlier in Section 1.1.1.2 when discussing the SEZs’ establishment, Mr. Deng was frank when talking about the financial situation of the State: “The CCP central authority has no money.” Therefore apart from the support in terms of “favourable policies”, it was not capable of providing regional governments with any financial support. And in order to overcome the economic difficulties, every individual region should take initiatives and “blaze a new trail on their own”. The favourable policies provided by the central authority to the regional governments not only include the approval of establishing SEZs and the delegation of land custody, but also a quasi-autonomous status in terms of tax administration: Take the Guangdong province for example, according to the ‘contract’ signed between the central authority and the

²³⁰ Newsweek magazine specialised in reporting political and economic events under the supervision of the Xinhua News Agency. It is founded in 1981 “upon the personal approval of Deng Xiaoping”. Information available at the official website of Outlook <http://lw.xinhuanet.com/htm/aboutus.htm>, last consulted on 6/5/2016.

province head at the beginning of the 1978 reform, Guangdong only needed to hand in to the central government 2.274 billion yuan (375 million US dollar) the first year, with an annual increase of 9% after; any extra amount demand of the central government exceeding this fixed number would be judged as having gone beyond the range of the ‘contract’ and therefore would not be ‘justified’. Moreover, the central government even allowed Guangdong, a coastal province with an enormous amount of international trade opportunities since the ‘opening-up’ reform, to retain all the tariff revenues, as an addition to a favourable policy given to the province (*ibid.*).

Thus, since the 1978 till right before the 1994 reform, the regional governments at all sub-national levels were to a great extent left to ‘finance themselves’, accompanied by a large-scale decentralisation of decision power to the provincial level, ranging from the sale of land-use rights, the granting of tax reduction to new investors and so on. The regional governments were extremely motivated to participate in revenue-generating economic activities, because the money went directly to the treasuries of individual provincial governments, and only a comparatively small and fixed portion was to be handed in to the national treasury.

After a decade of letting the individual regions run their own ‘businesses’, the central government found itself in an even severer financial crisis, since compared to the ever increasing GDP and total fiscal revenue, the increase of central government revenue had been extremely insignificant. The central government was facing an unprecedented “weakened-centre” situation, as it was unable to afford the expenses for national defence, disaster relief, basic researches and infrastructure construction, even though already heavily indebted (*ibid.*). And this is when the tax-sharing reform was put forward, notably by Zhu Rongji, Prime Minister at the time who is known as “the economist” of the third generation of leadership.

The 1994 tax-sharing reform above all requires the value-added tax (VAT), the biggest fiscal revenue source since the launch of the 1978 reform, to replace the scores of cascading indirect taxes. Equipped with a series of tax revenue collection and reallocation schemes, the central government’s 1994 tax reform managed to recentralise both the

revenues and the decision-making power from provinces as expected²³¹, yet has inevitably created conflicts of interests both in terms of money and power (Feng & Zhang, 2013; Wang & Herd, 2013). The regional governments have been henceforth more than ever motivated to “hide wealth in local industries” notably by granting them preferential access to bank credit and favourable conditions in their power, and to profit from the local firms’ ‘return’ to this ‘favour’ in various forms (Brink, 2012; Liu, 2000; Ma, 1995; Tung, 2003). This could otherwise be seen as one of the major reasons for the central authority to launch the recent anti-corruption campaign (*cf. ChinaFile*, 2016; Fenby, 2015).

As a one-party ruled country endowed with gigantic stock of land and labour resources, China does have a governance structure which resembles that of a big enterprise more than any of its Western counterparts (with the exception of Russian probably) (*cf. Chang*, 1994, p. 298). As demonstrated repeatedly in previous sections and chapters, when it comes to times of difficulties such as fiscal crisis, social security issues, and environmental problems, the State has always been ready to assume its “chief responsibility” (Mauss, 2002 [1950]), no matter if it is willing or obligated to do so. Yet the tax regime accompanying the 1978 opening-up and the 1994 tax reform that follows have cultivated an entrepreneur-like mentality for all the regional governments, who value the interest of their own regional-level entities/groups more than that of the State, and who compete with other ‘entrepreneurs’ when it comes to attracting ‘business partners’ (Goodman, 2009). It seems that the market mechanism has penetrated into the scene of politics, and that this enlarged scope of liberalism has gone against the state entrepreneurship. In short, the so-called “state capitalism” in China could not be simply interpreted as the existence of only one ‘state capitalist’, or central authority that leads the economy. Rather, it is characterised by decentralisation, or to be more specific, by the existence of several regional-level capitalists who by law represents the State, and who compete with each other in the overheated market for fictitious commodities deregulated by the State.

²³¹ These objectives are clearly stated in the central authority’s discourses, notably in the *Decision on Major Issues Concerning the Socialist Market Economy* issued in 1993.

2. Ideological conflicts concerning the adoption of a SA framework in the Chinese context

2.1 Reconsidering China's reforms and the underlying motives

Grésillon (2015) affirms that judging from the “massive indebtedness, concentration of power, urban smog, the crisis of ‘low-cost’, pollution in rural districts, censorship, social inequality, dispossessed minorities... the so-called Chinese model falters.”²³² It seems that Grésillon's concerns of China is not unreasonable: What if the last decades of economic growth was nothing but a big leap in the mist of uncertainty? Or even worse, what if the market-oriented ‘opening-up’ reforms led to an inevitable scenario, where the degradation of both ecological and social environment is accelerated by these reforms?

According to Polanyi's (2002 [1944]) writing, the dynamics of modern society have been governed by a double movement, where the market of commodities expands and continuously being checked and restricted by a countermovement of society, which, as manifested in the reality of modern times, is conducted by state governments, given their status as the sovereign or supreme law-making authority of their countries. The restrictive measures taken by the State are mainly intended to regulate the market of the three types of fictitious commodities, notably through nationalisation of land and resources, labour law (including minimum wages), and verification/audit regarding banks and credit demanders, for instance. In this regard, we could say that one of the most important motivations for the State—especially for the countries where state (and regional) governments come to power through elections—to take such restrictive measures is to win votes in elections, just as the motivations for any measure taken by the government in general.

Yet in China, since the one-party government does not have the pressure of *winning elections*, its main motivation for taking this kind of measures seems to rest upon *remaining in power*. Though at first glance these two motivations appear to be almost identical, they are fundamentally different: whilst in the first case the party in power

²³² Originally in French: “De l’endettement massif à la concentration des pouvoirs, du smog urbain à la crise du low-cost, de la pollution des campagnes à la censure, des inégalités sociales aux minorités spoliées, le modèle vacille.”

fights real adversaries only by providing *possible*—or in other words, ‘persuasive’—solutions (and if the solutions do not seem to work the party in power would be simply replaced, and this cycle might continue internally until the situation somehow changes), it is compelled to fight against each and every concrete problem in the second. And if the one-party government fails in the second case, the price might be too high for the State—and the whole country—to bear.

Mr. Xi Jinping once described this delicate situation for the CCP in the speech at the White House during a visit as Vice President of PRC in 2012:

“... There is no precedent for us to follow and no ready experience for us to refer to. We can only do what Mr. Deng Xiaoping said, ‘to cross the river by feeling the stones’. ... A Chinese pop song goes like this: ‘May I ask where the path is? It is where you take your first step.’ ”

Admittedly, on this “unprecedented path” of pursuing socialism with Chinese characteristics under the guideline of conducting a socialist market economy, Deng’s reform together with the following series of policies does represent some daring attempts that the CCP authorities have made, in the hope of reinforcing and/or repairing its leadership. The CCP seems to have been seeking for decades to reconcile the ideology of socialism and that of capitalism both through rhetoric and through the design of economic systems (land ownership, labour pricing, and tax schemes etc.). The CCP governments’ resolute application of these systems imply that, contrary to the Marxist beliefs, the accumulation/concentration of capital and the social wellbeing in terms of human (or “working class”) emancipation are officially no longer seen as two confronting concepts ever since the 1978 reform; rather, the former seems to have been rationalised as the only way leading to the latter. In this regard, the term “socialist market economy” is indeed rhetoric for a state-capitalist economy, and this capitalist nature of the Chinese economy is not much different from the one of any other capitalist country elsewhere in the world.

As what Xi implies in his speech, this path is full of uncertainties, which could lead to dangers that threaten the CCP leadership if (any one of) the paramount problems (*i.e.*, the awkward central-local government relations, corruption, degrading the natural and social environment and so on) confronted China are (is) not properly resolved. Nevertheless, the

crises faced by the CCP central authority could also be opportunities, as they always come together.

It seems that the CCP central leadership is aware of the existence of the overheated market of fictitious commodities of land, labour and money resulted from the previous liberal reform, because as analysed in the previous chapters, today's central authority have been making various attempts that serve in part the purpose of 'retrieving', recentralising, or regularising the controlling power over these three fundamental elements of the economy, which is precisely what is needed in China to deal with the environmental and social problems in the unsustainable development. Endowed with a political system that serves the one-party rule and thus 'frees' the central leadership from the public's periodical evaluation based on their *short-term* political achievements (or in other words, from general election on a 4 – 5 years' basis), China is probably one of the rare countries that are capable of conducting large-scale state-led projects that could lead to a path to strong sustainability. (see Section 3.2)

2.2 Environmentalism constructed in the enlarged scope of neoliberalism in the socialist market economy

At this stage, if we recall the successful case of conducting IFRS convergence and the relative failures in introducing sustainability accounting in China, we can notice that, whether a specific set of institutional changes *immediately* turns out to be a success or a failure largely depends on whether the reform aims at tackling the sensitive issue of conflicting interests between the central authority and the regions, or in other words, whether this role of "restrictor" seriously challenges the vested interest groups. Yet still, when the time of change is coming, no stage failure is supposed to halt the trend.

Nowadays, without any exaggeration, the environmental problems, the unemployment issues, and the instability in capital markets are the major concerns of almost all Chinese citizens, which in turn attract increasing national and international attention. Meanwhile, as demonstrated in previous chapters of this dissertation, the poor preservation of natural and human capital has been the major concerns regarding the sustainability of Chinese

economy in the eyes of numerous observers in the academic world, and also in the eyes of the CCP central leadership, especially in recent years of pursuing the economic ‘cool down’. After more than 30 years of *laissez-faire* enforced by the State, the central authority has started to curb the development of the liberalised markets of the fictitious commodities, notably by trying to restrain the regional governments’ participation to this market competition through an improved cadre appraisal system. It further attempts to guide the firms—both publicly and privately owned ones—to take more environmental and social responsibilities, notably by imposing the CSR reporting practice, a Global standard institutions (GSI) ‘imported’ from the West. All the measures seem to have aimed at reconstructing the ‘liberalised’ mentality of both the regional governments and the firms.

Similarly, as shown by Liu *et al.* (2006) in their investigation of China’s recent environmental campaigns based on two field studies, up to now, the environmental values in China is above all actively promoted by the State; and the implementation of the central government’s environmental policies at regional level have been largely “filtered through the local governments’ capacity, resources, vision, and interests, as well as their political power and limitations” (p. 82). The campaigns of the Chinese central authority reflect the “traditional *modus operandi*” of the CCP, which is to achieve, or at least to aim to achieve a goal over a short period of time, by creating policy models of control, and by deploying political, economic, and human resources toward it. But more importantly, these recent environmental campaigns seem to have demonstrated new trends in the central government’s efforts on promoting environmental values: Beyond the traditional project-based measures, the central government has started to seek more institutionalised means of environmental protection, notably by legislating environmental laws, establishing environmental bureaucracies, and stabilising environmental funding (*ibid.*).

The appreciation of environmental values in China falls also—as it is elsewhere in the world—into the “sustainability dilemma” (Adams, 2008), in which although everyone agrees to the idea of sustainability, this unanimous good intention has difficulties being turned into action. In practice, the expression of these values in China relies largely—if not entirely—on state-led initiatives, notably in terms of laws and regulations made by the central authorities. Other major organisations in the economy (notably the firms in general) position themselves naturally as law-abiding entities rather than ‘environmental

activists'. Even—and especially—the regional governments, the regional representatives of the State seem to be rather reluctant to implement the idea of sustainability, as it goes against their immediate interest when they compete with each other in the 'market' liberalised by the State in the first place (see Section 1.1). This is just like what is noted by Buhr and Reiter (2006), though environmentalism has become a dominant ideology and all individuals and organisations have realised the fact that “we are all in the same boat”, not all of us are “rowing in the same direction”.

The central authority's motive to promote sustainability could partially be understood when considering the international context, since it has always been the central authority of a country that is put forward when signing the international agreements on environmental and human rights issues and thus 'suffers' from the outside pressure (Bauer, 2006) – which represents indeed where the CCP central government stands. Apart from this international pressure, what could be noted on national level is that, it is also the central authority that is above all questioned by the civic society when it comes to environmental and social crises (see section 3.2).

Yet more importantly, in regard with the national sustainability agenda, the 'internal divisions' among different entities within a nation state could be also explained using Olson's (1965) theory on public goods: Since this change in development strategy benefits all members in the society and also requires investment on the part of all members in the society, other than the State, there is no individual entity that has the motive to conduct such investment that benefits the others 'for free'. The particularity for the Chinese version of this explanation is that the notion of “the State” is further split into the central authority and the regional ones, where the latter have also joined the camp of the self-interested individuals.

Even though the idea of sustainability is not new to the Chinese, as the traditional Taoism of “inaction” and “nature and human in One”²³³, the socialist humanism advocating labour rights, and the imported neoliberal perspective on resource conservation have been put forward as mainstream ideologies successively in time (though with some discontinuity), now it seems difficult for the people, or any entity involved in economic

²³³ In Chinese: “无为” “天人合一”.

activities to apply this philosophy, since the wave of globalisation has irresistibly transformed China, from a country which once had “an anti-developmental culture”, into an economy that has “engineered the biggest economic miracles in human history during the last half a century” (Chang, 2011, p. 492). The dissemination of environmental values and the return to the “anti-developmental culture” seem to be particularly difficult, because the market liberalisation has reached an unprecedented level in China, where the regional governments are the main participants to economic activities in this ultra-liberal market.

3. Economic anthropology and the accounting for sustainability

As discussed earlier, although everyone agrees to the idea of sustainability, this unanimous good intention is difficult to turn into action. The reason could be put into a rather simple way: To make economic activities sustainable, humans need to accept some serious trade-offs; and that is where it hurts. Nowadays, the whole world seems to have found itself in this “sustainability dilemma” (Adams, 2008), and every economy—notably in terms of individual nation state—seems to have developed its own version of it, characterised by its specific historical background and institutional context.

As stated in the epistemological discussions in the beginning of this dissertation, through the analyses on discourses (the ‘social construction of reality’) to study the applicability of the ‘ideal’ model (TDL-CARE) or, in other words, to get a forward-looking understanding over the mechanism for TDL-CARE implementation, this dissertation challenges the *status quo* and its underlying rationality (Kincheloe & McLaren, 2002). Further, since it seeks not only to understand and to explain the phenomenon of SA implementation in this constructed reality, but also to look at the possibilities of imposing the ‘ideal’ model and (re-)orienting the society towards sustainability as a whole, it also adopts a normative perspective that looks at the *praxis* of “what is to be done” in the specific historical background and institutional context for the purpose of implementing this model (Tinker & Gray, 2003, p. 740).

3.1 Matching conditions for implementing TDL to the Chinese context

Contrary to the school of thought derived from neoliberal ideology, scholars of the institutional political economy claim that a State could be seen as ‘entrepreneur’ that assumes its ‘chief responsibility’ (Mauss, 2002 [1950]), notably by providing “a ‘focal point’ around which economic activities may be organised in times of major economic change” (Chang, 1994, pp. 298 – 299). The State, “by definition, is the only agent which may represent the interest of the whole society”, or in other words, is the most motivated pursuer of the aggregated “national advantage” (*ibid.*, also in Olson, 1965). It is therefore the only agent that is ready and capable to take the responsibilities of maintaining all the three kinds of financial, natural and human capital stocks in the society. This is particularly true in the case of China’s one-party central authority’s pursuit of macro sustainability, since the so-called pursuit of “national advantage” has been naturally appropriated by the CCP central authority as advantageous to its rule and therefore, to itself.

This statement is echoed by the findings in Chapter IV, where it is demonstrated that the CCP central authority does have the incentives, and has already made several attempts to conduct projects that were destined to help achieve the macro sustainability. Further, beyond the intentions of promoting CSR among firms and that of ‘dissuading’ regional cadres from blindly pursuing GDP growth, the CCP central authority does have demonstrated an authentic and pressing need for a scheme that helps to acquire the results of census on the country’s true capital stocks, and to make a thorough diagnostic on the environmental and social problems that the country face. Indeed, despite the intrinsic problems in the data acquisition process and in the GGDP/NEAAS calculation model, the necessity for conducting such kind of periodic census and for establishing such kind of information communicating mechanism is incontestable.

Regarding TDL-CARE application in the Chinese context, what could be confirmed in the first place is that, the CCP central authority does have every interest to have an SA scheme like CARE to be established, because as a ‘state-entrepreneur’ who manages every aspect of the ‘enterprise’, and who concerns the viability of the ‘business’, the CCP

central authority would need a well-designed management and control system that accounts for all the three kinds of financial, natural and human capital stocks in society, for the purpose of (at least) decelerating the degradation of natural environment, as well as improving the social security for people in general. Second, in China, as argued notably by domestic scholars, what is the most needed for building a SA system at national level is above all the establishment of information systems that provide accurate data on different geographic locations. Indeed, within the scope of GGDP and NEAAS it is the statistic efforts that matter the most. Yet there could be alternative solutions to this lack of information infrastructure: If TDL-CARE is applied, the department-, regional-, and firm-level application of SA would be rendered possible, even before the establishment of such information systems, because the CARE model is immediately operable for individual entities. In the book where CARE is applied, we register the *cost of restoration* on the liability side of balance sheet for the natural and human capital stocks, rather than accounting for the *price* of the consumption/usury of these stocks. This possibility of applying a ‘bottom-up’ SA framework in parallel with the establishment of information systems provides an alternative thinking to the on-going efforts on applying the SEEA-based models.

Nonetheless, there are several issues to be further addressed in terms of its feasibility at operational level.

To start with, from a technical point of view, the monetary translation of sustainability indicators—the adequate amount to be put aside for the restoration of prairie during a year-round grazing, for instance—requires the cooperation of experts from different disciplines to set specific scientific thresholds regarding the maintenance of each and every specific items of capital stocks. Moreover, the application of these thresholds would vary according to region- and sector-specific features of the items to be maintained, and would also evolve in time, both of which require *ad hoc* adjustments. All these factors constitute a challenging task which demands further efforts of research and multi-dimensional cooperation.

Further, the institutionalisation of a SA-integrated accounting framework seems to be rather adventurous for China. The central authorities’ concerns on the risky nature of this move are double-folded: First, based on the former experiences of information disclosure,

notably the polemics evoked by the 2004 GGDP disclosure, and especially the recent official disclosure regarding air quality and underground water pollution²³⁴, we could come to a plausible prediction that even though a macro-level SA method is adopted after the establishment of information systems that provide accurate data, it would only be for ‘internal’ use, rather than being adopted as an institutionalised SA framework that requires periodic disclosure, since after all, the polemics evoked by the disclosure could be judged by the central authority as cause of disagreements and even social instability. Second, as demonstrated in previous chapters, ever since its reform and opening-up, China has always been playing the role of ‘follower’ when it comes to the adoption of GSI in general, both in the case of adopting the IFRS, and in the case of law-making related to environment and labour protection. Further regarding China’s SA initiatives at national and corporate level, this is still the case – The Chinese central authority has chosen to promote the CSR and the SEEA-based NEAAS, both frameworks being widely accepted GSI. In the global context where no precedent is to be followed in terms of adopting a SA-integrated accounting law at national level, it is difficult to imagine if the Chinese central authority could venture this move and take the lead in the world, even though the establishment of such a management and control system is exactly what the central authority has been looking for during the last decade facing the ever degrading natural and social environment.

As further regards the establishment of such a system in the real-world setting and its significance, we could, at this point, come back to Polanyi’s concerns on our economy, especially to those on “the motive of *gain*” or, as labelled by Polanyi in the beginning of his writing, a “religious fervour”-alike “utopian endeavour of economic liberalism to set up a self-regulating market system” (2002 [1944], pp. 31 – 32). In his questioning regarding the consequences of pursuing this gain, we notice some ambivalence. Firstly, the term does not seem to be given a clear definition. Secondly, the pursuing of gain does not seem to be criticised at local level as it is at international level. And thirdly, the (problematic) calculation of this gain or, the corporate accounting model as well as its evolution is not at all addressed in his writing.

²³⁴ See notably the polemics regarding the big differences of Chinese official air quality reading and that of the US Embassy (cf. <http://www.theguardian.com/world/2014/nov/10/apec-china-blocks-access-us-air-pollution-data-beijing>, last consulted on 3/6/2016), and the social impacts of the disclosure of official statistics on the fact that over 80 percent of the water from underground wells is unsafe (cf. <http://www.nytimes.com/2016/04/12/world/asia/china-underground-water-pollution.html>, last consulted on 3/6/2016).

The ambivalence in Polanyi's analyses leads us to wonder, do the problems in "the great transformation" take form, as believed by Polanyi, due to the industrial revolution and the development of (international) markets, or are they rooted in the mainstream (yet defective) conception of capital conservation since always?

As believed by many researchers in accounting, it is precisely the latter that gains ground. In fact, it is the evolution of the mainstream capitalist accounting models that could prove the best Polanyi's thesis: Promulgated as a set of neutral rules or laws, the accounting models used at each and every stage of capitalist evolution have played a major role in regulating the economic system, and it demonstrates the fact that the liberal 'market' is by no means 'self-regulating' – It is these accounting standards that have defined the concepts such as 'capital' and 'profit' and have governed the market in a relentless way (Arnold, 1998; Richard, 2014).

The adoption of TDL-CARE model actually seeks to tackle the problems raised by Polanyi by going beyond the realm of his writing, and to make some more fundamental changes in the calculation of the gain (profit) and the definition of the concept of capital (see Section 2.1 of Chapter I). If we opt for the latter reason raised above in the explanation of Polanyi's double movement, then with reference to the analyses conducted earlier in this dissertation, we could come to a similar reasoning in regard with the current environmental and social problems: The economic algorithms adopted in the West and in China are essentially the same, except that in the 'socialist market economy' of China, this 'for-profit' exploitation of all capital stocks is executed more thoroughly than it is in the West, as it is greatly facilitated by the State; the proposed changes in the economic calculation or, in other words, in the capitalist accounting, are therefore without much difference in principle. However, the real-world application of these changes would vary greatly according to the local context. Based on the analyses of this study, what is believed is that, given the centralised, authoritarian nature of Chinese society, the feasibility of applying TDL is greater in China than it is in Western countries, since the realisation of this kind of institutional change requires above all a strong government.

3.2 A proposal for promoting strong sustainability through religionisation

After having conducted the investigation in previous chapters and sections, we could find that the differences regarding the definitions of “sustainability” go beyond the distinction of whether substitutability is allowed in the capital preservation (*cf.* Neumayer, 2003). There is above all a distinction lying upon whether it is a sustainability *for growth*, as suggested in the well-known concept of “sustainable *development*” or, a sustainability *for existence*, which is essentially the synonym for strong sustainability, where all kinds of capital stocks are carefully maintained and if possible, maintained to be intact. In line with this distinction, we note that, whereas the ancient philosophies in the West and in the East all suggest pursuing a status of harmony with the nature and with oneself by complying with “the natural law of inaction” (Reynolds, 1969; Wang, 2011; *cf.* Aristotle, 2014[About 335 BC – 323 BC]; Lao Tzu, 1993[About 571 BC – 471 BC]), the human society of our age seems to have opted to seek for this harmony whilst continuing to ‘act’ and to ‘get more’. This utter compliance with the “principle of maximum energy flux” (Lotka, 1922) set by natural selection has allowed the human species to thrive in the evolution of the organic world; whilst the indulgence in these behaviours would lead to a ‘cul-de-sac’ of this very human society (Georgescu-Roegen, 1971).

In retrospect, sustainability *for growth* and sustainability *for existence*, these two almost opposing ideologies do have guided people to behave in completely different manners. Some would argue that the ‘anti-development’ culture in ancient times was rooted in primitive religions/worships, which resulted in the underdevelopment of science and technologies; whilst in our time it is another story. Yet as demonstrated below, the patterns through which these ideologies on sustainability exert impact on societies are exactly the same, no matter if it is in ancient times when the human abilities to modify the world were extremely limited, or if it is in modern times when these abilities are greatly improved thanks to the development of science and technologies. And this is essentially why in this part of this dissertation, the ideological aspect—or, in other words, a ‘religionisation’ of strong sustainability—is particularly underlined as proposal for the creation of favourable conditions that allow the installation of TDL-CARE.

In regard with the way to attain this sustainability *for growth*, Veblen (2012[1899]) writes in his economic study of institutions that

“...so far as concerns the economic efficiency of the community, the sentiment of personal fealty, and the general habit of mind of which that sentiment is an expression, are survivals which cumber the ground and hinder an adequate adjustment of human institutions to the existing situation. The habit of mind which best lends itself to the purposes of a peaceable, industrial community, is that matter-of-fact temper which recognises the value of material facts simply as opaque items in the mechanical sequence. It is that frame of mind which does not instinctively impute an animistic propensity to things, nor resort to preternatural intervention as an explanation of perplexing phenomena, nor depend on an unseen hand to shape the course of events to human use. To meet the requirements of the highest economic efficiency under modern conditions, the world process must habitually be apprehended in terms of quantitative, dispassionate force and sequence” (p. 185).

Veblen’s “peaceable, industrial community” corresponds to the mainstream conception of sustainability *for growth*, where efficiency, profit-gaining, economic growth and so on are added to the pure and simple idea of self-sustaining, and all these are seen as a prerequisite for any possible form of existence of human society. According to him, the human “sentiment”, notably in terms of resorting to an ‘unscientific’ explanation of things, is placed right on the opposite of sustainability. Whilst rejecting all other manners of thinking, he advocates an absolute *belief* on “material facts” and “mechanical sequence”, as well as the complete *reliance* on “quantitative, dispassionate force and sequence”, or, to put it in simpler terms, on science and on rationality. And this is by and large—if not exactly—the way science (including the rational calculation on economics) directs the human society nowadays. Veblen’s statement reveals the very process of religionisation of science: These unconditional belief and reliance represent precisely what we call “religion” in a broader sense (see below).

What is particularly noticeable is that, in this religionisation process, it is the “quantitative, dispassionate force and sequence” in science that play the role of doctrines and creeds in ordinary religions, in terms of providing explanations and prospects. Therefore, when it comes to the religionisation of sustainability, *for growth* or *for existence* alike, it is the corresponding economic calculation—notably sustainability accounting—that plays this role (*cf.* Crozier & Friedberg, 1977; Suzuki, 2003).

Regardless of the kind of sustainability we pursue, major institutional changes are to be conducted in our societies. What differentiates the strong sustainability (which is the focus of this dissertation) from the sustainability *for growth* is that, in order to attain this status, the world must go through a certain kind of ‘austerity’ where the current marginalist ideology and practices would change completely. Facing the ever increasing environmental and social problems as well as the institutional changes to be made, what is further needed on top of the measures of state-led restrictive policies/laws and incentive schemes?

As argued by Bauer (2006), as well as indirectly but explicitly by Napoli (2012) and by Olson (1965), in order to create and sustain large-scale programmes and collective movements of environmental action within a certain community (notably a country, or in the more ambitious case, the world), what is probably the most needed is to find out both the economic and non-economic values that bring all people together to bear on these problems. The forging of an environmentalism shared by all members of the community is essential, since achieving sustainability requires collective efforts. And this lead us back to the notion of religionisation.

Etymologically, the noun *religion* comes from the Latin word *religare*, a verb which means “to bind” or “to bring together”. In French, this verb is written as *relier*, with which the noun *la religion* still shares the same root. Further regarding the etymologies of this word, the writing of French philosopher Auguste Comte (2002[1854]) provides some interesting insights:

“Any religious state requires the continuous concurrence of two spontaneous influences: one objective, essentially intellectual; the other subjective, purely moral. This process of the two spontaneous influences represents how religion links both to logic and to feeling, where either one of these two linkages would be inappropriate to establish a unity, regardless if this unity is individual or collective. On the one hand, we need the intelligence to picture a powerful existence which is outside us, and which is powerful enough for us to be subordinate to forever. But, on the other hand, we also need to feel being internally driven by an affection that allows us to be reunited all together. [...] The very composition of this admirable word (“religion” – author’s note) could

summarise the theory above: A religion is what makes the two successive linkages that make us feel becoming a genuine unity, linking both the 'outside' and the 'inside'. This is the final outcome of the general positive dualism between an entity and its environment or, in other words, between the man and the world or, even better, between humanity and earth"²³⁵ (pp. 29 – 30).

It appears that unlike Veblen who sees sentiment as opposing to an efficient thought-to-action conduct, Comte values both sentiment and reason on the matter. In line with Comte's conclusion, the "objective", "intellectual", scientific and rational thinking of humans needs to be combined with the "subjective", "moral" aspects (or "feelings", in *ibid.*, p. 31) in order to direct human "acts" vis-à-vis the environment, consisting of the natural surroundings as well as the other humans and creatures. As revealed by the etymologies of this word, a 'religion' could be viewed as an existence that reunites people, and the 'religionisation' of an idea—knowledges, values, praxis and so on—consists above all of transforming the idea into an existence that reunites people to practice this idea.

The power of religion is above all explained in reference to Lévi-Strauss's (1987) theory: Generally speaking, any kind of "way of knowing", including the science and the ordinary religions, is a continuing process of using 'knowns' to explain 'unknowns', of assigning specific 'signifier' to specific 'signified', of trying to remove hazards (riskiness) through rationalisation and standardisation. No matter it is in what part of time in history, the most essential and fundamental question for the survival of mankind is the exploitation of natural and human resources, and this exploitation (human "acts") is always under the guidance of *knowledges*, where a series of dos and don'ts are imposed. The construction of these knowledges requires the assignment of adequate signifiers to

²³⁵ Originally in French: "... Tout état religieux exige le concours continu de deux influences spontanées: l'une objective, essentiellement intellectuelle; l'autre subjective, purement morale. C'est ainsi que la religion se rapporte à la fois au raisonnement et au sentiment, dont chacun serait isolément impropre à établir une véritable unité, individuelle ou collective. D'une part, il faut que l'intelligence nous fasse concevoir au dehors une puissance assez supérieure pour que notre existence doive s'y subordonner toujours. Mais, d'un autre côté, il est autant indispensable d'être intérieurement animé d'une affection capable de rallier habituellement toutes les autres. [...] La composition même de ce mot (la religion - author's note) admirable résumera désormais cette théorie générale, en rappelant deux liaisons successives ; de manière à faire sentir que la véritable unité consiste à lier le dedans et le relia au dehors. Telle est l'issue finale du grand dualisme positif entre l'organisme et le milieu, ou plutôt entre l'homme et le monde, ou, mieux encore, entre l'humanité et la terre."

the signified that represents the items in the environment and human entourages subject to exploitation.

In primitive societies where humans do not have effective knowledges to guide their exploitation, the chiefs would nevertheless use fuzzy terms (“*mana*”, for instance) to construct what Strauss calls the “floating signifiers”, for the rather self-interested purpose – A chief of a primitive society would use them to keep his/her people’s ‘fear’, and thus to remain in power (*ibid.*). Yet the chief would prefer not to use, or would prefer to reduce the usage of the knowledge based on the floating signifiers (the *mana*-phenomenon causality, for instance) to guide the exploitation of environment and human entourages, because there is a good chance that this knowledge would be proven wrong, and if this happens, the chief’s credibility as well as his/her rule would be seriously challenged. The environment and the human entourages would be therefore maintained largely intact thanks to this reluctance.

Nowadays when science is used as signifier to create knowledge, the human cognition and action are provided with much more effective guidance, which means that the exploitation of natural and human capital stocks becomes increasingly effective. This is otherwise echoed in Veblen’s confidence on human rationality and scientific processes. In time, the pure urge of gathering, producing and/or accumulating for immediate survival in primitive societies has been transformed into what is known today as capitalism. And the collective reluctance to explore (and to exploit) the environment and the human entourages has almost completely disappeared, thanks to the ever developing science and technologies that guide capitalist exploitation in an increasingly effective manner. The ‘inaction’ out of fear thus is no longer possible in the modern context.

In this regard, one of the probable ‘way out’ proposed here in this seeming ‘impasse’ is a ‘reenchantment’ with the new *mana*, or in other words, the religionisation of sustainability. The establishment of this new ‘mana’ would consist of the (re-)definition of a series of key concepts in life, notably those of positive meanings such as ‘happiness’ and ‘value’ and, perhaps more importantly, those of *taboo*, including ‘(environmental and social) crises’, ‘Apocalypse’ (‘the end’) and so on.

This redefinition of key concepts could be seen as a return to the use of floating signifiers that the chiefs had used in primitive societies, and it is expected to function in the same way the ‘mana’ did in ancient times. Regarding this point, an immediate observation would be the fact that, alongside the ever developing science and technologies as well as the accordingly evolved human cognitive abilities, the sustainability-oriented ‘code of conduct’ and the inaction out of fear would no longer possible to be imposed through the preaching on some ‘floating’, unspecified, or empty signifiers. However, the redefinition of key concepts that we seek to construct does not refer to any existing religion in the modern world, nor to any kind of witchcraft, ‘pure’ enchantment or deception. Rather, this redefinition only consists of the reassignment of signified-signifier, and this reassignment should be above all scientifically founded – a statement that brings us back to the role of SA should play in the religionisation of sustainability. To be more specific, in the case of the religionisation of sustainability *for existence*, these newly defined concepts would be able to explain the limits of environmental exploitation, to foresee difficulties as well as possible ‘sanctions’, and even the end of humanity, to advocate the idea of inaction and the pursuit of simpler life and so on. All of these concepts would be constructed based either on calculated thresholds or on incalculable uncertainties, both backed by quantified, rationalised scientific processes and proofs. In short, what is needed to be done is to use scientific terms to formulate religious discourses.

After describing ‘the modern Nineveh’ in which we live, Daly (2008) points out that under this rather religious reference and reasoning, we probably should “repent or be smitten”. He then points out the uselessness of these actions, and states that

“[i]f we liken our scientific arguments and evidence to a lever that we prophets want to use to move the world, and further argument and evidence to an extension of the lever, then we still need a fulcrum, a fixed point of value or right purpose against which to pivot the lever of science, or else the world will not be moved.” (p. 174).

Apparently, to Daly, the religionisation of sustainability does not seem to have a real impact to human activities due to the lack of “fulcrum”. In this dissertation, this fulcrum, or the actual promotion of the sustainability-oriented ideology refers to the institutionalisation of a strong-type SA in society, because it provides knowledge, which

aligns collective beliefs to the self-interested nature of individuals, and which in turn could drive individuals to practice sustainability for real. In other words, the institutionalisation of a strong-type SA as the accounting law of an economy is precisely the way through which the religionisation of sustainability *for existence* could be realised, and it is also the way through which this new ‘religion’ could make some fundamental changes in real world. The State could be seen as the organism that is the most capable of this task, since it has the most powerful sources of support, derived not only from non-economic motives of patriotism, shared ideologies such as democracy and communism, and shared tradition such as religion (in the common sense), language and cultural inheritance, but also from economic motives, since the State is the organism that provides the law and order as well as the relevant enforcement, which are prerequisite of all civilised economic activity (Olson, 1965). What is needed for imposing the ‘religion of sustainability’ is the provision of a new set of “law and order”, and thus it is the State that is supposed to shoulder this responsibility.

Concerning the further efforts to be made by the human society on environmental preservation, Balandier’s (1992) writing could be particularly relevant. After recalling the “old ways”, or the “ceremonial” and “theatrical” ways in which instructions and prohibitions are created notably in ancient times, he states that

“The political rationalisation does not completely erase the old ways. All periods of severe crises challenge everything and every order at the time, to the extent that the formulation of a new theory of nature (including both the human and the natural surroundings) is provoked. [...] Nowadays the modern societies have come to perceive the limitation of raw material resources and that of power generators, and thus are engaged in an everlasting economic war. They feel—and to a greater or lesser extent, confess—their guilt of denaturation, environment pollutions and degradation. [...] The linkage between political power and the protection of nature manifests itself almost too often in our daily life: [...] In terms of environmental and social protest, the theatrical struggles provide the defence against industrial pollution and against the ‘anti-nature’ state of things created in the expanding megacities. The fact that the environment movements need to resort to symbolic and dramatic ways, proves precisely the unavoidable existence of the power game. The objective of these

movements should be to redefine the economy (as the relationship between human and nature), the social relations, and the political system that expresses the ideas conveyed in these definitions”²³⁶ (pp. 29 – 30).

Similarly, if we say that we are currently experiencing—or soon to experience—the multiple environmental and social crises, then we are in a time when the old “order” is challenged and “a new theory of nature” is bound to take form. The current order, or the “technical rationality” (*ibid.*, p. 30) used to guide the exploitation has led to the economic development that the human societies are all proud of, but also to the “everlasting economic war” and the accompanying “guilt” regarding this war-like exploitation of raw materials, energy, and man power. This order therefore is—or soon to be—challenged and a new one is bound to be established. The redefinition of “the economy (as relationship between human and nature), the social relations, and the political system that expresses the ideas conveyed in these definitions” corresponds precisely the religionisation of sustainability discussed earlier. And the establishment of this new order could be—or according to Balandier, could only be—accomplished by playing “the power game” based on the “political rationalisation”.

As mentioned previously in the discussion regarding China’s urbanisation, there are some major differences between the political decision-making process in China and that in France, or in other Western countries in general. In most of the cases, the decision-making as well as the application of the decision in China is centralised, which could be an advantage in terms of efficiency. Yet this centralised and, above all, ‘shortened’ process has also largely reduced the democratic procedures where civilian movements could make a significant impact. Even though recently the public opinion pressure in relation to social and environmental issues has become increasingly visible thanks to the power of internet, this voice of civic society has been deliberately and continuously

²³⁶ Originally in French: “La rationalisation politique n’efface pas entièrement les anciennes manières. Toutes les périodes de crise grave remettent tout en cause, jusqu’à provoquer la formulation d’une nouvelle théorie de la nature, y compris la nature de l’homme. [...] Les sociétés contemporaines [...] éprouvent la limitation des ressources en matières premières et en générateurs d’énergie, et se trouvent engagées dans une guerre économique endémique. Elles se découvrent—et en font plus ou moins l’aveu—coupables de dé-naturation, de pollutions et de dégradations. [...] La liaison pouvoir/nature se montre d’une manière plus quotidienne. [...] Dans la protestation : les luttes théâtralisées assurent la défense contre les pollutions industrielles et contre l’état d’anti-nature créé dans les mégapoles en expansion. Le combat écologique, qui recourt aux moyens symboliques et spectaculaires, apporte lui aussi la preuve que le pouvoir est en cause. Il vise à définir autrement l’économie (en tant que relation à la nature), les rapports sociaux et le régime politique qui les exprime.”

weakened by authorities. This difference in turn makes the ecological combat in China quite different from the one in the West: Whereas in the Western context it is the environmental activists, pressure groups and lobbyists that are engaged in persuading politicians to make precautionary policies and relevant laws for the environment, the labours and the citizens, In China, it is the persons in power themselves who have to be keen to manage their own 'business' that is in environmental and social crises. The "power game" based on "political rationalisation" would thus be played very differently in the West and in China. In this sense, compared to the West, China does seem to have more possibility to establish a "new order" towards the austerity-required strong sustainability, provided that the central authority manages to consolidate its power in the mist of uncertainty.

4. Summary

Based on the above investigation on the Chinese context within which trade-offs are made in order to achieve sustainability, we could find that the so called "socialist market economy" in China implies above all the State's strong intervention of the seemingly self-regulated market. Yet this intervention, notably the intervention of the fictitious commodity markets conducted by the Chinese authorities did not work in the spirit of restriction. Rather, the free circulation of these fictitious commodities in China has been greatly facilitated by this 'state' intervention—or rather, the regional governments enthusiastic participation to this circulation—for the purpose of boosting the economy; and this is precisely the main cause of the environmental and social crises that China faces today. Moreover, the ideological conflicts in regard with the nature of the Chinese economy appear to be problematic when it comes to conducting major institutional changes towards sustainability in the future.

In order to pursue a strong sustainability, or a sustainability *for existence* rather than *for growth*, the religionisation of this sustainability *for existence*, notably the redefinition of the economy, the social relations, and the political system is needed. In this regard, since

China is a one-party ruled country endowed with a much centralised and shortened decision-making process compared to other Western countries, this religionisation seems promising, though there are multiple uncertainties in the offing.

CHAPTER VI. General conclusion

As defined by Polanyi (1957) from a substantive perspective, the meaning of ‘economic’ “derives from man’s dependence for his living upon nature and his fellows. It refers to the interchange with his natural and social environment, in so far as these results in supplying him with the means of material want satisfaction” (p. 243). Being so closely associated to the idea of sustainability, this meaning obviously has nothing in common with the one interpreted in the (neo-)liberal ideology that underpins the mainstream economics nowadays – As commented by Polanyi himself, the latter “derives from logic, the former from fact” (*ibid.*).

In line with this notion, ‘economics’—in its plural form—is supposed to be a discipline that concerns the whole set of relationships in the substantive perspective of its meaning; and ‘accounting’ is supposed to account for this very economic sense of human activities, or in short, account for sustainability *for existence*. Just like Hawken *et al.* (2013, 1999), scholars in the domain of SA might have all asked the same set of questions –

“What would our economy look like if it fully valued all²³⁷ forms of capital, including human and natural capital? What if our economy were organised not around the lifeless abstractions of neoclassical economics and accountancy but around the biological realities of nature? What if Generally Accepted Accounting Practice booked natural and human capital not as a free amenity in putative inexhaustible supply but as a finite and integrally valuable factor of production? What if, in the absence of a rigorous way to practice such accounting, companies started to act as if such principles were in force?” (2013, p. 9)

These possibilities suggested by the “natural capitalism”—as it is called by the above authors—provide great motivation for us, including the author of this dissertation, to explore the applicability of SA frameworks in real world settings.

²³⁷ This part and the part below in this paragraph are both emphasised by the authors (Hawken *et al.*) of the work quoted.

The research conducted in this dissertation is essentially a multidisciplinary study that combines linguistics and management. By conducting a series of critical discourse analysis, it sets out to investigate in the Chinese agriculture sector the adaptability of the social and environmental accounting system that advocates the ‘strong-type’ maintenance of natural, human and financial capital stocks under the principle of “Triple Depreciation Line”.

This research subject is inspired, firstly, by the literature regarding the various models designed to control and account for different capital stocks as well as the social and environmental impacts to their maintenance both at macro- and micro-level. After a thorough examination of the different models, what could be found is that, there are different levels of “sustainability” that underpin the different ways these models take into account the capital stocks. According to this literature, the distinction between the ‘weak’ and ‘strong’ sustainability could be made above all basing on the criterion of substitutability, or to be more specific, whether we tolerate or not the loss of natural and/or human capital stocks in exchange for the increase in financial capital.

Second, the research strategy of this dissertation is inspired by the literature of political economy of accounting and that of institutional changes, where the socio-economic context, the institutionalisation of accounting systems and their evolution are central topics. There are essentially two schools of thought that are underlined in the explanations of the installation of accounting systems: Whilst the current mainstream emphasises the power of the market and the behaviours of individuals, the institutionalist political economy accounting focuses on the power of the ruling individual(s) or group(s) in society, namely the capitalist(s), the authority(-ies), or these two allied, or even merged. This school is seen as a part of economic anthropology, grounded in power and human relations and the process of collective decision making.

Third, the literature on social construction of reality and on power relations displayed in language has laid the basis of the epistemological and methodological framework of this dissertation, which are the constructivist perspective and the critical analysis of public discourses respectively.

Last but not the least, the abundant literature related to sustainability accounting in Chinese has also played an important role in aiding the author's decision on choosing Chinese agriculture sector as the field of research.

Having set out to investigate the central questions of this research, which are – “What are the necessary conditions and possible resistances faced by the establishment of a ‘strong-type’ SA system, namely TDL, within the Chinese institutional context?” And further, “based on this analysis, what could we expect for the future of SA development in China?”, this dissertation starts from a study of the following three events, or the three institutional changes in the past or still in process. They are: the convergence of the Chinese Accounting Standards to the IFRS, the establishment of an ecological accounting and auditing system at national level, and the institutionalisation of CSR reporting in agribusinesses. The author's choice of examining these three events in particular is explained by the research strategy, which is to recognise and to gather the instrumental factors drawn from the past and the on-going events, in order to get a better understanding on the mechanism of adopting a set of ‘new rules’ in China, and further, to explore the possibility of adopting the TDL principles. In this regard, the study on IFRS convergence allows us to know how a set of accounting rules might be adopted in the Chinese context; and those on the NEAAS and CSR allow us to know how a set of sustainability management systems could be adopted at national level and at corporate level. The three sets of critical discourse analyses on the above mentioned events are briefly presented as follows.

The first event is the evolution of Chinese accounting standards and their convergence to the IFRS. In this part of the dissertation, the focus is on the examination of the mechanism through which a new accounting law—or a new set of generally accepted accounting principles—is introduced to the local context, which is precisely what the application of TDL principles would require. Further, what is of special interest to this investigation is that, in the chapter entitled “Agriculture” of the CAS converged to IFRS, it recognises for the first time the value of an asset that provides the environmental protection service, by adding a new category called “public welfare biological assets” in the part discussing the accounting methods for biological assets. It is therefore interesting to see how this initiative functions.

Concretely, the discourse of international and national accounting authorities, and also that of accounting scholars both in China and abroad are analysed, as they are the two key-players in the process of convergence, and who have thoroughly expressed themselves on this subject. Firstly, based the discourse delivered by high-level officials in China and officials on international level, we could note that the spirits expressed in both sets of discourses are extremely consistent with each other: Not only they both have affirmed the accomplishment of the convergence achieved at current stage, encouraged further efforts, and pictured a promising future, but they also have repeatedly emphasised the necessity and the insured benefits of complete convergence. In addition, the IFRS are described as a set of standards endowed with neutrality and scientific characteristics, notably by the Chinese officials. They further state that these standards could fit in any kind of market economy—thus the socialist market economy included—in China just as in the West.

Regarding academic discourses, two reputable scientific journals, namely *The International Journal of Accounting*, and the Chinese native journal *Accounting Research*, are chosen for the purpose of examining the articles that have mentioned the CAS convergence towards IFRS. The findings show that, whilst in TIJA opinions are quite diverse, where attitudes such as encouragement, reluctance and criticism (particularly against the idea of fair value) are all expressed, the views expressed in AR are surprisingly consistent with each other, and are also consistent with the spirit of the national authorities. This divergence of attitude is most likely related to the language barrier: Since the language of publication is English for TIJA and Chinese for AR, the TIJA naturally brings together authors from other countries, or Chinese researchers who are holding research positions, or have pursued higher education abroad; whereas AR brings together Chinese domestic researchers, or even government officials who publish academic articles as researchers.

Concerning the adoption of IFRS in agriculture in particular, three issues are to be underlined after the examination of the relevant public discourses. The first consists of some historical legacies in the management of agricultural activities in China: due to the long absence of an institutionalised set of accounting standards for agricultural activities in general, the adoption of IFRS for Chinese agriculture is hardly a “convergence”, but a ‘great leap forward’, which suggests a nominal rather than substantial convergence. The

second consists of the use of fair value: It seems that compared to IFRS, the CAS for agriculture demonstrate more prudence regarding the application of fair value. But according to Chinese experts, this prudence is certainly not related to reject, criticism, or any kind of reluctant attitude to this idea, but quite the opposite – In fact, they consider it a concept that is absolutely to be imposed whenever possible. But due to the backwardness of the Chinese agriculture sector and the poor management system applied to it, the application of FVA is not yet quite realistic. The third consists of the functioning of the “public welfare biological assets”. We notice that the creation of this category does not seem to have served the purpose of maintaining the natural capital stocks, but for some pragmatic reasons: Very often, it is for the purpose of registering the assets to which it is difficult to apply appropriate accounting treatments, due to the fact that they lack in clarity in terms of property rights.

Several interesting elements have emerged from this analysis. As demonstrated in the public discourses, the IFRS are constructed by the accounting authorities as a set of technology and socio-economic infrastructure endowed with a scientific and neutral nature, in order to facilitate the convergence. This fact reflects the dominant ideology in China, within which it is the ‘trust’, or the belief in science and technology that plays an important part. Moreover, we could notice that there is a close relationship between government officials and the domestic scholars, which is caused, firstly, by a so-called “meritocracy system” in the selecting process of government officials, and second, by a “on-the-position postgraduate degrees” in China’s reputable universities and also in the “Party Schools”, which allow the government officials to acquire diplomas and to publish papers as scholars, without leaving (even temporarily) their current posts in the government. Further, it seems that the choice of China is to adopt globally accepted accounting practices (through convergence with IFRS) but not yet, at this stage, to influence these practices, so that the specifics of China are taken into account. Regarding the accounting for agriculture in particular, what is above all noted is that the historical legacies, notably those on land ownership rights, consist of the central problems concerning the adoption of a new set of accounting standards.

The Second event is the installation of the national ecological accounting and auditing scheme in China. As described in the official documents of the Central Committee of the Communist Party, this system is supposed to include the establishment of a balance sheet

of *natural resources* and above all an audit of *natural resources*. Yet what could be noted immediately in these documents is that, from a semantic point of view, the central objectives of the NEAAS is formulated as to audit the mutated or retired *government officials and party cadres* and eventually, to build a system of ‘accountability for life’ for them.

When looking at the discourses of the CCP that represents the Chinese political authority, we note that, the detailed measures mentioned in these discourses regarding the environmental conservation at the national level could be grouped into two categories: Whereas the first mainly deals with the management of material resources, the second highlights the problem of the allocation of responsibilities, and it is again the second category that the central authority underlines. As described by President Xi Jinping in his explanation of the scheme, the allocation of responsibilities is supposed to be proceeded as follows: Based on an ‘inventory’ of natural resources of a region (a province in most cases), the central authority would be able to monitor the use and the stock of the resources related to a specific project (municipal and commercial alike), approved by a regional government, of which the person in charge is a CCP cadre.

When conducting the same kind of analysis on mainstream media and on academic discourses, we could notice that, instead of addressing the environmental problems directly, most media discourses related to this subject focus on the current cadre appraisal system, within which the GDP is seen as the only criteria to evaluate the economic performance of a region and the performance of a cadre. They are generally faithful reproductions of the ideas expressed in the documents of the CCP authority, yet with a much clearer focus. The academic discourses on the other hand, focus mainly on the technic facet, notably the use of the System of Environmental and Economic Accounting (2012) framework proposed by the United Nations. In fact, the Chinese domestic scholars have unanimously raised the SEEA (2012) as the framework to adopt, because it symbolises the mainstream theory and represents the practices the most widely accepted internationally.

Through the extremely consistent discourses delivered by the three institutions above, the NEAAS is presented as a revolutionary political change that reflects the resolution of China’s central authority, and demonstrates the latest research results of the most

reputable institution in the world. Yet if we go beyond the apprehension of the formal contents of NEAAS, and looking at the broader context within which the NEAAS is put forward, more interesting elements will emerge, which in turn provides a better understanding of the significance of this scheme.

In fact, the slogan of “We do not follow the ‘pollution first, treatment later’ development course of the West” was put forward by the CCP Central Committee as early as 1978. However, in the trade-off between economic growth and environmental protection, it is the former that constitutes greater concerns of the central leadership, and also of the Chinese people, after so many years of underdevelopment. It is not until the succession of the “fourth generation of leadership” in 2002 that the systematic management and control schemes in regard with the environment were again put on the agenda, under the name of ‘Green GDP’. Yet the central authority withdrew the project after the publication of the 2004 report, since the number was too shocking to be known to the Chinese people, and perhaps even to the governments themselves. Today, environmental degradation in China seems to have accelerated. And it is in this context that the fifth generation of CCP leadership has decided to give a second chance to SA. Furthermore, the persistent problems in the CCP cadre appraisal system, notably the GDP-centred performance evaluation, seem to have been targeted by this round of SA promotion, since to ‘score high’ in this GDP-centred evaluation is seen as the main motivation for the CCP cadres pursue growth at any price. Another prominent problem is the elite dualism in the hierarchic system in government structure: In China, for each administrative unit, there are always two persons in charge, one entitled as Party cadre and the other as government official. This makes it extremely difficult to allocate responsibilities to individual government officials, especially when it comes to environmental problems since, in the majority of the cases, it is the Party cadre who makes the decisions concerning the introduction of polluting—yet profit-generating—projects to the region, yet it is the government official who is held responsible for environmental damage.

After this analysis, we find that the installation of NEAAS is for the purpose of dealing with environmental problems through reforms in the cadre appraisal system: By introducing environmental indicators in the ‘ecological balance sheet’ established for the cadres, the cadres are supposed to be evaluated differently than in the GDP-centred system, and thus are motivated to make more pro-sustainability decisions. Nevertheless,

there are some intrinsic problems with NEAAS. To start with, it is not impossible for the motivated cadres to introduce ‘blindly’ some so-called environment-friendly projects that are unsuitable for the region. Further, the “structural adjustment” aimed at by the application of NEAAS would inevitably engender the problem of unemployment, which could be even more problematic to the society than the problem of environment pollution. Moreover, it is difficult to apply NEAAS using the calculation method proposed in SEEA, because by definition, SEEA is inseparable from the System of National Accounts; and in China, SNA is not yet fully established.

The third event under investigation is the practice of CSR reporting in Chinese agribusinesses. The firms chosen for this comparative case study are New Hope Liuhe and Beidahuang. The profile of Liuhe is rather ordinary. Created and managed as a private company since 1982, the firm is the largest listed company in animal feed and livestock in China, and it is a firm that connects thousands of subsidiaries and millions of farmer households. Compared to its counterpart, Beidahuang is a bit unusual, as it has a double identity: it is the biggest listed agricultural conglomerate in China, and it is also the biggest state-owned farm under direct administration of the Ministry of Agriculture. Another important difference that differentiates Beidahuang from any other counterpart (like Liuhe) is that, the production of Beidahuang involves a much shorter industrial chain, where almost all parts of the chain is actually a part of the Beidahuang group, and each farmer household is an employee of the company.

As regards the two series of sustainability reports (CSR reports) produced by these two firms, we could notice that, the most addressed theme for both firms is the same, which is “food safety”. Liuhe emphasises its efforts on the management of the long, scattered and complicated industrial chain. More importantly, it places the firm in a rather humble and helpless position as a “servant”, instead of picturing itself as an entity that is fully responsible for the safety or unsafety of its products. Meanwhile, Beidahuang focuses on its strong corporate control power: As a state farm, Beidahuang does have a centralised control in all areas of its activities. For the second most addressed theme “environment and natural resources”, these two series of reports do not show much difference, where both of them aim to communicate detailed information and quantified information regarding their investments in environmental projects. As to the theme “social aspects”, the two sets of reports show very different perspectives regarding their positioning

regarding the issue of social welfare: Whilst Beidahuang focuses solely on the welfare of its employees, Liuhe seems to have recognised a much greater variety of interest groups, or stakeholders, to borrow the key concept of CSR. This could well be explained by the different nature of the two firms.

The broader socio-economic context involves above all the large number of scandals related to food safety issues in China. What deserves special attention is the “melamine scandal”. As probably the most severe food safety scandal that ever happened in China, it evoked at the time serious questioning on food safety from the general public, which could be seen as the main accelerator of the governments’ efforts on promoting the institutionalisation of CSR reporting. We can notice that, the introduction of policies on gradually institutionalising CSR reporting among listed firms, matches the rhythm of major food safety scandals in society, and the CSR reporting practices of the two firms under investigation has been an act of compliance with laws and regulations. It seems that the CSR initiative in China, to a great extent, is again a state-led institutional change. The aim of promoting the CSR reporting seems to be set as to advocate the idea of *shared* social responsibilities. In other words, through this imposed institutional change, the message that the central authorities want to convey is that, the problems in product quality control, in natural environment protection, and in social security cannot be solved if depending solely on supervision and regulation of the government; rather, the whole of society, and the enterprises in particular, must take their share of responsibility and communicate their efforts, or the lack of effort on the matter. However, this share of responsibility is particularly difficult for the private agribusinesses to bear, as they lack control power over the long industrial chain, and this is due to a number of institutional factors.

To summarise the findings of the analyses of these three events with reference to the interview information acquired during the field work, we note that, firstly, compared to the regional governments, the Chinese central authorities, or the CPC Central Committee in particular, are much more concerned about the problems of natural environment and the whole society. Second, compared to other sectors in the economy, the agriculture sector seems to be more deeply involved in the preservation of natural and human resources, and more directly affected by the lack of it. The agribusinesses, and also the farmers who are poorly covered by social security schemes and who manage their own

leased land to cultivate, are therefore the most sensitive groups on the matter. And third, since today the environmental and social problems are becoming increasingly visible in China, institutional changes are expected, given that the State and the Chinese people are all concerned about these issues. However, the implementation and democratisation of these changes through which a social and environmental accounting system can be installed face major difficulties, considering the historical and institutional constraints. Further, it is highlighted that, there is quite a big contrast between the relative ‘success’ of IFRS convergence, and the relative ‘failure’ of introducing sustainability accounting in China, both at national level and at industrial level – This leads us to explore the reasons of this relative failure, with reference to economic theories.

The theoretical framework called “institutionalist political economy” is used as the main reference to rethink the sustainability dilemma in the Chinese context. This institutionalist political economy is notably based on the perspectives of Polanyi and that of Chang Hajoong, and is endowed with several dimensions: First, it distinguishes a “formal” and a “substantive” definition of the word *economic* – whereas the former is in accordance with the common conception related to the free market, the latter corresponds precisely to the idea of sustainability. Second, it is critical of the circulation of fictitious commodities (including land, labour, and money) in the free market, because they are by nature, not produced to circulate just like the other commodities. And third, it claims that the State is supposed to intervene in order to limit this circulation, and to initiate institutional changes for this purpose if necessary, because the State is probably the most suitable and capable entity to shoulder these responsibilities of maintaining all kinds of capital stocks within a given society.

As demonstrated in the analyses of Chapter V, China’s development course in recent decades shows that the State has done the exact opposite in order to boost the economy. And this is the main cause of the environmental and social crises facing the country today. Moreover, as the reform that started in the 1970s has created an ideological confusion between socialism and capitalism, and in line with it, a confusion of the roles of the State and the regional governments in the economy, the tensions among different agencies in the Chinese society have constituted major constraints regarding the installation of an environmental and social accounting system for a ‘strong-type’ maintenance of the different kinds of capital stocks. These observations demonstrate the consequences of the

State's 'failure' in assuming the role of "restrictor", facing the free circulation of the fictitious commodities; yet from a different point of view, they are also demonstrations of the State's 'success' in deliberately deregulating the economy (though the 'prosperity' comes with major implications in terms of natural and social environment degradation), which prove, from the exact opposite side, the necessity of the role of "restrictor" that the State should have played.

Facing the seemingly unstoppable degradation of natural and social environment largely caused by the lack of proper managerial tools, institutional changes consisting of the installation of adequate tools of natural and human capital stocks based on scientific thresholds are indeed in urgent need. Yet as Nietzsche (2008[1872]) points out, "the problem of science cannot be understood on the basis of science" (p. 4). This is essentially why the last two sections in this thesis set out to discuss the relationship between the adoption of a specific set of managerial tools for sustainability, and the ideological aspects of a given society. The central idea is that, the use of a set of scientific-threshold-based managerial tools is a powerful—if not the only—way to make some fundamental changes to the current dominant ideology of society; and it is only when the dominant ideology changes that the human activities could be reoriented towards sustainability *for existence*. In short, the practical and ideological aspects of the pursuit of sustainability are an 'inseparable whole' – We cannot talk about either of them without mentioning the other; and by the same token, we cannot talk about the implementation of a set of managerial tools for sustainability without mentioning the making of a corresponding dominant ideology. In line with this notion, an anthropologic perspective on 'religionisation' of sustainability is proposed.

If we return to the premise stated in the chapter of introduction which specifies the drive of pursuing material interest for survival as the ultimate motive for human behaviours, we could find that the exploitation—and the over-exploitation for accumulation—of natural and human resources has always been the principle struggle for human societies, be it in ancient times or today (*cf.* Lotka, 1925). This exploitation is always under the guidance of knowledge, where a series of instructions and prohibitions are imposed. In primitive societies, archaic knowledge—most of the time as 'mana' or other various religious explanations—did not allow human societies to conduct effective and efficient exploitation on their environment and human entourages. In this sense, we could say that

this religious power thus allowed the installation of a social order that “exploits the environment but not too much”.

Over the past thousands of years in human history, the development of science and technologies has gradually ‘disenchanted’ people of this social order. Armed with the guidance of the ever developing knowledges on science and technologies, humans become increasingly capable and ‘free’ in their activities of exploitation, and also increasingly indulged in the pro-growth ideologies.

In order to promote the environmentalist ideology of “sustainability *for existence*” rather than that of “sustainability *for growth*”, what would be needed is a kind of ‘re-enchantment’ by a religionisation of the former, or to be more specific, by an environmentalist ‘religion’ that advocates sustainability based on the ‘strong-type’ maintenance of capital stocks. The scientists, including those specialised in hard science and those in economics and management, have an important role in this process: By using scientific terms (based on ecological thresholds for example) to formulate religious expressions; and scientists, together with political and scientific authorities, should take the responsibilities to produce public discourses that serve the purpose of conducting necessary institutional and ideological changes, which the humans would need to fight against the multiple deteriorations in our society.

In the beginning of this thesis, it is stated this study works from the premise that individuals act and react *solely* upon material interests. And our assumption is that dominant ideology greatly influences critical decisions of society. In the Chinese context, the three events under investigation, as well as the analysis of the “socialist market economy” in general demonstrate that, the ideology that has dominated China over the past few decades is Mr. Deng Xiaoping famous statement – “Science and technology constitute a primary productive force.” In this statement, two elements are highlighted: the power of science and technology, and the top objective of economic development. We have witnessed, in the empirical part of this study, the multiple ways in which this dominant ideology functions in the Chinese society. In line with this observation, the last two sections of Chapter V propose to reorient this dominant ideology, notably by underlining more the former element. This could be realised by aligning the metaphysical aspect and the physical aspect of sustainability *for existence* through the knowledge of

'limits', within which a series of key concepts in life is redefined, using a set of scientific-threshold-based managerial tools. When collective beliefs align with the material interests of individuals and organisations, we probably could expect some real changes.

As further regards the ecological campaigns in human societies at all levels, it seems that the main idea has been trying to "save the planet". However, "saving the planet" itself is a faulty proposition, since the planet is and will always be there; it is only the human race not playing against the rules of this planet that will be extinct (Norton, 1991, p. 234). In this sense, sustainability should not be formulated as an ethical ideology full of compassion; rather, it is the only way in which the human race could save itself from suffering and even from extinction. In other words, 'sustainability' should, and could only be, *for existence*. As pointed out by Gray and Milne (2004),

"... sustainability is a systems—not an organisational—concept. Our current systems of financial and economic organisation lead us to try and relate all important matters to the level of current organisations because it is here that power and decision-making seem to lie. But nature and ecology know nothing of our companies and institutions. If we are to return to some notion of harmony with our ecological roots, we will need to reconceptualise our decision-making and probably our institutions and organisations along ecological lines. Ecology, clearly, will not reconfigure along our modern institutional lines" (p. 79).

By the same token, when talking about sustainability at different levels of the society, there is no need to advocate the idea of "saving the nation", or "saving the industry" either: A government or a business who fails to fulfil its mission of maintaining its natural, social and financial capital stocks is condemned; the nation or the industry however, will still be there and eventually, evolve along ecological lines.

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Appendix

i. Information of the interviewees

Interviewee	Institution	Feature of the institution
<i>Government apparatus</i>		
Mr A, staff of the prairie division, department of livestock	Ministry of Agriculture (MOA)	A component of the State Council in charge of agriculture and rural economic development
Mr H, member of the MEP think tank on environmental policies	Ministry of Environmental Protection (MEP)	In charge of 12 dimensions ²³⁸ of the country's environmental issues, mainly focus on policy drafting and implementation
Mr P, staff of the agriculture and forestry division, department of western development	National Development and Reform Commission (NDRC)	Central government apparatus currently more engaged to environmental issues and interestingly more powerful in the matter compared to the MEP
Mr Q, staff of the legal department	China Chamber of Commerce of Foodstuffs and Native Produce (CFNA)	Playing a consultant role under the leadership of the Ministry of Commerce (MOC), claiming its objectives as to coordinate and guide member agribusinesses to improve their competitiveness in global market.
<i>Agribusinesses</i>		
Mr W, top executive	Chincell-Town Honey	Private enterprise, claiming the full adoption of the "EU standards" for all their products of honey
Mr Z, top executive		

²³⁸ More details on <http://english.mep.gov.cn/>, consulted on 28/12/2013.

Ms C, staff of a regional subsidiary	New Hope Liuhe Group	Private enterprise, biggest listed group company of livestock and animal feed in China
Mr F, top executive	Slaughtering And Meat Processing Company of Jinan	Supplier of the local government advocated “Safe Meat” project for Jinan city
Ms J, staff		
Mr N, staff of trade department and the bureau of commerce of Heilongjiang province	Beidahuang Group, and Heilongjiang Land Reclamation Bureau ²³⁹	China's biggest agricultural conglomerate under direct management of central authority, a state-owned listed company and also the biggest state-owned farm.
Mr S, farm owner	Emerald Bay Sustainable Farm	Privately run farm gaining increasing reputation in Beijing’s organic food consumers’ community
<i>Independent organisations</i>		
Ms R, top executive	Global Environmental Institute (GEI)	A Chinese local non-profit NGO aims at designing and implementing market-based models for solving environmental problems; research focused
Mr M, top executive of China branch	Solidaridad China	Branch of an international NGO based in the Netherlands; initiator of the “fair trade” certification; specialised in agriculture and rural development; fieldwork focused

²³⁹ The double identity of this interviewee and this institution is due to the special status of the “agricultural land reclamations” in China, a kind of unique economic and semi-military governmental organisations. A “land reclamation” is a state-farm subordinate directly to the Ministry of Agriculture.

Résumé

À la lumière des perspectives critiques sur les théories et les pratiques comptables, « la comptabilité pour la durabilité » a émergé comme une discipline relativement nouvelle. Par rapport aux différents modèles développés dans le cadre de l'idéologie néolibérale, certains modèles alternatifs avec des stratégies « plus fortes » de conservation des capitaux, notamment la « Triple Ligne d'Amortissement » (TLA) (Richard, 2012; Rambaud et Richard, 2013), semblent avoir beaucoup des potentiels de faire quelques changements fondamentaux. Cette thèse est une enquête sur les conditions nécessaires et les résistances possibles rencontrées par la mise en place du modèle TLA. Le secteur agricole de la République populaire de Chine est choisi comme le terrain de recherche en vue d'étudier le contexte institutionnel et historique. L'enquête sur le contexte chinois est effectuée en référence aux théories de l'économie politique institutionnaliste, inspiré par Karl Polanyi (2002[1944]), Mancur Olson (1965), and Chang Ha-Joon (1994, 2002).

Mots Clés

agriculture ; analyse critique du discours ; applicabilité ; comptabilité pour la durabilité ; République populaire de Chine ; Triple Ligne d'Amortissement

Abstract

In the light of critical perspectives on accounting theories and practices, sustainability accounting (SA) as a relatively new discipline has emerged. Compared to various SA models developed under the mainstream neoliberal ideology, some alternative models with “stronger” capital conservation strategies, notably the “Triple Deprecation Line” (TDL) (Richard, 2012; Rambaud & Richard, 2013), seem to have a lot of potentials to make some fundamental changes. This dissertation is essentially an investigation of necessary conditions and possible resistances faced by the establishment of the TDL model. The agriculture sector of the People's Republic of China is chosen as the field of research in order to study the institutional environment and historical context in real-world settings. The investigation on the Chinese context is conducted with reference to theories of institutionalist political economy, inspired by Karl Polanyi (2002[1944]), Mancur Olson (1965), and Chang Ha-Joon (1994, 2002).

Keywords

agriculture; applicability; critical discourse analysis; PR China; sustainability accounting; Triple Deprecation Line