INSTITUTIONAL PROBLEMS FOR CHINESE ENVIRONMENTAL ACCOUNTING: EVIDENCE FROM THE ACCOUNTING PROFESSION

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Institutional Problems for Chinese Environmental Accounting: Evidence from the Accounting Profession – Li (Alex) Lin

Abstract

The global environmental crisis has turned accounting scholars' attention to environmental accounting (hereafter EA). With the gap of EA research and practice between China and the western world, it is necessary to elaborate on this gap through accounting professionals' environmental awareness (perceptions), which has tended to become the key to adopting EA practices in accounting firms. This has led to the main research question: what are accounting professionals' perceptions of EA?

To illustrate what factors would lead accounting firms (not) adopting EA practices, institutional theory is used as the main framework to identify key issues that lead firms to resemble each other. Legitimacy and stakeholder analysis are adopted as a supplement of institutional analysis to explain how accounting firms respond to influences brought by legitimate concerns and interest groups, which has constructed this multi-framework.

This thesis is conducted through 35 semi-structured interviews. Interviewees are invited from different scales of Chinese accounting firms on a top-down basis. Documentary review is used as a supplement of the interviews. Thematic analysis is employed to elaborate on how institutional drivers shape EA across different categories.

This thesis has identified that clients' demands tend to be the key for (not) adopting EA, which can be reflected through participants' knowledge structure, education and training, practices and the adoption of practical guidelines – this leads to the branding effects of EA in the Big Four, which reflects a practical gap between the Big Four and domestic firms. More specifically, this thesis has reasserted that organizations tend to model themselves on others perceived to be successful in response to certain uncertainty; whereas the clarity of 'successful organizations' and 'uncertainty' becomes the key institutional driver for firms (not) adopting EA practices. As a supplementary framework, stakeholder and legitimacy analysis tends to reflect how EA is perceived and influenced through different interested parties. In general, this thesis has demonstrated a rather low environmental awareness amongst the Chinese accounting profession, suggesting that EA is developed to enable instead of offsetting the inequity between the Big Four and domestic firms.

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List of Abbreviations

Certified Public Accountant – CPA

Certified Public Valuer - CPV

Clean Development Mechanism – CDM

Climate change and sustainability – CCS

Corporate social responsibility – CSR

Critical accounting research – CAR

Critical environmental accounting research – CEAR

Environmental accounting – EA

Environmental information disclosure – EID

Greenhouse gas – GHG

Intergovernmental Panel on Climate Change – IPCC

National Development and Reform Committee - NDRC

Normative accounting research – NAR

Normative environmental accounting research – NEAR

Political economy – PE

Positive accounting research – PAR

Positive environmental accounting research – PEAR

Social and environmental accounting – SEA

Social and environmental accounting research – SEAR

Chapter 1 Introduction

1.1 Environmental Crisis and Accounting

Environmental problems such as atmospheric, water and land issues have become one of the biggest global crises during the last century. With the rapid development of the economy and industrialization, China, the world's largest greenhouse gas emitter and second largest economy, is now facing both the process of economic restructuring and globalization, which indicates that a market-driven economy has gradually been replaced by the previous planned centralized economy. Meanwhile, the significant role of corporate social responsibility (hereafter CSR) in achieving both economic prosperity and sustainable distribution of social resources has been gradually recognized in China (Noronha et al., 2012). Such a situation has provided the opportunity to establish a good research and practical field for sustainability development in China. But more importantly, the Chinese natural environment has never stopped being polluted, as Chinese economics tends to be a GDP-oriented model since 1978's open-door policy, which focused too much on economic growth, and resulted in severe consequences such as the erosion of the natural environment and the biological system. Typical problems such as Chinese national-wide haze have been clearly recognized to threaten 'air quality, regional and global climate, and human health' (Huang et al., 2014). Such a situation has eventually led to a call to establish a harmonious and sustainable society (Noronha et al., 2012). I believe it is every Chinese citizen's obligation to leave our descendants a clearer sky and a green earth, and this has become my initial motivation to conduct this project. As a result, the above discussions have made China a unique, significant, but rather underdeveloped case for study.

In order to achieve sustainability, business organizations are suggested to enforce their roles in 'adapting, using, and maintaining the quality of the natural environment' (McAlister *et al.*, 2003: 280). In terms of accounting, this involves the measurement and distribution of resources in business. As an accounting student, it is my interest and academic career to identify the linkage between environmental sustainability and

accounting. The rise of the environmental crisis gradually turned accounting scholars' (Mathews, 1984; Gray, 1992; Bebbington & Larrinaga, 2014) research focus towards identifying the role of accounting in climate change and sustainable transformation. Gray et al. (1987: 9) conceptualized social and environmental accounting (hereafter SEA) as 'communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large...upon the assumption that companies do have wider responsibilities than simply to take money for their shareholders' (Gray et al., 1987: 9). This covers 'all areas of accounting that may be affected by the business response to environmental issues' (Gray & Bebbington, 2001: 7), which is a significant means of CSR to negotiate between organization-society relations, suggesting that CSR has performed as a leader and is of great importance in environmental accounting (hereafter EA) studies. On the other strand, critical perspectives (Deegan, 2006) view SEA as sustaining the contemporary social order (wealth creation) by legitimizing corporate environmental disclosure instead of 'destroying, refining, deregulating or liberat[ing] capitalism' (Gray et al., 1988: 8). To combine those two perspectives, SEA could be seen as a tool to achieve both CSR and profit maximization. Some latest news has suggested that the Chinese Environmental Protection Minister had drafted environmental protection tax laws to encourage businesses to discharge fewer pollutants, in multiple rows and pay taxes during the 12th National People's Congress¹, which would eventually achieve the calculability of environmental pollution. This, to a large extent, would secure an increasing involvement of accountants in sustainable development (see Thomson et al., 2014). As an intermediary between accounting and environmental protection, a detailed investigation of EA in China would therefore be a timely endeavour and may bring some insights on both contemporary accounting research and sustainability development in China. As a corollary, EA can be a feasible solution to promote sustainable development in China, which becomes the targeted topic with no doubt.

With the global-wide influences of sustainability development, Chinese listed companies have started to disclose environmental information in CSR reporting, which

¹ http://news.xinhuanet.com/english/2016-03/11/c 135179328.htm

has led to a few empirical studies examining corporate environmental information disclosure (hereafter EID) in the Chinese context. In the meantime, the world-known accountancy professional service firms (Big Four) have eventually penetrated the non-western market by providing a wide range of professional services other than conventional auditing and capital verification services, including specific climate change and sustainability (hereafter CCS) services such as CSR and sustainability reporting, auditing and assurance, carbon trade and taxation etc., which has established its unique 'empire' by serving multinationals located in developing nations (see Boussebaa, 2015). The diversity of professional services tends to become a major trend for Chinese domestic accounting firms to replicate, which can be reflected through the common adoption of management consultancy and taxation in the accounting profession; whereas the Big Four are claimed (Boussebaa, 2015) to provide such services for most multinationals. This suggests the possibility that EA (i.e. CCS) practices in accounting firms are prepared for multinationals rather than domestic clients, indicating that EA has not yet been efficiently practiced in China at the moment and, simultaneously, is at a rather lower level of both organizational based EID and professional based EA practices and research. In other words, a less-developed practical level of EA has led to a lack of EA studies in a Chinese context. Such a research gap has brought a good opportunity to look into EA practices in China. More importantly, this situation can be seen as a call for establishing a good practical and research field of EA in China, which is another major motivation to conduct this project.

As Lehman (1999: 238) suggested, EA is claimed to 'expos[e] and explain corporate effects on nature as a reflection of what is significant'; whereas the criterion of significance (materiality) is primarily based on 'our ontological background beliefs' (ibid.) of nature, which indicates that the determination of significance in environmental information tends to be the key driver for adopting EA practices. In other words, the environmental awareness (knowledge or perceptions on environment) of accounting practitioners tends to determine the materiality of environmental accounting information. The heavily polluted environment, coupled with the lack of environmental awareness in China, can be illustrated in two aspects: for accounting academics, the hybridization of

accounting and the environment seems like a 'stranger' that has been rarely included in Chinese accounting higher education: such a lack of environmental awareness has driven them to ignore environmental issues in their teaching and research activities, so a research gap of environmental awareness in accounting has existed in Chinese literature. For accounting practices, one of the key reasons is that some environmental information has not been disclosed in corporate annual and CSR reports as such information has been judged insignificant, by professional accountants; that is to say, this information has been regarded as 'immaterial'. As a result, the lack of environmental awareness has eventually caused a generally lower quality of EA practices in China. In other words, environmental awareness, or accountants' perception of EA, can be seen as the main driver for adopting EA practices in China. As an environmentalist who has chosen accounting as my major, this is why I have reasserted the significance of 'environmental awareness' so as to contribute towards promoting the development of sustainability, at least within the accounting discipline. This has led my attention to identify Chinese accounting practitioners' perceptions of EA. The next section will therefore elaborate on this major concern as the main research question for the whole thesis.

1.2 Accounting Profession and Institutional Analysis

Whilst scholars have made remarkable achievements in organizational-based EA studies, very little effort have been taken in the role of the accounting profession (accounting firms) in climate change and sustainability. Professionals are claimed (DiMaggio & Powell, 1983: 156) to aid in the process of institutionalization by 'the universality of credentials, the robustness of graduate training programs, or the vitality of professional and trade associations', which view professionals as the benchmark among other organizations in certain organizational fields. Likewise, accounting professional bodies can be seen as the benchmark for certain accounting practices by providing professional services to corresponding clients in normalizing and standardizing organizational behaviour. In general, the focus of the accounting profession does not only complement professional-based EA to mainstream organizational-based (client-based) EA research,

but also fills up the blank page of Chinese EA professional-based research. Additionally, this professional-based EA research would possibly contribute to policy setting for the Chinese accounting profession. This indicates the fact that accounting professional bodies are the collection of elite accounting practitioners, who may have superior knowledge or practical capability in certain accounting practices. EA practices are carried out by corresponding practitioners i.e. qualified auditors, certified accountants and other disciplinary employees; whereas public companies are their clients: their daily practices can not only reflect their perceptions of EA, but also 'shadows' of organizations (clients) i.e. how organizations prepare environmental information disclosure, how organizations recognize certain accounts. As such, the major focus of this project turns into the exploration of Chinese accounting professionals' perceptions of EA through in-depth interviews, which leads to the main research question: what are the Chinese accounting professionals' perceptions of EA?

As a commonly used organizational theoretical framework, neo-institutional theory describes how different organizations tend to resemble each other (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). Suddaby and Viale (2011: 426) regarded professionals as the key agents of profound social change (institutional change) by means of a 'prominent and powerful position that professionals often occupy within organizations and within organizational fields', which elaborates on DiMaggio and Powell's (1983: 156) hypothesis: 'The greater the extent of professionalization in a field, the greater the amount of institutional isomorphic change'. In other words, accounting professional bodies (i.e. professional accountancy firms) have become the key in determining the adoption of EA through professionals' knowledge and routines (perception) of EA, particularly looking at what EA practices have been adopted, how/why certain practices have been adopted, how/why certain (group of) accounting firms resist adopting EA, what/how practical guidelines do firms (not) abide by, what/why training courses do practitioners (not) attend, how accounting professionals treat environmental information. As such, the first sub-question identifies institutional drivers for EA practices in the Chinese accounting profession: what are the institutional factors and how do such factors influence Chinese EA practices?

While institutional analysis explains the most part of Chinese EA professional practices in marketing and a competitive context, stakeholder and legitimacy theory are used to identify non-marketing factors that either hinder or promote the development of EA practices. Stakeholder analysis has been commonly applied in EA projects in examining stakeholder influences in certain EA practices. Likewise, this thesis tends to illustrate whether the adoption of EA can be reflected through demands from their clients. Moreover, government has played a role in legislating and supervising the operation of the accounting profession, which makes government a potential stakeholder. As such, a stakeholder analysis is to illustrate whether the adoption of EA would be influenced by different interested parties. As a significant incentive for corporate environmental information disclosure, legitimacy tends to act as the key in determining whether certain EA practice is legally or socially acceptable. Another sub-question has been therefore derived from stakeholder and legitimacy analysis: what are other factors and how do such factors influence Chinese EA practices?

1.3 Thesis Structure

As the first chapter, this introduction tends to associate the environmental crisis with accounting, so as to identify motivations for this thesis. Correspondingly, the growing political and economic influences have made China a significant case; whereas the damaged natural environment has suggested the necessity to focus on Chinese participation in climate change and sustainability activities in both its domestic and global context. On the one hand, the *status quo* has reflected the difficulty of adopting the whole package of EA in China because of the general lack of environmental awareness; on the other hand, this situation has offered the opportunity to evaluate contemporary EA practices in both an organizational and professional context, so as to fill in this approximate vacuum state in Chinese SEA studies. Chinese EA practices appear far behind those in developed nations (for example, the U.K., Japan, U.S.). Therefore, it becomes rather important to investigate the reasons causing this left-behind state, which indicates the necessity to focus on SEA in a professional

context, and an alternative view of mainstream SEA research (organizational-based). Apart from that, the focus of the accounting profession would also do good to normalize current EA practices. As a result, this introductory chapter is to build up a pathway to subsequent chapters as a starter.

The second chapter will discuss the research context in EA in terms of revision on contemporary literature. The controversial objectives for EA will come first, leading to decision-usefulness, accountability and political economy in EA. Some non-economic discourse in EA will then be reviewed, with a short summary of other social and organizational theories used in EA. Pedagogic research in EA will be discussed next as a way to introduce perception (awareness)-based EA research, which leads to the review of EA in the Chinese accounting profession, with the illustration of general context in terms of different EA practices, the influences of Big Four and the role of state in shaping Chinese accounting profession, suggesting the significance of accounting professionals' perceptions in adopting EA. The next section will present what each theoretical framework will be and how each theory fits into this project. This chapter will end up with implications on the research method used and research question(s).

To respond to the preset research question, the third chapter will fully discuss how this project has been done. Commonly used accounting research methods (positive, normative and critical research) will be discussed retrospectively to evaluate both the fitness and suitability of this project, showing how each approach has brought methodological insights on this project. The following sections will present research design (research method, sample, region, data collection) and analysis (coding, translation, analytical tool), which will stop at methodological reflections as a summary.

Data analysis is divided into four chapters. Chapter four as the first chapter will elaborate staff information, which will lead to continuous discussions. Chapter five will discuss EA practices that firms adopted, illustrated by service structure, conventional services, financial and non-financial environmental auditing practices and an evaluation of competence in EA, as a means to not only summarize different forms of EA practices, but also identify what possible institutional drivers might be embedded within ordinary practices. Chapter six will discuss what/how certain EA standards and guidelines are

used by accounting firms, so as to identify whether EA is influenced by normative and coercive influences. Chapter seven as the last empirical chapter will be a summary of the previous three chapters to present how accounting firms have practised their EA in a competitive context, in which institutional findings are expected to be derived from. Each chapter will end with a short conclusion, with the overall summary of local settings and market for professional services in Chengdu and Shanghai, influences from size of accounting firms and their clients, the influence of Big Four, and how theoretical elements tend to fit into empirical data.

The eighth chapter will be a comprehensive discussion of preset theoretical framework. First of all, institutional analysis will be applied to identify what/whether institutional factors would promote or hinder the development of EA practices in accounting profession in a Chinese context; meanwhile, some critical assessment of neo-institutional theory will be discussed, with further implications of contemporary accounting and EA research. Stakeholder analysis will follow next to identify how accounting firms respond to clients' demands and how Chinese government plays its role in shaping EA practices in a neo-pluralism perspective. Being linked with institutional analysis, legitimacy analysis will discuss how legitimacy has been created and maintained in adopting EA in the Chinese accounting profession. This chapter will end up with a summary of theoretical findings and theoretical implications, as a reflection of how issues highlighted in research context and theoretical framework (Chapter 2) have been responded and reflected.

This thesis will be completed by conclusion, the ninth chapter. To match with the introduction and respond to the preset research questions, a summary of key findings will be reviewed, coupled with possible solutions and predictions for corresponding problems. Critical reflections from previous chapters will be illustrated through research contribution(s), strength(s), limitations, and further implications.

The next chapter, literature review, will elaborate on prior studies of SEA and how those studies could be linked to perception-based EA research and EA in the accounting profession, which fully responds to preset research questions in this chapter.

Chapter 2 Literature Review

From Chapter one, EA has tended to become a feasible solution for sustainability development in China; whereas the significance of these 'hyper-goods' (Lehman, 1999: 231) has not yet been recognized by most Chinese accounting professionals. One of the possible reasons is the lack of environmental awareness among Chinese accounting professionals, which contains knowledge and comprehension of EA. This would eventually build up a pathway through an introduction to the research context of EA. The task of this thesis is to identify Chinese accounting professionals' perceptions on environmental accounting (hereafter EA), which is therefore of great importance to elaborate social and environmental accounting (hereafter SEA) in terms of its objective (what is EA for?), theoretical foundation (where is EA from?) and commonly used theoretical approaches (how is EA interpreted?). This chapter will begin with the objectives of SEA by discussing whether the objective of SEA still follows a decision-usefulness approach derived from conventional accounting or make SEA more accountable to corresponding stake groups. It will then shift to a political economy as a theoretical foundation of SEA so as to elaborate how EA can be linked back to economics and how PE has motivated the emergence of critical accounting research. Following the discussions of EA in its economic context, a rather non-economic discourse of EA and other common theoretical approaches will be briefly interpreted to present the diversity of EA research and to illustrate how those perspectives tend to become improper for this thesis; whereas a pedagogic focus of EA will be picked out as a crucial means of creating and maintaining accounting professionals' perceptions on accounting-sustainability development. This has suggested the significance of reviewing perception-based research in EA and EA in the accounting profession more specifically, which leads to the determination of a multi theoretical framework in this thesis. This chapter will finish with theoretical summaries and, to enlighten the methodology chapter, descriptions of research questions outlined in the Introduction.

2.1 Objective for SEA: decision-usefulness or accountability?

2.1.1 Decision-usefulness

Accounting is seen as having a fundamental function to provide useful information for different users to support their decision-making process (Lewis, 1960) by 'reliably recording market-mediated transactions and providing numbers that serve as observable bases for contracts' (Thornton, 2013: 439). More specifically, Young (2006) claims that 'financial statements are said to exist primarily to serve user information needs' (ibid., 580), and '...the primacy of user needs and user decisions...guides the construction of external financial statements' (ibid., 579-580), which has made the usefulness of financial accounting and reporting information an essential accounting objective. Correspondingly, accounting is also seen as an essential tool of decision-usefulness for information users. This is stated in IFRS (International Financial Reporting Standards) conceptual framework:

'The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.' (IFRS, 2014)

Bebbington *et al.* (2001: 418) introduce two branches of decision-usefulness approaches in SEA: the decision-makers emphasis, and the decision-models emphasis. The former approach relies on undertaking research that seeks to ask information users what information they want; whereas the latter approach is based on researchers' perceptions of 'what is necessary for efficient decision-making' (see Bebbington *et al.*, 2001: 418; Deegan, 2006: 13) and focuses on the types of information perceived to be useful for decision-making, which assumes that classes of stakeholders have identical information needs. Williams and Ravenscroft (2009) also argue that decision-usefulness assumes a central place as the rationale for accounting choice by stealth rather than by careful argument or based on empirical evidence. Gray *et al.* (1995) summarize 'ranking' studies and investigation of information effects on share price behaviour as two main approaches in CSR decision-usefulness studies. In the former approach,

financial agents and market participants such as bankers and analysts (see Gray *et al.*, 1995) are asked to rank different accounting data in the order of perceived importance, which has been regarded as 'popular from time to time' (1995: 50)²; whereas the latter approach focuses on investigating what (if any) social and environmental disclosure could be treated as information by capital market participants. However, the latter approach had been claimed to be unsatisfactory (Gray *et al.*, 1995): first of all, the results of ranking studies tended to be inconsistent and inclusive (Holman *et al.*, 1985; Ingram, 1978; Shane & Spicer, 1983; Spicer, 1978); secondly, it has been claimed (Booth *et al.*, 1987; Mathews, 1987) that the interest of CSR was not motivated by concerns of financial participants; meanwhile, the whole process of decision-usefulness is claimed to be under-theorized (Cooper, 1988; Owen, 1992; Gray *et al.*, 1995).

Criticisms on decision-usefulness approaches are mainly concerned with ethics (Lehman, 1995) and capital market efficiency (Puxty & Laughlin, 1983). Lehman (1995) pointed out that decision-usefulness, based on the capital market, have led accounting to abandon its ethical obligations; she then argues that a decision-usefulness market-based approach had been fundamentally problematic when encountering current social and environmental concerns, as prices 'do not balance marginal ecosystem services sacrificed against marginal social benefit of a larger population or greater per capita resource use' (Daly, 1992: 190; in Lehman, 1995), and Daly (1992) claims it to be dangerous to completely rely on capital markets to solve environmental problems. Puxty and Laughlin (1983) state that there is a 'social welfare' assumption in conventional accounting theories, and the logic of conventional accounting should be seen as 'a criterion for accounting information which will directly benefit the individual user and hence, through the workings of an efficient capital market, lead to economic and therefore social welfare' (1983: 545). They regard an efficient market as a central component of decision-usefulness, which requires the quality of accounting information to become significant in determining the efficiency of the capital market; however, this

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² It is suggested (Gray *et al.*, 1995) that the financial community find CSR had ranked information in categories 'moderately important' and certainly more important than some issues to which accounting professions had given considerable attention in past events, which led to Cooper (1988) and Owen's (1992) criticisms of under-theorizing because it relies too much on the empirical findings with a lack of theorization.

efficiency might be restricted if information is imperfect. Therefore, they predict that 'the production of information which is more useful to the various parties as individuals will not necessarily lead to greater welfare' (1983: 557) and view decision-usefulness as an '[inappropriate] criterion in the real world of complex environment' (1983: 557). With respect to all critiques on the decision-usefulness approach in SEA studies, all critiques on decision-usefulness indicate an imperfect situation in SEA studies, as they criticize not only theoretical problems, but also practical shortcomings; therefore, it is suggested that decision-usefulness is not appropriate as the sole objective for SEA. To end, the following statements have suggested some insights on accountability, an alternative objective of SEA, which shall be discussed in the next section.

2.1.2 Accountability

As defined by Roberts and Scapens (1985: 447-448), accountability 'in its broadest sense simply refers to the giving and demanding of reasons for conduct...and, in its broad sense, accountability can be seen as 'a chronic feature of daily conduct'. Lehman (1995) and Gray (2001) regard accountability as a new criterion and objective for SEA, which concerns 'identifying what one is responsible for and then providing information about that responsibility to those who have rights to that information' (Gray, 2001: 11) and also is 'a relationship between a stakeholder and a firm that specifies moral obligations and duties between them' (Lehman, 1995: 396), which separates accountability, as an independent objective for SEA, from decision-usefulness.

Roberts (1991: 367) argues that accountability in practice 'is a form of social relation, which reflects symbolically upon the practical interdependence of action: an interdependence that always has a both moral strategic dimension', which had pointed out that both moral and strategic goals of accountability should be complementary. Gray (1992) suggests that the development of accountability helped to increase the transparency of organizations. Roberts (2009) concentrates specifically on issues of transparency and concluded that business cannot manage without transparency as a form of accountability. As an environmentalist, I do prefer Gray's (1992) 'deep green' position in accountability, which 'place[s] the environment at the centre of all things'

(ibid., 399). Employing the theory of a 'deep green' position, it is claimed that accountability has focused on 'the right to receive information and the duty to supply it' (ibid., 413). Regarding social and environmental information, Gray stated that the empirical basis of accountability was from 'law and quasi-law to public domain matters of substance' (ibid., 414). Within the theoretical perspectives of systems, Gray (ibid) states that organizational information that may influence society and environment would be of three types: input data (usage of physical and human resources), processing data (efficiency and accident), and output data (pollution emission and waste) (See ibid., 415). As an expansion, Lehman (1995) regards 'deep green' as the 'middle-ground' of accountability, which means Gray's (see Gray et al., 1988; Gray, 1992) position is that the acceptance of status quo had no intention (or ambition) to either destroy nor refine, deregulate or liberate capitalism. Rather, Lehman (ibid.) suggests adding justice and moral elements of accountability so as to make social and environmental awareness in accounting become thorough and comprehensive by establishing two premises: EA establishes and articulates an accountability relationship between corporations and others rather than just to be a call for more information and regulation, which indicated a moral aspect based on legitimate concern for fairness. It is then stated that accounting information formed part of a public account made by firms to justify their behaviour, which indicates that 'accounting is a moral discourse and...to put environmental matters on their agenda' (Lehman, 1995: 408). With the above analysis, Lehman finally argues addition of justice and morality in accountability 'transcends decision-usefulness to satisfy a necessarily larger range of accountability relationships' (1995: 408). To conclude here, accountability (mainly referring to social, environmental, and stakeholder accountability⁴, see footnote) has been confirmed as a suitable objective for current and developing areas of SEA.

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³ The 'middle-ground' that Lehman referred to means that 'deep-green' in accountability is not a thorough (real) concept of accountability because the lack of moral and justice cannot refine capitalism. Therefore, in Lehman's opinion, Gray's 'deep-green' accountability can be seen as an interim idea of accountability rather than an independent accountability.

⁴ Brown and Fraser (2006) argued that in stakeholder-accountability approach, SEA has been viewed as a process 'in which people and records must interact to achieve accountability' (2006: 107, cited in Yakel, 2001: 234) and to 'increase accountability and transparency of organizations' (2006: 114). Here, accountability refers to 'being called to account for one's actions' (2006: 107, cited in Mulgan, 2000: 555), which is concerned primarily with social impacts on business rather than business impacts on society, for example: employees, consumers and community groups are

To sum up, decision-usefulness is (Gray, 1992; Lehman, 1995; Gray et al., 1995) claimed problematic and inappropriate as the major objective for SEA, and accountability was introduced to replace the original objective. However, there had been some controversies between Gray and Lehman's accountability, in which Lehman regarded Gray's 'deep-green' position as the 'middle-ground' of accountability, and then suggested adding moral and justice concerns in the concept of accountability. As an environmentalist, I personally prefer Gray's 'deep-green' position, as it focuses more closely on the natural environment. However, I appreciate Lehman's efforts in the discovery of ethics and justice in accountability, which presents a wider view of SEA; whereas Gray's arguments on 'deep-green' present a more comprehensive view on corporate SEA as a whole system, which is reasonable as well. Those two perspectives are actually complementary rather than opposing. During recent years, scholars (Brown & Fraser, 2006) emphasize that accountability should focus on stakeholders and transparency (see footnote 4), which indicates influences from Friedman's thoughts that 'the business of business is business' and, to some extent, the revival of decision-usefulness. In a word, Gray's perspective focuses on environmental and ecological concerns with deep consideration of system theory, whereas Lehman concentrates on adding some social expectations (morality and social justice) into accountability, which represents two different strands of accountability. In that sense, it can be argued that the emergence of strategic SEA (referring to stakeholder accountability and transparency) suggests that decision-usefulness as an objective of accounting still remains its validity in SEA. Thus, accounting researchers cannot erase decision-usefulness in SEA studies, and it remains an important component of research, which will be revisited in the section of accountants' perceptions on EA.

It is also important to recognize the stakeholder as a significant element in both decision-usefulness and accountability. Friedman (1970) claims that shareholders should be regarded as the only corporate stakeholder, and business should only be responsible for shareholders to protect their interests. All shareholders' care is mostly

for economic information, for example, economic performance, short-term self-interests, and capital market effects, whereas they care less about information other than economic issues such as social concerns, environmental obligations and ethics. During the 1980s, corporate stakeholders started to acquire more social-related information from the corporate world, and that is how Freeman and Reed (1983) shift Friedman's narrow shareholder to a broader concept of social and political stakeholders rather than just economic ones. Brown and Fraser (2006: 114) also claim that stakeholders have the rights to acquire information that must be acknowledged for decision-making purposes, which makes it possible for various stakeholders to 'meaningfully participate in organization decisions/reporting'; whereas such acquired information is normally claimed (Brown & Fraser, 2006) to be financial information, which indicates the possibility that economic stakeholders are major CSR information users and acquirers.

The question 'what is accounting for?' has been asked and debated for decades. Earlier scholars (Yamey, 1949, 1964; Winjum, 1971) had looked into accounting and economics (i.e. spirit of capitalism, calculation of income), with the conclusion that double-entry bookkeeping did contribute to the world's economic growth, indicating that accounting had supported and promoted the development of the world's economy. Hopwood and Miller (1994: 9) stated that 'accounting could not and should not be studied as an organizational practice in isolation from the wider social and institutional context in which it operates', with the implication that accounting is supposed to be perceived and studied at a macro level. Lovell and MacKenzie (2011: 707) stated that 'accountancy is not only relevant within the boundaries of a particular firm, but plays a constitutive role in social processes more generally'. More specifically, Mason (1980: 29) regarded the macro social role of accounting as 'reduc[ing] uncertainty for social actors', and that it 'fulfils social demands for the construction of a symbolic order' (Ibid.), regarding the role of the accounting profession as 'to absorb uncertainty and to abate social anxiety' (Ibid.). All those comments have suggested the possibility that accounting tends to play its role in a macro social and economic context rather than a pure financial measurement tool for corporate decision-making. As such, the next section will present the political economy as a major theoretical component of EA.

2.2 Political Economy

During the middle of the last century, the two Cambridge debates⁵ led accounting scholars (Tinker, 1980: 158) to argue that 'while accountants are becoming more rigorous in their understanding of the economic realm, a commensurate degree of rigor also is required concerning the political and social realm'. As Hopwood and Miller (1994: 16) suggested, the political economy (hereafter PE) of accounting refers to 'drawing attention to the conflicting political and economic interests at stake in accounting', which highlights the emphasis of the interrelationship between political and economic forces in society. In PE approaches, accounting systems have been regarded as a mechanism through which power is exercised when accounting is 'the provision of neutral technical information for decision making' (ibid., 16); accounting is a partial and interested language that furthers the interests of particular classes and occupational groups when accounting has been seen as 'the objective depiction of reality' (ibid., 16). Therefore, they concluded that PE approaches had placed 'considerable emphasis on overt interests and conflicts, and on the links between such factors and accounting systems' (ibid.).

It seems that PE (Tinker *et al.*, 1991; Gray *et al.*, 1995; Williams, 1999) is becoming an interesting area for SEA studies. It is indicated that the bourgeois political economy⁶ looks more acceptable and applicable in SEA studies (Guthrie & Parker, 1990; Williams, 1999). First of all, Ramanathan (1976) emphasizes the concept of a 'social contract', which suggests that the existence of an organization relies on the support of society in general, offering valuable insights on issues related to social and environmental disclosure. Secondly, bourgeois PE concentrates on the 'interactions of

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⁵ The two Cambridge debates refers to the academic debates between classical political economy and neo-classical marginalist economics during the 1960s about the nature and role of capital goods and critiques on the dominant neoclassical vision of aggregate production distribution. The debates were mainly between economists from the University of Cambridge (Joan Robinson, Piero Sraffa) and neo-classical economists (Paul Samuelson, Robert Solow) in Cambridge, U.S.

⁶ PE here follows this definition: '...the interplay of power, the goals of power wielders and the productive exchange system. As a framework, political economy does not concentrate exclusively on market exchanges. Rather it, first of all, analyzes exchanges in whatever institutional framework they occur and, second, analyzes the relationships between social institutions such as government law and property rights, each fortified by power and the economy, that is the system of producing and exchanging goods and services.' (Jackson, 1982: 74)

actors within a pluralistic world' (Clark, 1991: 90), in which legitimacy theory and stakeholder theory are claimed (Gray *et al.*, 1995) to be derived from. Classical PE theory is argued (Gray *et al.*, 1996; Williams, 1999; Spence *et al.*, 2010) to be inappropriate as a theoretical framework of SEA studies because the focus of structural/system-level conflicts within society does not sound quite relevant to the context of SEA from a bourgeois perspective. There is an additional interesting part in bourgeois PE, which is the role of government. Clark (1991) argues that government intervention can often be of some advantage in sorting out market failures so as to protect individual rights, which Gray *et al.* (1995) have accepted. Thus, Gray *et al.* (1995) claimed that bourgeois PE was more appropriate for use in accounting studies than Marxist PE, and regarded PE as the most interesting discovery in SEA studies, which are highly acceptable and convincing. On that basis, PE is regarded (Shen, 2010) as a proper theoretical foundation of SEA, because it is not only theoretically more established than legitimacy and stakeholder theory, but also practically closed to the context of economics.

One of the significant insights brought from PE is the critical research in SEA. Critical accounting research (hereafter CAR) is claimed (Baker & Bettner, 1997; Deegan, 2006) to go beyond conventional accounting research and is focused primarily on the social and political role of accounting as a means to construct and maintain certain social norms. More explicitly, CAR puts structural conflicts and the role of the state at the centre of the whole critical analysis. This has made CAR political accounting research, which tends to concentrate on the conflicts between political and economic interests in accounting (Hopwood & Miller, 1994). Additionally, accounting is claimed (Cooper & Sherer, 1984: 219) to 'recognize power and conflict in society' and focus on the effects of accounting reports on the distribution of income, wealth and power in society. As such, critical perspectives (Gray *et al.*, 1988; Tinker *et al.*, 1991; Deegan, 2006) see SEA as a way to legitimize those companies providing disclosed information (politically pragmatic) rather than challenging current social orders (socially just). Radical perspectives (Gray, 2006, 2010) even regard conventional accounting models as maximizing environmental destruction and the erosion of social

justice. Despite the fact that critical approaches in SEA have been criticized (Deegan, 2006) as not providing solutions for certain problems, the interpretive approach adopted by critical scholars has brought meaningful insights on constructing methodology for this project. Meanwhile, its critical nature has also provided the opportunity to view SEA in a neutrally 'could be' instead of conventional patterns ('is' and 'should be'), which will be discussed in the methodological chapter.

In summary, bourgeois PE presents a view of SEA on a macro level. It is concluded that PE will not be explicitly used in this project because of its primary focus of political and economic conflicts, whereas influences from bourgeois PE should not be omitted. Its inspirations, namely the interactions of actors within a pluralistic world, have motivated the possible application of neo-pluralism (Gray *et al.*, 1995b; Held, 2006) in stakeholder analysis. Apart from that, PE has also suggested the necessity to track back to the origin of legitimacy. Both aspects will lead to the revisiting of PE in the discussion chapter. The next section will review other approaches used in SEAR.

2.3 Other Approaches

There has been a wider variety of social and organizational theories applied to SEA research, including insights from organizational change studies (Bebbington, 2007; Thomson, 2007), impression management (Solomon *et al.*, 2013; Le & Bartlett, 2014), business case studies (Archel *et al.*, 2009; Brown & Fraser, 2006), risk evaluation (Saravanamuthu and Lehman, 2013), contingency theory (Bouma & van der Veen, 2002; Otley, 1980; Thomas, 1986), cultural studies (Bebbington, 2007; Orij, 2011), and actor-network theory (Barter & Bebbington, 2013). Some pure grounded research in SEA (O'Dywer & Owen, 2005, 2007; O'Dywer *et al.*, 2011; O'Dwyer, 2011) also indicates the usefulness of grounded theory in analyzing this research; whereas those theoretical approaches are mainly about behavioural studies and are concerned with a particular case on a narrow (mini) level, not even micro; a single case might be less representative. In a more environmental context, deep ecology (see Gray, 1992; Everett & Neu, 2000) and sustainable development (Spence, 2007; Bebbington *et al.*, 2008;

Laine, 2009; Bebbington & Larrinaga, 2014) have been used to identify 'how accounting has sought to engage with sustainable development principles' (Bebbington & Larrinaga, 2014: 396); whereas I intend to identify whether institutional drivers would shape the development of EA in the Chinese accounting profession through participants' perceptions of EA, which may not necessarily be enhanced by the above approaches. However, the diverse theoretical approaches in SEA would help broaden perceptions of EA among accounting practitioners and educators. As such, the next section will present a pedagogic focus in SEA.

2.4 Pedagogic focus

Issues related to accounting education, often coupled with ethics, are also addressed in accounting and EA literature (Bebbington, 1997; Gray *et al.*, 1994; Thomson & Bebbington, 2004). Gray *et al.* (1994) apply learning theory and the taxonomy of learning as an educational theoretical framework in the case study of SEA teaching; meanwhile, they also apply Kohlberg's levels of ethical development to illustrate accounting ethics education. Thomson and Bebbington (2004) introduce some educational theorists and principles to identify problems in UK higher education and to find a solution for improving the shortcomings, which is illustrated by two elements: hidden curriculum and 'banking' versus dialogical education. Deegan (2013) makes suggestions for accounting educators on CSR and sustainable contexts. Very little notice is taken in higher education of Chinese CSR and sustainability, which has caused a lack of education and training in Chinese EA practices; therefore, pedagogic attention needs to be drawn from Chinese EA scholars so as to promote whole Chinese EA practices with well-designed education institutions.

This thesis is to identify accounting professionals' perceptions of EA by observing their daily practices, major clients and practical guidelines, which makes accounting pedagogy less possible to become the major concern. However, it is important to discuss education and training events during interviews with respondents in relation to the identification of normative influences, which would make it worth reviewing

Chinese accounting higher education. Therefore, the focus of pedagogic issues would be definitely useful in both this project and contemporary Chinese SEA studies, especially in improving accounting professionals' perceptions of EA, as a reflection of Chinese accounting professionals' ordinary training and previous education experiences, which will be revisited and indicated through corresponding empirical chapters and implications in conclusion chapter. This leads to the discussion of accountants' environmental awareness next.

2.5 Environmental Awareness: Accountants' Perceptions of EA

As Lehman (1999: 238) stated, EA is 'exposing and explaining corporate effects on nature as a reflection of what is significant'; whereas the criterion of 'significance' comes from 'our ontological background beliefs' (ibid.) of nature. In other words, whether certain environmental information is significant (material) primarily depends on accountants' perceptions of certain environmental issues (environmental awareness). Thus, the term perception in an EA context (or accounting professionals' environmental awareness) can be defined and clarified as 'making climate change understandable and relevant to their (organizations') members' (Lovell and MacKenzie, 2011: 725). As a result, accountants' perceptions of EA can be seen as both a key driver and eligibility for corporations to conduct certain EA practices. The social role of accounting has also been examined through accountants' perceptions (awareness) in a non-western context. Belal and Owen (2007) investigated corporate managers' perceptions of CSR reporting in Bangladesh, with the discovery that the motivation of CSR reporting comes from powerful stakeholder (patent companies and international buyers') management. They further discussed that the adoption of social accounting standards should consider local cultural, social and economic factors instead of completely imposing western models into a non-western context. Kalma et al. (2012) identified the dominant view among Syrian accountants that social accounting was seen as a legacy of western colonial practices, which tends to be a decision-usefulness domain. They argue that Syrian accountants' perceptions were shaped by the national social-political and economic context, including colonialism, globalization and Islamic cultural specificities. Both studies have suggested that EA is widely seen as the outcome of western capitalism by non-western accountants; whereas the adoption of EA (especially the homogenization of international standards) in certain developing nations tends to be problematic if there is a lack of consideration in the local historical, cultural, economic and social context.

Recent studies do suggest that a link between accountants and sustainability has been established (Bebbington & Larrinaga, 2014) that concerns how environmental measurement might be used in wealth creation (Parker, 2000; Spence, 2007). Studies of accountants' perceptions of EA are primarily concerned with the traditional role of management accountants: more specifically, EA is normally considered when commercial benefit is about to be recognized (Spence, 2007). Empirical findings (Albelda, 2011; Mistry et al., 2014) have identified that the role of management accountants in sustainable development is generally seen as a 'facilitator' for decision makers at a senior management level; whereas the size of firms is proven (Mistry et al., 2014; Shen & Yan, 2007) to become the dominant factor that shapes accountants' perceptions on sustainability i.e. accountants from larger organizations generally played a more active role than small-medium organizations; sustainable practices are normally mentioned in large firms instead of smaller firms. Apart from that, they (Albelda, 2011; Mistry et al., 2014) reasserted that the incorporation of the environmental management accounting system is to gain legitimacy from authority and society. In addition, Thomson et al. (2014: 457) looked into accounting-sustainability development in the UK public sector, with the finding that calculation and calculability of certain non-financially oriented items tends to become the centre of the identity and underlying rationality of accountants. Thomson's (ibid) study has suggested that accountants will become involved in such sustainable development on the condition that all information can be financially measured, which, to a large extent, has suggested that only financial aspects of EA are implemented since that is all the accounting system can cope with and process. What is more, Power (2004) regarded that CSR (generally referred to as accounting and reporting practices) are subsumed by risk management practices, to the point that EA can become re-oriented to solely measure and disclose risk for the benefit

of management for external stakeholder relationships, with the indication that the recognition of risk tends to reflect a risk-oriented dimension of EA. In general, the perceptions of accountants and auditors about SEA have generally indicated that EA is only useful if it fits certain notions of 'usefulness'. This is whether EA is fully implemented because of the recognition of profit (Spence, 2007), risks (Power, 2004) or the calculability of environmental information (Thomson *et al.*, 2014), which has indicated that the perception of EA is broader than the usefulness of EA on its own.

For accounting professionals' participation in environmental practices, Power (1997: 135) claimed that financial auditors with an accounting background are perceived to be skilled in the 'design of accounting systems and internal controls, including the methods and techniques used to measure and verify variables', which can make a meaningful contribution to the training of environmental auditors and the implementation of environmental auditing. Moreover, Power has put forward the perspective that environmental auditing tends to be a multi-disciplinary subject, in which experts from various fields 'seek to establish similarity relations between what they currently do and what they might do' (ibid., 142). Dominic and Martinov-Bennie (2015) investigate the role of internal auditors in environmental, social and governance assurance and consulting, with the discovery that governance issues are seen as the focus for respondents' assurance and consulting efforts; whereas environmental issues are reported to be in great need of development for internal audit functions' skills and expertise. Chiang (2010) also finds that clients would influence the goals and strategies of professional auditing services, with further notice that environmental matters would not be audited unless they have been quantified. Such perceptions are likely to be reflected throughout the whole empirical and theoretical discussions, with potential indications that EA is understood in a similar way among Chinese accounting professionals. This situation would suggest the necessity to view accounting as a profession, so as to identify the linkage between EA practices and the accounting profession in the next section.

2.6 EA in the Accounting Profession

While there are many EA professional-based studies in western contexts, little effort has been made towards Chinese professional-based EA research; whereas the role of the accounting profession in climate change and sustainable transformation has been increasingly addressed during recent years. Mason (1980: 29) regarded the role of the accounting profession as 'to absorb uncertainty and to abate social anxiety' (ibid., 29), which had eventually inspired subsequent focus on accounting professionals' participation in environmental and sustainability governance. Lovell and MacKenzie (2011) focused on how accounting professional organizations had been involved in climate change governance and concluded that accounting professional organizations were 'key players in identifying and modifying existing accounting technologies and practices in response to climate change, with the objective of making climate change understandable and relevant to their members' (2011: 725). Gray and Collison (1991: 24) recognized the importance of social and environmental auditing as 'the need to regulate both the environmental audit process and the environmental auditors seem to be crucial therefore', which suggests possible research attention on establishing links between 'third-party assurance and increased creditability for corporate environmental or sustainability reporting' (Park & Brorson, 2005: 1095). This has contributed to subsequent studies focusing on different aspects of professional practices in climate change and sustainability assurance practices by either analysing the contents of assurance statements so as to illustrate characters of sustainability assurance practice (O'Dwyer & Owen, 2005, 2007; Cooper & Owen, 2007), examination of certain assurance practices (Manetti & Becatti, 2008; Green & Zhou, 2013), or examining certain processes of sustainability assurance practices (Kok et al., 2001; Chiang, 2010; O'Dywer, 2011; O'Dwyer et al., 2011; Edgley et al., 2015).

After the establishment of the People's Republic of China in 1949, the Chinese government started to build up the economy based on single public ownership, with centralization of the management and controlling of all national economic resources, including the bureaucratic process to monitor internal accounting controls and the

accounts of subordinate organizations (Cooper et al., 2002: 383). However, such control was criticized (Xiao et al., 2000) as showing a lack of independence and being less effective. With the emergence of the Chinese Institute of Certified Public Accountants (CICPA) since China's open-door policy in 1978, the occupation of CPAs has been formally recognized as a 'profession' by the Chinese central government (Yee, 2009, 2012). The accounting profession has tended to play an increasingly important role since the planned centralized economy has been gradually replaced by a market-driven economy after the open-door policy (Chen & Chan, 2009), which has contributed to the emergence of Chinese domestic professional accountancy firms; whereas at earlier stage, most Chinese professional accountancy firms were deemed as affiliated organizations to certain government agencies such as Finance Bureau and Auditing Bureau. Soon after that, international accounting firms started to enter the Chinese market (Anonymous, 1984). After 1998's Deregulation Reform policy, domestic accounting firms started to become independent from their affiliated agencies in terms of their personnel, finance, services and names, with the following two main forms: limited liability partnership (LLP) and limited liability company (LLC). Cooper et al. (ibid, 383) regarded this re-emergence of this non-governmental accounting/auditing profession in China as 'the result of [a] mushrooming Sino-foreign joint venture'. However, Arnold (1990) claimed that governments in eastern nations could more easily and widely use their power than western nations, which actually indicated that a strong governmental-oriented nature (Lu et al., 2009) had been invested in the Chinese accounting profession since the very beginning, which has been conceptualized as 'state corporatism' (Unger & Chan, 1996): under such a Chinese-style phenomenon, corporate organizations (CPA firms) are created and maintained by the government; meanwhile, the weight of decision-making power is claimed (Yee, 2012) to be heavily laid on the government. Lu et al. (2009: 316) identified governmental influences on the Chinese profession in the following way: first of all, the central government used its legislative power to promulgate the basic legislation to govern operations of the Chinese accounting profession; secondly, the government used its powerful ministry to supervise CICPA and for the promulgation of auditing standards; and more importantly, due to the historical linkage between

accounting firms and government agencies, government officials could directly influence the operation of individual firms, with the indication that Chinese domestic accounting firms can, somehow, hardly get rid of their affiliated nature of local/national government agencies. This has eventually resulted in the difficulties for international accounting firms to broaden their service scope in China, which has constrained the development of accounting practices in the Chinese accounting profession.

Since EA was formally introduced (Ge & Li, 1992) in China during the early 1990s, Chinese accounting scholars and practitioners have started to focus and ground EA on CSR and sustainability. The People's Republic of China is now facing economic restructuring and international harmonization, which is 'not only important to have further economic development..., but also to promote continual awareness of social responsibility' (Noronha et al., 2013: 30). In this sense, CSR is regarded (ibid.) as achieving both economic prosperity and reasonable, balanced and sustainable distribution of society's resources. As such, state-owned companies listed in the Shanghai and Shenzhen Stock Exchange were required to disclose their social and environmental information; whereas the development of Chinese EA is generally lower than the western world. Liu and Anbumozhi (2009) selected over 100 Chinese listed companies to examine the determinant factors of the environmental information disclosure (EID) level, with the discovery that nearly half the sample opened non-substantial environmental data to the public. Apart from that, EID level depends primarily on environmental sensitivity and firm size, whereas the role of stakeholders in shaping EID levels was found to be weak. Weber's (2014) study demonstrated that external pressures such as regulatory forces, competitive mechanisms and non-governmental organizations were lower in China. More importantly, EID level is associated with companies' economic performance and geographic background; whereas the quality of environmental reports is generally found to be low (Wong et al., 2010; Kuo et al., 2011; Noronha et al., 2013). This situation initially reflects two indications: on the one hand, the increasing demands on CSR reporting have suggested the opportunity for accounting professionals' participation in climate change and

sustainable transformation; on the other hand, the overall lower level of Chinese EID might also reflect a correspondingly lower level in the accounting profession.

The worldwide Big Four accounting firms have already started their journey in global expansion and management of capitalism, and they have played a leading role in 'spreading 'best' management practices around the world...; to 'setting' global accounting standards...; and to establishing 'universal' corporate laws' (Boussebaa, 2015: 1217). More specifically, Boussebaa has reasserted the discovery of Anglo-American dominance (see Barrett et al., 2005) in the Big Four through their strategic decision makers (mostly US and UK partners), indicating that the emphasis of the Big Four has always been on 'serving Western clients (multinationals) around the world rather than 'transnational' organizations operating in a borderless world' (ibid., 1223). Multinationals are seen (ibid.) as the major agent of such an Anglo-American accountancy internationalization movement, which constitutes the contemporary 'new imperialism'. In that sense, the Big Four is perceived as not only providing worldwide 'neutral' services, but also shaping 'core-periphery relations in the modern world economy' (ibid., 1223) through their involvement in major privatization deals in developing nations (Dwyers & Roberts, 2004), professional standard settings (Botzen, 2014) and tax avoidance (Carter et al., 2015). In other words, the discovery of a new imperialism in the Big Four has indicated that accounting firms do serve to shape the national and global economy; meanwhile, the Big Four tend to adopt certain practices in satisfying their (western) clients' needs, which suggests the possibility that their practices (for example, EA) are likely to be perceived as their patent or brand. Such a situation is likely to result in practical inequalities of EA among Chinese accounting firms between the Big Four and the rest, which would possibly shape accounting professionals' perceptions of EA.

With the global trend of third-party assurance for CSR and sustainability reporting, Chinese listed companies have started to realize the importance of CSR reporting assurance, which has eventually led Chinese scholars (Shen *et al.*, 2010; Shen & Qin, 2010; Shen *et al.*, 2011) to conduct EA professional-based research in the form of non-financial auditing and assurance. However, these studies are either normative or

descriptive arguments with a lack of in-depth analysis, which indicates a huge research gap for EA professional research in a Chinese context. According to a KPMG (2013) survey, the Big Four have occupied over two thirds of the market for global CCS services and have even become the dominant service provider in the Chinese market; whereas domestic firms in China generally stand in a much weaker position. As such, a generally pessimistic result has been identified through not only very limited participation of accounting bodies and practitioners in CSR and sustainability reporting assurance, but also little efforts made by Chinese accounting scholars. Meanwhile, the contemporary CSR assurance practices in China have generally failed to 'improv[e] the creditability and usefulness of social report' (Shen *et al.*, 2010: 74). This situation indicates that a good research field for professional-based SEA has not yet been established in China, thus hindering the development of Chinese SEA practices. It is therefore worth turning attention to the professional-based SEA research to explore how SEA is practised in the Chinese accounting profession, so as to identify insights in improving contemporary SEA practices.

To sum up, it is clear to see that every theoretical approach above contributes a single aspect of SEA practices that eventually construct a detailed picture of SEA studies; however, this picture is not complete. According to the existing literature, very few studies can evidence the institutionalization of Chinese SEA practices on a professional basis, which can hardly be reflected by theories discussed already. It is essential to notice the process of the institutionalization of SEA practices so as to build up a better understanding of the development of current Chinese SEA practices, as the process of institutionalization discusses how organizational practices become homogenized and generally accepted. What is more, legitimacy and stakeholder theory, derived from bourgeois PE, are two commonly used frameworks of current SEA studies, as they are claimed to best suit the definition of SEA. It is my motivation to take institution, legitimacy and stakeholder effects into account so as to construct a combined framework, which can help to present a comprehensive view of current Chinese SEA practices: how SEA practices become institutionalized and what factors can influence

the institutionalization of SEA practices. Therefore, it is of great importance to recognize (neo) institutional theory in current Chinese SEA studies while ensuring that legitimacy and stakeholder effects should not be omitted. Arguments on each theoretical perspective will be discussed in the theoretical framework section in detail.

2.7 Theoretical Framework

With the review of all above approaches, especially social and political theories, there are studies based around institutional theory (Archel *et al.*, 2011; Chiang, 2010; Hoffman, 1999; Larrinaga-Gonzalez, 2007), legitimacy (Deegan, 2002; Lehman, 1995; Patten, 1992; Wilmshurst & Frost, 2000) and stakeholder effects (Edgley *et al.*, 2010; O'Dwyer *et al.*, 2011; Orij, 2011; Saravanamuthu & Lehman, 2013; Tilt, 2007) which offer the most interesting insights, particularly with regards to this project. Meanwhile, legitimacy and stakeholder effects need to be taken into consideration as well, which will be outlined in this section. More details are presented in the discussion chapter.

2.7.1 Neo-institutional theory

With the development of social and environmental accounting research (SEAR), institutional theory, particularly neo-institutional theory, which is regarded (Dillard *et al.*, 2004; Suddaby, 2010; Greenwood *et al.*, 2014; Lounsbury, 2008; Lawrence *et al.*, 2011) as a dominant theoretical perspective in macro organizational phenomena, has started to be used in SEA research on an organizational behavioural viewpoint through organizational operations, changes and developments (Tolbert & Zucker, 1983; Dillard *et al.*, 2005; Larrinaga, 2007; Sieweke, 2014). This has contributed to a broader explanation of SEA theoretical research.

The word 'institution' can be defined (Dillard *et al.*, 2004: 508) as 'an established order comprising rule-bounded and standardized social practices'; thus, the process of institutionalization can be generally seen (Ibid.) as a process that organizations expect in different social settings to be developed and learned. As stated by institutional scholars (DiMaggio & Powell, 1991; Selznick, 1995; Greenwood *et al.*, 2014), old institutionalism (also known as historical institutionalism) was often used in political

studies of formal institutions of government, which focuses primarily on a macro-level of competing values, power and influence, coalitions and informal structures. Meanwhile, Tilly (1984) stated that historical institutionalism is to measure (big) structures, (large) processes and make (huge) comparisons, which were normative and prescriptive i.e. legal regulations and professionalization. As Lounsbury (1997: 466) states, historical institutionalism is 'derivative of the rigid and unsatisfying functionalism'. Meanwhile, he (ibid., 466) argues that neo-institutionalism seems to misrepresent Selznick's historical institutionalism a little and 'takes an overly narrow view of what the rich tradition of institutionalism in organizational sociology is all about'. Selznick (1996: 273) has identified legitimacy as 'a sustained and driving force among organizational factors', which encourages institutional mimesis, suggesting that organizations tend to be highly sensitive to their cultural environment within which they live. As a result, DiMaggio and Powell (1983) argue that organizations tend to model themselves after those ones perceived to be successful. On the one hand, this justification has narrowed down the view of institutionalism from political systems to an organizational level; on the other hand, this narrowed view fits even better to describe the process of institutional change in the contemporary society at large. Moreover, Ball and Craig (2010: 283) state that neo-institutional theory emphasizes the survival value of conformity with the institutional environment; specifically, they claim that such conformity will lead to enhance stability, legitimacy and access to resources (Ibid., 283). In other words, neo-institutional theory is about following external rules and norms, which indicates that the normative issue is still the dominant focus of neo-institutional theory. Scott (2008b) reviews the progress of institutional theory's development⁷ and regards the process for the development of institutional theory as having 'reached the stage of healthy young adulthood' (ibid., 439), which indicates that institutional theory has been developed in a 'correct' or satisfactory way as scholars expected. It is argued (Borrena et al., 2010; Glover et al., 2014) that institutional theory

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⁷ Scott (2008) summarizes as 'from looser to tighter conceptualization' (ibid., 428), 'from determinant to interactive arguments' (ibid., 429), 'from superficial to consequential change' (ibid., 432), 'from assertions to evidence' (ibid., 432), 'from superficial to consequential change' (ibid., 432), 'from assertions to evidence' (ibid., 433), 'from organization-centric to field level approach' (ibid., 434), 'from non-rational formulations to rationality within institutional framework' (ibid., 435) and 'from institutional stability to institutional change' (ibid., 437)

explains the implementation of practices without obvious economic value. They have generally identified an uncertain association between environmental performance and profitability⁸ with the suggestion that the link between organizational environmental performance and financial results is preferably uncertain, and finally conclude that non-economic utilities tend to play a major role for companies to adopt environmental friendly policies and practices; whereas economic factors such as financial performance and profitability are less important in this case. As a result, neo-institutional theory has been used as a non-economic oriented theory to explain not only 'external pressures and constraints on the firm and advisability of adhering to societal rules and norms' (Meyer & Rowan, 1977; DiMaggio & Powell, 1983; cited by Borrena et al., 2010: 83), but also 'the extent to which institutional requirements are subject to interpretation, manipulation, revision, and elaboration by those subject to them' (Scott, 2008b: 434), which makes it fit well as an explanatory tool for environmental management, as EA is illustrated by those external norms and practices 'obtaining the status of social fact' (Oliver, 1992: 148) and the discussion of legitimacy that organizations do not respond until it becomes 'obvious and proper' (Ibid., 148). What is more, Ball and Craig (2010: 284) favour an institution-based level of analysis as a proper tool for 'emphasizing organizational structures or processes that are industry-wide, national or international in scope, and self-sustaining'. As an earlier sociological and political version, historical institutionalism is not frequently used to describe how accounting practices have changed, especially for the discussion of SEA.

It is stated (Greenwood & Hinings, 1996: 1023) that neo-institutional theory is usually supposed to explain the similarity and stability of organizational agreements in a certain (group of) organization(s) instead of organizational change theory. Meanwhile, the main assumption of institutional theory is that organizations are constructed through 'institutionalized practices and historical experiences that can construct normative models of organizational legitimacy' (Oakes *et al.*, 1998: 259). As stated by Suddaby (2010), neo-institutional theory can be largely understood from the three following

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⁸ Sarkis and Cordeiro (2001) argue that companies will have a market-based incentive to reduce its toxic gas emissions to eliminate air pollution if investors care about environment; whereas only a minority of empirical studies have proved a positive relationship with the majority showing a neutral or negative relationship.

aspects: on a micro organizational level, Zucker (1977: 728) regarded institutionalization as 'both a process and a property variable', meanwhile, she claimed that institutionalized acts as both objective 10 and exterior 11, with the investigations on the effect of different degrees of institutionalization in cultural persistence by three unique experiments, namely transmission¹², maintenance¹³ and resistance to change¹⁴ experiment, which strongly and consistently supported and matched her presumed correlation between the degree of institutionalization and cultural persistence. Secondly, Meyer and Rowan (1977) focused on the attribution of rationality to some certain activities by organizations; they claim that organizations tend to resemble each other so as 'to increase their legitimacy and their survival prospects, regardless of whether the acquired practices are of immediate effectiveness' (Ibid., 340). Then, DiMaggio and Powell (1983, 1991) stated that institutional effects are diffused through organizations and regarded institutionalism as an essential result of the institutional and competitive process. Likewise, Larrinaga-Gonzalez (2007: 151) regards institutionalization as 'both the process and the outcome of a process', and describes how a social practice can become usual, desirable and acceptable in an organization. Scott (1995, 2008) phrases it differently as three pillars of institutions: regulatory, normative and cognitive, because institutions were transported by cultures, structures and routines, which operate at multiple levels of jurisdiction. In general, neo-institutionalism aims to ask 'how social choices are shaped, mediated, and channelled by the institutional environment' (Hoffman, 1999: 351); meanwhile, both DiMaggio and Powell (1983) and Scott (1995) present the elements of institutionalization by using different phrases, which could be substantially similar (coercive-regulative, normative-normative, mimetic-cognitive).

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⁹ Zucker (1977: 728) wrote: 'It (institutionalization) is the process by which individual actors transmit what is socially defined as real and, at the same time, at any point in the process the meaning of an act can be defined as more or less a taken-for-granted part of this social reality.'

¹⁰ Acts are objective when they are potentially repeatable by other actors without changing the common understanding of acts (ibid, 728).

¹¹ Acts are exterior when the subjective understanding of acts is reconstructed as intersubjective understanding so that the acts are seen as part of the external world (ibid, 728).

¹² A transmission experiment is to test the proposition that the greater the degree of institutionalization, the greater the generational uniformity of cultural understanding (ibid, 731).

¹³ A maintenance experiment tests the proposition that the greater the degree of institutionalization, the greater the extent of maintenance of cultural understanding without direct control (ibid, 738).

¹⁴ Resistance to change tests the proposition that the greater the degree of institutionalization, the greater the resistance to change in cultural understanding through personal influence (ibid, 739).

Neo-institutionalism is claimed (Scott, 2001) as a perspective of viewing institutions outside traditional economics by illustrating how and why institutions would emerge in a certain way within a given environment, which is accepted by subsequent scholars (see Chiang, 2010; Qian et al., 2011). Neo-institutional theory assumes that business will adopt CSR and EA practices because of various institutional pressures largely due to other organizations developing similar practices, and they may 'risk disapproval from...economically powerful stakeholders' (Deegan, 2007: 393) if they do not do so, which has clearly identified imitating behaviour from organizations. For a major component of neo-institutional theory, Meyer and Rowan (1977) claim that organizations tend to isomorphise¹⁵ so as 'to increase their legitimacy and their survival prospects, regardless of whether the acquired practices are of immediate effectiveness' (1977: 340), which helps to generate academic interest in institutional isomorphism without explicitly developing a framework. DiMaggio and Powell (1983) also argue that institutional effects are diffused through organization and regard institutional isomorphism as an essential result of the institutional and competitive process. The process is institutionalization is thus described (Meyer & Rowan, 1977; DiMaggio & Powell, 1991) as a process where organizations resemble each other. It also refers to a set of shared meanings, beliefs, practices and values which, combined, tend towards the relative homogenization of organizations. In a similar view, Scott (2001) phrases it differently as three pillars of institutions: regulatory, normative and cognitive, because institutions are transported by cultures, structures and routines, which operate at multiple levels of jurisdiction. Scott (1995: 51) states that the three pillars of structures are identified by sociologists 16 'as a vital ingredient of institutions', which sounds more generally sociological. As for isomorphic mechanisms, these are claimed (DiMaggio & Powell, 1983) to focus on the homogeneity rather than variation of organizations¹⁷.

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¹⁵ As the verb form of isomorphism, isomorphise is defined as 'a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions' (DiMaggio & Powell, 1983: 149; Lieberman & Asaba, 2006: 371).

¹⁶ Economists often view institutions primarily on the regulative pillar, which focus on the behaviour of individuals and firms in markets and other competitive situations. Sociologists often see institutions primarily on a normative pillar with the consideration of prescriptive, evaluative, and obligatory dimensions in social life. Anthropologists like seeing institutions primarily on a cultural cognitive pillar, which involves the shared conceptions that constitute the nature of social reality and the frames through which meaning is made (see Scott, 2000: 51-58).

¹⁷ DiMaggio and Powell wrote: 'We ask...why there is such startling homogeneity of organizational forms and

DiMaggio and Powell (1983: 148) state that organizations should constitute a recognized area of institutional life, including key suppliers, resources and product consumers, regulatory agencies, and other organizations which provide similar services and products. They then claim that their intention is not only to 'competing firms or network of organizations actually interact' (ibid. 148), but also to 'the totality of relevant actors' (ibid. 148). Scott (2008b: 439) regards the process of the development of institutional theory as having 'reached the stage of healthy young adulthood' (ibid., 439). Both DiMaggio and Powell (1983, 1991) and Scott's (2000, 2008, 2008b) perspectives are regarded (Larrinaga-Gonzalez, 2007) as neo-institutionalism, which aims to ask 'how social choices are shaped, mediated, and channelled by the institutional environment' (Hoffman, 1999: 351). In summary, DiMaggio and Powell (1983) and Scott (2000) both present the elements of institutionalization by using different phrases, which could be substantially similar (see table-1). Thus, neo-institutional theory is used to explore EA innovations as it better explains EA practices by explicitly considering 'process and internal factors' (Adams & Larrinaga-Gonzalez, 2007: 344). In addition, the focus on how organizational practices might be adopted through the processes of institutionalization (isomorphism) has made institutional isomorphism 'stand out in explaining EM and EMA' (Qian et al., 2011) practices, which have led institutional isomorphism to be dominant framework.

DiMaggio and Powell	Scott (2001):	Overlapping area
(1983):	Three pillars of institution	
Institutional isomorphism		
Coercive mechanisms Such as the law or the market, leading organizations to comply and to align with the norms in such a way that behaviour becomes very similar in all of them.	Regulative structures Such as the law or the market, involving the capacity to establish rules, inspect conformity and manage sanctions in order to influence future behaviour.	In compliance with legal regulations, aiming at making organizational behaviour becomes legally acceptable.

Normative mechanisms Propelled through professionalization, formal education and professional networks, leading individuals to act according to values and norms.	Normative structures Based on social values and norms, leading individuals to act according to societal expectations.	Leads individuals to act according to social values and norms.
Mimetic mechanisms Organizations imitate those peer organizations that seem to be more successful and legitimate.	Cognitive structures Taken for granted symbols, meanings and roles that support the legitimacy of organizations.	Imitation from each other to be legitimate and/or successful.

Table-1 Elements of institutionalization (see Larrinaga-Gonzalez, 2007: 155)

It can be identified from Scott's (1995) work that his notion of institutions stemmed from legitimacy, which argued that legitimacy is based on regulative, normative and cognitive pillars. He further explained that institutions consist of and are transported by the above three structures and activities that 'provide stability and meaning to social behaviour' (Ibid., 33); whereas DiMaggio and Powell (1983) regard isomorphism as a mechanism instead of a structure. As a result, which vision is used varies in different approaches in neo-institutional theory. For sustainability reporting (SR) in SEA studies, Scott's (2000) three pillars' structure would be preferred, since SR could become institutionalized. This process of institutionalization is discussed by Larrinaga-Gonzalez (2007: 155) who examines it with reference to sustainability reports, noting that institutionalization can determine 'to some extent the choice of organizations in terms of whether or not to publish a sustainability report and how to publish it'; in that sense, SR consists of 'regulative, normative and cognitive structures, which would describe what type of reporting is produced, for who, by whom and with what assumed purpose' (Ibid., 155). However, the focus of reporting issues (Scott's three-pillar version) does not sufficiently cover a broader context of SEA practices; especially on a professional basis i.e. how and why EA practices have (not) been adopted. What is more, mimetic isomorphism has been explicitly discovered in accounting and EA practices (by Chiang, 2010; Han, 1994); whereas Larrinaga-Gonzalez (2007) claims it is difficult to examine

mimetic (cognitive) factors in environmental reporting issues. Furthermore, the choice of institutional isomorphism would suggest the importance of focusing on broader EA practices rather than just reporting issues. With the above comments, I feel the choice of an isomorphic mechanism fits better in Chinese EA practices, as it focuses on adopting similar practices and policies in broader SEA practices rather than only reporting issues. Therefore, institutional isomorphism is used to explore EA innovations as it better explains EA practices by explicitly considering 'process and internal factors' (Adams & Larrinaga-Gonzalez, 2007: 344); what is more, the focus on how organizational practices might be adopted through the processes of institutionalization (isomorphism) has made institutional isomorphism stand out 'in explaining environmental management and environmental management accounting' (Qian *et al.*, 2011) practices. All these comments have led to institutional isomorphism being chosen as my dominant theoretical framework.

Tuttle and Dillard (ibid.) state that coercive isomorphism arises from asymmetric power relationships, in which changes are imposed by an external related party (customer, supplier, and competitor). Coercive isomorphism mainly refers to complying with compulsory regulations and legal requirements, which highlights the importance of factors that the organization imposes upon the individual as a condition of membership, and certain non-negotiable reward structures entice appropriate behaviour (Fogarty, 1992) i.e. the adoption of IAS in developing nations is influenced by the command of powerful bodies (the role of The World Bank in the globalization of Bangladesh accounting standards, see Mir and Rahaman, 2005); applied to EA, it is about drawing governmental participation in regulating and legitimizing laws and regulations in EA practices. Chiang's (2010) study stated that both auditing regulations and local government laws mandated public sector auditors to add environmental considerations for public sector organizations, and the Auditor-General expected all public sector auditors to comply with his/her requirements. All those discussions have contributed to the identification of coercive isomorphism 'whereby the Auditor-General imposes on PSAs a duty to prioritize environmental matters in the audit of financial reports' (Chiang, 2010: 926). Archel et al. (2011) use both interviews and documentary reviews to investigate the institutionalization of Spanish CSR discourse, and concluded that the business capture of CSR has been ingrained into the institutional process (isomorphism). Bouma and van der Veen's (2002: 286) study indicates that an organizational field creates a concept for capturing environmental costs which would promote the development of environmental management accounting in individual organizations through a mimetic process, which could make the concepts and approaches of EA significant issues in the organizational field and finally be institutionalized.

Compared with coercive isomorphism, mimetic isomorphism is not necessarily derived from coercive authority. Mimetic isomorphism is claimed (Tuttle and Dillard, 2007: 392-393) to be usually occurred when the processes motivated by mimetic pressures become institutionalized so that copying continues because of its institutional acceptance instead of competitive necessity: more specifically, DiMaggio and Powell (1983: 151) regard uncertainty as a powerful force that encourages imitative (mimetic) behaviours 'when organizational technologies are poorly understood, when goals are ambiguous, when the environment creates symbolic uncertainty'. That is to say, while coercive isomorphism focuses on the compliance with legal regulations to make organizational behaviours legally acceptable, mimetic isomorphism tends to model themselves to each other to become legitimate (or successful). Thus, both isomorphic factors have reflected a shared focus of maintaining legitimacy. The difference, however, comes from how legitimacy can be maintained, or perceived: coercive forces emphasizes on obeying the rules as a way to legitimize organizational behaviours, on the condition that a shared social norm has already been established. Rather, mimetic mechanism tends to maintain legitimacy by modelling from other successful organizations; whereas modelling is claimed (DiMaggio and Powell, 1983) to be a response to uncertainty. As a result, mimetic behaviour can be regarded as 'a rational imitation of superior organization' (Lieberman and Asaba, 2006: 372) as it 'economizes on search costs to reduce uncertainty that an organization is facing' (ibid., 371). This is claimed to include the 'benchmarking and identifying of best practices and leading players in the field' (Tuttle & Dillard, 2007: 392). As a mimetic example, the adoption of international accounting standards (IAS) in many developing nations is caused by imitating behaviours (see Mir and Rahaman, 2005), as organizations tend to model themselves after similar organizations in their fields which they perceive as more legitimate or successful (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Chiang (2010) has discovered that the New Zealand Institute of Chartered Accountants has adopted an imitative approach i.e. the adoption of international auditing standards and guidance statements for NZ auditors. Moreover, it has been identified that financial auditors had a tendency to adopt '...company management which endorses technical rationality as a legitimacy criterion' (Chiang, 2010: 927). All these findings have led Chiang (ibid., 925) to conclude that 'mimetic influence may cause auditors not to prioritize environmental matters for companies'. In a quantitative way, Shen and Su (2012) use normative distribution and the disclosure level of annual reports to examine isomorphic influence in corporate [environmental] information disclosure, with the discovery that most environmental disclosures are at a lower disclosure level, except a few environmental-sensitive corporations. They also find that the level of environmental disclosure significantly deviated from the normal distribution that is highly concentrated at a lower disclosure level, which leads to the conclusion that an apparent isomorphic influence has been tested. They then established a mathematical model to analyse imitating behaviour of corporate environmental disclosure, with the conclusion that corporations tend to imitate from an average level of disclosure status rather than leading companies. Both examples have illustrated the process of imitation, and more specifically, mimetic isomorphism.

Normative isomorphism is regarded as consisting of 'conforming to a privileged worldview within the organizational field' (Tuttle & Dillard, 2007: 393). Tuttle and Dillard (ibid. 394) make further comments that 'formal education and legitimization of the knowledge base required of the field' should be regarded as a significant component of normative isomorphism, which indicates that normative isomorphic pressures can be often identified through professional education and training. Within this context, members of the same professions will exchange ideas and adopt practices that are considered by the professional community to be up-to-date and effective, which could result in homogenous attitudes and behaviours in adopting similar practices via

education and training processes (Larrinaga-Gonzalez, 2007). Apart from that, Zucker (1987) explains organizational structure and change by the idea that individuals prefer to reduce uncertainty and that the institutional process resolves uncertainty i.e. the imitation for firms to widely adopt EA practices is likely to help improve sustainability in accounting, which resolves uncertainty in environmental pollution. Chiang's (2010) results show that most NZ financial auditors did not receive any specific training for environmental matters, so that they could not prioritize environmental matters when auditing financial reports. In contrast with the majority of financial auditors, some public sector auditors claimed that they were given rigorous training in environmental matters and the Auditor-General exerted heavy normative pressure on his staff to achieve common standards of professional practice and attitude when dealing with environmental matters. Therefore, Chiang concludes that there are normative pressures upon current NZ environmental auditing practices.

In SEAR, the process of institutionalization has often arised from the needs for organizations 'to respond to environmental expectations, guarantee their survival and increase their success possibilities in a particular environment' (Larrinaga, 2007: 155). Apart from that, neo-institutional theory is claimed (Deegan, 2007) to assume that business will adopt corporate social responsibility (CSR) and EA practices because of various institutional pressures. This is largely because others are developing similar practices and may 'risk disapproval from...economically powerful stakeholders' (Larrinaga, 2007: 393). Ball and Craig (2010) analysed issues arising from the intersection of the environmental agenda (UK and Canadian council) with accounting theories (Accountability) and practices (EA), which generally reflects a standardized view that emphasizes the significance of normative forces i.e. national standards and performance indicators for the environmental agenda in UK local government. Le and Bartlett (2014) investigated how impression management had been used to deal with legitimacy gaps between organizations and societal expectations that drew on an institutional perspective, with the finding that organizations tended to rely on their own tangible technical attributes instead of shared norms of what should be responsible when there were no institutionalized rules in place around CSR concerns, which reflected that institutional theory helps to explain organizational reluctance for the adoption of certain EA practices. Jennings and Zandbergen (1995: 1023) state that institutional theory focuses on 'how items become rule-like or become social facts', which indicates that institutional theory is useful to explain how the perception of EA can be generated and accepted by both inside and outside organizations. More specifically, this linkage between institutional theory and practitioners' perceptions can be reflected through their routines, including daily works, practical guidelines, knowledge background and wider marketing and non-marketing context, suggesting the necessity for institutional isomorphism to become the dominant framework for this thesis, which fits well to describe how institutional factors can promote or hinder the development of Chinese contemporary EA practices in terms of accounting professionals' perceptions on EA.

As defined in a classical version, institution can be seen as a 'settled habits of thought common to the generality of man' (Veblen, 1919: 239), indicating that institutional drivers can be often embedded within Chinese accounting professionals' daily routines in the following: a coercive impact can be largely reflected through government intervention, policy and regulation requirements, which eventually shape professionals' daily routines and, more specifically, perceptions on mandatory forces. Accounting professionals' perceptions from normative impacts are supposed to come from professional standards, ordinary training and previous education, which are likely to shape their 'unique' understanding on the nature of EA. Apart from that, accounting professionals' daily routines and perceptions on EA can be largely reflected from a cognitive (or mimetic) sense through their daily works i.e. whether, why and how EA is (not) adopted: more specifically, this process is likely to involve ordinary practices, government influences, marketing, and other influences. Thus, neo-institutional theory is used as framework to not only data analytical tools in terms coding and categorization of data, but also theoretical analysis at both primary and deeper levels, which will be revisited in methodological chapter.

Neo-institutional theory is claimed (DiMaggio & Powell, 1983) to discuss how organizations would model themselves on others perceived to be successful; meanwhile,

they also held the point that the higher degree of uncertainty, the more rapid rate of isomorphic changes organizations would make. This suggests the necessity that the term 'successful' and 'uncertainty' need to be defined clearly as a criteria for organizations to copy others' behaviour. As a result, neo-institutional theory is also used to identify the criteria of 'successful organizations' and 'uncertainty' in both organizational and organizational field context i.e. how individual accounting firms perceive the meaning of successful companies, how accounting firms respond to certain uncertainty, how EA practices have been institutionalized in the Chinese accounting profession, and the Chinese accounting professionals' perception of successful firms. This thesis also reflects that the majority of domestic accounting firms have not yet adopted certain EA practices, which suggests the necessity for neo-institutional theory to identify the resistance of adopting EA practices within accounting firms (organization) to the Chinese professional accounting industry (organizational field). In summary, neo-institutional theory, as both a dominant framework and analytical tool in this thesis, is to describe how EA practices have been (not) adopted and practised in accounting firms through Chinese accounting professional perceptions of EA.

While neo-institutional theory is seen (Dillard *et al.*, 2004; Suddaby, 2010) as a dominant macro organizational framework, its application in accounting research has been rather restricted. As Suddaby (ibid) discussed, institutional isomorphism tends to focus primarily on examining the empirical fact of diffusion (communication) and its role in the isomorphic process, but it fails to address why and/or how such diffusion happens. In other words, institutional isomorphism is seen (Greenwood & Hinings, 1996; Suddaby, ibid) as a positive theory that aims to explain the similarity and stability of organizational agreements in certain organizations; whereas it is not used as organizational change theory. This has therefore indicated the discounted usefulness of neo-institutional theory to interpret how and/or why EA is adopted, which suggests the necessity to review another theory as a possible supplement in the next section.

2.7.2 Legitimacy

It is stated (Meyer & Rowan, 1977) that (neo)institutional theory explored different mechanisms through which information about legitimate and socially accepted or organizational behaviour could be transmitted and such behaviour institutionalized in organizations (see Qian et al., 2011: 98), and the essence of (neo)institutional theory is claimed to achieve legitimacy. Legitimacy is generally defined as 'a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions' (Suchman, 1995: 574). Applied to EA, I would prefer the idea that organizations required 'social acceptability and credibility' if they were 'to survive and thrive in their social environments' (Scott et al., 2000: 237; accepted by Deegan, 2006; and Patten, 1992), which can illustrate why legitimacy fits into this research, as these theoretical perspectives can not only indicate that the achievement of legitimacy is a goal for EA practices and institutional isomorphism, but also identify an apparent overlap between legitimacy and neo-institutional theory. According to Dowling and Pfeffer (1975), threats of organizational legitimacy would exist if its value system is perceived to be incongruent with the value system of the larger/macro social system.

It is claimed that the use of legitimacy theory in SEA studies is 'to describe SER as a strategic tool for closing [the] legitimacy gap¹⁸' (Spence *et al.*, 2010: 81); in addition, legitimacy is often introduced as Scott *et al.*'s (2000) argument that organizations' behaviour should be socially acceptable and credible if they want 'to survive and thrive in their social environments' (2000: 237), as this concept does suggest an overlap with institutional isomorphism¹⁹. From the 1970s, society started to demand business to address the social issues inherently related to organizations (Patten, 1992); therefore, legitimacy theory came to stress how business would respond to social expectations. Patten (1992) believes that firms could use environmental disclosure to influence the public policy process, by 'addressing...legislative concerns...or...projecting an image

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¹⁸ Lindblom (1993: 3) wrote: 'To the extent that corporate performance does not reflect the expectations of the relevant publics a legitimacy gap exists.'

¹⁹ Chiang stated that institutional theory 'posits that organizations adopt those practices that are perceived as legitimate in society...are influenced by coercive, normative and mimetic pressures in their organizational environment and constantly acquiesce, compromise, avoid, defy and manipulate strategies to respond to these pressures' (2010: 918). This description has indicated that institutional isomorphism can be a tool for improving corporate legitimacy.

of the company as socially aware' (1992: 472), which is the exposure of a company to the social and political environment. Therefore, he examines the change in environmental disclosure in annual reports by petroleum firms and concludes that the search for legitimacy of a firm's activities would lead firms to include more environmental information on their annual reports. Deegan (2002) examines the legitimacy effects of social and environmental disclosure, and he makes conclusions that the search for legitimacy is one of the motivations 'driving managers to externally report information about an organization's social and environmental performance' (2002: 302). Archel et al. (2009) examined the role of state played in the social and environmental disclosure of the annual report in Spain; they then discovered that the firm used social and environmental disclosure to legitimize new product processes by manipulating social perceptions, which is supported by the government. Those studies have generally stated that legitimacy itself is a positive theory (see Deegan, 2007), which is seen (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1995; Greenwood & Suddaby, 2006) as an essential goal for institutionalization. Thus, legitimacy usually appears as a positive theory that examines social and environmental disclosure, whereas it can hardly be developed as an independent framework for accounting research. As mentioned in the previous section, both legitimacy and stakeholder theory are derived from the political economy that reflects the negotiation (communication) of a social-organizational relationship. This has suggested the possible interests of a stakeholder review, which will be discussed next.

2.7.3 Stakeholder

Being derived from political economy that exercises the 'relationships between the interest groups of pluralism without explicit recognition of the way in which the forces of the system construct the self-interests as group interests' (Gray *et al.*, 1995: 53), stakeholder theory is drawn from managerial and organizational perspectives that focus on the 'continued success of the company' (ibid.). At the very beginning, Friedman (1970) insisted that the only social responsibility of enterprise was to protect shareholder value, which implies that the shareholder was the only stakeholder.

Freeman and Reed (1983: 89) use a wider concept of stakeholder: 'other groups to whom the corporation is responsible in addition to stockholders: those groups who have a stake in the actions of corporation', which include formal, economic and political stakeholders. It can be indicated that the nature of stakeholder has been moved to broader stakeholder groups to whom the corporate entity is responsible, which has then developed to be the main current stakeholder analysis. Stakeholder analysis has been frequently used in EA studies²⁰ because it can not only match best with the definition of SEA²¹, but can also help to identify connections between stakeholder management and CSR (Edgley et al., 2010; Hung, 2011; Roberts, 1992; Tilt, 1994, 2007). ST could be seen as the theoretical framework that most matches with the definition of SEA and apart from that, the purpose of corporate social and environmental disclosure is claimed to manage (manipulate) demands and to maintain the support of particular groups²² (Gray et al., 1996), which is widely accepted by SEA studies. Specifically for this project, stakeholder analysis acts as a complementary framework to illustrate the interaction between EA adoption and different interest parties i.e. whether the demand from customers would shape EA adoption; whether government intervention would promote or hinder the development of EA; and whether/how the accounting profession negotiates with government in adopting EA practices. As such, stakeholder analysis as a dependent framework has been employed for complementary purposes.

The goal of institutional isomorphism is to achieve legitimacy, and focus on survival in a competitive society, which shows the overlap between these two theories. For legitimacy and stakeholder theories, both can be seen as overlapping perspectives within the political economy, as both focus on a pluralistic world with a wide range of social-organizational relationships, and both concentrate on the continuous success of business. Stakeholder effects and institutional isomorphism are interactive, as

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²⁰ Deegan (2002: 295) stated that stakeholder theory helped 'in identifying what groups might be relevant to particular management decisions, and perhaps, which expectations the organizations have to pay more attention to conform with'.

²¹ SEA had been defined (Gray *et al.*, 1987: 9) as 'the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large...upon the assumption that companies do have wider responsibilities than simply to take money for their shareholders'.

²² In that sense I would respond to the previous section regarding to issues in decision-usefulness that, even though it has been criticized, decision-usefulness still can be valid as an objective of SEA, as decision-making processes from different stakeholder groups still mainly rely on the information that has been disclosed.

stakeholder demands can influence ordinary EA practices; meanwhile, the adoption of accounting practices (reporting, disclosure) will influence the decision-making process of different stakeholders. Compared to other approaches discussed in previous sections, I find institutional isomorphism fits best to view SEA practices in a broader social and organizational context, which has led it to be the dominant framework. However, as I have previously mentioned, this project focuses on the institutional findings of current Chinese EA practices in a broad and comprehensive view, which needs to consider legitimacy and stakeholders together to combine their main focuses so as to identify some discoveries. Therefore, the common area (or overlapping area) between all three theories becomes important and valuable in developing frameworks of this particular project. While the focus on legitimacy and stakeholders cannot satisfy my needs because both theoretical perspectives focus on the single aspects of EA practices, institutional isomorphism has drawn my attention in that it can possibly link everything (legitimacy, stakeholder, and institution) together by illustrating the process of adopting EA practices within organizations. This inspires me to choose institutional theory as the dominant framework, with the consideration of legitimacy and stakeholders. With regards to all the above comments and analysis, I would argue all institutional, legitimacy and stakeholder theories have brought insightful ideas in explaining organizational EA practices, which have been widely used by scholars who focus on CSR and SEA studies. As I have mentioned, the reason not to use political economy as an evaluation framework is that the focus on political matters is likely to lead this topic in a different direction, even though Gray et al. (1995) stated the importance of political influences and the use of bourgeois' PE in the studies of EA practices. In summary, there have been strong inter-relationships between each theoretical perspective that cannot be easily divided, and this has led me to develop this multi-framework.

2.8 Theoretical summary

Gray et al. (1995) state that stakeholder and legitimacy theory could enrich the understanding of corporate environmental disclosure practices; they also state that both

theories are concerned with the "mediation, modification and transformation" of sectional interests, structural inequity, conflict and the role of the state...' (Gray et al., 1995: 53). They focus on a pluralistic world as a wide range of social-organizational relationships and activities and comment on how stakeholder and legitimacy theory illustrates a type of organization-society relationship, which might examine the legitimacy of the system as a whole. Deegan makes further comments that while legitimacy theory has discussed the expectations of society in general, stakeholder theory has provided more refined resolutions 'by referring to different stakeholder groups within society' (2002: 295). As a result, Qian et al. (2011) claim that both legitimacy and stakeholder theory have taken 'an open system view of organization' and regard a 'two-way open' dialogue between organizations and stakeholders as an important management and communication tool. All those arguments show the fact that legitimacy and stakeholders can be complementary in SEA studies.

Deegan (2002) states that the central assumption for legitimacy theory is based on a manipulative logic and self-interest. However, institutional theory is claimed to be not only based on manipulative logic and self-interest, but also 'on the logics of appropriateness' (Larrinaga-Gonzalez, 2007: 163). It does not privilege any of those three isomorphic structures and he claimed that they operated at different levels through the process of organizational institutionalization. Apart from that, Larrinaga-Gonzalez (2007) argues that institutional theory focuses on the 'longitudinal study of institutional change and how organizations became institutionalized' (2007: 163). In other words, institutional theory is proved to be a richer theoretical framework for SEA studies, which is the reason I intend to put my project mainly in an institutional context. Furthermore, Deegan (2006) advocates for institutional theory, stating that it provides a very useful complement to both legitimacy and stakeholder analysis, which helps with an understanding of how business could respond to adjusting social and institutional pressures and expectations. In addition, institutional theory is linked EA practices to 'the value of the society' (ibid., 305) in which it operates, and also to the need to maintain its legitimacy. He also emphasizes that 'the structure of the organization...and the practices adopted by different organizations tend to become similar to conform with

what society, or powerful groups, considered to be 'normal'...' (ibid., 305), and to those who refuse to be of a form that had become 'normal' might have problems in retaining their legitimacy, which explicitly points out the test of isomorphic factors. In other words, Deegan's arguments have deeply inspired me. Finally, what encourages me to determine institutional isomorphism as my dominant framework is that institutional isomorphism primarily assumes that organizations adopt EA practices that are perceived to be socially and legally acceptable so as to enhance their chances of survival, which indicates an obvious overlap between institutional theory (isomorphism) and legitimacy. Thus, it can be concluded that institutional theory and legitimacy theory are mutually complemented in a SEA context.

As previously mentioned, legitimacy and stakeholder theory are regarded (Gray et al., 1995) as two overlapping perspectives within the context of a bourgeois political economy. Deegan and Bloquist (2006: 350) argue that stakeholder theory (often implied within legitimacy) is focused upon 'issues of stakeholder power and how a stakeholder's relative power impacts their ability to 'coerce' the organization into complying with the stakeholder's expectation'. Meanwhile, Meyer and Rowan (1977) make the emphasis that the essence of institutional isomorphism is to achieve legitimacy; DiMaggio and Powell (1983) also propose similar points, that institutional isomorphism indicate the purpose of organizational adoption of similar practices and policies under the condition that they are perceived as legitimate in society. In conclusion, strong inter-relationships between institutional, legitimacy and stakeholder theory in SEA studies have been identified, which are difficult to separate from each other. Therefore, this is why aspects of these three theoretical perspectives will be used as analytical tools.

In the Chinese accounting profession, EA practices are conducted by qualified auditors, certified accountants and cross-disciplinary practitioners, which indicate that EA practical issues may be uncovered through their attitudes and behaviour, which are likely to lead to their different perceptions on EA. That is to say, their perceptions of EA could be highly likely to reflect the development of EA in a professional context. In so doing, this leads to the main research question of the thesis as following:

What is the perception of Chinese accounting professionals of EA?

Institutional factors as an intended driver could be embedded within the development of EA practices in the Chinese accounting profession through professional perceptions of EA. That is to say, their practical routines, attitudes and educational experiences are of great importance to identify institutional insights from an internal viewpoint. Apart from that, business may resemble each other due to external pressures (i.e. marketing competitions, legal and political regulations), which indicates that institutional insights could also be interpreted through an external context. Thus, the main research question will lead to the following sub question:

I. What and how may institutional factors influence current EA practices?

Additional insights might be identified as well as institutional factors through professional perceptions of EA: whether the adoption of EA is socially and legally desirable, whether the adoption of EA could meet demands from public organizations (clients), and how government plays its role in promoting or hindering EA in the accounting profession; whereas such concerns cannot be fully interpreted in terms of institutional analysis. As such, a supplementary sub question fits well in illustrating such non-institutional insights:

II. What other factors influence environmental accounting work, and how?

The research aim of this thesis is therefore to identify and explore the factors (a focus on the possible institutional, legitimacy and stakeholder effects) that influence the adoption of EA in the Chinese accounting profession; this has also become the primary objective of this thesis. Additional focus is given to the identification of other such factors influencing adoption, which are to be identified through participants' perceptions of EA during this process. Therefore, the perceptions of Chinese accounting professionals of EA thus become the secondary objective of the thesis. The next chapter will discuss the method used to achieve the research objectives of this thesis.

Chapter 3 Methodology

The previous chapter concluded by suggesting that the adoption of environmental accounting (hereafter EA) practices in the Chinese accounting profession is highly likely to be driven by a mixture of corresponding influences. This suggests that institutional factors, accompanied with stakeholder and legitimacy effects, tend to be the dominant drivers that lead to the adoption or resistance of certain EA practices. As such, the exploration of possible institutional, stakeholder and legitimacy factors is the primary objective, and the heart, of this thesis. But more importantly, such institutional drivers are likely be identified through Chinese accounting professionals' perceptions of EA, which makes the elaboration of perceptions as a secondary but fundamental objective. To address these two research aims and, more explicitly, answer the research question outlined in the previous chapter, the purpose of this chapter is therefore to outline the insights from contemporary commonly used accounting and, more specifically, social and environmental accounting (hereafter SEA) research strategies, namely positive, normative and critical approaches, leading to the presentation of research design and research analysis, which shall bring some methodological reflections on the chosen research strategies in the end.

3.1 Common Approaches in Social and Environmental Accounting

Accounting scholars (Baker & Bettner, 1997; Hopper & Powell, 1985; Jeanjean & Ramirez, 2009; Watts & Zimmerman, 1978, 1986, 1991) have arrived at the common ground that accounting research methods are mainly constituted by positive and normative research. Hopper and Powell (1985: 432) integrated the accounting research framework into two main dimensions: one dimension is objective-subjective, which illustrated the objective and subjective nature of reality, knowledge and human behavior, whereas the other dimension defined two alternative approaches to society, namely regulation²³ and radical change²⁴. As a result, Hopper and Powell have identified main

²³ According to Hopper and Powell (1985: 432), the dimension of regulation is concerned with regulative powers,

accounting research methods as functional, interpretive and radical approaches, namely positive accounting research (hereafter PAR) that focuses on capital market research in a 'is' pattern (see Ball & Brown, 1968; Beaver, 1968; Callen et al., 2013; Gaffikin, 2007; Pilcher, 2011; Radhakrishnan & Wu, 2014; Yang, 2013), which aims 'to explain and predict accounting practice' (Watts & Zimmerman, 1986: 2); normative accounting research (hereafter NAR) that interprets accounting practices in an 'ought to be' way (for example, Birnberg, 1980; Colesman, 1949; Hopper et al., 2009; Lewis, 1960; Parker, 2008, 2012; Siti-Nabiha & Scapens, 2005; Winjum, 1971; Wyatt, 1983; Zeff, 1978); and critical accounting research (hereafter CAR) that tends to investigate the social role of accounting (Broadbent & Laughlin, 2013; Deegan, 2006; Dillard, 1991) in a 'could be' view (for instance, Aronsson & Lofgren, 1996; Boardbent & Laughlin, 2013; Arrington & Puxty, 1991; Ciancanelli et al., 1990; Hooper & Steward, 2015; Hopwood & Miller, 1994; Humphrey & Owen, 2000; Laughlin, 1987; Lehman, 2006; Jenkins, 1995; Neu et al., 2001; Neu et al., 2013; Reiter, 1994; Yang & Modell, 2013). Being inspired by conventional accounting research, social and environmental accounting research (hereafter SEAR) framework generally follows the logic of conventional approaches, namely positive and interpretive research. Thus, this section is going to present each approach and evaluate their fitness to this thesis.

3.1.1 Positive Environmental Accounting Research

PAR is claimed to objectively explain and predict accounting practices by examining certain accounting practices in the field of capital market research (Gaffikin, 2007). This makes positive environmental accounting research (hereafter PEAR) focus on empirical research: more specifically, positive research is claimed (Patten, 2015) to be reluctant to move beyond the basic financial investigations (examination) of SEA projects, which actually reflects that positive research is purely used to describe specific EA practices without perceptions of value judgment and critical concerns of certain practices. In that sense, SEAR in a positive approach is supposed to be grounded in the

order and stability and sets out to explain why society tends to hold together.

²⁴ Hopper and Powell (1985: 432) regarded 'radical change' as the focus of fundamental divisions of interest, conflicts and unequal distributions of power that provide the potential for this radical change.

correlation between data and theories, particularly about examining the existence of certain theories embedded in reporting issues (Patten, 1991, 1992; Deegan et al., 2002; Hackson & Milne, 1996; Orij, 2010; Cho et al., 2010; Liempd & Busch, 2013; Matsumura et al., 2014) or the correlation between certain financial and environmental indexes (Li et al., 1997; Li et al., 2014; Green & Zhou, 2013), indicating that PEAR generally reflects a empirical-oriented view by examining certain hypotheses in quantitative models. It is true that positive methods have brought a scientific and objective viewpoint and dominated the mainstream accounting research, whereas the implication of positivism on exploring potential social factors in shaping and critically evaluating certain accounting practices is next to nothing. As a result, PEAR generally fails to 'address the issue of how to measure environmental liability' (Li's et al., 1997: 439), which can indicate the lack of value judgment as the major shortcoming. In general, PEAR fails to interpret an alternative view of how accounting 'ought to be' or 'could be', which has restricted itself on the grounds of empirical research instead of a wider research context. As such, the fitness of positivism in this thesis is restricted, which would bring necessary assessment on NEAR next.

3.1.2 Normative Environmental Accounting Research

While the accounting research field has been filled with many empirical and interpretive studies, scholars have just established a good field for SEAR, which is primarily based on theoretical arguments with rather little empirical evidence. As such, in this situation has emerged the thinking of Gray *et al.* (1995a) to construct a publicly available computer-readable database of social and environmental disclosure in a UK context, which is a way to develop contemporary PEAR. Nevertheless, this situation makes PEAR no longer occupy the leadership in SEAR. NEAR at this present stage is generally seen as a normative theoretical research that tends to establish certain practical guidelines (Ramanathan, 1976) or research classification (Mathews, 1984). Scholars (Beams & Fertig, 1971; Marlin, 1973) in the 1970s looked at accounting for environmental pollution and proposed to develop a new form of accounting, which motivated the emergence of 'green accounting'. In that sense, a normative approach

would maximize its significance in the research field of newly developed practices by establishing certain benchmarks and creating new orders in a subjective and deductive way. As a result, subsequent efforts on constructing certain social and environmental accounting research (SEAR, see Ramanathan, 1976; Chadick et al., 1993; Gray & Bebbington, 2001; Jones, 2003, 2010) and building up linkage between sustainability and accounting practices (Dillard et al., 2005; Bebbington et al., 2007; Bebbington & Larrinaga, 2008; Gray, 2010) have been made by subsequent accounting scholars, which demonstrates that SEA is practicable to a certain extent and it is designed to 'communicate the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large...' (Gray et al., 1987: 9); whereas a normative approach is claimed to reflect the 'subjective nature of the social world and attempts to understand it primarily from the frame of reference of those being studied' (Hopper & Powell, 1985: 446), which has led to criticisms of it being unscientific and less objective from positivists (Watts & Zimmerman, 1978, 1986). Meanwhile, the subjective nature may also lead to questioning the fairness and appropriateness for the role of accounting in social change, which motivates the emergence of a neutral but critical perspective in the next section.

3.1.3 Critical Environmental Accounting Research

While accounting scholars (Watt & Zimmerman, 1978; Hopper & Powell, 1985; Humphrey & Owen, 2000) maintained that economics provided the theoretical basis for accounting, debates (Puxty, 1993; Roslender & Dillard, 2003) have emerged arguing that accounting should be rooted in a broader theoretical context (sociological, philosophical, behavioural and organizational theoretical perspectives). Radical perspectives (Gray *et al.*, 1988; Deegan, 2006) claim that SEA acted just to legitimize those companies who provided disclosed information rather than challenge current social orders, which indicates that SEAR is seen as a wasted tool to sustain particular social structures (Tinker *et al.*, 1991; Deegan, 2006) instead of to 'destroy capitalism, (n)or to refine, deregulate and/or liberate it' (Gray *et al.*, 1988: 8), which causes a so-called 'inappropriateness' of applying conventional accounting to sustainable

assessment (see Gray, 2006, 2010). In other words, critical environmental accounting research (hereafter CEAR) primarily refers to interpretive EA research, and can be generally seen (Baker & Bettner, 1997; Lehman, 2010) as an exploration of non-economic roles of accounting in social and environmental practices (Dillard & Layzell, 2014; Jones & Solomon, 2013) and the role of accountants in climate change and sustainability practices (O'Dwyer & Owen, 2005; O'Dwyer, 2011). More importantly, critical research tends to focus on political studies of SEA, since the political economy is seen (Tinker, 1980; Cooper & Sherer, 1984; Deegan, 2006) as the origin of political accounting research and critical accounting research. Thus, claims that it is 'politically pragmatic and acceptable' instead of 'what is socially just, scientifically rational, or likely to rectify social ills' have been claimed (Tinker et al., 1991: 29; Grat et al., 1988) as the major focus of CEAR. Thus, CEAR is understood as a 'could be' version i.e. in what view can EA be interpreted? This situation leads CEAR to become an application of non-economic social science theories in SEAR projects (Gray, 1992; Bebbington et al., 2007; Larrinaga & Bebbington, 2001; Archel et al., 2011; Moore, 2013; Barone et al., 2013), political models (Gray et al., 1995b; Brown, 2009) and the role of states (Russell & Thomson, 2009). In other words, CEAR tends to interpret accounting practices in climate change and sustainability by rooting SEA in a wider non-economic social and political context.

With the review of research methods in accounting and EA, mainstream (positive) accounting research is claimed (Chua, 1986: 601) to be grounded 'in a common set of philosophical assumptions about knowledge, the empirical world, and the relationship between theory and practice', which emphasizes 'hypothetico-deductivism and technical control [and] possesses certain strengths'²⁵ – positive research is to answer a research question (examine research hypothesis) in an empirical way by testing correlations between different statistical variables (Baker & Bettner, 1997). Despite the fact that PAR has replaced the dominant position of NAR in accounting research since the 1960s and has dominated accounting research, the implication of positivism in

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²⁵ More specifically, Baker and Bettner (1997) regarded the focus of mainstream accounting (normally refers to positive accounting) as an 'analysis of empirical data' and 'development of mathematical models'.

exploring potential social factors in shaping (or redirecting) and critically evaluating certain accounting practices is next to nothing. Meanwhile, PEAR fails to interpret an alternative view of the accounting practice itself i.e. how accounting 'ought to be' or 'could be', which has restricted itself on the grounds of empirical research instead of a wider research context. Roslender and Dillard (2003) reclaimed that accounting positivists (see Watts & Zimmerman 1978, 1986, 1991) were to re-ensure the economic-oriented feature of accounting research; whereas accounting is claimed (Puxty, 1993; Roslender & Dillard, 2003) to be grounded in broader theoretical perspectives rather than economic-based theories, which reflects not only a restricted view in accounting positivists, but also makes positive research problematic. As such, I intend to relegate positivism as a diversion in SEAR for this chapter instead of developing further as main research strategy for this thesis, not only for its uselessness in interpretive research, but also the very little contribution it can make to answer how and what institutional factors have shaped certain practices in the accounting profession.

By assessing NEAR, an interpretive approach tends to be dominated in SEAR that focuses on the 'description and interpretation of real world phenomena' and the 'development of new theories or the critique of existing theories' (Baker & Bettner, 1997: 297). In this sense, the research question is answered in a subjective way. That is to say, a normative approach normally relies on a set of subjective benchmarks and standards to discuss what certain practices should be. Normative research is to explain the value rather than the fact of the real world with the support of subjectivism and deductivism. Meanwhile, NAR also contributes to an interpretive way to explain how certain accounting practices should be implemented by exploring respondents' perceptions of EA. Moreover, an interpretive strategy of NEAR provides the possibility for in-depth analysis and recommendations in the process of both constructing an accounting system for social and environmental accounts and corresponding policy-setting process, especially in a Chinese context²⁶. However, the subjectivism of NEAR has failed to present an objective view of the accounting practice itself Despite the fact that the normative research method has shown its insights and potential for

²⁶ Chinese SEAR is recently at the beginning stage of theoretical and practical research field (Shen, 2010)

policy setting and suggestions on the standardization of Chinese EA practices, the primary intention of this thesis is to investigate the process of institutionalization for EA practices in Chinese accounting profession rather than a pure normative research with strong sense of value orientation. As a result, normative research provides a rather limited contribution in designing this thesis.

Using critical methods, research questions can be alternatively answered in a critical way by using existing theories to explore interpretive data. In general, CEAR tends to bring some insights in designing and analysing this thesis. First of all, an interpretive research is to explore non-quantitative data in an in-depth case, which helps to identify what and how institutional factors would shape accounting practices. Then, a CEAR project tends to reflect a non-economic perspective to view accounting, which fits well to identify both marketing (economic) and non-marketing (social and political) factors shaping EA practices. Apart from that, the 'could be' pattern of critical research is likely to neutralize subjectivity (normativism) and pure empirical focus (positivism) that provides an alternative way to analyse and assess certain accounting practices. However, this thesis does not completely meet the politically-oriented nature of CAR, as it tends not to be pure politically focused research. Apart from that, CAR has been criticized (Deegan, 2006) as not providing specific solutions to perceived problems, which has eventually led critical accounting scholars being marginalized to a greater extent. Instead, this thesis is intended to identify some insights on the institutionalization of EA practices on a professional basis to provide potential solutions or implications for future EA development in China, which indicates the possibility for this thesis to be developed in a less critical dimension. More importantly, the interdisciplinary nature of SEAR allows the application of wider organizational theories rather than critical perspectives in describing accounting practices, particularly for accounting changes, which indicates the necessity for presenting the exploration of EA practices in the Chinese accounting profession by explicitly addressing the preset research question i.e. what factors and how such factors would shape EA practices. In so doing, the next section will discuss how this research has been designed to answer the research question.

3.2 Research Design

This thesis primarily focuses on the institutional drivers of current Chinese EA, which is essential to gather useful information from professional accountants so as to gain possible institutional discoveries; meanwhile, legitimate and stakeholder factors have also played significant roles in shaping EA practices. This study is guided by basic principles of environmental accounting practices (Gray & Bebbington, 2001, Unerman *et al.*, 2007), while institutional (Chiang, 2010), legitimacy (Patten, 1992; Deegan, 2002) and stakeholder (Edgley *et al.*, 2010) theory will be used as significant analytical tools. Qualitative research is claimed (Bryman & Bell, 2011) to better explore the influence of institutions behind the collected data; whereas quantitative data has a stronger focus on data examination (ibid.). For institutional studies, it is significant to discover in-depth information in the data itself rather than simply examining whether certain hypotheses match with empirical data analysis. As a result, the preset research question has been addressed through a qualitative research of EA practices.

To answer the preset research questions, it is therefore significant to choose proper data as the basis of the whole analysis, which suggests the importance of the choice of data source. In a Chinese context, most Chinese energy and environmental industries are gathered in the west of China with plentiful energy resources (oil, natural gas, medal and mineral etc.), which makes environmental issues more prevalent here than other parts of China. In the centre of South-West China, there have been a wide range of well-known energy enterprises in Chengdu; meanwhile, accounting parties have taken a rather active role in environmental accounting/auditing, which initially enhances the possibility of discovering institutional issues in EA practices. As the financial and economic centre of South-West China with a great range of productive firms, which presents an excellent opportunity to explore EA institutional issues, subsequently Chengdu is the chosen sample region for this research. However, choosing Chengdu as an interview place can be double-edged: focusing on small areas is likely to yield more details but also regional variation may cause different EA practices in other provinces.

Meanwhile, as an inland city, the economic development of Chengdu is not as successful as eastern coastal areas; meanwhile, with the low demands of climate change and sustainability practices, the participation of the accounting profession in climate change and sustainability is limited. Therefore, Shanghai, one of the biggest international financial centres in East Asia, has been selected as an additional sample region. 15 accounting firms have been selected as samples: 13 were from Chengdu; two were from Shanghai (see Appendix I: participant profile). Apart from the Big Four, large domestic firms were chosen on both a purposive and snowball basis by the introduction of friends; meanwhile, large firms had either particular environmental practices or clients from heavily polluted industries. Smaller firms were gathered primarily on a snowball basis by friends' or former interviewees' introductions; whereas the majority of them had not adopted specific environmental and sustainable practices. As a result, firm size became a determining factor for firm selection. Size was determined on the basis of employee number: large firms referred to those who had over 50 employees; medium firms referred to those who had employees of between 30 and 50; small firms referred to those who had fewer than 30 employees.²⁷ Each interview was done to represent the views of every participant.

Qualitative interviews are used to examine accounting professionals' perceptions towards EA, as it is good at describing 'social and political processes' (Rubin & Rubin, 2001: 3): more specifically, a qualitative interview is claimed (Mason, 2002; Edwards & Holland, 2013) to help explore understanding, experiences and imaginings of research participants, and how social processes, institutions, discourse or relationships work: this can be closely linked to participant's perceptions on certain issues, as participant's perceptions are mainly from their understanding, experiences and imaginings through their ways of expressing. I have used semi-structured in-depth interviews and relevant documents to seek more in-depth information and understanding from participants (Johnson, 2001). A group of interviewees from all

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²⁷ Domestic and small accounting firms are often constructed in forms of group company (GC) or limited liability company (LLC) rather than limited liability partnership (LLP). As a result, leaders in LLC firms are often called 'manager' or 'deputy manager', and 'project manager' refers to a person who is in charge of a particular auditing project (normally a big project); whereas 'partner' and 'senior manager' is for LLP firms.

levels of chosen accounting firms who are practising or familiar with EA, have been invited as participants (participant profiles can be found in Appendix I, including both personal and organizational information), all interviews in each organization have been conducted as interviews on a top-down basis, which indicates that all interviews have started with senior management staff to tactical staff. The criteria for the selection of firms is that the chosen firms who are more successful have a long and traditional financial/commercial history, so that it is more likely that they may get involved in SEAR practices; thus, the chosen firms are expected to be mainly large and medium firms. Apart from that, this thesis is about EA practices in the Chinese accounting profession, which indicates that Chinese domestic firms can be more typical and representative; therefore, participants have mainly come from domestic firms rather than international accounting firms. Participants have been gathered on a purposive and snowball basis (Gilbert, 2008) by contacting previous schoolmates and friends through email and telephone who were working in relevant organizations. The sample size is 35, a number judged sufficient (Chiang, 2010; Spence, 2007) to cover most key issues for data analytical purposes. All interviews took place during April 15th to July 27th 2014 when data collection was considered to be saturated.

Qualitative researchers (Sturges & Hanrahan, 2004) generally prefer face-to-face interviews when 'conducting semi-structured and in-depth interviews' (2004: 108). After samples were chosen, I started face-to-face interview process with each individual member. Each interview lasted between 30-60 minutes (Chiang, 2010) to help gather adequate details. Interviews were open in forms of personal interview. At the start of interviews, general information was gathered via the following topics in the first stage: What is your position in your current company? (Position will influence participant's perceptions on a different level i.e. micro-meso-macro; thus participants were invited on a top-down basis to define their thinking) What is your educational background? (Education and knowledge structure will shape one's understanding of certain things) What are your previous working experiences? (Practical experiences will determine whether a participant has [sufficient] understanding of certain practices) To identify participants' perceptions of EA, questions in this stage were frequently asked about

their ordinary works and practices: Are there any typical EA practices? How is EA practised in organizations? What do you do in EA projects? What common approaches do you often adopt in your EA work? Are there guideline documents you rely on? As has been emphasized in the research question, personal perception is the key to identifying institutional factors that promote (or hinder) the development of EA practices. Thus, to obtain participants' perceptions of their daily practices, this stage generally asked for participants' critiques of EA: How do you generally perceive the consideration of environmental issues in your everyday work? What do you think your colleagues think about the significance of environmental issues regarding their practices and clients? Is there anything that you think could be done better in EA?

In an attempt to explicitly identify potential institutional factors and to classify the correlation between each element of institutional theory so as to integrate them as a whole, many organizational documents have been used as practical as well as 35 semi-structured interviews, such as guides for accounting/auditing practices i.e. International Accounting Standards (IAS), International Financial Reporting Standards (IFRS), Chinese Accounting Standards (CAS), Chinese CPA Practical Standards (auditing standards) and other specific EA practical guidelines, as well as regulatory statements such as government policies, national legal regulations and customer checklists. The use of a customer checklist generally reflected 'shadows' of organizations in a Chinese context: how relevant EA practices (i.e. CSR report preparation, carbon information disclosure) have been participated in, which groups of corporations (or industries) would normally conduct such practices, implications on the adoption of practical standards, and where such demands were from (whether localized or internationalized). This led to clients' demands becoming an independent category for data analytical purposes, which would help to analyse clients' influences on shaping certain EA practices in drawing up connections between institutional and stakeholder analyses. The focus of practical guidelines and national regulations was to bring indications on normative and coercive factors, since accounting firms are supposed to be policy-sensitive and standard-sensitive: why firms adopt certain standards instead of others, how firms are influenced (guided) by certain standards, what consequences do

certain policies or regulations bring about and how such consequences shape firms' (or industrial) practices, how 'shadows' of organizations could be possibly reflected. The documentary review process is to help in gaining a deeper understanding of EA in a certain institutional environment (Chiang, 2010), which can be regarded as one of the central concerns of the whole thesis.

3.3 Research Analysis

As an interpretive dominant research, qualitative data analysis has been applied to this thesis. Among various qualitative data analytical strategies, thematic analysis has been found to be a useful analytical tool. As an independent qualitative descriptive approach, thematic analysis is usually defined as 'a method for identifying, analyzing, reporting patterns (themes) within data' (Braun & Clarke, 2006: 79). Sparker (2005) claimed that thematic analysis often examines narrative materials from real life stories by breaking each text into small units and submitting them to descriptive treatment. Braun and Clarke (2006) also regarded thematic analysis as a flexible and useful research tool to provide a rich and detailed account of the data, which is actually a pure qualitative data analysis; whereas content analysis, another commonly used qualitative analytical tool, is claimed (Green & Thorogood, 2004) to be suitable for the simple reporting of common issues that are reflected by data. The goal of thematic analysis is simply to paraphrase and summarize the dataset as a whole or in part in relation to particular research questions. Analysis typically involves steps that a) identify the content of the data, b) reduce redundancy, and c) group data into representative categories that articulate or describe a particular social phenomenon (Jeffery, 2012: 769). It can be therefore concluded that thematic analysis fits well as the dominant analytical tool in explaining how identified institutional factors have influenced Chinese EA practices.

Grounded theory is defined (Glaser, 1992: 16) as 'a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantial area', which is claimed (Hagg & Hedlund, 1979) to adopt a holistic point of view, developing theories on the basis of

detailed observations of complex social phenomena without prematurely defining areas of investigation or related prior assumptions. In other words, grounded theory has offered a systematic framework for the research of the accounting system and management practices in their social and organizational context (Parker & Roffey, 1997), which could help lead to connections across each category. As a result, grounded theory as a typical interview methodology has been regarded (Parker & Roffey, 1997: 243-244) as the most appropriate means for social and environmental dimensions of accounting and finance, as it has offered the prospect of providing useful confirmation of the applicability of pre-existing theories as well as the possibility of offering new theoretical development, which might carry the advantage of environmental sensitivity when considering grounded theory's emphasis on grappling with the multiple complexities of the observed environment.

This project is not a pure grounded research that does not directly build theory from empirical data; whereas the insights and significance of grounded theory (see Charmaz, 2001; Hagg & Hedlund, 1979; Moll *et al.*, 2006) has made it partly employed as an analytical strategy in research design and primary data analysis process. The set-up of research question (broad – narrow), themes (namely participant profiles, practices, practical guidelines, and the competitive context), sample saturation (data was considered to be saturated in 24 July 2014 after the 35th interview) are induced from neo-institutional theory; whereas the criteria for the above steps generally follows principles of grounded theory^{28,29,30}.

Being reflected from Chinese accounting professionals' daily routines fully elaborated in previous chapter (), the indication of institutional theory has contributed to the coding of research data into eleven categories, including participant information, practices, practical standards, general context (in China), client information, previous

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²⁸ An initial grounded theory research question is claimed (see Glaser & Strauss, 1967; Strauss, 1987; Parker & Roffey, 1997) to be broad, and then narrowed down during the research process, which would most likely be action-or process-oriented

²⁹ Coding is defined (Strauss, 1987: 21-22) as the result of 'raising questions and giving provisional answers (hypothesis) about categories and their relations'

³⁰ Grounded theorists (Glaser and Strauss, 1967, accepted by Parker & Roffey, 1997: 232) claim that grounded theory research would keep sampling until 'no new or relevant data appear, all elements of the theoretical paradigm are covered, and relationships between categories have been validated'

education and training, government, competition, clients' demands, large firm brands and other influences. All coded data was then categorized and initially analysed into four main themes: participant profile, practices, practical standards and competitive contexts, a division to reflect how Chinese accounting professionals' perceptions on EA could be reflected in each single aspect in empirical chapters (Ch.4-7). All themes were theoretically interpreted in terms of institutional analysis, coupled with legitimacy and stakeholder analysis, as a whole in theoretical discussion chapter (Ch.8), from which I shall be able to derive conclusions.

It is also claimed (Robertson et al., 2010: 2) that language can 'order[s] our perceptions to make[s] things happen...to construct and create social interaction and diverse social worlds'. More specifically, discourse is seen (Bryman & Bell, 2011: 525) as 'not just a mirror on the social world around us but in many ways plays a key role in producing that world'. As a result, DA is an approach to language that can be applied to forms of communications (Harris, 1952; Schegloff, 1997) i.e. company mission statements, websites, email messages as well as talk. According to Potter (1997: 146), DA focuses on 'the way versions of the world, of society, events and inner psychological worlds are produced in discourse'. Potter (ibid.) also claims DA is more flexible than conversation analysis, since there is much less of an emphasis on naturally occurring talk, so that talk in research interviews can be a legitimate target for analysis. The main focus of this thesis is primarily on the Chinese accounting professionals' perceptions of EA through 35 in-depth interviews, indicating the high likelihood that participants' perceptions on EA tend to be largely reflected from their languages, attitudes and specific ways of expressions during interviews. Therefore, discourse analysis was considered as a suitable analytical approach.

Being a research in a non-western context, the differentiation of language is essential to be considered. English has been regarded (Squires, 2009; Nes *et al.*, 2010) as the dominant language in cross-European projects and publications. As for research in a different language, Nes *et al.* (2010: 313) stated that language differences might bring consequences in terms of language barrier, as 'concepts in one language may be understood differently in another language'. As such, Polkinghorne (2007, also see Nes

et al., 2010) claimed that the closer the distances between the meanings as experienced by participants and the meanings as interpreted in the findings, the clearer interpretation of research would present. All interviews have been recorded and transcribed in Chinese to provide a full record (Moll et al., 2006; Roulston et al., 2003). It is also said (Squires, 2009: 285) that researchers conducting cross-language research projects can never under-estimate language as a methodological challenge 'when conducting a study with participants who do not speak the same language as the researcher', indicating the potential dangers for subsequent analyses in translated interview transcript from its original language or cultural contexts. With the attempt to maintain the true and fair meaning of each transcript in its original context (Denzin & Lincoln, 2004; Nes et al., 2010; Squires, 2009; Temple, 2008), all interviews were recorded and transcribed in Chinese, stored in separate files. Transcripts in Chinese version were then analysed and summarised prior to translating into English, so as to minimize the misunderstanding and gaps between two different cultures and, more importantly, languages in terms of people's logics and ways of expressions. The next section is to summarize reflections from current methods and implications on alternative studies on similar or supplementary areas of SEAR, which will lead to the data analysis chapter starting with participant information.

3.4 Reflections

This thesis focuses on the process of institutionalization in EA practices in the Chinese profession through interviewees' perceptions of EA. Research design and analysis are guided by neo-institutional theory (Meyer & Rowan, 1977; DiMaggio & Powell, 1983; Scott, 2008a; Suddaby, 2010, 2011; Suddaby *et al.*, 2010, 2011) for data coding and categorization of each theme generally reflects Chinese accounting professionals' perceptions from their background, practical experiences, training, understanding of particular environmental issues, practicing guidelines, clients and competition. This coding would lead to the classification of the four main themes in this thesis: participant profile, practices, practical standards and guidelines, and competitions, a classification

helpful to present a comprehensive view on how and why certain EA practices have (not) been adopted, with further implications on what institutional drivers may promote/hinder EA development in Chinese accounting profession. The next chapter will start from participant profile.

There are, however, several specific issues identified in this research, which may help bring implications for alternative studies. Choosing Chengdu, an inland city, as a major interview place can be double-edged: on the one hand, focusing on small areas is likely to find more details; on the other, regional variation may cause different degrees of EA development in other provinces because of commercialization, which makes Chengdu less representative. Thus, subsequent research might consider choosing first-tier cities (Beijing, Shanghai, Guangzhou, Shenzhen) or south-east coastal areas with higher degrees of economic development and openness. Apart from that, neo-institutional theory tends to describe the process of institutionalization on an organizational field level i.e. how a certain group of organizations resemble each other, whereas fewer efforts have been made to reflect how institutional mechanisms (isomorphism) are internally interpreted (Suddaby, 2010). This suggests a new direction on how an accounting firm is constituted and how it elaborates its institutional pressures, and more specifically, whether/how the adoption of EA practices could be associated with the process of organization institutionalization, indicating that an alternative quantitative method that examines or explores the existence of certain isomorphism might be considered. In addition, the sample was collected mainly from accounting firms, indicating that financial auditors held a large proportion among selected interviewees: surely the focus of professional-based research is of great interest in SEAR; whereas this professional-based research has reflected restricted 'shadows' of organizations i.e. what are the reporting issues of social and environmental information, how such information could be measured, the quality of reporting and disclosure issues. As such, alternatives have already been carried out and are definitely worth expanding in either positive ways by examining the presumed hypothesis of financial reporting/measuring issues (Patten, 1992; Deegan et al., 2002), or interpretive ways by

elaborating on the process of institutionalization of EA practices within organizations (Archel *et al.*, 2011; Chiang, 2010; Contrafatto, 2014).

To minimize the risk for language barriers between English and Chinese, all interviews were transcribed and analysed in Chinese before translating into English; whereas subsequent challenges would be likely to occur through the risk for interpretive errors related to translation. More specifically, this would concern the term 'trustworthiness' of translation in qualitative research (Nes *et al.*, 2010), which is likely to comprise 'the credibility, transferability, dependability, and confirmability of translated data' (ibid., 285). Thus, this chapter would also indicate distinguishing the role of translators and interpreters and, simultaneously, highlight the significance of language barriers through 'maintaining conceptual equivalence, translator credentials, the translator or interpreters' role in the research process, and specific recommendations for different types of qualitative approaches' (Ibid., 278). Furthermore, this may also indicate the importance of trustworthiness in cross-language research, as the inappropriate use of translators or interpreters may threaten and decrease the trustworthiness 'of the data and the overall rigor of the study' (Ibid., 278).

Chapter 4 Participant Information

This thesis aims to identify Chinese accounting professionals' perceptions of environmental accounting (hereafter EA); whereas their perceptions could be shaped through comprehensive reasons. As the starter of a whole analysis, this section will focus on participants' background information, and starts with the discussion of the major background of current Chinese professional accounting practitioners, which is expected to identify some factors that influence their professional perceptions of EA. The first part of an interview would therefore be analysed through participants' major background and team/staff structure and training, which would possibly shape participants' practicability of certain EA practices. Thus, those primary categories would lead to the discussion of their competence of EA as the main argument of this chapter, which is likely to be the key to shape their perceptions of EA. As such, the focus of competence in this chapter not only reflects the common background of Chinese accounting professionals, but in the next chapter also expects to help identify how their daily work would influence their perceptions of EA.

4.1 Staff Information

The first 5-10 minutes of each interview mainly focused on participants' information, including their university majors, job titles and responsibilities. This section is to identify the linkage between their background information and perceptions of EA, so as to indicate whether their university major would affect their competence in EA. To investigate the university majors of Chinese accounting professionals, it has been identified that current Chinese accounting firms are filled with professional accountants with corresponding degrees or qualifications in accounting, finance or economics:

'Most of them graduated...in accounting'. – L, manager, medium, Chengdu

'All of us have a background in finance and accounting.' – C, principal, Big Four, Chengdu.

It can be seen that accounting, finance and economics are the dominant university majors of current professional accountants, which indicates that financial people dominate the firm, especially traditional financial auditors. As such, the number of financial auditors has become an important index for accounting firms:

'We have over 200 employees in our accounting firm, with 114 CPAs. We have the largest number of CPAs among all Sichuan's accounting firms.' – J, deputy manager, large domestics, Chengdu.

'We have totally over 40 employees, with 18 CPAs, two CTAs and one CPV.' – M, manager, medium domestics, Chengdu.

'We have about 50 staff in total with 17 CPAs, two ACCA, and three CTAs. All of us have gained at least an undergraduate degree.' – C, principal, Big Four, Chengdu.

In a more specific sense, Chinese accounting firms are ranked on a basis of different grades, a very important criterion for reputation and competitions, whereas the number of qualified employees has eventually become a significant criterion for the ranking of Chinese accountancy firms, which can actually enhance their competitive strength. This has generally reflected the simplification of both staff and the knowledge structure of the current Chinese accounting profession. In other words, most domestic professionals are highly specialized in ordinary financial practices; whereas they normally reflect a restricted understanding of a broader context of social and environmental accounting practices:

'Not only me, I think most of our peers, even CPAs, they may not be clear about EA. It's really a stranger for most of us. Our knowledge structure is rather simple.' -Z, deputy manager, large domestic, Chengdu.

'The knowledge and comprehensive quality of current Chinese practical accountants is unsatisfactory; most accountants know little about the knowledge beyond their majors, there's generally a lack of professional competence ability...' – L, auditor, large domestic, Chengdu.

The above discussion indicates that the simple structure of practitioners and their knowledge background would possibly lead to a lack of sufficient understanding of factors other than conventional financial and managerial accounting. To a large extent, their perceptions of EA are on a basis of limited traditional accounting perspectives, which are normally about numerical measurement and recognition:

'Most enterprises make an input on sewage and waste disposal as their participation in environmental activities; meanwhile, the environmental department will raise some charges on polluted enterprises. So enterprises have to record those kinds of expenditures as environmental input, which often appears under non-current assets or amercement; this has been included in the ordinary practices of financial accounting. However, this information can be reflected in financial accounting only on the condition that it has actually occurred, you see, it can be actually quantified.' – Z, deputy manager, medium domestic, Chengdu.

Likewise, most participants can often give a very general or rough impression of EA; whereas the main focus is on monetary measurement and traditional financial accounting recognition:

'One thing to be sure, is that this is something new, something we're not doing at the moment...how to convert environmental

information as monetary items, and how to measure the non-monetary environmental information; second, how to recognize environmental assets and liabilities, whether it still complies with the traditional assets and liabilities.' – L, project manager, large domestic, Chengdu.

'The EA you refer to, I think it's something about the account for environmental related assets and liabilities. Am I right?' – Z, CPV&CPA, large domestic, Chengdu.

It can be indicated from the above quote that most accounting practitioners still regard EA as a traditional financial accounting technique. Rather, a specific EA practical team in EY has reflected a comprehensive major background:

'Some of them have an accounting background, but pure financial workers are incompetent in...supporting climate change and sustainable services. There are groups of professional staff in EY to provide different techniques and professional services for different clients...Some non-economic indexes cannot be sorted through traditional audit and accounting techniques, which makes it necessary to use the strength of experts. Our ordinary audit projects will use the expertise of experts in relevant fields.' – C, principal, Big Four, Chengdu.

Similarly, a manager from DTT described their team, indicating that EA practical teams should contain people with different university major backgrounds, since pure professional accountants are incompetent to do this:

'In this project, we have about six or seven experts in geography and resource exploitation. DTT's energy group has a

number of environmental experts.' – Q, senior manager, Big Four, Shanghai.

It can therefore be seen that at least one environmental expert should be a team member, which can also be an eligibility to establish an EA team; meanwhile, it is also useful to improve the diversity of team members so as to maintain high quality services. A manager of SW, the only domestic firm that adopted carbon emission practices, has expressed this similar situation in detail:

'We have over 10 members. Our partner Chen is our leader. Half of us have undergraduate degrees; whereas the other half has postgraduate degrees. We have people in accounting and economics, construction, and mathematics. We have some technique staff in carbon emission and C.D.M.: they have environmental protection majors.' – D, senior manager, large domestic, Chengdu.

It can be indicated from the above quote that certain EA practices are not necessarily practised by pure financial and accounting workers; instead, a comprehensive team seems more proper to do so. What is more, it indicates the possibilities that there might be some practical knowledge gap between financial and non-financial colleagues within the same firm, which will be analysed further in the next section. In addition, the following description has been identified that accounting and finance has been the dominant background of contemporary Chinese accounting professionals, which indicates some incompatibility between finance and accounting and environmental science majors. This can also explain the difficulty of a comprehensive knowledge mixture:

'...there are two main groups of participants: A. people who know much about auditing and accounting, but know less about the environment; B. people who know much about the environment, but know less about auditing and

accounting...There are only a few Chinese people who are familiar with accounting, auditing and the environment.' - S, carbon emission auditor, large domestic, Chengdu.

It can be seen through the above discussion that the pure financial and accounting background, coupled with the simplification of knowledge structure and the lack of education, is likely to be a significant factor that leads to the lack of sufficient understanding of EA among both environmental expertise and accounting professionals. Such insufficient understanding of EA among accounting professionals would be likely to indicate the possibility that accounting professionals are likely to be incompetent in doing certain EA practices, which tends to become one of the main arguments to explain how the Chinese accounting profession tends not to take part in climate change and sustainability (hereafter CCS) practices. Thus, the next section will elaborate on accounting professionals' EA perceptions by discussing whether current Chinese accounting professionals are competent to conduct normal EA practices.

4.2 Competence

This thesis mainly focuses on Chinese accounting professionals' perceptions of EA, which suggests the possibility that their professional capability (competence) in EA tends to be a key for assessing their perceptions. Several indications from participants' information discussions have identified that the simplification of knowledge structure in Chinese accounting professionals, which would possibly lead to the incompetence of EA, may highly depend on their educational background. Therefore, it is significant to focus on 'competence' so as to measure professionals' perceptions of EA, through team structure, clients' demands, training and accounting firms.

The world's leading professional accountancy services firms, known as the Big Four, have established a group of people specialising in practices for different clients in various industries. According to C's description in the previous section, the simplification of knowledge background and staff structure does not enable pure financial staff to independently handle specific non-financial practices. As such, many

larger firms have realized the necessity of comprehensive knowledge and skills other than traditional accounting techniques, by recruiting expert teams from comprehensive university major backgrounds, which can be seen from the following quote:

'We have experts in oil and gas, mineral resources, marine science, sewage disposal and carbon and coal etc., both internal and external experts. There are specific procedures about environmental investigations and inquiries; whereas our financial auditors are a little incompetent to do so. Therefore, we should use the expertise from experts during our audit procedures.' – Q, senior manager, Big Four, Shanghai.

It might be essential to notice that Q refers to traditional auditors as 'us' and environmental experts as 'the rest', which indicates that those groups are actually two different parties with a lack of frequent and active communication. This might eventually enhance the knowledge gap between accounting and non-accounting practitioners within the same organization and, consequently, lead to a restricted understanding of what CCS really is. In addition, most Chinese accounting firms are mainly filled with (conventional) professional accountants/auditors. For many years, accounting firms doing auditing seemed to be an old tradition; meanwhile, it tends to be controversial to break through one certain tradition to achieve innovation, not to mention most accounting practitioners are reluctant to adopt new accounting concepts because of their accumulated habits, which are unlikely to be changed shortly:

'...accounting firms do auditing, which is a traditional perception of most of our peers. It's always difficult to break through the tradition, even though we are the Big Four. I don't mean to criticize our employees, but most of them have nearly no idea of your EA, which is a fact.' – Q, senior manager, Big Four, Shanghai.

As Q has stated, most accounting professionals are rather 'naive' about EA. Such a reflection has eventually led the following respondents to realize the incompetence of EA among Chinese accounting professionals:

'The knowledge structure of the accounting industry is simple, as most accounting staff have no idea about things other than accounting practices.' – S, carbon emission auditor, large domestic, Chengdu.

Through the above quotes, it is clear that most Chinese accounting practitioners are not familiar with EA practices at all, since the current knowledge structure in accounting and finance majors has little to do with CCS issues. This situation has also reflected a lack of environmental awareness in current Chinese accounting education. In addition, two participants have described the *status quo* of the Chinese accounting profession, which reflects a general lower practical quality:

'Previous Chinese financial statements didn't include cash flow statements: they consisted of a balance sheet, income statement and statement of changes in financial position. The cash flow statement has replaced the statement of changes in financial position since 1999. What I want to point out is that 15 years has passed, and now over half of corporate accountants cannot prepare an accurate cash flow statement; even myself would sometimes make a mistake.' – L, manager, medium domestic, Chengdu.

A lower practical quality for the current Chinese accounting profession has been reflected though managerial perceptions on competence, which has led to the practical gap between domestic companies and the Big Four. For non-conventional services such as management consultation in large accounting firms, the leader seems pessimistic:

'We really don't have adequate skills for that...Firstly, clients don't have such demands; secondly, our practices are not that professional, I mean, for our Chinese domestic firms...PWC had done an IPO audit for the Bank of China with \$40 million income. The price standard of Chinese firms for the same project is no more than 5 million RMB. However, those big clients prefer spending more to choose one of the Big Four rather than coming to Chinese firms.' – J, deputy manager, large domestic, Chengdu.

It can be reflected through the above quote that clients tend to trust the Big Four rather than domestic firms, even though domestic firms have offered such big discounts. This can possibly reflect how domestic firms are perceived as less competent than the Big Four. To link the trust relationship between the Big Four and their clients to EA practices in the Chinese accounting profession, one crucial thing is that most Chinese accounting firms do not have sufficient, or even any, experts in doing CCS practices. Thus, 'people' has become the key in all CCS practices, just like one deputy manager said, who actually participated in corporate social responsibility (hereafter CSR) report assurance:

'It's useful to recruit some tactical staff specialising in some certain fields, for example, social science and environmental management...Our team should not be only a CPA team; instead, it should have some fresh elements.' – Z, deputy manager, large domestic, Chengdu.

This discussion states the necessity of non-accounting technique application in CCS practices, which has re-indicated the incompetence of CCS practices among current Chinese accounting professionals. This situation has led Z's firm to recruit people with a specific background to make the whole team become 'competent' in doing certain CCS practices.

Being the most frequent phrase that has been mentioned by interviewees, clients' demands tend to play a significant role in adopting certain practices in accounting firms, which can also be linked to accounting professionals' competence. This perspective has been discussed by another deputy manager from a large domestic firm:

'...the adoption of any forms of environmental practices in our daily practices depends on our clients' demands. Once they have such demands, we'll plan to recruit relevant specialists and introduce environmental practices.' – J, deputy manager, large domestic, Chengdu.

From accounting professionals' perceptions, clients' demands are seen as a core driver to adopt certain services, which indicates that the adoption of certain practices does not only depend on competent workers, but also the demands from relevant clients:

'Chengdu office is 10th EY office in the Greater China Region established in 2007. EY is the first in the Big Four that set up its branch in Chengdu...The main services in the Chengdu office are IPO audit, tax and other financial consultation. The main demand for south west Chinese companies is to go public.' – C, principal, Big Four, Chengdu.

It can be seen that, with the demand of different clients, accounting firms will adjust their practices to satisfy clients' needs, with the indication being that accounting professionals' competence can be reflected through their participation in certain projects. As a result, many managerial respondents regarded clients' demands as their major motivation to adopt new practices by recruiting new expertise with special skills, since existing employees may not be competent in new services. When applied to the CCS services in the Big Four, it can also be indicated that the CCS service heavily relies on clients' demands, which can be regarded as 'localization':

'...most clean-tech and public listed companies are gathered in south-east coastal areas and Beijing, Shanghai, Guangzhou and Shenzhen etc. Our expert groups are mainly in such areas...The main demand of Chengdu's local companies is to go public, which is the reason EY is good at doing IPO audits to satisfy their demands. Currently, only a few accounting firms are qualified to do IPO audits in Chengdu...; meanwhile, we have a few competitors...and some large local accounting firms.' – C, Principal, Big Four, Chengdu.

It can be seen that localization is likely to lead to different demands from local customers. The majority of transnational enterprises and public listed companies are gathered in Beijing, Shanghai and south-east coastal areas, which are more likely to have superior demands with the influence of global harmonization; meanwhile, working competitions are much more stronger than other areas, which leads to a higher level of both the educational and practical background of workers, especially in financial and economic industries. For inland Chinese cities, their economic development and educational popularization is not as good as coastal areas, even for first tier cities such as Chengdu. As such, the main demand for most inland enterprises is to go public rather than employ climate change governance, which indicates that EA practices are not that necessary at the moment. Thus, local accounting firms will adjust their main services to satisfy their clients' needs. As one of the main arguments in this thesis, clients' demands have been regarded as the key driver for firms not to adopt certain EA practices by many respondents; whereas the lack of clients' demands have eventually led to the general incompetence of EA within the Chinese accounting profession, since firms have less access to EA practices due to a lack of clients' demands.

In addition, organizations tend to resemble each other through the process of professionalization, indicating that the competence of EA may depend on not only clients' demands, but also firms' systematic training and educational events, as their professionalization and competence is mainly maintained and improved through daily

work and ordinary training and education. Training normally refers to school education and continuous career education. Accounting education tends to be the key in shaping accounting professionals' perceptions of EA. Common modules of accounting undergraduate programs in Chinese accounting higher education are listed below:

'...Quantitative economics, introduction to accounting, statistics, financial management, HRM, budget accounting, management accounting, financial accounting, fundamentals in investment, industrial accounting, auditing, accounting information system, tax planning, advanced theories in accounting and so on.' – L, assistant auditor, small domestic, Chengdu.

It can be seen from the above quote that current accounting education structure shapes the perception of EA in Chinese accounting students and practitioners. Even for those who have successfully passed all Chartered Public Accountants (hereafter CPA) exams and gained professional qualifications, their perceptions of EA are likely to be restricted due to the simple knowledge structure. In a domestic context, large firms normally organize corresponding training for their existing services:

'We'll provide training events related to relevant accounting standards; meanwhile, we also take notice of national and international economic situations related to auditing services; we also have annual CPA continuing education. Those are our regular training events. We'll also provide contemporary training events such as the issuing of new accounting standards. We organize employees for vocational studies per month, which is our main training event. This event normally trains and educates employees' daily practices; meanwhile, we'll discuss specific business cases...and some other controversial problems. I think it's quite important to improve their skills.' – J, deputy manager, large domestic, Chengdu.

For the Big Four, their clients contain not only local customers, but also overseas customers. Therefore, international firms would consider updates of international accounting standards and the global economic context. This is also a reflection that clients can significantly influence services provided by accounting firms:

'We have training in global economics, IAS, regulations and changes in different industries, and our practical studies etc. DTT will provide annual technique training and relevant updates of professional techniques; we also have email tracking for updates and policy influences of major industries.' – L, senior auditor, Big Four, Shanghai.

While most large firms organize regular training for their employees, smaller firms tend not to provide formal training for employees; whereas both have similar training content:

'No specific training events. Our firm had organized a study meeting and some internal training regarding the issue of new accounting standards...Our leaders will regularly organize some meetings to communicate the latest economic situations and new policies with us.' - Z, CPV and CPA, large domestic, Chengdu.

The similarity of training within different scales of accounting firms has been identified, which is generally about accounting standards, industrial changes, governmental policies, and the economic situation in a Chinese/global context and practical skills. More importantly, corresponding training is specifically based on existing services that firms have provided, which heavily depends on mandatory requirements and clients' demands. As such, firms do not normally adopt certain environmental training in their ordinary training events since they have neither such demands nor requirements; rather, the financially oriented training would possibly

restrict accounting professionals' perceptions of EA to financially quantified information:

'[Are environmental issues covered in your ordinary training?] No. Our training events are based on our current services. We don't have training for services we don't provide. Once a government has established a new accounting system, and our clients have specific demands, we'll definitely organize relevant training and education events and prepare to introduce new practices.' – J, deputy manager, large domestic, Chengdu.

Being one of the main themes of daily training, national policies and regulations tend to become another key for firms to not adopt certain services; whereas environmental disclosure in CSR report is only compulsory for Chinese public listed companies – most non-listed companies are not forced to do so. This suggests the fact that domestic firms are not required to and, thus, are good at certain EA related services. Rather, domestic firms have suffered from negative influences from government policies on conventional financial audit and capital verification services:

'Our auditing services involve supervising a company's registered capital, so as to prevent the company drawing out capital illegally; that's why companies have to accept industrial and commercial inspections annually. From March 1st, companies are not required to be annually inspected by industrial and commercial administration, so a number of companies are not willing to accept audits...so accounting firms lose their clients.' – L, manager, medium domestic, Chengdu.

It can be seen that current government policies on the accounting profession have shrunken the audit market, which has threatened their chances of survival; whereas such policies have not shown any signs of adopting environmental audits or carbon emission assurance. It can therefore be identified that EA is only for large companies in China at the moment; whereas only a few of these large companies have participated in carbon trading and relevant activities. A domestic partner has expressed the feeling that it would be more possible for larger companies, especially state-owned companies, to have demand in doing EA practices, which may indicate their possible client strategy:

'We've been communicating these issues with companies, and we're active to get in touch with state-owned businesses, as privately-owned businesses do not have a strong will regarding that...Most of those companies are state-owned businesses, or prospective companies, and a few are successful privately-owned business. But of course, they must be affordable to achieve this' – C, partner, large domestic, Chengdu.

'Our CCS practical experiences are mainly gained from large state-owned businesses and listed companies, whereas they are the main clients of large domestic accounting firms. So I think the trend is that larger firms adopt first, and then smaller firms will follow.' – C, principal, Big Four, Chengdu.

It can be indicated from the above two quotes that Chinese state-owned companies are much stronger in their financial power than most privately-owned companies that are focused on long-term sustainability development; whereas smaller companies often concentrate on short-term profit. The adoption of EA is seen as an input-output balance: if you want to win the competition and thrive in the market, you pay for it; whereas not every company can afford to adopt EA practices. Therefore, C's discussion has reflected this client's strategy, which has a large company focus. As such, the limited demands from clients would result in the restricted access and experience of EA practices, which is likely to result in some 'naive' perceptions of and general incompetence in EA among Chinese accounting professionals. On the contrary, some different voices suggested the possibility that incompetence should not be taken as an excuse for not adopting certain

EA practices. The deputy manager of BDO has illustrated this idea on the view of the professional accounting industry, which has brought some significant insights:

'For the nature of our industry, independence and fairness are the typical characteristics of accounting firms, which have matched the requirements of CSR assurance; meanwhile, CPAs are known as a group of well-educated and high-level people; therefore, from the viewpoint of industrial characteristics and professional competence, accounting firms are eligible to do CSR report assurance.' – Z, deputy manager, large domestic, Chengdu.

According to Z, the potential for CPAs to conduct relevant EA practices i.e. CSR assurance practices has been identified, since the nature of professional accountants industry has brought them the eligibility to adopt CSR assurance practices. This similar expression has been responded by another participant:

'The purpose of an audit is to enhance the reliability and effectiveness of financial reports; thus it requires our auditors to be independent and fair. Meanwhile, it requires us to have corresponding professional competence. As a third independent intermediary agency, an accounting firm is born with independence and fairness. Professional competence can be improved by regular education and training. So from our industrial characteristics, current Chinese accounting firms are capable of doing EA&A practices.' – W, assistant auditor, large domestic, Chengdu.

Independence and fairness are claimed as the two main characteristics of public accounting firms by both respondents; thus, environmental audit practices require these two characteristics as well. Both have mentioned that current Chinese accounting firms have generated professional competence, or the potential of competence, to adopt EA

related practices, which indicates that it is not totally impossible to conduct EA among Chinese professional accountants, especially at the moment that current policies have brought negative impacts on traditional financial services. The adoption of EA can possibly, to some extent, bring them opportunities to recover from policy influences and increase their chances of survival. As such, Chinese accounting professionals' environmental awareness can be maintained through their potential of professional competence of EA, which leads to the conclusion next.

4.3 Summary

This chapter explicitly discusses how accounting professionals' perceptions of EA can be influenced through their background information, with the discovery that competence tends to become the main argument of this chapter: their education background and knowledge structure has determined their perceptions of environmental accounts as financial (monetary) focused, which has restricted their perceptions on the role of accounting in a wider social and environmental context. On the one hand, it has been discovered unsurprisingly that Big Four in China have actually taken the leadership in CCS, which can be reflected from their team structures (i.e. a mixture of accounting and non-accounting practitioners - however, CPAs have become the dominant practitioners within domestic firms); client's demands (i.e. transnationals, state-owned and public companies); and training (i.e. a comprehensive and in-depth training programs in national/global economy, IAS and significant industries; whereas the lack of environmental awareness among most domestic firms has been generally reflected through the financially quantified accounting modules in higher education, clients' low demands, staff team structure and insufficient training). On the other hand, few voices have brought positive attitudes on accounting professionals' competence in certain EA practices, which indicates that Chinese accounting professionals are not incompetent in EA at all. Nevertheless, this suggests the necessity to effectively combine different knowledge together to adopt EA practices by recruiting expertise; however, this can temporarily solve certain cases in one time, whereas a long-term

strategy for the development of new practices is needed. The identification of clients' demands becomes rather significant in the whole thesis, which can be linked to the discussion of recruitment, training, client strategies and practice adoption. More details would be elaborated during following data chapters.

As a starter of the whole data analysis, the purpose of this introductory chapter is to bring audiences into the Chinese accounting profession. 'Competence' has become an interesting topic in this section. Therefore, it is significant to review each individual in terms of their background, so as to present a general knowledge structure, staff structure, and more importantly, their capabilities in doing EA practices. Here, it can be concluded that there is generally a lack of professional competence in EA practices within the Chinese accounting profession, which has been reflected by a low educational level, the loss of training and clients' demands, and the lack of coercive forces. In addition, the focus on participant profile has also brought some further insights on the process of institutionalization, which can be reflected from how firms in different structures and sizes tend to recruit people by adopting similar strategies, how certain firm is constructed in different sizes, how client's demands would shape firms' recruiting strategies, and how normative and legitimate concerns would be reflected through participant profile. Thus, 'people' has become the centre for maintaining such competence, which can be achieved by either recruiting expertise, or providing training events to the organization's own employees; whereas it links back to the discussion of the clients' demands, which directly influence the accounting professionals' access to EA practices. With the discussion of participants' profiles, it should be reasserted that participants' perceptions of EA can not only be reflected through their background, but, more importantly, their daily work. In other words, their job titles and duties would specifically reflect their routines of practicing, which would possibly lead to their unique (or uniform) perceptions of certain EA practices. The next discussion will focus on the practices they have actually been doing, so as to discover more findings from their behaviour and daily work.

Chapter 5 Practices

The previous chapter highlighted Chinese accounting professionals' restricted perceptions of environmental accounting (hereafter EA) which was stimulated by a general lack of competence in certain EA practices. More specifically, such incompetence is likely to be reflected through accounting professionals' daily work, including job duties and ordinary practices. As a result, investigating how accounting professionals' perceptions can be reflected through their daily work becomes an important task, especially with respect to understanding how specific EA practices have been developed by accounting firms, and in responding to the research aim of this thesis. As discussed in the previous chapter (Ch.4), the restricted financially-oriented perception of EA among Chinese accounting professionals has reflected a rather financially-focused service structure in accounting firms, especially within most domestic medium and small accounting firms. This chapter will therefore elaborate on accounting professionals' perceptions through their job duties and ordinary practices of EA i.e. financial and non-financial environmental audit, CSR assurance and carbon practices, so as to identify how accounting professionals' perceptions of EA are shaped by their daily practices. As the main argument in this whole thesis, clients' demands would also be discussed to identify their perceptions through the adoption of certain EA practices. As such, this chapter will start from the service structure of Chinese accounting firms (both the Big Four and domestics), which helps to derive further analyses of common services, encompassing conventional auditing, environmental financial auditing, non-financial auditing and carbon assurance. Insights on the next chapter will be highlighted at the end.

5.1 Service Structure

In order to discover underlying influences that cause the incompetence of EA practices, it is significant to revisit accounting professionals' daily work, which indicates the importance of the current service structure in most Chinese accounting firms. As such,

service structure has been discussed during the second 10-20 minutes of each interview as a pathway to lead to discussions of specific practices. The following is a typical case in domestic firms:

'Our main services include auditing and capital verification.' -Z, deputy manager, medium domestic, Chengdu.

As mentioned in the previous chapter, conventional auditing and capital verification tend to be the main source of income for most domestic firms; whereas recent policies have implicitly 'cut down' auditing and capital verification services for most medium and small firms, which has heavily threatened their chances of survival. As such, firms eventually developed their 'featured' services. Thus, the focus of featured services or a particular group of clients tends to become a common strategy:

'We're good at new high-tech enterprises, especially auditing for such enterprises, and we have our special advantages among Sichuan's accounting firms in this area.' – L, manager, medium domestic, Chengdu.

'We quite often do special audits for leader economic responsibilities for public institutions.' – H, manager, medium domestic, Chengdu.

It can be indicated that domestic firms tend to focus on a specific field of accounting practices, which is necessary to link back to the source of their main clients. For most domestic firms, their main client groups have accumulated through their operating process, especially for medium and small firms:

'...we've accumulated plenty of old clients [private-owned companies]...Almost covers every industry.' – L, manager, medium domestic, Chengdu.

More explicitly, a typical domestic respondent had expressed his feelings on their services, which reflected a strong client-oriented nature of their services:

'Our services are to satisfy our clients' demands...If clients want us to provide certain services, we'll have market for such services.' – Z, deputy manager, medium domestic, Chengdu.

It has been re-emphasized that accounting firms are heavily relied on client's demand, regardless of firm size or nationality. Unlike medium and small firms, larger firms normally focus on big clients i.e. listed companies and state-owned companies, which bring them more opportunities and competitive advantages to earn greater business performance among smaller competitors:

'We're featured in auditing for state-owned enterprises.' – J, deputy manager, large domestic, Chengdu.

From this quote, it can be reflected that big companies tend to be the major client group in large accounting firms. As a result, their demands are rather more complicated than smaller private-owned companies, which have led to a more complex service structure other than conventional auditing and capital verification. The development of the professional accounting industry in a Chinese context is shown through the following quote:

'We were qualified to do six main services, including financial auditing, engineering auditing, judicial expertise, assets evaluation, land evaluation, and real estate evaluation... Then, the national government had implemented subdivision administrations for accounting firms...so only audit services has been left in our current accounting firm; meanwhile, we have some consulting services.' – J, deputy manager, large domestic, Chengdu.

It seems that the above statements have clearly suggested why practices in accounting firms are normally financially-oriented, since the government had already divided different services into corresponding departments. This has explained the

tradition of 'accounting firms do auditing'. This is even though larger firms often regard their services as 'better' quality than smaller firms, which generally reflects a practical gap between larger and smaller practitioners:

'Small firms provide auditing services with lower prices, but their practices cannot meet our practical standards...They complete the whole audit process in a shorter time with a lack of consideration of the clients' accounts and internal control system. We big firms provide more professional services with comprehensive consideration, so we deserve to set a higher price standard. I mean, the price standard is related to the quality of services.' – J, deputy manager, large domestic, Chengdu.

Compared with smaller firms, service structures for larger firms can often be complex. As one of the most successful domestic firms in China, SW's partner had described their services below, which reflected a rather more complex structure than smaller firms; whereas SW's EA practices i.e. greenhouse gas (hereafter GHG) emission audits are under the management consulting service section:

'We currently provide services in four main sections, including traditional financial auditing, accounting and taxation, engineering cost consultation and management consultation... International accounting firms have specific sections about climate change...' – C, partner, large domestic, Chengdu.

Details for the motivation of adopting EA practices will be discussed shortly, but from the above quote, some insights from mimetic influences might have been identified, since SW has the intention to adopt similar practices of international firms. Apart from that, BDO, the earliest Chinese accounting firm, has set up their service structure as following:

'Our main services are auditing, taxation, engineering cost, asset valuation, risk management, corporate governance, rebalancing, and bankruptcy liquidation etc.' – Z, deputy manager, large domestic, Chengdu.

As the only one domestic firm who has adopted corporate social responsibility (hereafter CSR) report assurance, BDO has its longest commercial history with an outstanding tradition; meanwhile, the location of Shanghai also brought opportunities to get in touch with the latest international news and influences, which has led to the complexity of its service structure. Compared with those two largest firms with more than 4000 employees, ZA's service structure, an inland domestic firm, generally concentrated on ordinary financial practices:

'We provide...auditing, capital verification, asset and capital verification, design for internal control system, and management consultation...We're featured in auditing for state-owned enterprises. Our consulting services are good among other Sichuan domestic firms.' – J, deputy manager, large domestic, Chengdu.

Despite the fact that inland firms normally focus on conventional financially-oriented practices, it seems that management consultation has been widely adopted in most large local firms, which has eventually held a significant proportion of their total incomes. It can also be seen that larger firms tend to adopt management consultation; whereas smaller firms normally focus on conventional auditing services. Consulting practices are more likely to gain access to contemporary issues such as CCS, since current larger companies i.e. state-owned and public listed enterprises have started to realize the significance of environmental protection and greening operations. However, most private-owned companies focus primarily on their survival (profit making and cost saving) instead of CCS. Again, this suggests the significance of the clients' demands in the whole analytical procedure in shaping perceptions of both

accounting professionals and business organizations on whether to adopt certain EA practices, which is the main argument of this whole thesis.

This section has presented the most common practices and services provided by current Chinese accounting firms, with the conclusion that while management consulting services have not yet been widely adopted by most medium and small accounting firms, auditing is seen as the core business service within the Chinese accounting profession; meanwhile, larger firms tend to establish a complex service structure more than smaller firms. This supports the main argument that accounting professionals' perceptions of EA are constrained by their competence, since the simplification of service structure (i.e. conventional auditing and capital verification) in most domestic firms would eventually restrict their access and understanding of advanced accounting practices i.e. EA. Under these conditions, the following section will elaborate how their perceptions of EA can be reflected through conventional financial auditing practices, so that more problems can be identified and analysed.

5.2 Conventional Financial Auditing Practices

It can be reflected through the whole interview process that conventional auditing and financial staff have made up a major proportion of the Chinese accounting profession, suggesting that their perceptions are of great importance and representative of Chinese accounting professionals. A conventional auditing project normally focuses on the effectiveness of financial indexes in audited financial reports, even under the specific CCS service section in Big Four:

'Our typical practices include financial auditing, preparation to go public, financial accounting consultation, CSR and sustainability auditing, fraud examination, tax relief, international tax strategy, corporate tax, leadership in energy and environmental design consultation, risk management, market penetration strategy, cross-border transaction and mergers consultation etc.' – C, principal, large domestic, Chengdu.

Here, it can be seen that practices under the sustainability section are still financially-oriented; whereas auditing makes up a major part of CCS services. In other words, CSR and environmental related consulting services are considered to be part of traditional auditing services rather than an independent service section. For firms who do not provide services to specific environmental industries, their respondents often regard their auditing for environmental items as 'so-called' environmental auditing, which is shown below:

'...the majority of medium and small size firms are mainly doing traditional financial auditing services. Our auditing services for the resource recycling companies and power stations, honestly, have just touched the surface of the so-called environmental auditing, not real EA, not to mention to enhance our current services to the level of low-carbon and sustainability.' – L, manager, medium domestic, Chengdu.

It can be indicated from the above quote that traditional financial auditing practices are still the mainstream of current auditing practices, even for the auditing of environmental accounts. To understand current environmental auditing practices better, it is therefore important to review the general auditing procedure so as to identify some insights from practitioners' daily practices. The three-step procedure is also known as audit preparation, audit implementation and audit finalization. There are several fundamental sub-steps of each stage of procedure, which are often done by junior employees i.e. the preparation of trial balance and different financial ratios. Then, auditors will discuss and prepare a draft audit report to clients, signed by the chief auditor(s). An audit report will be finally issued with agreements between auditors and auditees. Another assistant auditor has described this process in more detail as follows:

'The first step is to become familiar with the company and its context, so as to know the real situation of their internal control; then, we'll evaluate significant risks and prepare audit plans to

carry out a control test; then, based on the result of the control test, we carry out substantive tests; during the testing process, we need to sign a business agreement with the client.' -X, assistant auditor, large domestic, Chengdu.

This respondent has mentioned risk evaluation during the implementation of audit preparation, which reflects that risk evaluation is regarded as a significant step in the whole audit practice. Likewise, an auditor who has been in an environmental-risk project has expressed some similar views on the substance of audit procedures, which has indicated the importance of risk evaluation in the whole audit procedure:

'It's actually a process of getting familiar with the company, and identification and response to potential risks correspond to audit preparation, implementation and finalization, which is the whole procedure of auditing for high environmental-risk clients.' – L, senior auditor, Big Four, Shanghai.

As one of the potential corporate risks, environmental issues related to ordinary corporate activities have increasingly drawn auditors' attention during audit practices. As one of the common accounts in corporate financial reports, environmental issues will be presented in the form of individual elements, such as energy assets, non-current assets (sewage disposal system), environmental penalty fees, equipment maintenance expenses, water and electricity expenses and waste management expenditure, which has reflected that current EA is commonly a financial accounting practice. This also reflects that current Chinese accounting professionals commonly perceive EA as just an extension of current financial reporting and financial auditing. Their understanding of EA is still stuck in traditional accounting. As a result, current audit projects for those clients are actually financially-oriented practices. Since environmental accounts have been created in corporate financial statements, auditors have started to pay attention to environmental items when implementing their audit procedures. Such financially-oriented perceptions of EA are likely to be an obstacle for expanding their perceptions of the wider social role of accounting in climate change and sustainable transformation:

'I guess green accounting has emerged under the background of environmental sustainability. Its target is to promote environmental protection and social sustainability... But for an accounting technique, it should involve in accounting measurement and recognition.' – W, CPA, medium domestic, Chengdu.

Another respondent from a small domestic firm had expressed his similar feelings on EA through daily works, which is restricted to monetary or numerical items. The following respondent has reflected his perceptions of the materiality of accounting information, which indicates that EA information is seen as having no significance among other accounts. That has also reflected a rather lower environmental awareness among smaller domestic practitioners:

'...we take special notice of the equipment maintenance expenses, so we would check their previous maintenance expenses and see whether the company has properly maintained its sewage equipment to guarantee its efficient operation... We mainly focus on its whole financial position rather than concentrating on just environmental issues.' – L, assistant auditor, small domestic, Chengdu.

With the review of how smaller firms treat environmental issues in their daily practice, it is important to compare how larger firms deal with environmental issues in the auditing process first, which has been introduced by the following respondents:

'We'll normally take notice of environmental related accounts or items in the financial statements of our clients... We'll focus on the actual amount of that input, e.g. whether it has paid or spent money in time, with the reference to national government regulations. For their equipment maintenance costs and expenditures, we'll still focus on the actual amount of its actual expenditure, so as to judge whether it has met the standards of governmental requirements.' – J, deputy manager, large domestic, Chengdu.

It can be indicated that J's client is a large state-owned company with a rather comprehensive accounting structure, which has led to J's detailed and specific investigations of certain monetary items; whereas L's client is a private-owned company with a simple accounting structure, so their environmental inquiries tend to be generic rather than in-depth investigations. However, despite the fact that several differences exist in their clients and the content of their practice, it can be seen from larger firms' practices that their audit practices for the environment still follow the basic logic of financial auditing, which is substantially an incompliant audit practice. Therefore, current auditing practices are normally financially-oriented practices, regardless of firm sizes. It can be reflected from the above statements that current financial auditors actually focus on the actual amount of money rather than non-financial disclosure:

'Common environmental accounts include environmental investment, environmental penalty expenses, environmental governance expenses, provision for environmental penalties etc. Currently we often categorize environmental related expenses into cost and periodic expenses; environmental investment is recognized as corporate assets; any provision for money outflow due to environmental issues is quite often disclosed as contingent liabilities.' – G, principal, Big Four, Chengdu.

From the above quote, it can be reflected that, in current accounting practices, the main focus of environmental information is generally on monetary information. Current

Chinese accounting professional practices are guided under Chinese CPA practical standards, and so it is necessary to review related requirements in No.1631 Chinese CPA practical standards that accounting professionals have relied on., which reflected a regulatory force that CPAs are required to consider environmental issues during their auditing practices. The specifics of CPA environmental standards have been described by the following respondent:

'There are six typical environmental issues related to the preparation of financial statements: penalty expenses; environmental information or contingent liabilities disclosed in financial statements; environmental impacts on corporate sustainable developments so as to influence the basis of financial statement preparation; any environmental obligations brought by corporate production the manufacturing or process; environmental constructive obligations that corporations voluntarily undertake; and provisions for assets impairment.' – C, CPA, small domestic, Chengdu.

With the review of No.1631 CPA practical standards, over half of all six practices are related to monetary measurement. It can be indicated that, on the one hand, current accounting practical standards primarily focus on financial information instead of non-financial information. The influences brought from practical guidelines have led the mainstream of current financially-oriented audit practices. On the other hand, it cannot be omitted that CPA standards have also addressed how corporate environmental obligations need to be taken into account by CPAs in auditing practices, including investigations for non-financial items such as environmental impacts in manufacturing and operating activities. This has suggested the tendency of an increasing application of non-financial techniques in ordinary auditing practices. As a result, financial auditors have started making relative inquiries about general environmental issues in corporate ordinary activities:

'What we do is to make relevant environmental inquiries and field investigations. We have randomly selected one of their main oil and gas pipeline groups and driven to Mianyang to see their operating conditions, and whether oil and gas has been spilled, although I feel it is not that necessary.' – X, chief auditor, large domestic, Chengdu.

This respondent has stated that environmental enquiries actually come along with a field investigation by selecting working areas on a random basis, which reflects that there is an increasing trend for the application of non-financial techniques in ordinary auditing practices, especially for the auditing projects of environmental industries. However, the most interesting point I have captured from this note is that the respondent feels it is unnecessary to do this field investigation, which could reflect a general lack of environmental awareness in her daily work. It can be easily identified from this that there is not only a lack of environmental awareness, but also normative influences from CPA audit standards and that CPAs need to take notice of environmental issues in corporate ordinary activities as required by practical standards:

'Our job is to make our professional judgments on the fairness and objectiveness of the corporate financial position and its cash flow. We are not environmental assessment departments... Our business agreement never mentions that we're required to make reasonable environmental suggestions, so we normally don't do so.' – G, principal, large domestic, Chengdu.

This respondent regarded the role of CPA as professional judgment makers of the fairness and objectiveness of corporate financial statements instead of environmental concerns, which is CPA's primary professional responsibility required by CPA practical standards; whereas environmental awareness is only regarded as their secondary responsibility, or even of minimum importance. Secondly, his discussion has indicated that their practices are primarily based on the demands from clients instead of

environmental assessment. With the lack of clients' demands, environmental training is less likely to be provided inside each accounting firm. In fact, accounting professionals do not normally realize the significance of environmental issues in their ordinary training events, even for those who have actually participated in environmental projects. As a result, their perceptions of EA are likely to be restricted through the lack of training focus and, thus, lead to general incompetence:

'I don't realize the significance of environmental issues in our daily practices. My ordinary work is mainly about traditional financial auditing rather than this kind of environmental auditing.' – Z, senior auditor, Big Four, Shanghai.

To a certain extent, this perception has reflected a lack of environmental awareness among current financial auditors in auditing practices. First of all, due to the lack of demand from current Chinese companies, especially for the majority of medium and small private-owned companies, most accounting firms are less likely to provide specific environmental services in their ordinary practices, not to mention the adoption of EA in their ordinary training events. In addition, the focus of financial information within current audit practices has resulted in a general restricted perception of EA: a number of accounting practitioners regard environmental information as having equal importance in relation to ordinary financial information rather than having unique significance among other accounts. Finally, China has not established a legal system and practical guidelines for all EA practices, which shows a lack of mandatory regulations on EA practices. Another respondent, who is also a senior auditor, has explained previous statements in a comprehensive way:

'...[there is] no significant influence. Our services are still normal auditing services with little to do with environmental practices. Our current services contain some consulting services...; whereas auditing is still our main service. This is the common situation of Chinese accounting firms... We have only

a few clients in environmental industries; most of our clients are still non-manufacturing companies.' -X, chief auditor, large domestic, Chengdu.

As for the perception and understanding of EA, some respondents have also reflected a rather similar perception on EA across the Chinese accounting profession, regardless of their firm's scale:

'As for accounting, environmental issues could only be measured once they have actually occurred, or some predictable fines or penalties have been issued... As a branch of accounting, first it involves problems of measurement: how to measure environmental information in currency? Once this problem has been sorted, it can be more practical.' – Z, deputy manager, large domestic, Chengdu.

It is very common to hear the expression that 'the reason EA is still called accounting, is that it is about currency measurement', which clearly states that accounting for environmental information is actually about monetary items, especially for transactions which have actually taken place. However, Z did not mention how to deal with environmental accounts other than expenses. Another respondent has expressed his impression, which indicates that EA is currently seen as just a numerical tool for measuring and recognizing environmental items. According to their comprehension, EA is still seen as traditional accounting with very little difference. Another participant has expressed a more extreme discourse on accounting:

'M: You mean, environmental accounts refer to monetary information? G: Of course. Accounting is to account for monetary information.' – G, principal, large domestic, Chengdu.

It can be seen from the above comment that the conservative nature of the Chinese accounting profession is reflected through the tradition that 'accounting firms do

auditing', which indicates that Chinese accounting professionals seem resistant in accepting innovation in techniques; or they are reluctant to change their habits and perceptions: on the one hand, their clients did not ask for innovations in environmental investigations; on the other hand, government policies did not indicate further changes in their contemporary practices towards an environmentally-oriented focus. As a result, this conservatism has actually influenced their practical skills and competence in certain accounting practices (i.e. EA). For larger firms, this impact of competence might be minimized by strict entry requirements about the educational level and practical experience of new entrants; whereas it is not as easy for smaller firms to get rid of this impact. For normative training and education, there is generally a lack of environmental elements within training events, which brings less opportunity for young employees to access knowledge of EA. In general, a conservative tradition in Chinese accounting profession has been commonly identified, especially within older accountants; this reluctance (or laziness) can influence younger workers.

Following the discussion of service structure, this section has elaborated on accounting professionals' perceptions of EA through their participation in conventional auditing practices, with the discovery that most auditing projects in Chinese domestic firms are mainly financially-oriented ones; whereas only a few of those have participated in specific environmental projects. The lack of clients' demands, coupled with financially-oriented practical standards, has resulted in a restricted environmental awareness among Chinese accounting professionals and, thus, led to the lack of professional competence in EA. The next section will specialize in auditing projects related to environmental clients in larger firms, so as to find out the gap between larger and smaller firms.

5.3 Financial Environmental Auditing Practices

The interviews have discovered that Chinese domestic accounting firms are normally doing financial auditing projects, especially for medium and small firms; whereas firms generally have restricted access to financial environmental auditing practices due to a

lack of clients' demands. In that case, it becomes rather necessary to elaborate on their perceptions of EA through particular environmental auditing projects, which is the main focus of this section. To begin with, a manager has told me their clients' general information, which is representative for similar sized firms in China:

'[Our clients are] mainly mid- and small sized companies in sales and marketing industries, such as instrument sales and commodity sales. We also have some sporadic clients such as winery and real estate agencies.' – C, manager, small domestic, Chengdu.

It can be seen through previous discussions that medium and small private-owned companies mainly focus on their survival; whereas environmental sustainability seems far from their business growth. They are less likely to have certain environmental demands such as sustainability assurance, carbon trade or environmental management system and design etc. At the moment, such demand can hardly be identified from most companies. Take EY for example:

'The main services in the Chengdu office are IPO auditing, tax and other financial consultation. The main demand for south west Chinese companies is to go public; whereas most clean-tech and public listed companies are gathered in the south east coastal areas and Beijing, Shanghai, Guangzhou and Shenzhen etc. Our expert groups are mainly in such areas.' – C, principal, Big Four, Chengdu.

This statement can be regarded as 'localization', which is mainly based on local clients' demands. The localization also shows a geographic variance for clients' demands. Therefore, I would argue that environmental accounting, more specifically, climate change and sustainability (hereafter CCS), can also be regarded as a client-oriented practice. Nowadays, only a few large public listed companies have such demands; they are normally the main clients of large accounting firms i.e. the Big Four.

Therefore, most domestic participants have titled EA as a Big Four Brand, or Large Firm Brand:

'I would suggest you talk to some international accounting firms, such as the Big Four.' – G, principal, large domestic, Chengdu.

For respondents from the Big Four, their reflections have clearly demonstrated that EA services are actually a Big Four product, whereas Chinese domestic firms do not provide this:

'As far as I'm concerned, very few Chinese domestic firms have particular environmental services. The Big Four have already developed specific climate change and sustainability practices in response to global environmental problems ... The Big Four have almost dominated climate change and sustainability services in the Chinese market.' – Q, senior manager, Big Four, Shanghai.

It seems that the Big Four dominate EA (i.e. CCS) services among other competitors in the Chinese market, whereas domestic firms have not realized the importance of CCS and the influences it can bring to them. As such, discussions in this section will be mainly based on the Big Four's scenarios. To understand how particular environmental projects work, it is helpful to examine DTT's general procedure of auditing for a mine restoration project:

'It's actually a process of getting familiar with the company; the identification and response to potential risks correspond to audit preparation, implementation and finalization, which is the whole procedure of auditing for high environmental-risk clients.' – L, senior auditor, Big Four, Shanghai.

This respondent has made some corresponding comparisons between traditional financial auditing and auditing for high environmental-risk clients, which indicates that

the whole process can be linked to the general auditing procedure. More specifically, a senior manager at DTT has described some typical processes of auditing for a certain geographic project, which shows that financial indexes are still their main focus:

'First, we should have a general understanding of the operation and financial position of our client so as to prepare for the forthcoming practices; then we'll negotiate and sign our business agreements to carry out our audit procedures.' – Q, senior manager, Big Four, Shanghai.

This statement has clearly identified the financial focus of current environmental auditing practices. The first stage looks quite similar to ordinary auditing procedures, which indicates that current environmental auditing practices still follow the logic of conventional financial auditing. However, details of techniques in environmental auditing practices have been innovated from purely financial statements to the broader content of documents, as described below:

'We examine whether the budget for this project has indicated an economic capital usage according to their submitted Technical Specifications on the Preparation of Geographic Environment Protection and General Governance; in addition, we examine whether their project budgetary estimates are scientific, economic and rational. For this step we have to consult experts from environmental science and geography to evaluate the rationality and economic efficiency.' – Q, senior manager, Big Four, Shanghai.

It can be seen that the document specifically related to environmental governance has been taken into account during the auditing procedure, which indicates the necessity for the application of non-financial expertise and investigation in environmental audit projects:

'We also have to summarize and analyse accounting data and other economic indexes, such as payback period, profitability, debt payment ability and net present value etc., and the results of whether it enhances industrialization, improving productivity, enhancing product technological contents and additional value etc. to evaluate their economic benefit. And finally we terminate our audit procedure and issue our audit report.' – Q, senior manager, Big Four, Shanghai.

The assessments of budgetary estimates and economic indexes are exactly the same as traditional audit practices, which identify the strong financially-oriented nature of their practices. EA has often been regarded as a quantitative tool for measuring environmental monetary information, which could partly explain why certain non-monetary information will not be determined as material by accounting professionals, which can be regarded as a loss of environmental awareness. As such, current audit projects for environmental related accounts could be regarded as only the surface of environmental auditing:

'Our auditing services for the resource recycling companies and power stations, honestly, have just touched the surface of the so-called environmental auditing, not real EA, not to mention to enhance our current services to the level of low-carbon and sustainability.' – L, manager, small domestic, Chengdu.

As a manager from a domestic firm, L's perception can reflect the general understanding of environmental auditing of the current Chinese accounting profession. For respondents from larger firms, especially from the Big Four, their perceptions can be more comprehensive. A senior manager from DTT has described the Chinese context of environmental auditing, which has brought the possibility that social auditing for environmental needs to be improved:

'... Traditional auditing focuses on whether a company has correctly used the money and economic benefits brought by the expenditure; whereas environmental auditing is actually a green auditing practice that focuses on the social and environmental benefits brought from a company's expenditures. I think our auditing for a mine restoration project is a work-in-progress product between traditional financial auditing and real environmental auditing.' – Q, senior manager, Big Four, Shanghai.

A senior auditor from DTT has introduced some specific practices other than financial investigations, which shows the difference between a specific environmental and pure financial audit project as follows:

'We focus on their financial position and the usage of government funds. I'm working on the evidence of corporate accrued expenses estimation, and to examine the reliability of evidence and the rationality of their estimation.' – Z, senior auditor, Big Four, Shanghai.

It can be seen from the above statement that the role of auditors in this project is still focusing on financial position and expenditure, which is quite similar to ordinary financial auditing practices. However, non-financial inquiries and techniques have been developed to conduct relevant investigations, reflecting that the conduct of environmental auditing tends to become a mixture of financial and environmental specialists:

'Our environmental practices are mainly about the revision and inquiries of relevant documents. We'll examine whether the mine owner has completed mine restoration on time through relevant inquiries and investigations; we have incompliance inquiries such as whether the company has paid environmental

governance deposit per regulations; whether the expansion or changes of exploitation range and exploring methods have been prepared and submitted new governance plans; in the completion stage of the mine restoration, we'll review and examine engineer completion reports, inspection reports and other documents such as engineer design and plans for restoration governance etc.' – Q, senior manager, Big Four, Shanghai.

It can be reflected that the focus of field investigation is an incompliance process that concentrates on whether companies have done their environmental practices in accordance with relevant regulations and policies. From this project, some reflections of government auditing i.e. regulation incompliance, usage of governmental budget and funds, have been indicated. Therefore, the role of environmental investigations has been described as follows:

'... We'll make necessary field investigations and inquiries to check whether the area and results of restoration governance has met the standards of regulations by using relevant monitoring data provided by the environmental department.' – Z, senior auditor, Big Four, Shanghai.

Z's discussion has shown that the whole project is filled with not only financial estimation and analysis, but also plenty of incompliance inquiries; or, to some extent, the proportion of non-financial investigation tends to play a more significant role than financial auditing procedures. The respondent regarded their audit practices as a 'work-in-progress' and a product of real environmental auditing, which has reasserted that current environmental auditing is still within the scope of financially-oriented auditing, reflecting a mixture of expertise; whereas the whole project has been controlled by accounting professionals (senior managers and auditors).

In general, this section has elaborated on accounting professionals' perceptions through their participation in particular environmental auditing projects, with the discovery of the branding effect of EA in the Big Four; meanwhile, that an increasing application of non-financial techniques tends to be prevalent in environmental auditing projects, which reflects an eventual close cooperation between financial and non-financial specialists in conducting such accounting-environment/sustainability hybridisation. This section has also reasserted the discovery of the branding effect of EA in the Big Four. On the one hand, the branding effects have motivated a few domestic successors to adopt certain EA practices i.e. SW's carbon services and BDO's CSR assurance services; but more importantly, this branding perception has restricted most domestic firms' willingness to adopt EA, as EA seems so far from them. As a result, domestic firms have become reluctant to adopt technique innovation (EA) and, thus, their competence in EA has been constrained. Following financially-oriented practices, it becomes vital to elaborate on accounting professionals' perception ofo EA through their participation in non-financial environmental practices in the next section, so as to identify whether competence and clients' demands really do matter.

5.4 Non-Financial Auditing and Assurance Practices

With the review of accounting professionals' participation in financially-oriented practices, it is important to examine how they take part in non-financial practices, which helps identify their perceptions of EA through a non-financial context. EA here refers to CSR and sustainability reporting assurance. The interviews have also reflected the impact on the shrinking of the contemporary audit market and the restricted developing space of conventional auditing practices, which has eventually led to the emergence of non-financial auditing and assurance practices in a few selected firms. As such, the discussion of this section is primarily based on larger firms who have already adopted certain non-financial auditing practices (the Big Four and BDO). Nowadays, government policies have brought negative influences on the audit market, especially for medium and small accounting firms, which make competition more serious. With the completion and perfection of traditional financial accounting/auditing systems, there is less space for the development of ordinary audit practices:

'The auditing market seems to have expanded, but in some way it has shrunken. Our auditing services involve supervising a company's registered capital. From March 1st, companies are not required to be annually inspected by industrial and commercial administration, so a number of companies are not willing to accept auditing.' – L, manager, medium domestic, Chengdu.

Having suffered from this influence, firms have been motivated, or forced, to develop new practices so as to achieve survival. This has eventually brought the opportunity for the emergence of non-financial auditing i.e. CSR report assurance. The deputy manager of the BDO Chengdu branch has expressed this view:

'I think it's the developing trend for audit practices in accounting firms. Till now, the institutions and standards of traditional financial auditing are completed with less development space; thus, non-financial auditing is the corollary of this trend.' – Z, deputy manager, large domestic, Chengdu.

In addition, this tendency has been described as 'duplication' of Big Four, which has generally reflected the influences of globalization:

'...it (EA) is something that foreign accounting firms have already been doing. This is an unavoidable tendency, it's not because you don't want it so you don't have to do it. Even if you didn't do it yesterday, you are not doing it today, or you won't do it tomorrow, you'll definitely do it the day after tomorrow, because you have to conform to the trend of the time.' – C, partner, large domestic, Chengdu.

It is definitely important to recognize competitive concern as major factors that influence the innovation of contemporary accounting practices. Several insights have been identified from the above quote. It's the trend for the development of contemporary

accounting practices, which has been adopted by global firms i.e. the Big Four. This comes from competitive pressures in the Chinese market. Current policies have suggested the shrinkage of the audit market, which has brought fatal impact for domestic accounting firms. As a result, this technique innovation has been perceived as a response to the fierce competition. EA has only been adopted by a few global firms, which has motivated SW to become the leader of carbon emission auditing services among Chinese domestic firms, which can enhance their competitive strength in the long run. In addition, C has described the role of accounting in economic development:

'In the Chinese context, since our accounting profession has proposed 'accounting should serve for national economic transition', so SW started to launch EA (carbon emission auditing) practices... We have cooperated with the Sichuan Economic and Planning Committee for low-carbon experiments. The government has proposed this policy.' – C, partner, large domestic, Chengdu.

It can be reflected through C's description that this innovation is perceived as a response to government interests, which views the government as a 'client' or 'stakeholder' for climate change and sustainable transformation. China has been facing a historical period of economic transition at the moment, from traditional (GDP-oriented) to sustainable (low-carbon) economics. To that extent, the emergence of EA can be seen as a server for national interests: in other words, the Chinese government has realized the significance of low-carbon in economic and social development, which shows the potential demands from the national government. In addition, Z has made comparisons between financial and non-financial auditing as following, which indicates that CSR assurance has been developed from traditional auditing procedures:

'Our assurance practices are actually on the basis of traditional financial auditing procedures. Our main focus is whether there are significant inconsistencies in CSR reports in relation to the guidelines for CSR reporting preparation; meanwhile, we also take notice of whether there are some unfair descriptions of CSR reports with regards to the aspects of materiality, substance and systematicness. The whole procedure is actually an incompliance examination, which is quite similar to what we do in audit practices.' – Z, deputy manager, large domestic, Chengdu.

From Z's discussion, the main focus of CSR assurance is about incompliance examination for the preparation of CSR reports, with regards to their practical guidelines (GRI, Guidelines for CSR Reporting Preparation issued by the Shanghai Stock Exchange). Similarly, another respondent has expressed another supplementary view:

'Actually, their frameworks are quite similar. CSR assurance practices are actually developed traditional financial audit procedures. The whole procedure is quite similar from what we do in audit practices. I think the main difference is, the assurance of CSR reports involves indexes other than an economic index, which indicates that we have to develop new techniques in CSR report assurance practices, since the focus on monetary items cannot satisfy our needs.' – X, CPA, large domestic, Chengdu.

With the comparison between traditional auditing and CSR assurance, X has identified significant differences between those two, which is about the increasing focus of non-financial indexes. This makes non-financial techniques significant in the investigating process:

'...we have to use more qualitative investigations rather than traditional quantitative methods. So I feel that our current CSR report assurance is developed from traditional auditing but beyond traditional auditing, which is an initiative.' – X, CPA, large domestic, Chengdu.

It seems that CSR assurance is actually developed from traditional financial auditing procedures; whereas significant differences can be identified through the following, indicating that the focus of CSR assurance is no longer numerical. Rather, a more interpretive dimension has been reflected through the practical procedure of CSR assurance:

'First we need to collect relevant information in regards to their social responsibility practices through the internet. Then we'll find the real situation of how companies fulfil their social responsibilities, which requires us to interview representatives from relevant departments to be clear about their CSR performances. After that we'll become clear about data statistics and the logic framework of CSR reports preparation; we'll also take notice of a company's internal communication mechanism and reports from external stakeholders on their CSR policies.' – X, CPA, large domestic, Chengdu.

It can be reflected from the above statements that the most significant difference between CSR assurance and financial auditing is perceived as the wide application of interviews and communications. The purpose of interviews is to become familiar with the policies and procedures of CSR practices and the implementation of CSR activities in each department; in other words, interviews are to investigate how companies fulfil their social responsibilities. Apart from that, CSR assurance practices involve more qualitative techniques such as interviews and field investigations, since there are more non-economic indexes such as consumer satisfaction, employee index, social index and environmental index; in contrast, conventional financial audit practices focus primarily on the accuracy and fairness of financial representation. What is more, the focus of CSR assurance is on the internal communication mechanism rather than the internal control system, which indicates that CSR assurance focuses more on the reporting for external stakeholders rather than the report itself. Meanwhile, the depth of interviews is different

from those in ordinary audit practices, which is seen as a challenge for CPAs to conduct different interviews:

'It focuses more on the communication skills... We have widely used in-depth interviews in our investigation process, and we just have to make simple inquiries in our audit practices.' – X, CPA, large domestic, Chengdu.

X specially mentioned an interesting point that communication skills have played an important role in the whole CSR assurance process. However, there is a lack of communication skills within younger people due to the lack of working experiences, whereas older workers are more familiar with this. Therefore, this communication procedure has often been done by experienced professionals:

'...younger colleagues... may have weaker communication abilities in talking to corporate staff, as there's always a positive correlation between life experiences and communication abilities. Therefore, we older staff normally do interviews and younger staff work on fundamental data collection and summaries.' – X, CPA, large domestic, Chengdu.

X showed me a CSR report of their client, which reflected that social and environmental information (achievements made by energy consumption saving, energy saving, the measurement of reducing the influence of products and services on the environment, environmental punishment made by any non-regulatory behaviour, and achievements on GHG emission reduction etc.) tends to become a major component of CSR reports. Thus, environmental practices have been described by a CPA in the following manner:

"...We'll make relevant interviews and field investigations about their environmental activities, for example, we randomly selected one of their hotels to examine their energy saving activities, since they reported that relevant measurements have been made in lambs and escalators. According to our investigation and observation, their facts have matched with their descriptions.' – L, CPA, large domestic, Chengdu.

It can be indicated that the focus of CSR reporting is on the corporate disclosure of environmental aspects rather than just the corporate financial position, which can be seen as an innovation of accounting techniques from pure economic decision making support to environmental accountability:

'Our CSR report assurance mainly focuses on corporate disclosure of environmental protection and energy saving; meanwhile, we also take notice of environmental issues in our ordinary financial report audit practices.' – Z, deputy manager, , large domestic, Chengdu.

This section has elaborated on accounting professionals' perceptions of EA through non-financial audit practices, which, to some extent, has broadened their roles in CCS governance. Primary findings suggest that the process and goal of CSR assurance is substantially similar to conventional auditing practices; whereas the increasing use of qualitative investigations tends to become the main technique innovation. Experienced workers are perceived to be more competent than younger workers in the whole process, as it requires communication skills rather than numerical and IT skills; whereas workers born in the 1980s and 1990s may be too young to communicate with organizations. In other words, their participation in non-financial assurance practices has somehow shaped their perceptions of non-financial assurance as a technique innovation. In summary, the emergence of non-financial auditing within the Chinese accounting profession has suggested that EA is seen as a greater technique innovation and contribution for the development of contemporary accounting practices by interviewees. As such, a few domestic firms have started adopting certain EA practices as not only a competitive response to the Big Four and global influences, but also a response to

national demands in economic transition. Being a more specific environmental term, the next section will elaborate on accounting professionals' perceptions of EA through carbon-oriented audit practices as supplementary to previously mentioned practices.

5.5 Carbon-Oriented Audit Practices

The over emission of greenhouse gases (hereafter GHG) should be blamed for contemporary global warming, which has been recognized as a current environmental problem that is closely related to recent EA development. Therefore, carbon-oriented practices have been recognized as typical non-financial oriented practices in the accounting profession within EA practices. With the discovery of the Big Four (or large firm) branding effect of EA, discussion in this section is based on firms that have already adopted carbon practices i.e. SW and the Big Four. To start with, a partner in SW has expressed his perceptions of the major causes of the global environmental crisis:

'The rise in sea-levels has first influenced those small island states, which was caused by huge greenhouse gas emissions after the industrial revolution and economic developments. The basic reason for that is the overuse of fossil fuel energy such as oil, coal and natural gas..., which caused global warming. CO₂ has been concluded as an offender of global environmental pollution by the UN.' – C, partner, large domestic, Chengdu.

The frequent discussion of GHG indicates the importance of carbon emissions in contemporary global environmental problems. This may possibly reflect that SW's starting point of adopting their EA practices is on carbon emission and subsequent organizational responses. More specifically, a senior manager has expressed his understanding of carbon training, which identified emitters and providers of GHG:

'I personally think to adopt carbon emission auditing also has practical significance. First of all, industries and enterprises are the producers, or the emitters, of carbon sources; whereas agricultural and forestry industries are the providers of carbon sources.' – D, senior manager, large domestic, Chengdu.

D's discussion has presented a supply-demand relationship for carbon trading parties, which indicates the possibilities of developing corresponding supporting techniques to achieve carbon trading activities. This has been perceived as motivation for the accounting profession to establish a specific service section for climate change and sustainability (hereafter CCS); whereas accounting professionals tend to become a rather proper third party to serve the carbon emission trade between emitters and providers:

'So to achieve business trade between the emitter and provider so as to increase the industry chain through carbon balance between each party, it needs an independent party to issue an audit and assurance report that can be acceptable to both parties.'

– D, senior manager, large domestic, Chengdu.

From the above quote, auditing (assurance) has played a role in providing a true and fair view on the carbon trade activities so as to satisfy the needs of both parties. More specifically, D has introduced the general circumstances of their ordinary carbon emission assurance practices, which is fundamentally developed from conventional auditing techniques:

'The audit report we issue is constrained by CPA Standards with scientific and rigorous auditing procedures; then, with relevant inspecting technology and standards, we accounting firms can provide an acceptable assurance report for both carbon trade parties.' – D, senior manager, large domestic, Chengdu.

As previously stated, EA practices have been perceived as a Big Four brand product for clients, and the market as a whole, implying a strong commercial imperative underpinning the development of CCS-related techniques and measures. On the one hand, the development of CCS services is to respond to the Big Four's competitive pressure; on the other hand, the emergence of CCS is against a main global background, which has been discussed by C:

'...most UK accounting firms have specific sections about climate change... whereas we don't ... With the establishment of the Chinese carbon trading market and system, the emergence of the climate change section should be an inevitable outcome... EA is against the main background of global low-carbon and sustainability concepts.' – C, partner, large domestic, Chengdu.

It can be indicated that the development of Chinese carbon trading activities is a significant opportunity that can promote the development of EA practices in the Chinese accounting profession. Moreover, C has stated the promotion of EA from a regulative (mandatory) view, with the indication of significance in mandatory and regulatory influences in guiding and enforcing EA practices:

'In the Chinese context, the promotion of EA is not only influenced by government support, but also environmental legal regulations such as the Kyoto Protocol and basic laws on climate change issues in the EU carbon market.' – C, partner, large domestic, Chengdu.

From C's point of view, global climate change regulation is of equal importance with government support, which has clearly reflected that EA should be regarded as a regulative-oriented practice. Meanwhile, it has emerged with economic transition, explained by C:

"...It depends on the promotional strength of the government and economic transition, as this is related to macro strategies rather than any personal willpower... The reason I mentioned economic transition is because accounting should serve for

economic development; thus, in the context of accounting, our EA and climate change section has emerged.' – C, partner, large domestic, Chengdu.

It is indicated that accounting has not only acted as the server for regional and national economic development, but also to satisfy national interests. The needs from compulsory agencies (government) can also be regarded as a demand from a certain 'client'; whereas the accounting profession should always meet national (government) interests. The following discussion has explicitly reflected SW's developing strategy in terms of the adoption of their EA practices, which has pointed out a feasible suggestion for the development of the Chinese accounting profession:

'Our carbon audit practices would make remarkable achievements only if we combined our practices with the overall situation of economic development, such as develop-the-west strategy...to combine our self-interests with national interests, which is a feasible way to develop Chinese accounting firms.' – D, senior manager, large domestic, Chengdu.

Several insights can be identified from the above statements. First of all, the adoption of EA is a way to expand existing accounting services, which is a profit-oriented motivation. Then, EA practices are of significant relevance with economic development, which proves that accounting can promote economic development. Moreover, the role of the accounting profession is to combine self-interest (income) and national interest (economic development), which indicates that the adoption of any accounting practices will contribute to the general development of economics. Therefore, current Chinese EA practices have played an active role in the satisfaction of national demand, which can be a successful experience for the development of the contemporary professional accounting industry. Likewise, a senior manager from DTT has also mentioned the Chinese economic transition:

'...It also indicates an economic transition from the traditional GDP economy to a low-carbon economy, which also brings the Big Four an opportunity to adopt sustainability practices.' – Q, senior manager, Big Four, Shanghai.

The question 'what is accounting for' has been asked and debated by academics for decades. As contemporary accounting practices, it is therefore important to understand what accounting is for in carbon-oriented practices. C has given the following perception, indicating that EA is actually beyond conventional financial and management accounting techniques:

'The word 'accounting' in EA is a completely different phrase of traditional accounting that we normally refer to; it's just because we normally regard accounting as the currency measurement of the corporate periodic financial position. Actually, accounting is a mathematic method of measurement – here we talk about it in a broader scope of measurement.' – C, partner, large domestic, Chengdu.

In order to compare with conventional auditing procedures, it is important to review specific carbon emission practices. As the core case of this thesis, SW has helped one of the largest Chinese listed companies for their carbon accounting practices, with the following procedure:

'First of all, we need to communicate with the company... Then it's about corporate reporting and assurance, time schedules, data collection and management, information analysis etc. and finally, the reporting stage.' – C, partner, large domestic, Chengdu.

Taking notice of all three practical stages i.e. preparation, implementation and finalization, it can be seen again that the whole carbon emission assurance process is

under the framework of ordinary auditing procedures, which can be reflected through a GHG training course:

'We have a training event about GHG emission assurance, which is a new audit practice... I remember a rough procedure, which contains training for companies; meanwhile, it also contains assistance in establishing relevant data management systems and preparation of carbon emission report, and finally auditing their report.' – C, principal, Big Four, Chengdu.

One indication from C's 'rough' memory is that C was not certain about the whole process. This has reflected a rather lower degree of familiarity and understanding (perception) of carbon emission assurance among Chinese accounting professionals, which may result in a general insufficient competence within Chinese accounting professionals. With the identified similarities between carbon emission assurance and conventional financial auditing, it can be indicated that carbon accounting in China is at its starting stage; whereas most companies have not recognized the significance of low-carbon and energy saving, which has led to a general reluctance in particular environmental activities. This may reflect the lack of such demands by current Chinese listed companies. Thus, as a consulting provider, or a practical assistant, accounting firms do not often receive such inquiries, which have restricted their access to carbon emission practices. Therefore, some compulsory action needs to be carried out to 'increase' such demands so as promote the development of CCS practices:

'As far as I'm concerned, it needs a compulsory action, for example, to implement specific legal regulations, just like the UK's basic law on climate change and the Canadian Montreal Protocol.' – C, partner, large domestic, Chengdu.

From the above discussion, government intervention is perceived to be necessary in the improvements of EA practices. For new practices adopted by accounting firms, they have to not only obtain relevant qualifications, but also affirmation from relevant authorities, just as this respondent told me:

'...There are currently no authorities or other agencies in charge of EA and carbon accounting/auditing practices; meanwhile, the practices we've done haven't received any affirmations from authorities... It's not quite convenient to tell you more details; please do understand our difficulties.' – D, senior manager, large domestic, Chengdu.

With the indication of governmental 'silence' in EA, a fear of legitimacy uncertainty can be generally identified through respondents' discussions, which has reflected a rather unestablished EA practical system and regulations in China at the moment. It is therefore important to draw the government's attention to normalizing carbon trading activities, which is a feasible way to develop corresponding practices in the accounting profession. However, some insights have been implied from the government's attitude, which might be seen as the incentive for SW's adoption of EA practices:

'But we're influenced by national government policies...What we did and what we're doing are permitted by governmental policies. The concept of low-carbon and energy saving our government advocates is quite relevant to our carbon audit services. So our practices will be influenced by national macro policies.' – D, senior manager, large domestic, Chengdu.

According to D's description, they have gained support from superior administrative agencies; meanwhile, their daily practices have completely relied on contemporary regulations and practical standards on national energy and environment, which has suggested the significance of governmental affirmation and regulatory establishment:

'...Our approaches can be found from international technique guidelines and practical methodologies issued by NDRC... We also take notice of P.R. China Energy Saving Law and our Circular Economy Promotion Law.' – S, GHG auditor, large domestic, Chengdu.

Most of the above documents are regulatory guidelines or policies issued by government agencies, which can indicate that SW's carbon practices have been practised at least within a legal context; the next step is for legislation and legitimation of current EA regulations and standards. As such, the professional accounting industry is better to wait until everything has been settled:

'What we do now is to wait for the establishment and completion of our national environmental legislation; then we can start to discuss and improve our practices. I think EA practices should be developed in this way.' – D, senior manager, large domestic, Chengdu.

To identify the association between accounting professionals and carbon emission assurance practices, it is necessary to revisit the background of accounting professionals in certain carbon practices, so as to identify their perceptions on such associations. Most selected interviewers are from an economics-related discipline i.e. accounting and finance, whereas there are still a number of respondents who are not that 'naive' about EA. As such, it has become necessary to investigate reasons that cause this gap between individuals. As the core case of this thesis, the partner of SW has described his subject major background as following:

'My bachelor's degree was in accountancy, and my master's degree was in global economics.' – C, partner, large domestic, Chengdu.

The following statement reflects that the development of the Chinese carbon trade market has promoted the development of carbon trading activities, so as to consequently develop carbon accounting practices as well. This can possibly explain that C is able to link his understanding of carbon trading back to economics (his subject major background):

'...The government has to control the ratio between carbon volume and GDP; based on the actual carbon emission volume, the government will allocate a certain amount of carbon to the corporation and let them purchase, so as to promote low-carbon and energy saving in a marketing way.' – C, partner, large domestic, Chengdu.

Two insights have been identified: first of all, government intervention might indicate that global climate change has drawn governmental attention to some specific aspects of the environment; also, specific government actions on the marketing of carbon resources reflects that the process of the carbon trade is actually marketing, and more precisely, economics. Thus, everything can be traced back to the context of 'economics', which shows that economics actually plays the central role in the development of the Chinese carbon trading market, and generally the development of Chinese carbon accounting (EA) practices:

'So I think here, everything comes back to the concept of economics, and that's why the word 'economics' will be added behind carbon.' – C, partner, large domestic, Chengdu.

In addition, C kindly introduced his previous working experiences, which shows that C was the trailblazer of the Chinese carbon emission assurance practitioner; meanwhile, C's firm was the trailblazer of climate change accounting practices amongst domestic firms:

'...We few friends had established an accounting firm called ZX, which you can search for on the internet. The purpose of establishing ZX is about EA practices, and that's our common goal. Then we thought we needed a bigger platform, so we agreed to be combined with SW, our current firm.' – C, partner, large domestic, Chengdu.

Apart from that, C has described their practical strength among major competitors as following, which might indicate their potential competence in adopting global-wide accounting practices (i.e. carbon emission assurance) as, thus, the possibility of adopting advanced accounting services i.e. EA:

'We're leaders in setting professional standards, information construction and the assistance of Chinese corporate globalization among our competitors.' – C, partner, large domestic, Chengdu.

More specifically, C extended their strength of professional standard setting to the application of IAS GHG statements, which has made SW the leader of CCS services:

'Our attempts on the application of this standard (IAS) can be regarded as leaders in China, even in international accounting professions.' – C, partner, large domestic, Chengdu.

C's discussion has therefore reflected SW's confidence and competence in carbon emission assurance practices among other domestic firms. It can be concluded, to this extent, that the stronger environmental awareness of SW (more specifically, C) has motivated their adoption of EA, which has become the unique carbon emission firm among domestics. C's personal willingness is respectful, since the adoption of new accounting technology needs both professional expertise and innovation spirit. But more importantly, it is SW's carbon practical experiences that have led to C's comprehensive perceptions on EA. In summary, this section illustrates accounting professionals'

perceptions through their participation in carbon practices, with the (re)discovery that carbon emission practices are substantially similar to conventional auditing procedures, so that the role of accounting professionals in carbon emission assurance practices can act as an 'auditor'. In addition, the emergence of carbon emission practices in the professional accounting industry is under the influences brought from competition and globalization; whereas government intervention tends to play a key role in the enforcement of carbon trading activities in certain industries, which would eventually create 'demands' for professional service firms. Meanwhile, the adoption of SW's carbon practices has been banded together with national strategies, which is seen as both the recognition of national demands and a feasible development strategy for the Chinese accounting profession. Moreover, it has re-emphasized that accounting professionals' perceptions are shaped by the access of EA practices through educational background and practical experiences in response to the previous chapter. This leads to the conclusion and implications for the forthcoming chapter.

5.6 Conclusion

This chapter illustrates Chinese accounting professionals' perceptions of EA through their daily practices, which can be reflected from their job responsibilities and daily work. Typical EA practices within Chinese accounting profession have been identified, including environmental financial audit, CSR report assurance, carbon accounting and assurance services under CCS specific section. This, to a large extent, has reasserted the branding effects of EA in Big Four and, simultaneously, the leadership of Big Four in shaping Chinese CCS market. In addition, it has been identified that conventional auditing is seen as both the major component and main source of business income for accounting firms. Current auditing practices financially-oriented auditing; whereas non-financial items seem to be less important during the auditing procedure. This financial-oriented service has restated Thomson's (see Thomson et al., 2014) discovery that the calculation and calculability of non-financial information tends to become the key determinant for accounting professionals to become involved in such accounting-environment hybridisation practices. The application of non-financial techniques in auditing projects can be regarded as an innovation for current auditing techniques, which would eventually lead to the development of non-financial auditing practices i.e. CSR and sustainability report assurance; whereas many respondents did not recognize its necessity, which reflects a rather insufficient environmental awareness. As such, a financially-oriented perception has been generally identified within Chinese accounting professionals. Moreover, the shrinking of the current audit market also suggests some necessary innovation for traditional practices. It is therefore important to expand on current auditing practices, which can not only be recovered from policy influences, but also contribute to the development of contemporary accounting and auditing practices.

With the adoption of non-financial auditing practices, the term 'environment' has initially become an interesting element in auditing and assurance practices. Typical environmental audit practices include auditing for environmental projects, CSR report and carbon emission assurance. However, environmental auditing is still at its starting stage at the moment. Among all influential factors, government intervention has shown its significance in the macro controlling of the carbon trading market and, more importantly, the enforcement and legislation of EA. Thus, EA is seen as a financial, client and regulative-oriented practice. The emergence of EA has also reflected the role of accounting in economic development, which makes the government a potential stake party. As such, the adoption of EA is supposed to be associated with national strategic plans which most domestics have failed to recognize. In that sense, SW and BDO has caught the opportunity to develop its own EA practices. As a result, EA has been entitled as a 'brand' for a few successors (namely, the Big Four and a few domestic firms). This has reasserted the leadership of Big Four in dominating the whole Chinese CCS market, in terms of their comprehensive services and wider demands from their clients. This branding effect has made the Big Four the motivation for a few domestic firms and, simultaneously, the entry barrier for most domestic firms to step into the EA market, with the indication that domestic firms are generally likely to resist adopting EA with the fear of this Big Four branding. In addition, SW's practices have also identified the link between accounting professionals and carbon emission, which has been eventually developed as its unique service among domestic firms; whereas most respondents with a pure financial and accounting background have failed to associate their competence in accounting and auditing skills with specific carbon practices. Here, environmental awareness not only refers to professionals' perceptions of EA, but also the ability to link their capabilities to certain environmental issues, which has identified a general lower environmental awareness among most Chinese accounting professionals.

This chapter has also brought some institutional insights on practices, which can be indicated through the branding effect of EA in Big Four: domestic firms generally tend to adopt rather financially oriented services; whereas only Big Four and a few domestics have adopted specific EA practices, reflecting a general lack of demands and competence (normative maintenance) in EA among Chinese domestic accounting firms. In addition, this lack of demands and competence are likely to be illustrated further through a lack of compulsory (coercive) requirements on adopting EA. As a result, while a few Chinese domestics have modelled their EA practices to Big Four, the remaining are generally keeping silence in adopting specific CCS services, reflecting a general resistance of EA in Chinese accounting profession. More specifics will be discussed in details in Chapter 8.

This chapter goes through ordinary environmental practices of the current Chinese accounting profession, with the implication for the significance of practical standards in guiding and normalizing certain accounting practices, which makes it essential to review practical standards and regulations for environmental practices. As a result, the next section will focus on accounting professionals' perceptions through their practical standards and corresponding documents, so as to identify whether regulative and normative factors may influence current Chinese EA practices.

Chapter 6 Practical Standards

The previous chapter has discussed Chinese accounting professionals' perceptions on environmental accounting (hereafter EA) through their ordinary practices, which reflects some indications about how domestic firms tend to resist adopting EA practices through their ordinary practices. As guidance for EA practices, practical standards and regulatory statements would guide and normalize accounting professionals' behaviour, with the implication that their perceptions of EA might be embedded within the use of those standards or codes from their daily practices and ordinary training. In addition, the adoption of certain practical models heavily rely on clients' demands, which indicates the possibility that the selection of corresponding practical standards would also reflect clients' influences. More importantly, some insights on possible institutional drivers through coercive and normative influences can be possibly indicated through influences from practicing standards and regulations. In respond to EA in Chinese accounting profession, following the discussion of practices, another 10-20 minutes have been spent on the practical guidelines and standards during the interview process, since the identification of possible regulative and normative factors is supposed to be the main focuses of this thesis. In the following sections, various documents and standards (practical codes) will be therefore analysed for the possible identification of coercive and normative forces.

6.1 Accounting & Auditing Standards

As the main practical guideline for accounting practices, it is necessary to identify accounting professionals' perceptions of EA through Chinese accounting and audit standards, so as to examine how the adoption of accounting and financial-oriented standards would shape their perceptions on accounting-environment/sustainability hybridization. The interviews have discovered that the most commonly used documentary guidelines are primarily financial-oriented Chinese Accounting (Auditing) Standards, which focus on general financial instead of non-financial practices,

containing some specific measurements on environmental accounting information; whereas other non-financial standards are rather generic. A respondent from a Chinese domestic firm has described their practical documents as following, which is most commonly used in China:

'Chinese accounting standards, CPA audit standards and enterprise accounting standards. We have a big accounting standard as a framework. We also have several small accounting standards under this framework, such as a public institution accounting system, an enterprise accounting system and a small enterprise accounting system etc.' – L, manager, medium domestic, Chengdu.

It can be identified that accounting standards tend to contribute to the standardization and normalization of professional accounting practices. More specifically, the following statements have suggested the significance of accounting standards updates:

'...new accounting standards will lead accounting firms to be developed to be more professional; meanwhile, new accounting standards often reflect the principle of risk orientation, which might enhance the difficulties of corresponding audit practices. Therefore, new accounting standards will prompt accounting firms' practices to become more standard, normative and professional.' – L, auditor, large domestic, Chengdu.

Being one of the main influential factors, any updates of accounting standards will lead accounting firms to adjust their current practices by means of introducing relevant training events and adopting new practices. As a typical example, SW has been directly influenced by the issuing of GHG statements in IAS and adopted their carbon emission audit services:

'IASB started to discuss this in 2009, and finally issued this standard in 2013. Our cooperation between WLY started from 2011.' – C, partner, large domestic, Chengdu.

As for certain EA practices i.e. carbon emission accounting, contemporary Chinese Accounting Standards (hereafter CAS) seem to be too financially-oriented; whereas International Accounting Standards (hereafter IAS) specifically mention measurements of greenhouse gas (hereafter GHG) in the corporate production process, just like C discussed:

'IAS requires us to link our practices to a company's specific technological process.' – C, partner, large domestic, Chengdu.

C's discussion indicated that IAS is rather more specific than the Chinese abstract and generic standards. Meanwhile, C has identified a significant difference between traditional accounting and EA, which indicates that CAS as ordinary financial accounting standards are less proper for EA practices. Meanwhile, it can also be seen that SW's adoption of EA practices can be seen as an explicit response for the issuing of IAS corresponding statements. Apart from that, a larger proportion of non-local clients in the Big Four have indicated the possibility that clients' demands are likely to shape the adoption of certain accounting standards. A few successful Chinese firms are actually learning from western successful models through the adoption of IAS and climate change and sustainability (hereafter CCS) services; whereas most domestic firms do not adopt IAS because of their clients' insufficient demands and professional competence in certain EA practices. This has also proved the point that EA related practices are easier to be introduced in larger firms rather than smaller firms; meanwhile, EA practices are more easily practised in international firms than domestic firms, which can be reflected through the identified branding effects of EA in the Big Four.

To investigate how practical standards would shape accounting professionals' practices and corresponding perceptions, a respondent introduced their practical

guidelines as following, which indicated that environmental considerations are required by practical codes of accounting professionals:

'...our practices are guided by Chinese CPA Auditing Standards, which is our practical code. No. 1631 standard requires us to take environmental issues into account when auditing financial statements.' – C, CPA, small domestic, Chengdu.

More specifically, the following participant described the role of environmental investigations in the risk evaluation process, which indicates that the adoption of environmental investigation is actually an influence brought from CPA auditing standards:

'It's actually within our CPA's practical responsibilities.' – L, project manager, large domestic, Chengdu.

It has been mentioned that contemporary Chinese accounting professionals' knowledge structure is generally based on financial and management accounting; whereas most of them do not have sufficient expertise in CCS. In other words, financial techniques are still the dominant practical approach in current ordinary audit practices. As such, EA firms tend to rely primarily on international standards, which are less financially oriented:

'We normally use Chinese accounting standards, IAS, IFRS and CPA audit standards in our ordinary audit practices.' – Z, senior auditor, Big Four, Shanghai.

'We normally use Chinese accounting standards, IAS, IFRS, CPA audit standards and international assurance practical guidelines.' – C, principal, Big Four, Chengdu.

From the above discussion, the increasing use of international standards tend to become a major tendency, just like Belal and Owen (2007) have suggested. In addition, the localization of clients tends to be the major reason for adopting corresponding

practical standards, which indicates that clients' demands tend to shape firms' practical guidelines. Even for the Big Four, their adoption of practical standards did heavily depend on clients' demands:

'We don't have many foreign enterprise clients in South-west China. Most clients are state-owned and privately-owned companies. We normally use Chinese accounting standards and tax laws in our ordinary practices; whereas IAS has influenced us very little.' – C, principal, Big Four, Chengdu.

From the above quote, the Chengdu office does not often use IAS and IFRS in their ordinary practices because of their clients' demands, since the major demands for most inland companies are to go public instead of using CCS practices i.e. carbon trade, corporate social responsibility (hereafter CSR) reports, environmental management; meanwhile, the localization of clients has caused the variance of development in CCS practices in a regional context (i.e. coastal and inland, eastern and western), which indicates that most Chinese inland companies do not have the compulsory demands for the adoption of international standards. Instead, Chinese enterprise accounting standards, issued by the national fiscal department, are compulsory accounting standards that every company registered in mainland China should follow. For audit and consulting services provided by accounting firms, their adoption of practical guidelines also depends on their clients' demands: if their clients want to be transnational companies, then international standards should be considered by accounting firms; if their clients do not have such demands, then it is useless for accounting firms to adopt IAS or IFRS. Thus, most domestic firms tend to largely rely on CAS instead of IAS, since this is the choice for their major clients. Here, it can be identified whether using accounting standards mainly depends on localization, which shows the significance of clients' demands in the adoption of accounting.

With the development of globalization, accounting practices have become convergent by assimilating with western accounting standards and systems, which is actually a process of international homogenization. Another respondent has expressed his feelings on the homogenization of accounting standards as following:

'Over half of our accounting standards are 'copied' from international standards.' – L, manager, medium domestic, Chengdu.

Despite the fact that the homogenization of international accounting standards has become an unstoppable trend, plenty of countries and regions have kept their own standards while they have already adopted IAS and IFRS. This has already been identified (Boussebaa, 2015) as the localization of 'global' standards:

'We have our unique standards with differences to globally used standards. So as for the US, Hong Kong...their standards are slightly different from IAS and IFRS, but the Chinese [standards] are much more different.' – L, manager, medium domestic, Chengdu.

It can be clearly seen that the development of Chinese accounting standards are normally contributed to by the adoption of western models. More importantly, the development of the Chinese professional accounting industry can be regarded as a learning process of western models. This has, therefore, become a feasible strategy for a few Chinese accounting larger firms (i.e. SW and BDO) to be globally influential by adopting certain EA practices. Meanwhile, a few medium and small firms have also started to imitate large firms by adopting management consultation services other than traditional audit and capital verification. This has been regarded as the process of international homogenization of the Chinese accounting profession:

'...in order to normalize accounting firms' practices and achieve deregulation reform, the Chinese government compulsorily led accounting firms to become international intermediary organizations' – J, deputy manager, large domestic, Chengdu.

This section has elaborated on accounting professionals' perceptions of EA through their accounting practical standards, with the discovery that the adoption of accounting standards heavily relies on clients' demands. As the core argument of this whole thesis, clients' demands can be linked to every section of analysis. First of all, one of the main motivations for a single accounting firm is to make money from their clients; secondly, their services should satisfy the needs of their clients; apart from that, their services need to be adjusted to respond to any change of their clients. Thus, the choice of accounting standards can also be seen as a client-oriented process, which supports clients' demands as the major argument of this thesis. Apart from that, the adoption of international accounting standards tends to become a feasible tendency for CCS practices; meanwhile, an increasing adoption of the western practical model in the Chinese accounting profession has reflected the influences brought from globalization. What is more, the choice of accounting standards can also reflect a developing strategy of accounting firms i.e. larger firms tend to be globally or nationally influenced whereas smaller firms tend to be regionally (locally) influenced. It can be therefore seen that the adoption of certain accounting standards can not only reflect client and normative focus, but also mandatory requirements. Such a process would guide accounting professionals' perceptions on environmental issues as a necessary ordinary auditing process. One factor crucial from the above quote is that, national (governmental) regulations and policies tend to play an even more coercive role in guiding and legitimizing accounting professionals' behaviour, since the internationalization of the Chinese accounting profession has been promoted by government actions. As such, it becomes rather significant to seek accounting professionals' perceptions on some governmental documents i.e. legal regulations and policies, so as to capture potential signals on coercive influences.

6.2 Laws, Regulations & Policies

Following the discussion of mandatory accounting and auditing standards, governmental regulations and policies tend to play a more compulsory role in

determining and shaping accounting firms' practices, which would shape accounting professionals' perceptions of EA in a more legislative and mandatory way. Thus, this section would elaborate on accounting professionals' perceptions of EA through governmental influences by illustrating how the adoption of national regulations and policies would influence accounting professionals' adoption of EA. As well as practical codes, the interviews have also identified some additional indications that coercive forces (laws, regulations and policies) did shape and influence the development of certain accounting practices within the Chinese accounting profession. This can be reflected from the following statements:

'Our services and practices are strictly in accordance with government legal regulations and industrial standards, they guide our practices. You can imagine the consequences if there's no united CPA auditing standards.' – Z, deputy manager, large domestic, Chengdu.

The normally used legal regulations that accounting practitioners often abide by during ordinary financial audit practices are all general laws and guidelines:

'Our accounting standards, accounting law, economic law and Chinese CPA auditing standards.' – W, assistant auditor, large domestic, Chengdu.

While Chinese CPA Practical Standards focus on the normalization and standardization of accounting practices, government regulations have the strongest legal effects on not only normalization and standardization, but also the legitimation of accounting practices. More specifically, another respondent has directly pointed out that the nature of audit practices as an non-compliant practice indicates the significance of national legal regulations in ordinary audit practices:

'The audit services or procedures we provide to PC, I think can be regarded as compliance auditing, as we have to review on relevant environmental regulations.' - J, deputy manager, large domestic, Chengdu.

This quote reflects how the documentary review is a necessary process in the whole audit procedure. Those mentioned regulations (see W's quote) are the most commonly used accounting laws and regulations, which are normally financially-oriented; whereas the diversion of audit practices suggests the possibility of taking an increasing trend of less-financially oriented documents into account. This would require additional knowledge on non-accounting and financial issues, which may indicate insufficient competence among accounting professionals in handling non-financial practices. Take new high-tech special audit practical documents, for example:

'Chinese CPA auditing standards. New High-Tech Enterprises Affirmation, Guidelines for New High-Tech Enterprises Affirmation and Fields of National Supported New and High Technique.' – W, CPA, medium domestic, Chengdu.

As a medium domestic firm, there is no expert who is specialised in New High-Tech skills within W's firm, which requires CPAs to be aware of relevant knowledge. This, to some extent, may reflect an insufficient competence in New High-Tech practices among accounting professionals, as accounting professionals' are not specialised in non-accounting/financial techniques. For a Big Four geographical environmental project, the process of mining restoration is regulated by several environmental oriented documents. Such a situation has reflected potential co-operation between financial and non-financial practitioners, which have indicated an insufficient professional competence within pure accounting professionals in dealing with an environmental project:

'For this project, we've used...national regulations on mine environment restoration...and some local government regulations...' – Z, senior auditor, Big Four, Shanghai.

As for EY's clean technology clients, EY has also used many relevant industrial and national regulations other than accounting standards:

'...we have to take notice of some national and local industrial regulations, such as Cleaning Production Promotion Law, Chinese Environmental Law and so on.' – C, principal, Big Four, Chengdu.

With the review of the Big Four's environmental-oriented audit practices, it is necessary to take notice of how the environmental audit has been practised in Chinese domestic firms. Environmental projects are normally for state-owned and public listed enterprises, which indicates the possibility that larger accounting firms find it easier to get access to those projects. As for domestic participants, the adoption of environmental inquiries (derived from documentary review) is regarded as a progressive improvement of contemporary audit practices in the previous chapter; whereas indications on the adoption of certain environmental regulations can hardly be identified. For international and large domestic firms, their practices on environmental projects contain comprehensive processes including environmental documentation review, which shows that environmental regulations are better understood and applied by those firms (see p.8: Z). This can be contributed by their ordinary training and continuous education; meanwhile, their clients may have demands regarding specific environmental issues i.e. mining restoration; whereas smaller firms are normally focused less on environmental regulations and guidelines. Influences from policies and regulations in smaller firms are only concerned with their existing services (financially-oriented); whereas irrelevant documents are less applied. Apart from that, the demands from clients will also influence their choice of government regulations, since the adoption of normative standards is actually a client-oriented process. What is more, most Chinese accounting firms and companies seemed reluctant to strictly carry out national regulations that bring negative impacts upon them, unless they are commanded to do so, or the policy stands for their own interests. As a result, most domestic firms tend to respond similarly to current environmental policies and regulations, which can not only reflect how

accounting firms responded to government regulations, but also reflect how their clients responded with regulatory influences. To a certain extent, the adoption of certain policies or standards often indicates additional economic expenditure; whereas smaller firms and companies often refuse those changes for cost saving purposes:

'Unless there is something related to their survival lifeline, or the government is prepared to punish somebody or enforce a compulsory policy, no company will be willing to do this.' – L, manager, medium domestic, Chengdu.

It can be seen from the above quote that government intervention i.e. standards and regulation setting tends to be a major component for the development of EA practices, since regulations have their strongest legal effect in legitimizing certain practices, so as to make them legally acceptable and enforce companies to adopt certain EA. Some participants have expressed similar feelings as following:

'...it needs a compulsory action, for example, to implement specific legal regulations, just like the UK's basic law on climate change and the Canadian Montreal Protocol.' – C, partner, large domestic, Chengdu.

'... [the] Chinese government doesn't compulsorily command companies to do so. So I guess this is the main reason why EA develops so slowly in China.' – L, project manager, large domestic, Chengdu.

It can be indicated that the development of Chinese EA cannot be achieved without a push from the government. In other words, Chinese EA practices are more likely to be influenced by government regulations, which is an indication of coercive influences. Some indications from firms' ordinary training could also reflect the significance of coercive forces in shaping firms' practices, suggesting that accounting professionals' perceptions of governmental influences can also be reflected through their training:

'M: So do you provide environmental training or advertisements to your employees or your clients?

L: Honestly, not now. It depends on the actual situation, but it'd be better to follow national policies. If the government asks us to do so, we will definitely do so.' – L, manager, large domestic, Chengdu.

It can be seen from the above statement that, not only accounting practices, but also ordinary training events, are heavily influenced by government policies and regulations, which reflects a clear legitimate concern on the adoption of certain accounting practices in response to government policies i.e. the 'cutting-off' capital verification services. For ordinary training events within accounting firms, environmental issues have been rarely mentioned. Rather, common training includes policies, standards and practical issues, which generally reflect the nature of financial orientation in ordinary training:

'We've studied government policies during our regular meetings. From the current meetings, no indication can show that China will shortly propose any environmental policies to accounting firms. You know, it's difficult to adopt a new practice without the support of policies.' – L, chief auditor, medium domestic, Chengdu.

Several indications have been identified from the above quote. Firstly, training events in smaller firms are not as formal as larger firms; secondly, governmental policies have become one of their major training events, which have nothing to do with practices (EA) they have not yet adopted; what is more, an uncertainty of policy permission is likely to be identified. This is not only a legitimate concern, but also a reflection of coercive forces. As a result, some respondents have suggested that the government should pay more attention to environmental governance:

'I think no matter whether it is EA or an environmental audit, both need national compulsory regulations and policies; whereas it may involve some professional assessments and affirmation from relevant authorities.' – L, senior auditor, Big Four, Shanghai.

Despite the fact that very few indications on environmental issues have been identified for the current Chinese accounting profession, some recent news has brought good signals on the development of specific EA and audit practices. The following tax consultant in the Big Four had discussed the introduction of independent Chinese national environmental tax, which is also a feasible way for the Chinese accounting profession to develop EA practices:

'The formal application of Chinese environmental tax proposal has been submitted to the state council to be approved...National fiscal department, environmental department and taxation administration have jointly submitted this application for formal levy and experiment of environmental tax, which will be implemented shortly.' – L, tax consultant, Big Four, Chengdu.

It can be seen from the above statement that the government has played the main role in the approval and implementation of environmental taxation. As a result, with the official approval of environmental tax proposals, subsequent legal regulations and policies will be released from central government to every province. It is therefore necessary for the accounting profession to organize relevant training events on environmental tax. Relevant training will be then organized for firms who have provided tax consultation and assurance services. For the adoption of EA practices, despite the fact that the EA legal system and regulations are less established at the moment, the government has started to realize the significance of low-carbon and sustainability in social and economic development. This can be reflected through the following example of co-operation between the local government and accounting profession (e.g. SW) for low-carbon projects, which indicates that social auditors (accounting professionals) have already taken part in an environmental project as both external auditors and a consulting agency. This can not only reassert the fact that SW

adopted their EA practices as a response to government reactions, but also supports the main argument that government intervention tends to act as a key role in shaping and developing EA practices in the Chinese accounting profession:

'The Sichuan Department of Finance asked us to deal with one problem: how could the Sichuan fiscal department propose a set of evaluation and performance assessments as a measure to support Sichuan's current low-carbon development and air polluting prevention? We previously assessed the efficiency of fund usage only on the basis of actual fund usage efficiency.' – C, partner, large domestic, Chengdu.

This section generally elaborates on participants' perceptions through national regulations and governmental influences so as to identify how accounting firms respond to coercive forces by whether they adopt or resist EA practices, indicating that accounting firms heavily rely on existing governmental regulations and legal documents in adopting certain practices. It can be identified that regulatory and political influences are not only reflected through accounting firms' adoption of EA, but also determine whether to provide environmental training and education in firms' ordinary training events. As for an environmental oriented project, a wider application of legal documents and policies other than financially practical codes tends to become a tendency, which suggests the necessity of interdisciplinary documentary review in EA practices. The launching of environmental tax would possibly bring insights into the implementation of EA practices in the Chinese accounting profession. In addition, despite the fact that legal regulations and policies for certain EA practices have not yet been fully established at the moment, the adoption of SW's carbon emission practices has indicated that accounting firms are supposed to receive affirmation or support from government authorities in adopting EA. Such circumstances have suggested that the adoption of EA can be seen as a political process. Unlike compulsory regulations, the adoption of CSR disclosure tends to be more voluntary for companies and, thus, accounting firms; whereas accounting professionals tend to reply on certain practical codes for CSR reporting and assurance practices. Being linked to the discussion of CSR assurance in the previous chapter, it is therefore necessary to review practical guidelines for CSR report assurance, which will be discussed in detail in the next section.

6.3 CSR Assurance Practical Guidelines

As discussed in the previous chapter (practices), the restricted access of CSR assurance has grounded discussions of corresponding guidelines on interviews with a few large firms. With the development and completion of standardization and normalization in traditional audit practices, it is therefore necessary for the accounting profession to develop new audit techniques to recover from policy and competitive influences; meanwhile, the emergence of non-financial audit practices can be seen as an innovation of accounting and auditing practices. As a typical non-financial audit form, CSR report assurance practices have been adopted in an increasing number of larger accounting firms, which has promoted the development of Chinese EA practices. The general CSR report assurance practices, and carbon emission audit practices, are actually developed from traditional audits. However, several major differences have been identified from the following quote, which shows the main difference between traditional financial and non-financial audit practices regarding economic and non-economic information. Meanwhile, it also suggests the necessity for specific expertise in the CSR report assurance technique other than a pure accounting and economic knowledge background. This would possibly influence the adoption of certain practical standards within the current Chinese accounting profession. As a CSR assurance practitioner, X has introduced specific practical standards within their CPA audit standards:

'Our CSR assurance practices are normally guided by no.3101 Chinese CPA Assurance Standards: Assurance Services Other Than Historic Financial Information Auditing or Revision, which is under CPA auditing standards.' – X, CPA, large domestic, Chengdu.

For the Big Four, their practical guidelines have been introduced as following, which shows that both domestic firms and international firms have adopted similar practical guidelines. Even for local clients, their practical standards are almost the same:

'We mainly use no.3000 International Standards on Assurance Engagements (ISAE): Assurance Engagements Other than Audits or Reviews of Historical Financial Information and GRI guidelines in CSR assurance practices. For Chinese listed companies, we also have to take notice of CSR report preparation guidelines issued by the Shanghai and Shenzhen Stock Exchange' – Q, senior manager, Big Four, Shanghai.

With comparisons between domestic firms and the Big Four, several indications have been identified. First of all, for Chinese domestic firms, the adoption of CSR report practices can reflect a general process of international homogenization through the adoption of similar practical guidelines. Likewise, the adoption of GRI and CSR assurance practical guidelines has also led firms to resemble each other, which may indicate possible institutional drivers:

'With the influence of CSR popular activities from international companies, Chinese central enterprises and listed enterprises have successively started to disclose CSR information and prepare CSR reports.' – Z, deputy manager, large domestic, Chengdu.

As the core finding of this thesis, it has been suggested that the adoption of certain practices actually depends on demands from firms' major clients, especially for local clients. As a result, the adoption of relevant practical standards will actually depend on the localization of clients as well, which has reasserted the nature of the client-orientation of EA (CSR assurance) practices. As such, the adoption of CSR practical guidelines in the Chinese accounting profession can be seen as the process of the localization of 'global' standards, which reasserts that the adoption of EA standards would depend on clients' demands:

'Most clients are state-owned and private-owned companies. We normally use Chinese accounting standards and tax laws in our ordinary practices; whereas IAS has influenced us very little.' – C, principal, Big Four, Chengdu.

To refer back to the comparison of practical guidelines between the Big Four and domestic companies, the following respondents expressed their feelings on contemporary CSR assurance practical guidelines as being generic and financially-oriented, which indicates that the adoption of international standards tends to be more proper as EA guidelines:

'In China we have an assurance standard for other business/service, which are all-embracing...The content of other service assurance standards is actually empty.' – C, partner, large domestic, Chengdu.

It can be reflected from the above statement that Chinese CSR assurance standards can reflect some shadows of conventional audit practices, which tend to be financially focused. In that case, such a situation may indicate that CPAs are supposed to be the major participants, since their CSR practical standards are financially oriented; whereas the calculation and calculability of CSR information tends to become the key to getting accounting practitioners involved in certain EA practices. However, the participation of accounting profession in non-financial audit practices has been restricted:

"...the participation of CPAs in CSR assurance is quite limited...for all of China's CSR reports which have been audited, only less than 10% reports have been audited by accounting firms; whereas the other 90% are done by other consulting agencies and experts from relevant industrial associations." – Z, deputy manager, large domestic, Chengdu.

From the above discussion, it can be reflected that most CSR assurance practices are done by industrial associations; meanwhile, their associations are also responsible for assurance standard setting. As such, participants regarded this as a lack of authority that helps to normalize CSR assurance practices within the accounting profession, which has led to a restricted participation of accounting professionals in CSR assurance:

'There are no compulsory CSR assurance regulations in China...So I feel there is a lack of authorized agency in China, which, more or less, has caused some lack of standardization in our daily practices.' – Z, deputy manager, large domestic, Chengdu.

It can be identified from Z's description that the focus of compulsory regulations in CSR reports is not only a legitimate concern, but also a normative and professional concern. As a result, it is necessary to establish a relevant legal and practical system to normalize and standardize current CSR assurance practices, which the government is primarily responsible for. To sum up, there is little direct indication from coercive factors in the adoption of CSR assurance practices; however, some reflections have also indicated the significance of compulsory regulations in CSR report preparation, which suggests the potential importance of corresponding assurance practices. However, from the list of CSR reporting grading companies during 2010-2014 provided by one participant, those CSR grading companies are normally central enterprises and large public listed companies. In that sense, companies may not actively participate in this activity. As a result, the scale of clients has become the determinant factor that has led to the participation of specific EA practices; whereas large companies are major clients for large accounting firms i.e. the Big Four and domestic large ones. Therefore, the participation of smaller firms' CSR assurance practices can actually be ignored, since they normally do not have practical experience in CSR reporting and assurance practices. With the limited participation of CSR report preparation among current Chinese companies, the market for CSR assurance is restricted as well. This can be partly caused by a lack of compulsory requirements for the preparation of CSR/sustainability reports. Therefore, the popularization of CSR practices needs a compulsory action, just like C stated:

'As far as I'm concerned, it needs a compulsory action, for example, to implement specific legal regulations.' – C, partner, large domestic, Chengdu.

Unlike larger firms, most medium and small Chinese firms are unable to obtain access to most non-financial audit and assurance practices, which is likely to be reflected through their insufficient competence. But more importantly, since their major clients (privately-owned companies) do not have such demands, they would be less likely to adopt IAS and CSR assurance practical standards as their practical guidelines. As such, the content of CSR assurance will therefore be ignored in their regular training events. Thus, everything goes back to the clients' demands, which can determine not only the adoption of certain EA practices, but also the selection of practical standards in CSR reporting assurance.

This section generally elaborates on accounting professionals' perceptions on EA through CSR reporting assurance related documents. As one of the main arguments, clients' demands can not only be reflected through the adoption of certain EA practices, but also through the choice of CSR practical standards, since 'global' standards tend to be localized to satisfy local clients' needs. Meanwhile, international standards tend to become more proper as practical codes, whereas domestic standards are seen as rather generic and financially-oriented, which might eventually constrain accounting professionals' perceptions on CSR assurance. More importantly, the financial-oriented nature of contemporary practical standards can reflect the potential for accounting professionals' participation in CSR assurance, whereas the majority of CSR assurance is done by non-accounting industrial associations. This would suggest the possibility that either contemporary CPA assurance standards are not proper as CSR practical standards, or accounting professionals are incompetent in doing CSR assurance practices. However, a lack of coercive regulations of and involvement in non-accounting associations has also restricted Chinese accounting professionals' participation in CSR

assurance, especially for medium and small domestic companies. As such, it can be reasserted that both clients' demands and coercive influences would influence the adoption of CSR practical guidelines and, more specifically, accounting professionals' perceptions of EA. As another typical component of EA practices, it is important to review relevant documentation for carbon emission audits in the next section, so as to identify potential problems through accounting professionals' perceptions.

6.4 Carbon-Related Documents

According to the previous chapter, interviews on carbon practices were generally based on the Big Four and SW. Thus, discussions in this section are primarily based on the Big Four and SW's participants by elaborating on accounting professionals' perceptions on EA through carbon-related documents. China established a carbon trade market in 2013, which has suggested that carbon accounting tends to play a significant role in the whole carbon trading process. The Big Four has already established a specific service section for CCS, which contains services for carbon practices; whereas SW is the only domestic firm that has adopted carbon emission practices. With a lack of Chinese practical guidelines, SW has adopted international standards and regulations as guidelines for their carbon practices:

'No. 3410 International Assurance Service Standards: GHG Declaration Assurance Services. 2006 IPCC Guidelines for GHG Inventories and ISO 14064s.' – D, senior manager, large domestic, Chengdu.

In addition, Z, one of the oldest members in SW's carbon practical team, has introduced more specifics, which has re-emphasized the international tendency for the choice of carbon practical standards:

'We mainly rely on international standards, such as No. 3410 International Assurance Service Standards: GHG Declaration Assurance Services, PAS 2050 Carbon Footprints Standards and

Guidelines, GHG Protocol for Corporate Accounting and Reporting Standards, and ISO 14064s etc.' – Z, CPA&CPV, large domestic, Chengdu.

It can be seen that the audit/assurance practices for carbon focuses primarily on GHG rather than other historic financial information, which indicates that carbon emission audit practice is less financially oriented:

'We normally rely on international standards...We also take notice of Chinese CPA Assurance Service Standards, P.R. China Energy Saving Law and our Circular Economy Promotion Law.' – S, carbon inspector, large domestic, Chengdu.

It can be seen from S's discussion that some national regulations have been used in specific carbon-related practices; however, all their critiques have reflected that they mainly relied on international standards rather than domestic ones, since domestic guidelines are generic; whereas international standards often focus on a certain area. This, to a large extent, has reasserted the point that international standards tend to be proper for EA practices, as reflected from Belal and Owen (2007):

'However, our national standards are generic...rather than specific. So we normally rely on international standards.' – S, carbon auditor, large domestic, Chengdu.

As for the difference between conventional auditing and environmental auditing (carbon emission), SW's partner has expressed a very insightful point about the comparison between double-entry bookkeeping and their current carbon audit practices, which has clearly distinguished carbon emission assurance from traditional financial audit practices:

'The main difference between them, I think, is that traditional auditing can be traced back...' - C, partner, large domestic, Chengdu.

C's expression has reflected that EA has already broken the edge of traditional accounting, which shows the innovation of accounting theoretical and technique improvements. As a result, the practical guidelines for specific carbon emission practices should no longer be purely accounting standards, but also comprises a broader carbon technique:

'2006 IPCC Guidelines for National Greenhouse Gas (GHG) Inventories, Guidelines of Good Practices and Uncertainty Management for National GHG, GHG Protocol Tool for Energy Consumption in China, GHG Protocol Calculation Tool for Chinese Coal-Fired Power Plants, NDRC Project Methodologies for Chinese Certified Emission Reduction, CDM Project Methodologies etc.' – S, carbon auditor, large domestic, Chengdu.

From the above quote, it can be reflected that all those practical guidelines are about the measurement of GHG emission volume rather than monetary information. This also indicates the fact that carbon emission accounting/auditing practices have less to do with current Chinese accounting standards. Thus, the updates of current Chinese accounting standards brought little influence to SW's carbon emission audit practices:

'There is almost a blank in Chinese EA legislation; we don't have a specific Chinese EA system and standards. So now the latest accounting standards can have little influence on our current EA practices.' – D, senior manager, large domestic, Chengdu.

As for ordinary audit and financially-oriented practices, any updates of accounting standards will bring immediate effects on corporate practices for corresponding practical adjustments, which will lead to the adoption of relevant training and educational processes, whereas the Chinese accounting profession failed in building up such hybridization between carbon emission and accounting. Thus, carbon emission and corresponding practices can be hardly identified from contemporary accounting standards. Apart from that, being the main argument of this whole thesis, the clients'

demands have determined firms' adoption of carbon practices, with the implication that medium and small firms (with fewer clients' demands from EA) are less likely to adopt carbon-related standards and guidelines. That has reasserted the finding from previous chapters that EA is seen as a branding of the Big Four, or large firms. In addition, one interesting finding from D's discourse is that D has unconsciously referred to their carbon emission audit practices as EA; in other words, the EA legislation here can be comprehended as the legislation of Chinese carbon emission accounting/auditing practices. That is to say, the updates of accounting standards will finally influence carbon accounting practices anyway. It can be indicated that the adoption of carbon guidelines and standards can possibly be regarded as an outcome of coercive and normative forces. Therefore, it is important to complete legislation for carbon accounting practices, so that the importance of accounting standards in carbon practices can be recognized:

'Currently, the influence from new accounting/auditing standards cannot be recognized through our carbon practices. I personally think, as long as China has formally proposed GHG legislation, this influence will become apparent.' – D, senior manager, large domestic, Chengdu.

From the above discussion, it can be seen that the influence of current Chinese accounting and auditing standards on carbon emission accounting/auditing practices is limited. This is not only because their practices have less to do with current Chinese accounting standards, but also there is less participation in EA practices, especially with accounting professionals. As a result, very little achievement has been made in building up Chinese EA standards and legal regulations. Instead, current EA practices in China have been more influenced by international legal regulations and guidelines:

'...we are influenced by international environmental trends such as international climate change legal regulations...' – D, senior manager, large domestic, Chengdu.

International influences (globalization) are claimed to be one of the major motivations for SW's adoption of carbon emission practices, which tends to catch up with the development of history and international tendencies. Another important reason for SW to introduce their carbon emission audit practices is about Chinese national interest. China has now been facing the historical moment for economic development and restructuring from traditional economics to low-carbon economics. As such, the accounting profession is acting to serve to shape economic development in China:

'The reason I mentioned economic transition is because accounting should serve economic development; thus, in the context of accounting, our EA and climate change section has emerged.' – C, partner, large domestic, Chengdu.

Having been discussed, Chinese contemporary accounting/auditing standards and relevant regulations have been regarded as generic by respondents; meanwhile, the legislation for Chinese EA practices is blank. Therefore, SW has no choice but to totally rely on international standards as practical guidelines. Thus, the adoption of international standards can be seen as international homogenization as well. As competitors, there is less possibility for SW to know much about their competitors:

'Well, I don't know how things are done in the Big Four...' -Z, CPA&CPV, large domestic, Chengdu.

It seems that there is generally a lack of communication between competitors, especially between Chinese domestic and international firms. This would make carbon emission services become more mysterious, which enhances the difficulty of determining whether domestics model their specific technique issues on the Big Four. However, the following discussion has reflected similarities of carbon practical codes between the Big Four and SW in terms of clean development mechanisms and GHG:

'...most of us haven't participated in specific [GHG] projects. As I remember, they used methods of something called, um, clean

development mechanism [CDM].' - C, principal, Big Four, Chengdu.

C's discourse did not only reflect similarities of practical codes between Big Four and domestics, but, more importantly, reflect some unfamiliarity for carbon emission accounting, which generally indicates that carbon emission is still seen as 'stranger' among accounting professionals. This may further lead to a general insufficient competence on carbon accounting practices within current Chinese accounting professionals, which would hinder the development of EA in Chinese accounting profession. As an additional way to enhance accounting professionals' competence, the practical guidelines for carbon practices can also be reflected in practitioners' ordinary training events. Some general carbon principles have been included in SW's ordinary training events, including:

'Those training events are covered in environmental management courses, such as national and international GHG protocol and inspection criteria, and professional competence development for energy saving audits.' – D, senior manager, large domestic, Chengdu.

Despite the fact that many carbon-related documents have been included in SW's training, the following discussion has reflected limited staff participation in environmental training, which indicates that accounting professionals did not recognize the significance of those carbon practical principles in their daily work; rather, most of them felt such training quite unnecessary:

'Most employees respond like, 'well, I'll join in some day, but not now, it's not that necessary'.' - C, partner, large domestic, Chengdu.

An insufficient environmental awareness among Chinese accounting professionals can be reflected from the above quote. More specifically, the training for their carbon practices contains environmental management, carbon techniques and practical approaches; whereas most of SW's employees are conventional accounting and auditing employees who are not involved in particular carbon emission projects. As such, the less relevant training has led to their reluctance to attend carbon educations and, thus, they limited perceptions of such accounting-environment/sustainability hybridization.

SW is the only domestic carbon emission firm, whereas most Chinese domestic firms under similar scales and structures have not introduced those practices. On the one hand, carbon practical guidelines are not included in their ordinary training events nor their daily practices, which indicates that carbon practical standards have not yet been widely adopted within the Chinese accounting profession at the moment. On the other hand, since accounting standards and economic situations have been included in accounting firms' ordinary training events, with the development of Chinese carbon emission accounting/auditing practices, the training of corresponding carbon practical standards and regulations may eventually become useful for the improvement of professional accounting practical skills. However, just like D has mentioned, this significance should only be identified as long as the completion of legislation in carbon accounting practices is carried out.

To sum up, this section elaborates accounting professionals' perceptions of EA through carbon practical guidelines, with the implication that current carbon documents have played a role in the normalization of carbon emission audit practices, regardless of incompletion for current legislation in carbon emission practices. The use of international accounting standards has, unsurprisingly, suggested the properness of international practical codes in carbon-related accounting services, whereas an increasing amount of non-accounting documents have been applied in SW's carbon emission assurance services, which can be reflected through both their practical guidelines and training. The significance of training has not yet been widely recognized by accounting professionals, or such documents and training tend not to be understandable for accounting professionals, which has indicated a rather restricted environmental awareness among accounting professionals. This would enable me to derive conclusions for this chapter, leading to the next analytical chapter.

6.5 Conclusion

This chapter has elaborated on Chinese accounting professionals' perceptions of EA through their practical guidelines i.e. accounting standards, national regulations, CSR assurance documents and carbon practical guidelines, which could reflect both clients' demands and professional competence influences upon ordinary practices in the Chinese accounting profession. The role of state in shaping the adoption of EA has been generally identified as a facilitator in normalizing and legitimizing corresponding practices i.e. environmental governance, carbon trading, and CSR disclosure. The interview discovered that environmental-related auditing standards are financially oriented, which may indicate that the calculability of non-financial environmental information would motivate accounting professionals to become involved in EA practices (see Thomson et al., 2014); whereas such a situation may somehow restrict accounting professionals' perceptions of EA as pure monetary items. Apart from that, the adoption of accounting standards actually depends on local clients' demands, which re-emphasizes the significance of clients' demands as the main argument of the whole thesis. Government policies have become the major influential factors for accounting firms to adopt certain services, especially for smaller accounting firms. Not surprisingly, the selection of practical codes for EA in Chinese accounting profession tends to be international preferably, which is similar to Belal and Owen's (2007) findings. An increasing tendency for a mixture of accounting and non-accounting guidelines has possibly indicated that pure accounting professionals are not competent in running environmental projects independently; whereas a team with comprehensive background may be seen as more feasible. In addition, the setting of Chinese accounting standards is seen as the process of the localization of 'global' standards; whereas accounting professionals' adoption of their standards depend primarily on local demands and mandates. Environmental regulatory power can have little influence on small firms' ordinary practices because of their irrelevance of environmental practices. A generally conservative tradition in the Chinese accounting profession can be reflected through the

reluctance of adopting new services or the latest standards. This would eventually lead to slower step for the internationalization of the Chinese accounting profession, just as Boussebaa (2015: 1227) states: 'imperial efforts by [the Big Four] are continually frustrated by local resistance through the localization of 'global' standards or clients'.

As for CSR assurance and carbon-related documents, several insights have been identified through contemporary restricted access of CSR and carbon assurance. A strong international homogenization has been discovered through the similarity between international and Chinese CSR assurance standards; whereas Chinese standards are seen as generic and localized. With the lack of coercive requirements, companies are not that willing to disclose CSR information, which suggests a lack of demands for accounting firms' CSR reporting and assurance services; on the contrary, with compulsory regulations, companies listed in Shanghai and Shenzhen stock exchange will definitely prepare CSR reports. Apart from that, most practical guidelines for CSR assurance and carbon emission are international standards, or similar to international standards, suggesting that the adoption of EA practical standards is under the influence of international homogenization. For carbon emission assurance, their practices are primarily based on international standards, as Chinese standards are too generic to be adopted. What is more, the development of the Chinese carbon trade market will contribute to the completion of the whole carbon emission system, including the legislation and normalization of carbon accounting. Moreover, relevant training events relating to EA practical standards will help to improve practicing skills for accounting professionals, as a way to improve their environmental awareness.

It has been discovered through interviews that SW's adoption of carbon emission assurance is motivated by opportunities from China's economic restructuring, indicating that accounting professional services firms do serve to shape the economy. The Chinese government has released corresponding government documents for the establishment of a low-carbon society whereas the transition of low-carbon economics cannot be accomplished immediately. For Chinese accounting professionals, only a few Chinese accounting firms are competent in practising carbon accounting/auditing practices at the moment whereas most medium and small firms are incompetent to do so with neither

expertise nor clients' demands to implement EA practices. Then, the evolution of traditional accounting techniques and notions is important. The development of Chinese carbon accounting/auditing practices needs the active participation of the whole Chinese accounting industry rather than just a few trailblazers standing for the professional accounting industry whereas current medium and small accounting firms are not that competent to undertake carbon or environmental projects. In summary, a general lack of environmental awareness by Chinese accounting professionals has been identified.

Some institutional insights have been reflected from a normative and regulatory context. It is stated that (Meyer & Rowan, 1977: 340; also see DiMaggio & Powell, 1983) organizations tend to isomorphise so as 'to increase their legitimacy and their survival prospects, regardless of whether the acquired practices are of immediate effectiveness'. While government policies and regulations focus on the compulsory implementation of certain practices, accounting guidelines and standards concentrate on the normalization and standardization of accounting practices, which eventually leads to the process of institutionalisation. The international homogenization has also reflected some indications of imitating behaviours from international firms through the adoption of internationally recognized standards i.e. IAS, GRI. The selection of different standards and regulation has also reflected either the globalization or localization of certain clients, indicating that client's demands tend to become a crucial factor that lead to the process of institutionalisation in determining the adoption of certain standards and guidelines. Apart from that, the adoption of carbon standards can not only reflect client-oriented characteristics in EA practices, but also indicate an insufficient professional competence for EA practices among most Chinese accounting professionals. This would suggest possible inequity for competition within the Chinese accounting profession as a summary of previous data chapters, which makes the revision of the competitive context crucial in the next section, so as to lead to further institutional analysis.

Chapter 7 Competition

The previous chapter discussed relevant documents and regulatory reviews in Chinese environmental accounting (hereafter EA) practices. In so doing, the influences from EA practical standards and corresponding regulations have been analysed, which have brought several insights on legitimacy and stakeholder concerns. All those indications have demonstrated that EA is not only client-oriented, but also politically-oriented. The analysis of interviews so far has largely focused on participant profiles, ordinary practices and corresponding documentation, which have reflected insightful indications on potential institutional drivers accompanied with legitimacy and stakeholder concerns. However, it is possible to go further with analysis, so as to complete a more extensive discussion, and therefore becomes crucial to go through an additional context that summarizes findings from previous chapters, so as to lead to a more theoretical discussion. Clients' demands have been demonstrated as the centric, which influences firms' operating strategies i.e. recruiting strategies, client strategies, the adoption of certain practices and practical standards. Being reflected from Ch.4 (participant profile), 'people' tend to play the key role in maintaining firms' competence, indicating that the obtaining of human resources (recruitment) and maintenance of competence (training and education) would possibly bring competitive strength to accounting firms. Being the main argument of the thesis, practices and clients' satisfaction tends to become the core criteria for the evaluation of competitiveness; whereas firms' competitive strengths (or weaknesses) might also be reflected from regulatory and normative influences through the selection of practical codes and influences brought from regulatory policies, which may link back to the discussion of competence. As a summary of the previous three data analysis chapters (Chapters 4, 5, 6) as a whole reflection of EA in Chinese professional accounting context and, simultaneously, a significant starter for theoretical analysis, this chapter will explicitly elaborate on accounting professionals' perceptions of EA through the context of the industrial competition of the Chinese accounting profession, so as to identify how/why accounting firms tend to adopt/resist EA.

7.1 A Human Resource Context

The whole analysis for this thesis begins from the discussion of participant information, which suggests the significance of 'people' in adopting certain practices. In other words, knowledge and expertise (human resources) have played a key role in the adoption of certain EA practices by maintaining a certain practical level within organizations, which can also be seen as organizational competitive maintenance. As a result, human resources can be regarded as a significant competitive strength or weakness for accounting firms, which enables firms to be qualified in conducting specific services, since the competitiveness is maintained by competent employees, which fits into re-emphasizing accounting professionals' perceptions of EA through their competence. In a domestic context, human resources specifically refers to chartered public accountants (hereafter CPA) in each firm. More specifically, the number of CPA is a crucial criterion for the ranking of accounting firms in different regions, which is likely to influence the choice from clients when choosing accounting firms:

'The Sichuan CPA association proposed interim procedures for general assessments of Sichuan's accounting firms, which divided all firms into four levels: 3A, 2A, A, B. Specific criteria include operating incomes, numbers of CPA, industrial contribution index, disciplinary punishment and overall assessment...' – C, manager, small domestic, Chengdu.

It can be reflected that firms with over 100 CPAs are normally classified as large accounting firms ranked in 3A and 2A categories. For most medium and small firms with approximately 20-30 CPAs, they are generally ranked as A or B level. In that sense, the number of CPA tends to become the main component for accounting firms to maintain their professional practical strength, so as to maintain their competitive strength among other firms. In that sense, larger firms generally set higher criteria for staff educational (major) backgrounds for their entry requirements to ensure recruiting good employees as a way to secure the firms' competitiveness through the maintenance

of staff practicability and professional competence, which tends to develop into typical and common recruiting rules large firms generally follow:

'...the entrance eligibility of our firm requires potential employees to have at least undergraduate degrees from 1st-tier universities; we normally don't consider applicants from 2nd-tier universities.'

– J, deputy manager, large domestic, Chengdu.

'We have about 50 staff in total with 17 CPAs, 2 ACCA, and 3 CTAs. All of us have backgrounds of financial and accounting majors. All of us have gained at least an undergraduate degree.' – C, principal, Big Four, Chengdu.

The gap of human resources between larger and smaller firms can be reflected, since larger firms always obtain 'competent' practitioners. As such, most domestic smaller accounting firms have no choice but to recruit candidates with lower degrees i.e. college instead of undergraduate degrees, which can be normally seen in the first part (3-5 minutes) of each interview:

'We have over 40 employees with about 20 CPAs... Most employees have graduated with a college degree, and only a few with solely an undergraduate degree.' – Z, deputy manager, medium domestic, Chengdu.

In the first section of this chapter, the competitiveness of Chinese accounting firms can be explicitly reflected through their obtained skilled labour: in other words, personnel is to enable firms' competitiveness through their competence of certain services; whereas the controlling of staff entry standards tends to become the first priority in maintaining personnel. As such, the personnel gap between large and small firms has been reflected through the controlling of staff entry requirements. In addition, such personnel gap can be reflected through ordinary training, as training is seen as crucial to maintain accounting professionals' competence and, thus, secure the

competitiveness of certain firms. As previously mentioned, training events are often carried out in both international and large domestic firms; whereas smaller firms normally do not provide formal trainings, which may indicate that smaller firms do not acquire 'competent' employees. As for the comparison between the Big Four and domestic firms, several similarities for training contents have been identified through Ch.4 (practices) and 5 (practical standards) i.e. accounting standards, national and international economic situations related to current services, annual CPA continuing education, and practical skills. However, some insights from the Big Four's training need to be noticed, which suggests distinctions between the Big Four and domestic firms in terms of their ordinary training:

'We have training in global economics, IAS announcements, regulations and changes in different industries... We also have email tracking for updates and policy influences of major industries.' – L, senior auditor, Big Four, Chengdu.

It is reasserted that clients' demands have played one of the most significant roles in shaping certain EA practices, which has indicated the importance of industrial (client) characteristics in the implementation of EA practices. This suggests the necessity that client information needs to be considered in professional accounting practices. Thus, EA practices need to be adjusted in correspondence with changes in the particular industry i.e. clean technology. Therefore, industrial changes have been reflected in the ordinary training of the Big Four. The training of industrial information can also help practitioners to build up a comprehensive view of certain practices rather than purely concentrating on financial information, which would somehow enhance accounting professionals' environmental awareness of certain environmental projects:

'Since you've been in the audit project, it's necessary for you to have a comprehensive understanding of the company and its industry; otherwise, you might ignore some significant influences.'

– L, senior auditor, Big Four, Chengdu.

Compared with the Big Four's specially designed industrial-focused training, the focus of Chinese domestic firms' training is rather a uniform (generic) target-oriented training with less focus on certain industrial characteristics and international standards, which has been reflected in Ch.5 (practices) and Ch.6 (practical standards). It has been admitted by most participants that services provided by accounting firms are to satisfy clients' needs; international firms seem more competent in client satisfaction than domestics, as industrial factors have been largely considered in their training and practices. As such, a personnel gap between larger and smaller firms, and more specifically, the Big Four and domestic firms has been identified, which would suggest the possible competitive strength of the Big Four in dominating climate change and sustainability (hereafter CCS) services in the Chinese market.

In addition, the discussion of personnel in a competitive context can also be associated with the maintenance of employees in accounting firms. The following respondent has identified high staff mobility as the dominant feature of the professional accounting industry, which suggests the possibility that such inequitable personnel between accounting firms can be somehow balanced through the flow of employees:

'... There is high staff mobility in accounting firms, as accounting firms normally don't have this attraction for employees.' - J, deputy manager, large domestic, Chengdu.

In addition, a Big Four senior manager has expressed the nature of high staff mobility in the professional accounting industry, which regarded the Big Four as the 'training school' for employees' careers rather than a permanent working place. As a result, accounting firms, especially the Big Four, will no longer become attractive for most employees; instead, it becomes a pathway for entering a second career life:

'Our new entrants are normally assistants, and they often depart after becoming senior auditors. The Big Four is just like a springboard and a training school. Our resigned employees will often have a better career in the future.' – Q, senior manager, Big four, Shanghai.

More specifically, the training school mainly refers to a platform that provides employees with a better practicability through training and practical experiences. As a result, such career moves and resigned employees from the Big Four can get promoted or get well paid from elsewhere, including smaller accounting firms, business organizations and other consultancies. Similar circumstances can also be seen in domestic firms, which reflect such top-down movement of employees:

'Our team was previously working in another bigger company [accounting firm]; we then decided to separate from the former one and became an independent firm.' – L, manager, medium domestic, Chengdu.

It can be seen that L's firm is constituted by his original practical team in previous domestic firms instead of recruitments of new entrants, indicating that L preferred his original team to maintain both practices and competitive strength. As for EA adopted firms, the construction of SW's carbon practical team has presented a different scenario:

'I wasn't originally in SW, we few friends had established an accounting firm called ZX ...Then we thought we needed a bigger platform, so we agreed to be combined by SW, our current firm.' – C, partner, large domestic, Chengdu.

With the identification of two major characteristics of the accounting profession, it can be reflected that, on the one hand, the high staff mobility would certainly lead to a loss of practitioners within this industry; but on the other hand, a top-down movement of accounting professionals tends to be clearer i.e. seniors in large firms tend to either flow to other industries or smaller firms, which eventually shortens the competitive balance between larger (Big Four) and smaller (domestic) firms. To link the staff mobility to the adoption of EA practices, it can be reflected on from the above

discussion that the construction of large firms is normally accomplished through the consolidation of smaller firms, which combines existing professional knowledge and expert powers (bottom-up). For SW, it has adopted carbon emission audit practices ever since C's original firm has been consolidated by SW's Chengdu branch, as C has brought a whole carbon practical team into SW, which retained both manpower and professional expertise. Therefore, it can be seen that the adoption of SW's EA practices is a bottom-up approach, which reflects that practices in the parent firm are influenced by its subsidiary (combined) branch.

Several indications have been identified here. Firstly, the difference between the accounting education of undergraduate and college degrees: college focuses primarily on the practical capability for accounting; whereas higher education in accounting normally focuses less on practicability, which can possibly indicate a better practicability of college graduates than undergraduates in conventional financial and accounting practices. Apart from that, the constitution of accounting firms has indicated that junior workers have dominated the major proportion of each firm, who are responsible for fundamental work; whereas qualified workers hold only a minor position. Junior workers do not necessarily have to obtain a higher educational degree; instead, smaller firms prefer choosing those who are easily satisfied and good at practical capabilities instead of having a higher educational level. As a result, the choice of employees with lower educational degrees can be seen as a feasible strategy for smaller firms to survive, not only because of cost saving, but also to ensure their practical quality. Nevertheless, it can be generally reflected from the above discussions that larger firms generally maintained their competitive practicability by controlling the quality of entrants; whereas smaller firms tended to maintain their practicability (manpower) by recruiting staff with a lower satisfaction level.

This section elaborates on accounting professionals' perceptions of EA competition in terms of personnel, with the discovery that a personnel gap between the Big Four and domestic firms has been illustrated through entry requirements and ordinary training, which eventually leads to a personnel inequity between EA practices by Chinese accounting professionals. In addition, the focus of personnel in competitive context has

reasserted the main argument that 'competence' has become the key in not only maintaining a level of practicability, but also an important means to secure competitiveness. As discussed in Ch.4, 'people' has become the main focus in adopting certain EA; whereas the obtaining of competent people is seen as the means to secure firm's competitiveness. Such a situation has suggested that the Big Four have dominated EA services in the Chinese market by occupying the majority of EA competent practitioners, which can be identified as an 'oligopolistic competition' in Chinese CCS market. As one of another main argument, clients' demands tend to be the determinant factor for firms' adoption of certain EA practices, which suggests the possibility that the obtaining of clients would become the key in marketing competitions. Thus, it becomes more than necessary to link EA to different industries (clients), which indicate the significance for the discussion of clients' information in the analysis of this chapter. The next section will therefore elaborate on accounting professionals' perceptions of EA competition through clients, which is to illustrate how clients' demands would promote or hinder competitiveness in accounting firms.

7.2 A Client Context

After the discussion of participant information, client information was normally asked for in the first 10-20 minutes along with services in firms. As the centre of the whole thesis, clients' demands are linked to accounting professionals' perceptions in every chapter through their influences on the adoption of certain EA practices and practical codes, which would suggest the possibility that client strategies tend to become the key for accounting firms in competitive analysis. In the previous section, industrial training can be regarded as a major difference between international and domestic firms, which could be a main factor that may possibly lead to the competitiveness of the Big Four in EA practices. To identify the potential competitive gap between the Big Four and domestic firms, it is rather important to focus on clients' industrial context, so as to discover more insights from clients' demands. To start with, EY's principal has

described their featured environmental practices and clients, which has clearly reflected EY's commercial reputation of clean-tech services among their top clients:

'EY mainly provides clean technology services for relevant clients, which is our featured environmental practices... The proportion of our clean-tech industrial clients among global top 100 companies is at the leading position than other accounting firms.' – C, principal, Big Four, Chengdu.

It can be reflected that EY's good reputation in certain CCS practices has not only dominated EY's competition in clean-tech industries, but has also enabled EY to expand its CCS services to a wider industrial context:

'EY provides CSR and sustainability assurance services not only for clean-tech industries, but also other clients such as mining industries, oil and gas companies and financial industries. The CSR report of the Ping'An group is audited by us.' – C, principal, Big Four, Chengdu.

Several indications can be drawn from the above quote: first of all, EY is said to be the dominant CCS service provider for the clean technology industry, which can be seen as a client strategy that has occupied the whole clean-tech industry rather than single clients. Then, it can be indicated that the classification of EY's service is not only on the basis of service type, but also under different industrial categories: in other words, EY's CCS services have reflected the strong nature of client orientation. Take mining industry as an example:

'EY has established specific center for global mining and medal industries. The Sydney headquarter is also responsible for China and other Asian-Pacific regions. EY established mineral medal office in Shanghai last year, which is responsible for China and Mongolia.' – C, principal, Big Four, Chengdu.

It can be reflected from the above discussion that EY has established specific administrative institutions for specific industries on a worldwide basis, which might reflect increasing demands from regional clients; meanwhile, this also suggests the possibility for the necessity of specific expertise in dealing with particular cases. This makes the revision of personnel more than necessary in the discussion of clients' demands, since 'people' tends to be the main focus in providing services to maintain clients' satisfaction and secure competitiveness. In addition, the strength of human resources³¹ can be regarded as a main competitive advantage for the Big Four in competing with domestic firms; whereas for Chinese domestic firms, large firms have more competitive advantages in human resources than smaller firms, which enables them to be qualified in certain practices and occupy the market. Therefore, it is necessary to link the background of 'people' to the industrial context. Back to the discussion of competence, EY has sufficient resources of expertise in dealing with various industrial clients, just like C has introduced:

'There are groups of professional staff in EY to provide different techniques and professional services for different clients...in the major backgrounds of environmental science, biology, engineering, medical science, chemistry, mineral exploration, mass media, economics, laws and so on.' – C, principal, Big Four, Chengdu.

Similarly, Q has indicated influences from an industrial context in their daily work. Despite the fact that he did not explicitly classify their practices in industry, according to DTT's training, industrial characteristics have been embedded in their ordinary practices:

'DTT has provided a wide range of training events for employees, including global economics, updates of different industries, accounting standards, CPA examinations and ordinary practical studies etc.' – Q, senior manager, Big Four, Shanghai.

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³¹ The phrase 'human resources' here refers to manpower (people), professional knowledge, skills, experiences and expertise.

With the review of DTT's ordinary training, Q has described DTT's expert groups as having different majors. This indicates that DTT's CCS practices can also be regarded as client-oriented, since it has to satisfy demands from various clients in different industries, which has reasserted the significance of interdisciplinary knowledge and expertise (human resources) in certain practices:

'They're from different majors...oil and gas, resource exploration, electronic automatization, computer science, medical science and environmental science etc.' – Q, senior manager, Big Four, Shanghai.

It can be reflected that EY's practices are primarily categorized by industries, which can reflect that EY is to provide relevant EA practices to satisfy clients' demands. As for DTT, their major clients are a little different, as most of their clients are international rather than Chinese companies. Such situation would indicate the possibility that the source of clients really does shape the practices of accounting firms:

'About 30% of the top 100 global enterprises are clients of DTT, which makes our special advantages in international services... [environmental clients] mostly large listed and foreign-owned enterprises.' – Q, senior manager, Big Four, Shanghai.

It can be reflected that while EY's EA practices focus on specific industries, DTT is good at EA practices for multinational clients; more specifically, DTT is rather good at international services than domestic services, whereas EY is good at providing services to certain industries. But nevertheless, EA practices in the Big Four are primarily shaped by their clients. In general, it can be indicated that the strategy for the expansion of clients in the Big Four focuses on the occupation for a certain group of clients, which mainly refers to certain industries or certain categories, rather than a single client; whereas representatives of those industries have become regular clients of the Big Four. This strategy, which I would like to phrase as 'industrial occupation' or 'client capturing', very likely explains why the Big Four have successfully dominated CCS

services in the Chinese market. This can also partly explain why EA is seen as the brand of the Big Four; whereas clients of domestic firms normally cover almost all industries. This situation suggests the possibility that services provided by domestic firms are uniform products that are generic, which, to some extent, cannot satisfy certain needs for all clients. First of all, it is important to consider client information for typical domestic firms, which can reflect that state-owned enterprises and public-listed companies are the main targets that all accounting firms have been chasing:

'Almost in every industry our normal clients are state-owned enterprises. By the way, we provide audit services for asset management companies under Sichuan's universities.' – J, deputy manager, large domestic, Chengdu.

'...large state-owned companies and public listed companies.' – Z, deputy manager, medium domestic, Chengdu.

J and Z's discussions can indicate that their clients are grouped on firm scales rather than industries. The interviews have identified that large companies (public-listed companies and state-owned companies) are their main client groups of large accounting firms. From a competitive viewpoint, their focus is on a certain client rather than a certain industry. In general, a partner of SW's Chengdu office has described how they have found their clients of carbon emission services, which indicates that clients generally reflect less willingness to adopt any carbon emission disclosure; on the contrary, accounting firms need to actively communicate them first:

'We've been communicating these issues with companies, and we're active to get in touch with state-owned business.' – C, partner, large domestic, Chengdu.

This quote has indicated several insights. Firstly, a lack of clients' demands from carbon emission practices has enhanced the difficulty in the popularization of carbon practices in the Chinese accounting profession. Then, the focus of state-owned business

instead of privately-owned business, which indicates that state-owned companies tend to be their main source of potential EA clients:

"...privately-owned business doesn't have a strong will on that...they must be affordable to achieve this." – C, partner, large domestic, Chengdu.

It can be identified that the reason for SW to actively communicate with state-owned business is the affordability for adopting carbon emission practices. Apart from that, most companies have no willingness in adopting relevant EA practices, reflecting a lack of clients' demands in CCS services:

'As I recall, no company has proactively demanded as in this way. That's why we have to communicate with the company first... They don't come to us at all. We usually get in touch with companies in our specific ways.' – C, partner, large domestic, Chengdu.

The interviews discovered that C's discussion can be seen as a common reflection of the accounting profession, which can be elaborated on in two aspects: first of all, they do not have the willingness to develop certain EA practices i.e. carbon emission and assurance etc., since they are not compulsorily required to do so. Then, only a small number of companies are capable of adopting EA practices, since those practices are cost consuming; whereas the majority of companies are less affordable. This can possibly reflect a commercial logic that drives the development of certain EA practices in a few Chinese larger companies, provided that they are affordable for particular environmental output i.e. energy saving, carbon emission trade etc. Additionally, C has implicitly described their 'specific' ways to get in touch with potential clients, which is seen as their business confidentialities. Such information seems mysterious in the Big Four as well. However, a domestic practitioner has introduced their main source of clients, which can be seen as an inexplicit response to explain C's 'specific ways':

'Well, we've accumulated plenty of old clients...Almost covers every industry.' – L, manager, medium domestic, Chengdu.

The interviews have discovered that one of the common themes for competition among accounting firms are about the maintenance of existing (old) clients and possible absorption of potential clients, which leads them to use their 'specific' ways to explore their market. But more importantly, the maintenance of existing clients seems to be their primary way to maintain a certain profit level. More specifically, L has introduced their cooperation with a new high-tech client on a long-term basis (more than one year), which can be regarded as a typical example:

'...The retrial period [for new high-tech enterprise application] is three years and application period is six years, so most people will forget it. So we have to train them in every application... As long as their practices have met the standards, we start auditing them.'

– L, manager, medium domestic, Chengdu.

It can be seen from the above quote that, the retrial and application process of Chinese new high-tech enterprise are on a three- and six-year periodic basis respectively, which indicates that L's firm will be guaranteed to have business every 6 years, provided that there is no additional firm qualified in doing new high-tech enterprises. An auditor of L's firm has expressed his feelings on their motivations to take notice of environmental issues about their resource recycling clients, which strongly proves the significance of the maintenance of old clients as a way to secure competitiveness:

'It's not only for their continuous operation, but is also good to maintain our clients, which is win-win.' – W, CPA, small domestic, Shanghai.

From the above discussions, it can be reflected on that the maintenance of existing clients has become one of the most important motivations for environmental concerns

during ordinary accounting practices. Even for large domestic firms, the maintenance of existing clients has become rather vital for their survival:

'...We had an audit client, that cement plant, it had been closed because of environmental pollution, which caused the loss of one main client and directly influenced our audit incomes.' – J, deputy manager, large domestic, Chengdu.

It can reflect a general business survival in certain industries for current Chinese domestic firms. Like medium and small domestic firms, large domestic firms have been suffering from competitive pressures brought by the Big Four, since the Big Four's strategy is to obtain the whole industry rather than single clients, which becomes rather more typical in certain EA practices:

'Another influence is from our strongest competitors from the international market: the Big Four. Globally speaking, the Big Four have dominated CSR and sustainability assurance services for large multinationals.' – Z, deputy manager, large domestic, Chengdu.

As mentioned in Ch.5 and Ch.6, international homogenization tends to be an unstoppable trend, which indicates that western models in the accounting profession tend to be adopted in China in terms of professional services and practical standards. As such, some large domestic firms have already started imitating practical models from international firms i.e. the popularization of management consulting services; whereas the following statement has clearly reflected that such adoption of management consultancy tends not to be proper:

'...Our services cannot satisfy the need from our clients. Meanwhile, the ideologies of Sichuan's clients do not match with clients themselves. I mean, leaders are not quite suitable for running some advanced enterprises.' – J, deputy manager, large domestic, Chengdu.

This statement can be actually split into several pieces for discussion: first of all, it generally reflects the incompetence of Chinese accounting professionals to provide good quality services to satisfy clients' demands. Then, it is about the localization of clients, which indicates the difficulty for accounting firms to identify local clients' needs, since their clients are not very good in adopting certain models or practices, or clients cannot even identify their needs. To investigate deeper for firms' client strategy, it is important to consider the general goal of accounting firms, which may reflect indications embedded within their client strategy. More specifically, a domestic respondent has explicitly pointed out the goal of domestic firms:

'Our current mission is not to catch up with international practices; instead, we're to guarantee our survival.' – C, CPA, small domestic, Chengdu.

From C's discussion, profit making tends to be the first priority. In a competitive context, firm scale and market occupation are the two main obstacles in front of most domestic firms. The competitive context of firm scale can be divided into the Big Four vs domestic and larger vs smaller. As for the competition between international and domestic firms, the Big Four have already obtained many EA clients from certain industries, which has left domestic firms no choice but to focus on 'leftover' clients (single clients) for survival. Likewise, since larger firms have obtained major clients, so feasible strategies for smaller firms tend to be either focusing on single clients, or setting lower price standards for similar services; whereas their practices are regarded as not standard and normative, which is known as vicious competition (see Ch.5). Such competition is generally not socially admirable and acceptable. As a result, most medium and small domestic firms tend to focus on the maintenance of existing clients instead of expanding their size within the industry. Despite the fact that this short-term strategy does no benefit for long-term development, most Chinese firms prefer to follow this cost-profit strategy for their survival, which can explicitly identify a tendency of homogenization. Thus, most domestic firms provide rather generic services for clients from all industries as a response to competitive pressures, especially among medium and small firms; whereas the Big Four take more notice of the significance of industrial characteristics. This client-focused strategy, to a large extent, has enlarged the competitive gap between the Big Four and domestic firms.

Being the central focus of this thesis, clients' influences have been discussed in a competitive context through this section. Not surprisingly, clients' demands tend to become the key for accounting firms to recruit corresponding practitioners, to adopt EA and to secure their competitiveness in the Chinese CCS market; whereas such competition has become an oligarch competition between the Big Four and a few large domestic firms. This can also reflect a positive correlation between the size of accounting firms and their clients: the larger the accounting firm, the larger their clients, and more possibilities that clients may have demands on certain CCS services. Thus, it becomes unsurprisingly apparent that most clients with EA demands i.e. state-owned companies, public listed companies, transnationals, have been already captured by Big Four and a few domestics; whereas it becomes even harder for the rest domestics to secure their sources of EA clients in Chinese CCS market. As for most medium and small domestic firms, their clients are medium state-owned companies and, primarily, private-owned companies, with little demands on certain CCS services. Being a client-oriented practice, EA is well-practised in larger firms i.e. the Big Four and a few domestic firms, since their practices tend to satisfy their clients' demands much more than smaller firms. This also suggests that larger firms often provide 'better' services for specific clients. The word 'better' here does not refer to pricing competition; rather, their certain practices are likely to reflect a competitive gap between the Big Four and domestic firms, as their practices are targeted to client orientation (client satisfaction) rather than uniform products. As the main argument across the whole thesis, the focus on clients' demands has reflected that the greater the extent to which accounting firms can capture and satisfy their clients, the better the position they would hold in competitions. More specifically, the Big Four's 'industrial capture' and SW's focus of large listed companies have reflected a way that is perceived to be a feasible client strategy in competitions; whereas smaller firms have commonly failed to gain access to those clients' groups, which reflects a rather competitive inequity in terms of industries

(clients). As a result, this section has identified the competitive gap between large and small firms through clients' analysis, with the discovery that an industrial inequality has been reflected through competition between the Big Four and domestic firms in the Chinese EA market. Additionally, competence, alongside personnel and clients' demands, is also likely to secure the core competitiveness, as clients are attracted by actual CCS services that accounting firms provide. This suggests the significance of practices in a competitive context as the theme for the discussion of the next section.

7.3 A Practical Context

It can be reflected from previous sections that human resources and clients' demands have been identified as two significant drivers for enhancing and maintaining firms' competitiveness. But more importantly, the core competitiveness depends on how well they can provide their services for clients. More importantly, it suggests the possibility that a practical discussion in a competitive context could be reflected through accounting professionals' perceptions of the adoption of EA, as their (which mainly refers to domestic firms) environmental awareness would motivate their adoption of certain EA practices, so as to compete with the Big Four in the Chinese CCS market. As such, it is necessary to revisit practices to identify how firms' competitiveness is maintained by firms' services, so as to measure accounting professionals' environmental awareness.

As previously mentioned, the adoption of EA practices in domestic firms is partly driven by the Big Four. First of all, the emergence of EA practices is under the influence of international homogenization: on the one hand, domestic firms tend to be similar to western successful models as a development and competitive strategy; on the other hand, the expansion of the Big Four's market has eventually threatened their chances of survival, which forces them to expand their service scales instead of sticking with traditional financial practices. As a result, the emergence of EA in the Chinese accounting profession is seen as an unstoppable development trend:

'Even if you didn't do it yesterday, you are not doing it today, or you won't do it tomorrow, you'll definitely do it the day after tomorrow, because you have to conform to the trend of the times.'

- C, partner, large domestic, Chengdu.

It can be reflected from the above quote that the adoption of CCS services in domestic firms can be seen as the influence brought from international homogenization. The major reason for the adoption of EA practices is to survive in a competitive context. Likewise, for other non-financial assurance practices i.e. CSR report assurance, Z has expressed her feelings on the competitive influences brought from the Big Four, which shows that their adoption of CSR assurance services are directly influenced from the competitive market:

'The Big Four have dominated CSR and sustainability assurance services for large transnational corporations; whereas the participation of Chinese domestic firms in non-financial assurance is restricted... They are our motivations to adopt CSR assurance services.' – Z, deputy manager, large domestic, Chengdu.

With the review of the above quote, the establishment of the Chinese carbon trade market is an external motivation for SW to expand their carbon services as a competitive strength. In other words, SW's EA practices are specifically about carbon, which includes carbon accounting, carbon information disclosure assurance and carbon consulting. SW's EA practices are under the management consultation department, which focuses primarily on the assurance and accounting practices for carbon information disclosure, which reflects a rather narrow scope of services. Compared with SW, the Big Four have provided a comprehensive structure of services under different service departments:

'...Services have been distributed into different departments, such as audit, risk management, D.C. and taxation etc. There are some typical practices in DTT's climate change and sustainability

practices, such as strategies for supply chain, governance structure and risk management, carbon emission consultation and so on.' – Q, senior manager, Big Four, Shanghai.

A clear indication brought from the above discussion is that environmental practices in the accounting profession are supposed to be designed as a series of services instead of a single service; whereas the role of accounting professionals in such comprehensive activities focus primarily on conventional accounting and auditing issues. In that sense, a financially-oriented perception of EA might be reflected through accounting professionals, indicating that their perceptions might be generally restricted within a narrow financial dimension of environmental accounts:

'We focus on their financial position and the usage of government funds. I'm working on the evidence of corporate accrued expenses estimation, and to examine the reliability of evidence and the rationality of their estimation.' – Z, senior auditor, Big Four, Shanghai.

It can be reflected and reasserted through the above quote that pure accounting professionals are not sufficiently competent to deliver EA practices independently, as their perceptions of EA are generally restricted to the calculability of non-monetary items, which reasserts previous arguments that EA practical teams are claimed to be a comprehensive structure of practitioners i.e. a mixture of qualified accountants/auditors and environmental specialists, so as to maintain their competence and competitiveness. To that extent, it can be hard to identify whether domestic firms or the Big Four have a 'better' perception of EA; whereas service structure and ordinary practices have reflected that the Big Four have established a rather comprehensive series of services that are likely to meet with demands from diverse clients. In contrast, domestic firms i.e. SW and BDO have just adopted a single aspect of CCS services with even fewer client demands. That has also supported the main argument that clients' demands tend to play

a key role in shaping accounting professionals' adoption of EA, whereas the satisfaction of clients' demands has become the dominant feature in EA competition.

As well as service structure, practical advantage (or, featured service) has normally led to a commercial reputation in accounting firms to attract clients, which can be seen as a pre-condition for domestic firms to determine whether to adopt EA. Being the pioneer of carbon emission practices in the Chinese accounting profession, SW has undertaken EA policy setting and commissions from government agencies, which leads SW to become the best practitioner of EA practices among Chinese domestic firms. It can be seen from the previous chapter (Ch.5) that SW's advantage in the assistance of Chinese corporate globalization would indicate the possibility that SW is good at standard setting and governance of global enterprises, so that they are competent in satisfying their clients with corresponding needs. Combined with SW's practical strength, it can be reflected that EA services are normally adopted in those firms that have a number of international clients, or firms that are good at international services for local clients. The reason I mention international clients is that EA practices i.e. environmental information disclosure etc. are legally required to be carried out in a western (UK) context. As previously mentioned, the emergence of EA needs a compulsory action by the enforcement of international and local legal and environmental regulations. As such, C's perception of EA has also reflected this point of view, which indicates that certain EA practices (CSR reporting, carbon emission) tend to be easily adopted by international clients and, simultaneously, professional service firms (accounting profession). Therefore, the capturing of transnational enterprises has become central for the competition between accounting firms in EA related practices. In a Chinese competitive context, most international (or more precisely, transnational) clients have been already obtained by the Big Four; whereas most clients in large domestic firms are domestic state-owned companies and public listed companies, in which CSR reporting and carbon emissions are not compulsorily required. As a result, domestic firms have very limited participations in CSR report assurance and carbon practices, since very limited EA demands can be identified from

their contemporary clients. As such, this has indicated a weaker competitive position for domestic firms against the Big Four:

'Our domestic firms are in a much weaker position since our participations in CSR assurance are limited.' – X, CPA, large domestic, Chengdu.

With the review of EA practices in the Chinese accounting profession, it is also necessary to reflect a wider competitive context of non-EA practices in accounting firms, so as to present a comprehensive view of the whole competitive context of the Chinese accounting profession, since medium and small firms are major representatives of the Chinese accounting profession. Meanwhile, those non-EA discussions are likely to bring insights on (the resistance of) adopting EA through competition between the Big Four and domestic firms. The following statement has identified that the income of accounting firms has been heavily influenced by economics:

'Our incomes actually depend on the situation of economic developments; if the economic situation is good, then we benefit from it; if the economic situation is bad, then we suffer from it.' – X, assistant auditor, large domestic, Chengdu.

It can be reflected from X's view that economic development is closely linked to financial performance of their clients; whereas the current economic situation is not good, which has brought negative impacts on both accounting firms and their clients. Accounting firms would therefore expand their sources of clients, regardless of public and private companies. This can even be seen in the Big Four's clients in Chengdu, which tend to be mainly private-owned business:

'Our Chengdu's clients are mainly private-owned companies, such as chain supermarkets, tailoring and electrical sales etc.' – L, tax consultant, Big Four, Chengdu.

It has been identified, surprisingly, from EY's story that privately-owned businesses have become the main clients of EY's Chengdu branch. Apparently, there might be some influences from the localization of EY's practices and clients, since an increasing number of privately-owned companies have taxation demands. But more importantly, it can possibly be regarded as consequences for the influences from a negative economic situation. As a result, there has been much fiercer competition between accounting firms, since the market for professional accounting practices has shrunken, as mentioned in Ch.6, indicating that the Big Four have to compete with not only large domestic firms, but also smaller domestic firms. This mutual influence can be illustrated in two ways: on the one hand, the Big Four have suffered from the national economic situation and competitive pressures from domestic firms, since domestic firms generally have strengths in pricing competition; on the other hand, it suggests the possibility that smaller practitioners have suffered more competitive pressures from both larger domestic firms and the Big Four:

'For most traditional services such as auditing and capital verification, I don't think the Big Four have more special advantages than domestic accounting firms, since our services are not that localized... Even medium and small firms have more advantages than us.' – Z, senior auditor, Big Four, Shanghai.

Compared with larger firms, smaller firms generally stand in a weaker competitive position. This is not only because their main clients are medium and small privately-owned businesses, but also because of their simplicity of service structure, as conventional practices such as audit and capital verification are the main source of income for most medium and small firms. A domestic respondent has described competitions between larger and smaller accounting firms, which indicates that the gap between practical quality should not be classified as a main case in a competitive context, as accounting firms actually provide similar practices, especially for traditional financial services i.e. financial auditing and capital verification etc. As such, pricing has

become the main competitive element for firms to obtain their clients; whereas the quality of services seems less important:

'Almost all accounting firms have provided auditing, capital verification and asset evaluation services with very similar procedures. Maybe individual differences...will lead small and medium accounting firms' practices to be not that normative and standard than large firms, but this slight difference can actually be omitted.' – W, assistant auditor, large domestic, Chengdu.

From the above statement, it can be indicated that the practical gap is not likely to be the main competitive determinant; instead, most domestic (privately-owned business) clients tend to prefer those firms with lower prices and simpler procedures. This context, to some extent, can be regarded as the satisfaction for client's demands. As such, this competition has been frequently regarded as a vicious competition. In that sense, it can be commonly identified through participants' discussions that the goal of most domestic firms is to survive between the track of the Big Four and large domestic firms; whereas the adoption of EA practices tends to be irrelevant. Therefore, the restricted participation of domestic firms in CCS services has suggested that the competition of EA in the Chinese market has become a oligarch competition with only the Big Four and a few domestic players; whereas most Chinese domestic firms are generally perceived to be incompetent in conducting certain EA practices, since they have neither sufficient human resources nor professional qualifications in undertaking particular EA cases. The Big Four and a few domestic successors have obtained sufficient knowledge and people, which enable them to provide satisfactory services for their clients. But more importantly, clients' demands tend to become the major incentive that leads to their adoption of EA and, thus, become competent and dominant in the Chinese market. In other words, big firms (especially Big Four) have knowledge and people altogether, which eventually lead to their undefeatable competitive strength.

This section elaborates on accounting professionals' perceptions of EA through practice competition, with the main findings that a huge practical gap of EA has been

identified through the comparison between the Big Four and domestic firms, which can be reflected through their service structures and practical experiences of certain EA services. In addition, some discoveries can be discussed in a domestic context: domestic firms focus primarily on a special theme of environmental elements i.e. carbon and CSR assurance instead of constructing a comprehensive CCS service structure. This indicates the possibility that the Big Four may satisfy their clients' demands are easier because of their comprehensive services and experienced expertise. As for clients, firms tend to cooperate with large (i.e. multinationals, public-listed companies and state-owned companies) rather than smaller clients (privately-owned businesses); whereas the focus is basically on single clients rather than industrial occupation, which suggests that domestic firms have already lost the competition of clients. The discussion of non-EA competition has reflected rather fierce competitive pressures brought from a negative economic situation, indicating the likelihood that pricing dominates competition in conventional services for domestic clients (mainly privately-owned businesses) rather than a practical gap between larger (the Big Four) and smaller (domestic firms) practitioners. This, to some extent, may determine the Big Four and a few domestic firms' minds for their service innovation (the adoption of EA), with the reflection that Big Four dominate the whole Chinese CCS market; whereas smaller firms tend to continuously maintain their pricing competitiveness in conventional services rather than innovation. In that sense, such reluctance of adopting EA among domestic practitioners has even enlarged the practical gap of EA between the Big Four and domestic firms.

This section has reasserted that EA firms are heavily influenced by, and tend to adopt, international practical guidelines and regulations rather than domestic practical codes. Being a significant external factor, regulatory and political forces tend to play a significant role in shaping EA practices in the Chinese accounting profession, which suggests the likelihood that government regulations and national policies might determine the competitive context of EA services. More importantly, the discussion of possible influences from coercive forces is also likely to complement current competitive analysis, which is necessary to present a Chinese context for external forces i.e. normative and coercive insights, which will be discussed in the next section.

7.4 A Regulatory Context

While competitions have been largely reflected through a practical context, it is noticeable that the adoption of EA would generally require a compulsory action through regulatory and political forces. Apart from that, the normalization and standardization of EA practices also involves specific governmental interventions including releasing relevant policies and regulations to support EA practices; meanwhile, the legitimization of the Chinese carbon trade market cannot be achieved with the formal approval of the national government as well. Moreover, the standard setting process is also regarded as a political process, which involves interests and cooperation across different parties i.e. government, business organizations and professional accounting industry. As a result, it is rather important to identify how firms' competitiveness could be influenced by accounting professionals' perceptions of regulatory and political influences, which will become the main focus of this section.

As mentioned in Ch.6, the development of Chinese EA practices cannot be achieved without necessary government interventions. The phrase 'reaction' here does not necessarily refer to compulsory actions and movements; rather, it can be accounting professionals' political perceptions as a response to economic development:

'In the Chinese context, since our accounting profession has proposed that 'accounting should serve for national economic restructuring', so SW started to launch EA practices.' – C, partner, large domestic, Chengdu.

From the above discussion, it can be reflected that SW's adoption of EA practices can be actually regarded as a response to government reaction, as China has encountered the historical moment of economic restructuring from traditional GDP-oriented economics to low-carbon economics. Meanwhile, accounting is supposed to play an important role to serve for shaping national economy. Thus, accounting firms should satisfy national demands, which can explain that EA is regarded as both a client and politically-oriented practice. As a result, the adoption of EA is supposed to be

influenced under coercive (political) forces. This government response is also a motivation for accounting firms to not only develop new services so as to recover from negative political influences of conventional services, but can also bring an opportunity for development and more importantly, enhance their competitive strength within the Chinese accounting profession. Likewise, their clients can also benefit from the adoption of carbon accounting practices, which reflects a win-win outcome for both accounting firms and their clients. Some shadows of business organizations have also been identified, indicating that the participation and adoption of certain EA related practices is perceived as their self-interests. As such, clients' demands do not necessarily mean that clients need certain demands; rather, it depends on accounting professionals' perceptions of the identification of potential clients' demands:

'WLY first established carbon accounting in China. They can make it clear when facing carbon distribution, they've been leaders in energy saving and emission reduction among their competitors, and that is its self-interest. WLY will also store carbon in advance.' – C, partner, large domestic, Chengdu.

Being one of the frequent topics during interviews, the Chinese carbon trade market has been identified as a key factor that influences, or will influence, the adoption of Chinese EA practices. The establishment of the Chinese carbon trade market requires necessary legislation and normalization from relevant government agencies, which clearly reflects government interventions in the Chinese carbon trade activities. On the one hand, government is responsible for setting guidelines and regulations; on the other hand, a governmental macro-control on carbon trade activities is needed so as to achieve the reduction of carbon emission. As such, the adoption of certain EA practices (carbon accounting) can be also seen as a politically-oriented practice:

"...Government has to control a ratio between carbon volume and GDP; based on the actual carbon emission volume, the government will allocate a certain amount of carbon to

corporations and let them purchase, so as to promote low-carbon and energy saving in a marketing way.' - C, partner, large domestic, Chengdu.

As well as national interests, government has also set up rules for the ranking of accounting firms, which tends to become an important criterion for business organizations (clients) to select their service providers (accounting firms). In addition, government has also set up a series of alternative libraries, containing specific criteria for the qualification of certain practical services and specific requirements from certain clients. More specifically, the proposal of an alternative library is to guarantee the quality of services that firms provide, so as to possibly satisfy clients' need. As a result, accounting firms tend to develop themselves in accordance with criteria of certain alternative library, so as to become qualified to conduct specific practices with specific clients. As such, the shortlisting of specific alternative libraries can be regarded as a core competitive strength:

'We have to be shortlisted in some certain alternative libraries if we have to do some projects, such as Chengdu's SASAC (State-owned Assets Supervision and Administration Commission of the State Council), Sichuan's SASAC and major financial institutions. Our firm has been shortlisted in all those alternative libraries; that is to say, we have qualifications, or strength, to do something.' – Z, deputy manager, medium domestic, Chengdu.

More specifically, Z has described general criteria for the competitive strength that can be reflected from both the ranking and shortlisting of particular alternative libraries, which reflects that government regulations do bring significant influences on the development of accounting firms and their competitive strength:

'...the number of CPAs; the amount of firms' income; and the penalty received from supervision department, which is also

known as quality of practice. None of a single index can be omitted.' – Z, deputy manager, medium domestic, Chengdu.

As well as medium domestic firms, larger firms also regard the shortlisting of specific alternative libraries as their competitive strength, which can indicate some similar perceptions:

'We have been shortlisted in over 20 alternative libraries for government agencies, such as the education department, fiscal department, audit department, provincial financial institutions and so on.' – J, deputy manager, large domestic, Chengdu.

On the one hand, government policies can bring positive effects on accounting firms' services, which helps to maintain the fairness of competition and protecting them from illegal competitions. On the other hand, policies have brought negative impacts on the professional accounting industry, some of which are likely to be fatal. As mentioned in previous chapters (Ch.5, 6), conventional services in accounting firms i.e. financial report audits and capital verification etc. have been severally 'damaged', since companies do not necessarily have to have their registered capital verified; thus, companies do not want their financial reports to be audited. Therefore, it becomes rather important to identify their reactions and solutions on the impact of policy. A few respondents from medium and small firms have expressed their solutions on adopting new services in response to such political influences:

'We've been keeping adjusting and developing our new services to meet governmental demands, as I have to feed our employees. We started to provide a bookkeeping agency for a few companies.'

- C, manager, small domestic, Chengdu.

Compared with smaller firms, the influences from this policy are harmless for larger firms, since the influences from income are comparatively insignificant in this manner. In addition, traditional auditing and capital verification in relation to annual

commercial and industrial inspections are primarily demanded by privately-owned companies with less registered capital; whereas big clients i.e. state-owned companies are the major clients of large firms. As a result, capital verification services have been generally cut off by large firms; meanwhile, the improvements of current services will continuously be conducting:

'Those two services hold 20% of our total income. Now we have to cancel capital verification services and develop our management consulting services.' – J, deputy manager, large domestic, Chengdu.

It has been identified through interviews that the adjustment of current services and the development of new practices tends to be a common reaction to policies. First of all, firms are coercively forced to 'cut' their capital verification services under the influences policies. This consequence would lead to implicit imitative behaviour through the adoption of a similar strategy (adjusting service structure) among the Chinese accounting profession. Moreover, their adjustments are within the permission of legitimation, which means their new practices should be legally acceptable. However, this is the way to maintain the status of survival in such political influences; whereas the key for competition is about development and innovation, which can be reflected through SW's carbon practices with WLY by SW's first attempts on the latest issued IAS statements in carbon emission:

'IASB started to discuss this in 2009, and finally issued this standard in 2013. Our cooperation between WLY started from 2011. Our attempts on the application of this standard can be regarded as leaders in Chinese, even international accounting professions, to a large extent.' – C, partner, large domestic, Chengdu.

One factor that should be noticed is the year 2013 when ISAB's carbon standards were finally issued. In addition, the first deal of carbon trade in the Chinese carbon

market was also in 2013, whereas SW started their carbon project with WLY in 2011. SW's attempts for the adoption of carbon accounting practices have become the pioneer within the Chinese accounting profession, which makes their carbon services their unique competitive strengths among domestic firms. To identify influences from normative drivers in a competitive context, it is important to review how and why accounting firms choose particular practical standards, which is likely to reflect some insights from their ordinary perceptions. It has been identified from Ch.5 (practical standards) that the adoption of international EA practical codes tends to be prevalent, since Chinese domestic standards are rather generic. As a client-oriented practice, EA is supposed to satisfy clients' demands, which is the way to maintain their practical competitive strength; whereas demands can be varied via different clients, indicating that the choice of practical codes should be closely relevant to certain clients. As a result, the adoption of international practical codes tends to become a feasible competitive strategy:

'In China we have an assurance standard for other services... The content is actually empty. However, IAS requires us to link our practices to a company's specific technological process.' – C, partner, large domestic, Chengdu.

As well as SW's carbon emission practical codes, a similar scenario can be reflected from CSR assurance codes in both the Big Four and domestic firms. In fact, no.3101 Chinese CPA Assurance Standards are mostly copied from no.3000 IASE, which indicates that EA firms tend to resemble each other in adopting similar practice guidelines:

'We mainly use Guidelines for CSR Reporting Preparation issued by the Shanghai Stock Exchange and GRI guidelines... Our CSR assurance practices are normally guided by no.3101 Chinese CPA Assurance Standards: Assurance Services Other Than Historic Financial Information Auditing or Revision.' – Z, deputy manager, large domestic, Chengdu.

'We mainly use no.3000 ISAE: Assurance Engagements Other than Audits or Reviews of Historical Financial Information and GRI guidelines in CSR assurance practices. For Chinese listed companies, we also have to take notice of CSR report preparation guidelines issued by Shanghai and Shenzhen Stock Exchange.' – Q, senior manager, Big Four, Shanghai.

Despite the fact that both firms have adopted very similar practical codes, some insights can be discussed from Z (BDO) and Q's (DTT) discussion. It is noticeable that DTT's practical codes are for both multinationals and domestic clients. In general, DTT adopt international standards in their practices rather than pure Chinese standards, which is likely to reflect the internationalization of the Big Four's EA practices; whereas BDO generally adopts domestic standards, which indicates that BDO might not provide a better practice than DTT. To that extent, it can be re-identified that the adoption of international practical codes seems more reliable. Secondly, both firms have reflected a combination of practical standards for CSR reporting preparation and assurance practices; whereas Q's discussion has also reflected a client-oriented approach, which can be reflected from their mixture of domestic and international standards. In general, EA as a client-oriented practice is supposed to satisfy specific needs from clients, which means the adoption of practical standards is likely to follow clients' demands. Meanwhile, with a lack of legislation and standardization in current Chinese EA practices, it is less likely for current accounting firms to widely adopt Chinese domestic standards as their practical guidelines, since international standards generally reflect comprehensive and systematic practices, which eventually enhance the Big Four's strength in competing with other firms. Apart from that, less established EA legislation in China would make it even harder for participants to make any suggestions. That, to a large extent, would restrict Chinese accounting professionals' perceptions of such an accounting-environment/sustainability hybridization and, simultaneously, hinder the development of EA in the Chinese accounting profession:

'M: So regarding this issue, do you have any suggestions or recommendations on that?

C: Honestly, none...there is a problem about priority: since there are few environmental auditing practices in China, the first thing we should do is to make up something...' – C, partner, large domestic, Chengdu.

In addition, it can be reflected on from previous chapters that the Chinese accounting profession has modelled themselves after western accountancy professional service firms in terms of team structures, services and some selected practical codes; whereas the internationalization of the Chinese accounting profession is not quite supported from current policy. This would possibly hinder the development of the domestic Chinese accounting firms and, consequently, EA practices in the accounting profession. But more importantly, this has also suggested the irreplaceable significance of government intervention in shaping the development of the accounting profession and, thus, the wide adoption of EA in the Chinese accounting profession:

'In China, there's no discount or privilege for taxes paid from accounting firms...whereas things are completely different in foreign countries. Their taxes are quite cheaper than China...So I feel our national policy doesn't quite support the internationalization of Chinese accounting firms.' – J, deputy manager, large domestic, Chengdu.

Several factors have been identified through regulatory analysis in this section. First of all, one important factor is the identification of potential clients' demands through perceptions of national interests and potential opportunities for developing new services, which would help accounting firms to obtain potential clients and adopt EA practices in advance. Then, it is reasserted that EA in the Chinese accounting profession is shaped

by coercive forces, which can be reflected from the influences in terms of policy and regulations. Under political influences, accounting firms are forced to adjust their practices. It can also be reflected from the above quote that, while most domestic (medium and small) firms suffered greatly from negative policy influences of their conventional services, larger firms can still secure their survival by concentrating on their major income services. In contrast, such influences have hardly affected the Big Four in the Chinese market, since the diversity of the Big Four's services would easily get rid of such negative influences; meanwhile, transnationals tend to hold a significant proportion among their overall clients, which are influenced less by local policies and regulations. For normative (professional) influences, this section has reasserted previous findings (Ch.6) that the adoption of international standards tends to be prevalent, with the implication that the adoption of international standards tends to reflect a superior competence of practicability and, thus, competitiveness among other competitors. To build up a linkage between the regulatory and competitive contexts, it can be identified that while the Big Four's EA practices tend to be client-oriented and influenced less by local policies and regulations, domestic firms heavily rely on national and local policies, which generally becomes their barrier to entering the Chinese EA market. Thus, it can be indicated that the Big Four generally stand in the leading position of EA in the Chinese market in terms of their leadership in shaping standard setting process and maintaining their professionalization, whereas domestic firms find it hard to catch up. This would lead to the conclusion of this chapter so as to identify possible institutional insights on EA practices in the Chinese accounting profession.

7.5 Conclusion

This chapter has elaborated on accounting professionals' perceptions of EA through a competitive context for Chinese EA practices, which is divided into human resources, clients, practices and politics (or regulatory forces). Knowledge is seen (Drucker, 1993) as the main producer of wealth in this post-capitalist society. More specifically, Mouritsen and Roslender (2009: 803) state that knowledge containers 'sum up activities and effects in the name of knowledge', which contains 'education, experience, results

and many more items that indicate even if not represent knowledge'. It can be indicated that the maintenance of competitive strength is enabled by sufficient expertise (knowledge) in certain practices, which can be reflected through the recruitment and training of employees. On the one hand, high staff mobility would eventually lead to the loss of potential accounting practitioners in certain firms. On the other hand, the high staff mobility do contribute to balancing the development of large and small accounting firms; whereas participants from large firms do not always carry specific knowledge about EA and apply it to smaller firms, which can hardly contribute to the development of EA practices in smaller firms. This has also suggested the possibility that smaller firms are not that easy to 'plagiarize' practices in larger firms. The entry requirement for larger firms generally reflects a higher standard, which is seen as a way to maintain their practicability level; whereas smaller firms are not that attractive for new candidates. In addition, ordinary training and education is significant in maintaining accounting professionals" competence, with the reflection that larger firms tend to be normalized in setting training structures compared to smaller firms. While domestic firms provide rather generic training courses, international firms tend to focus more on industrial clients' characteristics. However, both domestic and Big Four respondents have not yet commonly realized the significance of EA in climate change and sustainable transformation, with the indication that passive educational models (i.e. banking approach, see Thomson & Bebbington, 2004) do not enhance accounting professionals' understanding on EA. As a result, it should be reasserted that clients' demands have played a central role across the discussion of the whole thesis, which proves EA as a primary client-oriented practice for competitive winning purposes.

Practical issues are highly connected with discussions of client contexts in terms of specific clients' demands. A very clear identification of client orientation in the Big Four's EA practices can be reflected from their daily training. In addition, EA practices in the Big Four are grounded in specific groups of clients i.e. industries and nationalities. Apart from that, the adoption of EA in accounting firms normally depends on the scale of their clients, since large companies would normally be able to afford to undertake EA practices, which enhances the likelihood that EA tends to be easily practised in larger firms. As a result, clients tend to trust the Big Four more than domestic firms for better services. In other words, the Big Four's EA service strategy in the Chinese market can

be summarized in brief as 'industrial occupation', as the Big Four have already obtained most clients who have the potential or competence in EA demands. In contrast, most domestic firms have not yet recognized the meaning and significance of EA practices. This situation has suggested the possibility that domestic firms will have fierce competition when entering the EA market, as they have to 'rob' potential clients from the Big Four. This can also be elaborated through the sources of clients in different firms. Thus, it can be generally reflected that EA practices tend to be easily adopted in firms with international clients, or who are good at doing international services, indicating the possibility that the adoption of international practical codes tends to be proper for EA practices. As for non-EA (conventional financial services i.e. audit, capital verification, taxation) service competitions, pricing tends to become dominant instead of a practical gap (or quality of service); whereas domestic firms generally stand in stronger price strength in competition than the Big Four. However, the pricing competition of non-EA services has eventually enlarged the practicing gap of EA between the Big Four and domestic firms: while most medium and small domestic practitioners feel 'satisfactory' about their victory of pricing competition without developing strategies, such weakness of pricing competition does not stop the Big Four (and a few domestic firms) from innovating and developing their advanced professional services i.e. EA. This, to a large extent, has suggested the necessity of innovation and proper strategies for the development of the accounting profession; whereas the identification of 'proper strategies' has reasserted the significance of recruitment, identification of clients' demands and client capturing, which has become the key for the Big Four's competitive success.

In addition, the influences from coercive and normative forces play a significant role in not only legitimizing EA practices, but also shaping competitive patterns in professional accounting practices, as larger firms would suffer less than smaller firms; whereas such political influences could have little effect on the Big Four's CCS services. Meanwhile, the establishment of the carbon trade market is also classified as a major influence on the development of Chinese EA practices. With the shrinking of the audit market, accounting firms tend to adjust themselves to recover from negative policy

impacts, which reflect a general common reaction. This situation has reflected that accounting firms tend to respond similarly (imitate) by adjusting their existing practices as a response to regulatory political uncertainty. Furthermore, the adjustment of current services and the introduction of new services has reflected the direct influence from national policies and regulations, which it is compulsory to follow. The adoption of international practical codes tends to be prevalent, which can be seen as a feasible way to maintain firms' competitiveness in EA practices; whereas clients' demands tend to become the priority for firms to adopt certain practical codes. As a result, firms specializing in EA practices normally adopt international standards rather than domestic standards, not only because there is generally a lack of legislation and normalization for Chinese EA practices, but also because international standards focus more on industrial characteristics and client specification. Therefore, EA practical firms prefer using international standards as a means of both enhancing their practical quality and maintaining their competitive strength, which can be generally regarded as an indication of possible normative and coercive institutional drivers. Therefore, it can be identified that institutional drivers would possibly be reflected in a competitive context, whereas this influence upon EA practices still needs further investigation.

This chapter has also reflected a view on local settings and markets for professional services in Chengdu and Shanghai. As an inland city, the market for Chengdu tends to be influenced less by the globalization of certain professional services i.e. EA. Instead, most demands from Chengdu local clients (most none public listed state-owned and private-owned companies) are ordinary managerial consultancy and going public rather than clean-technology and sustainability. Thus, this localization of clients has even led services in Big Four (EY) becoming localized. As for Shanghai, one of the four first-tier cities in mainland China, there is an increasing need for internationalization of public listed companies, including certain CCS services; meanwhile, a number of national environmental sensitive industries i.e. mine and oil, are located in East China, which indicates the situation that most EA clients are gathered in South-East coastal area and, simultaneously, lead to a rather active

participation of EA practices in Shanghai's Big Four. As such, a rather clearer gap of client's demands of EA can be identified from the geographic variance.

In summary, this chapter has discussed how competitive factors have influenced EA practices in a Chinese context, with the identification of unbalanced (inequitable) competition of EA in the Chinese accounting profession. Such inequity can be reflected through personnel, industrial (clients), practices and regulatory influences, which have reflected a branding effect of EA in the Big Four; whereas EA has emerged and designed to enable instead of shorten such inequity. As such, a competitive inequity of EA practices has been identified in the Chinese context: the Big Four has held the dominant and undefeatable position of the Chinese CCS market; whereas domestic firms are less likely to catch up. Apart from that, this chapter has also reflected that accounting firms tend to respond similarly in adopting EA, which can be reflected through practitioners, clients, practices and guidelines. Overall, this chapter summarized the previous three chapters in a competitive context, in terms of recruiting strategies (larger v.s. smaller), ordinary training (Big Four v.s. domestic), marketing strategy (client v.s. industry), standard adoption (international v.s. domestic), and government reactions, which indicates a strong possibility that institutional drivers possibly carry out EA practices in the Chinese accounting profession between firms and participants. As a result, this suggests the necessity for possible institutional analysis coupled with other significant components i.e. legitimacy and stakeholder as the next mission, which helps present the whole picture for the institutionalization of Chinese EA practices.

Chapter 8 Discussions

In the previous analytical chapters, participants' profiles, practices, practical standards and the competitive context have been critically analysed as a starter, which indicates the significance of institutional factors in shaping Chinese current environmental accounting (EA) practices. The purpose of this thesis is to present a whole picture for the process of institutionalization for EA practices in the Chinese professional accounting industry. As a result, institutional isomorphism will be linked to the previous empirical data chapters with further investigations on factors that lead to Chinese accounting firms resembling each other by adopting/resisting certain EA practices i.e. 'successful organizations' and 'uncertainty', so as to present the process of institutionalization of Chinese accounting professionals' adoption on EA. What is more, Roy Suddaby and his collaborators' (see Suddaby, 2010, 2011; Suddaby et al., 2010, 2011; Suddaby & Viale, 2011; Lawrence et al., 2011; Greenwood & Suddaby, 2006; Greenwood et al., 2002) works have brought about some insightful institutional perspectives on this project, which have clearly indicated the usefulness of neo-institutional theory in identifying key factors i.e. 'successful organizations' and 'uncertainty' that hindered the development of EA practices in the Chinese accounting profession by elaborating on previous and contemporary institutional studies (Meyer & Rowan, 1977; Zucker, 1987; DiMaggio & Powell, 1983; Scott, 1995, 2008a). More importantly, Suddaby's works have critically evaluated contemporary institutional theory by addressing its restrictions in describing how and why accounting firms tend (not) to adopt certain practices, which helps not only to produce a critical review on neo-institutional theory, but also to construct the linkage between institutional theory and critical accounting research. Moreover, Suddaby (see Suddaby, 2010; Suddaby & Greenwood, 2005) emphasized legitimacy in the process of institutionalization, which suggests the necessity for legitimacy analysis as a supplement of institutional analysis. As such, Suddaby's works are used to summarize and identify the main findings and discussions through the whole chapter. In addition, some principles of political economy in Chapter 2 would be revisited and elaborated in how neo-pluralism (Gray *et al.*, 1995; Held, 2006) is used to interpret stakeholder effects in terms of the role of state in shaping EA. Meanwhile, political economy will be reviewed (Gray *et al.*, 1995; Suchman, 1995; Tinker, 1984) as origin of legitimacy to illustrate how legitimacy has been created and maintained in the adoption of EA in Chinese accounting profession. In the following sections, the details of each isomorphic mechanism and the interlinks between institutionalism, legitimacy (Deegan, 2002, 2006; Patten, 1991, 1992; Spence *et al.*, 2010) and stakeholders (Barone *et al.*, 2013; Gray *et al.*, 1995; Hung, 2011) will be discussed as well, which will finally lead to the conclusion.

8.1 An Institutional Analysis

8.1.1 Insights from Empirical Chapters

8.1.1.1 Participant Profile

Institutional isomorphism can be used to describe participants' profiles. First of all, firms under similar size tend to adopt a similar recruiting strategy, which is about the recruitment of financially-oriented practitioners, especially for qualified practitioners i.e. CPA, CPV and CTA, which can be regarded as a strategy for the maintenance of their competitive strength; whereas financial employees have dominated accounting firms, which has eventually led to poor developments in Chinese EA practices. It is then about two main ways for the construction of new firms, containing consolidation with large firms i.e. SW, and being independent from large firms i.e. smaller domestic firms. As a result, firms tend to model themselves after those successful cases (DiMaggio & Powell, 1983), which indicates some imitative strategies in the construction of firms and recruitment subsequently.

In addition, the adoption of EA practices depends on specific demands from the clients of accounting firms; whereas there is generally a lack of local clients' demands of climate change and sustainability (CCS) needs in inland China (Chengdu), which suggests less opportunity for most domestic firms to adopt certain EA practices, thus with low (or no) recruitment of EA practitioners. In other words, most domestic accounting firms tend to act similarly with the adoption of EA practices for a lack of

clients' demands, which is regarded as an indication for both mimetic and stakeholder influences (clients' demands). Apart from that, accounting firms are not compulsorily required to adopt EA practices, which reflects a lack of coercive forces i.e. national policy, governmental regulations etc. in implementing EA practices.

What is more, there is generally a lack of a normative process in EA practices i.e. accounting education and career training events, which explains that Chinese accounting professionals do not have sufficient knowledge of EA practices: this is likely to suggest the legitimate and normative concern of EA i.e. whether EA is practiced in a legally and socially acceptable manner; and whether training events are organized in the correct way. As a consequence, the lack of practicing experiences and coercive enforcement, coupled with the lack of clients' demands and normative training, have led to a less positive situation of the current Chinese professional accounting industry to widely adopt EA practices at the moment. In summary, the general poor development of EA practices in Chinese accounting firms shows how isomorphic pressures hinder the adoption of EA practices in Chinese accounting firms, especially domestic firms.

8.1.1.2 Practices

Institutional isomorphism can also be applied in a practical context, which can be shown from participants' perceptions on EA throughout their discussions. From a technical viewpoint, a financially oriented technique has dominated current environmental practices in accounting firms, which can be reflected in their ordinary service structures: ordinary financial services i.e. traditional financial audits, capital verification, management consultation, taxation etc. are the dominant source of income for most domestic firms in Chengdu; whereas a few of them have adopted certain non-financial practices i.e. carbon emission and CSR report assurance, since a fewer demand from clients have been identified in Chengdu compared with Shanghai. This also leads to the general perceptions from both Chengdu and Shanghai's respondents that EA is seen as a Big Four brand rather than a common accounting practice in most domestic firms. It also shows that firms tend to adopt financial practices instead of non-financial practices for complex reasons. First of all, most domestic firms are not

adequate enough to undertake certain EA practices, as most accounting practitioners are pure financial workers i.e. qualified accountants, assistants and managerial consultants that are incapable of undertaking specific non-economic practices.

Secondly, firms are not compulsorily required to adopt specific EA practices i.e. climate change and sustainability (CCS) services by either legal regulations or governmental policies, which indicates a lack of coercive forces in the implementation of EA. After this, the fewer clients' demands on CCS services have brought firms less opportunity to adopt CCS practices, which indicates that firms tend to adopt this similar strategy by resisting EA for a lack of clients' demands. What is more, another common perception from most participants is that current EA is still a financially oriented practice at the moment, suggesting that current accounting practitioners express a very similar perception of EA, which is within the scope of traditional financial accounting practices (financial accounts) whereas they have ignored non-financial information (physical accounts). This has led to the so-called EA becoming more financially oriented. As for non-financial audits and assurance i.e. CSR assurance, carbon practices etc. in large domestic firms, such practices are claimed to have arisen largely through external motives i.e. under the influence of both isomorphic pressures and competition with global firms. From a mimetic point of view, typical firms (e.g. SW, BDO) model their practices on successful companies (Big Four) to expand their influences on specific practices (e.g. SW's carbon emission assurance, BDO's CSR assurance). Meanwhile, SW's adoption of carbon practices has also been influenced by normative factors i.e. IAS corresponding requirements; whereas EA has not been mentioned in contemporary Chinese accounting standards (CAS), which shows that the lack of local normative influences does hinder the development of Chinese EA practices.

What is more, respondents from SW and the Big Four have both emphasized the establishment of the Chinese carbon trade market and its significance in Chinese carbon accounting, which shows that their carbon practices are actually a response to the establishment of the carbon market (through the approval of governmental policies and regulations). In other words, this is explicit evidence of isomorphic influence, containing all three mechanisms i.e. mimetic – EA firms (SW and BDO) tend to model

themselves after Big Four by adopting CCS services as a way to maintain their legitimacy and competitiveness; normative – the adoption of EA in accounting firms (SW and Big Four) is guided by international standards and corresponding training; and coercive – government mandates do shape firms' attitudes towards adopting or resisting certain EA practices. Apart from that, the perception that accounting firms rely heavily on policies has been agreed by almost all participants, which shows that government interventions (coercive forces i.e. policies, regulations, laws) do shape the practices of accounting firms; likewise, the lack of coercive forces on EA has brought negative impacts on the development of EA, which has led to a low participation of accounting practitioners in EA at the moment. Moreover, since SW has become leader of carbon services among Chinese domestic firms, as long as their practices have proven to be successful and socially and legally acceptable, subsequent accounting firms will follow and imitate SW's successful model to adopt carbon services in their existing services, which suggests the potential existence of mimetic isomorphism in the future.

8.1.1.3 Practical Standards

Institutional analysis can also be applied to the discussion of practicing standards. Firstly, normative influences can be easily identified, as most participants have made comments that any change in accounting standards will lead accounting firms to adjust their current practices by introducing relevant training events and adopting new practices e.g. SW's carbon practices. Meanwhile, government intervention in normalizing and standardizing EA has been frequently noticed during interviews whereas current policies and regulations do not explicitly mention EA, which indicates that the lack of coercive forces have slowed down the development of Chinese EA practices. The process of institutionalization can also be reflected in the international homogenization between domestic and international firms i.e. the adoption of IAS. This can reflect some indications of mimetic isomorphism, which shows that a few successful Chinese firms are actually learning from Big Four i.e. the adoption of IAS and CCS service section; whereas most Chinese domestic firms do not adopt IAS, since their services mainly provide for local clients instead of overseas clients. Therefore, the

source and scale of clients is also an influential factor for the adoption of certain standards, which initially categorizes accounting firms into different groups i.e. international and domestic, larger and smaller. In this case, firms in each group tend to model themselves on each other: firms tend to adopt similar practicing guidelines (EA firms i.e. SW, BDO and Big Four often rely on international standards while non EA firms often use CAS), practitioners (EA adopted firms use non accounting expertise in EA projects while non EA firms rely on pure financial staff), and customers (the geographic variance of clients leads to the inequality of EA adoption in China). Firms are more likely to have similar training and educational events and also tend to be influenced by certain policies and regulations to a similar level (formal training is held by large firms; medium and small firms do not generally organize ordinary training). For large firms who have both international and domestic clients, the adoption of practical standards and governmental policies is actually a client-oriented procedure, which shows that clients' demands have become a significant mimetic factor for firms to not only adopt certain EA practices, but also similar practicing standards and guidelines. For smaller domestic firms in both Chengdu and Shanghai, they are influenced very little about contemporary environmental policies and standards; rather, they heavily relied on policies relating to the shrinking of conventional auditing and capital verification services issued by 2014. As a result, isomorphic factors have led to the unequal development of EA practices in larger and smaller firms.

8.1.1.4 Competition

Institutional isomorphism also fits well with describing the inequality of EA practices between larger and smaller firms in a competitive context. First of all, isomorphism can be seen in recruiting strategies in different sized firms i.e. entry requirements, practical competence, numbers of qualified workers, staff mobility. The entry requirement for larger firms generally reflects a higher standard whereas smaller firms are not that attractive for new candidates. It is then about ordinary training events that firms generally provide, which can be identified in that larger firms tend to be normalized in setting training a structure compared to smaller firms. In contrast,

international firms are more concerned with client information (of a certain industry) instead of the general training process. Meanwhile, the high staff mobility does contribute to the balance between the development of large and small accounting firms whereas participants from large firms do not always carry specific knowledge on EA and apply it to smaller firms, which can hardly contribute to the development of EA practices in smaller firms. For marketing strategy, the Big Four's strategy is to obtain more clients who have potential or competence in EA demands by industrial occupation whereas most domestic firms have not yet realized the meaning and significance of EA practices. This can also be explained through the sources of clients in different firms. Thus, it can be generally reflected from Big Four's respondents that EA practices tend to be easily practised in firms with international clients, or good at doing international services, since the internationalization of the Chinese accounting profession is not quite supported by current policy. As a result, firms that specialize in EA practices normally adopt international standards rather than domestic standards, not only because of the identification of the lack of legislation and normalization for Chinese EA practices, but also international standards focus more on specific details i.e. industrial characteristics and client specification. Therefore, EA practical firms prefer using international standards as a means of both enhancing their practical quality and maintaining their competitive strength, which can be generally regarded as an indication of possible normative and coercive isomorphism.

With the shrinking of the audit market brought about from 2014 government policies, accounting firms tend to adjust themselves to recover from negative impacts, which reflect a general common reaction regardless of their size. This situation has also reflected how accounting firms tend to react similarly (and imitate) through adjustments of their current practices, indicating a mixture of coercive and mimetic forces: on the one hand, most domestic firms in Chengdu have reacted to government mandates by cutting off their capital verification services; on the other hand, a fewer medium and small firms in Chengdu and Shanghai have been commonly motivated to develop their new services for New High-Tech Enterprises as a response to the negative policy impact. Meanwhile, the competitive strategy for Big Four can be called 'client capturing',

which indicates that the Big Four have almost dominated EA services in the Chinese market: this is also why most participants perceive EA as the unique brand for the Big Four. From a coercive point of view, the adjustment of current services and the introduction of new services has reflected the direct influence of national policies and regulations, which it is compulsory to follow. Therefore, it can be identified that isomorphic factors do possibly influence competition between accounting firms. Additionally, the influences from coercive forces play a significant role in not only legitimizing EA practices, but also in shaping competitive patterns in professional accounting practices, which can be illustrated in terms of relevant policies and regulations i.e. SW's carbon practices are actually a response to governmental reactions to low carbon, which became the first domestic firms doing carbon emission assurance. Meanwhile, the establishment of the carbon trade market is also classified as a major influence on the development of Chinese EA practices, which brings an opportunity for competent firms to enter into the market to become a pioneer i.e. this is how SW and BDO have become bellwethers in their unique practices, and regarded as the influence of mimetic factors. This also leads to a situation in which firms that specialize in EA practices normally adopt international standards rather than domestic standards, not only because of a general lack of legislation and normalization of Chinese EA practices, but also because international standards focus more on specific details i.e. industrial characteristics and client specification.

8.1.2 Theoretical Discussions

Organizations are claimed (DiMaggio & Powell, 1983: 152) to 'model themselves after similar organizations in their fields that they perceive to be more legitimate or successful'; whereas it is notable that the term 'successful' is difficult to conceptualize, as the criteria of 'successful' tends to be understood by organizations, with the indication that the criteria of 'successful organizations' could be possibly generated from perceptions of organizational residents. Without DiMaggio and Powell's further interpretation, some insights have been discovered from their discussions in terms of organizational levels and organizational fields level (Wooten & Hoffman, 2008).

By accepting Meyer and Rowan's (1977) statements, DiMaggio and Powell (1983) claim that organizations with insufficient well-defined technologies will import institutionalized practical guidelines and practices, which leads to one of their primary hypotheses, that 'the more uncertain the relationship between means and ends the greater the extent to which an organization will model itself after organizations it perceives to be successful' (Ibid., 154). This argument can be clearly identified from the example of SW and BDO's adoption of carbon emission audits and CSR report assurance practices, which is a typical example of modelling advanced organizations (domestic firms modelling themselves after the Big Four). In other words, 'successful' here represents well-defined technology or practices.

It is, however, confusing to define how a certain technology can be regarded as 'well-defined'. On the one hand, it may refer to a higher quality of practices i.e. participants from larger accounting firms generally regard their ordinary practices as standard and more professional than smaller firms; whereas it tends to be difficult to judge how well larger firms could be. On the other hand, a well-defined technology is supposed to be about the establishment of normative and standardized practical guidelines and the implementation of those guidelines i.e. the adoption of international standards and guidelines in EA projects. Another crucial point in isomorphic mechanisms is the perception of legitimacy in the adoption of certain practices, which indicates the possibility that a well-defined technology should also consider whether it is socially and legally acceptable or desirable (Suchman, 1995). Thus, legitimacy seems a key criterion of a well-defined technology; whereas a lack of guidelines and understanding of EA among most Chinese accounting practitioners has been found, which often reflects a legitimate concern about the adoption and popularization of EA practices in China at the moment. Meanwhile, the general lack of well-defined technology also indicates that organizational technologies are poorly understood (March & Olsen, 1976), which will create potential uncertainty. Such uncertainty is claimed (DiMaggio & Powell, 1983) to encourage organizational imitating behaviour by modelling other organizations. Therefore, the criteria for successful organizations (accounting firms) should also contain sufficient understanding of technologies (EA) by employers and employees, which is likely to be maintained by continuous training and education, such as SW's successful experiences in adopting carbon accounting.

The definition of 'successful organization' may indicate that the majority of Chinese accounting firms are generally facing 'uncertainty' in the adoption of EA: first of all, they do not seem confident in adopting EA, since EA needs special knowledge and expertise; whereas conventional financial staff (professional accountants and auditors) are not very skilled in handling such practices. This can also be shown in respondents' perceptions that EA is actually a brand of the Big Four; whereas there is generally a lack of professional expertise of EA practices in domestic firms. Thus, this uncertainty could be regarded as a fear of professional capability and practicability. It is also about whether the adoption of EA can be legally acceptable and socially desirable, as there are neither governmental regulations nor officially announced practical guidelines about certain EA practices in a contemporary Chinese context; meanwhile, there is generally a lack of EA demands from their existing clients, which is why social desirability (which generally refers to wider demands from clients) would be re-emphasized. In other words, most domestic firms have their legitimate concerns. Moreover, some participants also mention that accounting bodies need to take environmental obligations into account during their daily practices, which shows the motivation of environmental protection in adopting certain EA practices. In this case, environmental concern becomes an uncertainty for accounting practitioners, since accounting firms are not commonly perceived to be environmental assessment agencies. The Big Four as global-wise accounting agencies provide services for both Chinese domestic and international clients: their practices in China are also influenced by local factors such as politics, marketing and the source of clients; however, their reliance on Chinese governmental policies is not heavier than domestic ones, which may reflect that domestic firms might be uncertain about whether their practice of EA can be proved or supported by the government (an uncertainty of *coercive influences*).

Apart from that, EA practices in the Big Four are generally guided by international standards; whereas the applicability of certain international standards in Chinese accounting firms can be seen as a normative uncertainty for the choice of practicing

standards, as most domestic respondents have reflected this uncertain perception that whether international standards can be completely applied and properly understood in a Chinese context, since there has been a lack of resident knowledge of EA in Chinese accounting profession. The Big Four has already established certain 'social norms' (a well-defined practice for EA from its service section to specific practices), which can be regarded as *successful* firms by a few large domestic firms. As a result, domestic representatives such as SW and BDO have established their typical EA practices by modelling after the Big Four; whereas the Big Four story is less compatible with most domestic firms, as they are having different clients, practices, team structures and a reliance on political factors.

Another uncertainty is created from marketing factors i.e. the competitive strength of the Big Four, stating that the Big Four have established a rather ingrained market power in Chinese EA services; whereas other competitors, especially smaller domestic ones, can hardly enter and occupy sufficient EA market share. Hence, domestic competitors are fearful of challenging the leadership of the Big Four, which makes them even more hesitant in adopting EA practices. In other words, the Big Four is an uncertainty for most domestic firms because of differences in their clients, practical capability, reliance on policies and a degree of normalization; that is to say, even though the Big Four have established the 'norm' of EA practices in the professional accounting industry, most domestic firms will still be uncertain about adopting certain EA practices by simply copying the Big Four model, as they are primarily uncertain about whether EA can be well practised, whether EA is against current policies and regulations, and whether EA can achieve short-term profitability for them, especially for smaller firms. This can also explain how isomorphic pressures would hinder the development of Chinese EA practices. In general, isomorphic analysis does help to identify how accounting firms adopt EA practices as a response to my self-defined uncertainty, with the conclusion that particular uncertainty is created by the process of institutionalization and eventually leads to isomorphism, which is a significant finding.

DiMaggio and Powell (1983: 155) state further that organizations and their fields with vague (or ambiguous) goals will be more likely to model themselves after

organizations to be perceived successful: firstly, organizations with unclear goals are likely to rely on legitimacy more, as reliance on legitimated procedures would enhance their chances of survival; secondly, practitioners tend to mimic other organizations rather than self-decision making so as to avoid 'painful or disruptive' analysis. Here, 'successful' may refer to a clear goal/target/strategy for organizations: the Big Four adopt EA practices to occupy the Chinese market; meanwhile, EA is perceived as both technological and perceptive evolution for traditional accounting practices in larger firms. Likewise, uncertainty can be defined as ambiguous organizational goals at this point. Applied to this project, this can be shown in SW's adoption of carbon emission practices, which is also SW's process of perceptive progress micro-organizational level i.e. profit making to a macro-socio-economic level i.e. a low-carbon economic and sustainable society. In other words, SW have developed their carbon emission audit practices with both self-creation and learning from the Big Four so as to stabilize their organizational structures and set up clearer strategies (to reduce uncertainty). As such, BDO and SW have started to realize the significance of EA practices; whereas most domestic firms have been struggling to survive rather than identifying the significance of adopting EA. For firms who have realized and adopted EA, they may not know why exactly they should adopt certain practices, and how this would affect their incomes and developments, or maintain their competitive positions. Even though firms may still insist on modelling after successful cases i.e. Big Four, by adopting EA practices, since EA can be seen as a symbol of a successful strategy or branding for accounting firms. More generally, the emergence of technological innovation (e.g. EA) may lead to organizations adopting this to enhance their legitimacy, to prove that they are trying to improve their ordinary practices in a certain manner. As a result, DiMaggio and Powell (1983) regard modelling as a response to uncertainty caused by ambiguous organizational goals.

Organizations are claimed (Ibid., 155) to be more likely to model others in the same industry if there is greater 'reliance on academic credentials in choosing managerial and staff personnel', which tends to be one of the most typical features for the Chinese professional accounting industry: most large accounting firms prefer entrants gaining

good degrees from at least 1st-tier universities with an accounting major, especially for the Chinese Big Four; meanwhile, it is preferable that new entrants have gained certain professional qualifications or sufficient working experience. Apart from that, it can be also reflected from interview data that competitive accounting firms often obtain a large number of professional workers i.e. qualified accountants and auditors; meanwhile, the competitive firms also refer to those who have successfully 'captured' a wider range of clients i.e. state-owned enterprises, public listed companies and transnational enterprises. This also indicates the fact that organizations may feel stronger pressures to adopt similar models or services of other organizations if they employ a wider population of personnel or obtain a wider customer base i.e. the adoption of management consultation in some medium-sized firms. As a result, DiMaggio and Powell (1983: 151) argue that 'either a skilled labour force or a broad customer base may encourage mimetic isomorphism', which reflects how personnel and clients' demands have played the central role in illustrating mimetic isomorphism. Here, uncertainty could be associated with practicing capability, but may be better defined as the acquisition of skilled labour, which indicates that most domestic firms generally feel uncertain about the adoption of EA with the lack of sufficient practitioners and expertise, since most EA practitioners are gathered in Big Four branches in south-east coastal areas (Shanghai) instead of inland regions (Chengdu). As such, a positive correlation between EA skills and educational levels can be reflected.

On an organizational field level, DiMaggio and Powell first state that the level of isomorphism will be higher if an organizational field is more dependent on 'a single or several similar source of support for vital resources' (Ibid., 155), which reflects how the centralization of sources within a certain field (industry) can directly cause homogenization by putting organizations under similar pressure in resource allocation and distribution i.e. only a few public listed companies have the demands on certain EA practices (e.g. carbon emission trade, CSR reporting and assurance). Meanwhile, it 'interacts with uncertainty and goal ambiguity to increase their impact' (Ibid., 155), which suggests the possibility of modelling other organizations as a response to uncertainty caused by either ambiguous goals or poorly understood organizational

technologies. Specifically in this thesis, the Big Four have established climate change and a sustainability service section with similar practices in contents and practical standards; whereas the Big Four can be seen as a field within the Chinese professional accounting industry. Therefore, the definition of 'successful' has shifted to the capturing of clients in a Chinese EA context.

Next, DiMaggio and Powell (1983) discuss the faster speed of isomorphism in certain fields with less alternative organizational models, by using Granovette's (1978) point that there will often be a threshold for any organizational structures in a certain field and beyond which the adoption of dominant forms will proceed with increasing speed. As a result, the meaning of 'successful' particularly refers to those large firms who have already completed their institutional constructions. What is more, DiMaggio and Powell state that isomorphic change is affected by the 'professionalization' of certain fields, which is measured by the 'universality of credential requirements, the robustness of graduate training programs, or the vitality of professional (and trade) association' (Ibid., 156) i.e. accounting firms are regarded as an industry with high professionalization, which shows that large firms often introduce regular training events for employees whereas most medium and small firms do not often hold formal training events. As a result, this makes EA practices develop poorly in the Chinese professional accounting industry. 'Successful' has therefore been converted to the training programs in daily work, which indicates one of the strongest advantages for the Big Four compared to most domestic competitors.

It is important to find out the hypothesis regarding the uncertainty of technologies or ambiguous goals on an organizational field level as worthwhile examining, which indicates that 'abrupt increases in uncertainty and ambiguity should...lead to rapid isomorphic rate' (DiMaggio & Powell, 1983: 156); whereas this process generally requires 'brief periods of ideologically motivated experimentation' (Ibid.). This perspective can be explicitly explained by SW's example that their carbon emission practices have not yet been officially published in public, since their practices are still at the experimental stage i.e. their practices have not yet received any official affirmation from authorities; otherwise, it may cause uncertainty and ambiguity that result from

poor understanding of carbon emission practices. As a result, DiMaggio and Powell (Ibid) state that new entrants in a field of a high uncertainty level who 'could serve as sources of innovation and variation' tend to 'overcome the liability of newness by imitating established practices within the field'. This can also reflect a tough learning process of how SW has adopted their carbon emission practices as a response to the Big Four's climate change and sustainability services.

The notions of 'successful' have been identified by DiMaggio and Powell, which reflect the suitability for institutional isomorphism as a dominant explanatory tool for this project. But more importantly, Selznick (1995: 273) regards mimetic isomorphism as a response to uncertainty that is 'more deeply rooted in anxiety than in rational efforts to avoid reinventing the wheel', with the conclusion that organization adaptation is rather 'compulsive' and does not solve certain problems. That is to say, 'uncertainty' plays a significant role in organizational change and, more specifically, the process of institutionalization by defining what pressures or incentives may push organizations to model themselves on their peers. In summary, the above notions of 'successful' have reflected a common result that successful organizations tend to have stronger competitive strength in terms of their standardized and professionalized practices, the acquisition of sufficient human resources and expertise, feasible and sustainable corporate strategies and the obtaining of resources (clients' demands).

Several insights can be identified throughout the critical review of neo-institutional theory. First of all, this project reflects how Chinese accounting firms have changed their practices under institutional influences, which can possibly broaden the research context for future institutional studies on an organizational level; then, the focus of EA in this project can help to recall research interests as a disciplinary contribution from accounting (and EA) to neo-institutional theoretical and practical studies. On the other hand, neo-institutional theory has brought an interesting version of the development of EA practices by analyzing how and why accounting firms tend to adopt certain practices through accounting professionals' perceptions from the Chinese accounting profession, which can be illustrated in several aspects: firstly, neo-institutional theory helps to identify primary findings including the branding effects of the Big Four, a lack of

clients' demands and internationalization versus localization. It then concludes that institutional pressures do possibly hinder the development of Chinese EA practices, which lists potential problems to be sorted by both the Chinese accounting profession and the government. What is more, neo-institutional theory has brought this project and EA research to a Chinese context, which enriches the research context of both accounting and Chinese studies; moreover, institutional analysis provides a comprehensive view on the resistance of EA practices in the Chinese accounting profession i.e. obstacles created by a lack of professional capability due to insufficient manpower and expertise, a general lack of service market (clients' demands), and an incomplete practical system and legislation. In addition, Lounsbury (2008: 354) states that institutional shifts are often seen as 'period effects' that 'segregate one relatively stable period of beliefs and activities from another', which indicates that institutional theory may better be used for periodic research; whereas this periodic characteristic has been generally reflected in this project i.e. what accounting firms were doing 20 years ago and what they are doing now. All these findings indicate that neo-institutional theory plays a significant role in illustrating how EA has been practised in the contemporary Chinese accounting profession; meanwhile, it also reflects how their professional perceptions have influenced their practices.

8.1.3 Critique: Some Reflections from Roy Suddaby

It can be summarized here that the discussion of competition cannot be separated from participants, practices and practical standards; in other words, it is necessary to link the discussion of the competitive context to previous analytical sections in terms of institutional analysis, so as to present a comprehensive view of the institutionalization of EA practices in the Chinese contemporary professional accounting industry. Institutional isomorphism fits well to describe how the Chinese accounting profession perceives EA within the aspects of organizational behaviour, which can be seen in the previous section; however, IT has not covered all relative areas in this project. From a methodological viewpoint, Suddaby (2010: 16) argues that neo-institutional theory has generally failed to 'retain methodologies that are consistent with their need to attend

to...processes by which organizations interpret their institutional environments', as neo-institutionalists are supposed to move away from strictly positive and interpretive methods that 'pay serious attention to the subjective ways in which actors experience institutions' (Ibid., 16) if institutional scholars want to take seriously the 'ideational' aspects of institutions. That is to say, while institutional theory has become the dominant explanatory mechanism for organizations (Suddaby et al., 2010), its usefulness has been threatened by a lack of coherence, deviating from the treatment of organizations as a dependent variable and treating them as an independent variable. As a result, Suddaby (2010: 18) raises five key questions that the focus of institutional theory needs to consider, and which suggest a solution for the feasible development of institutional research, concerning organizational perceptions on certain aspects of 'institutionalization' i.e. how organizations attribute the meaning of institution during their operational process.³² Suddaby et al. (2010) pointed out a new direction of institutional research that organizations should be treated as constructs that interpret and elaborate institutional pressures; more specifically, the first concern of Suddaby (2010) can be illustrated as an approach that is 'attentive to the process by which organizations attach meaning and value to social pressures exerted by their social environment' (Suddaby et al., 2010: 1239). How organizations interpret isomorphism internally³³: from a view of early institutionalism, Suddaby et al. (2010) provided an interesting view that saw institutions as independent variables and organizations as dependent variables, which highlighted seeking to find out the institutional pressures on organizations, whereas attention tends to be paid more to elaborating independent variables instead of dependent variables i.e. what an organization is 34, how it is constituted, and how it elaborates institutional pressures (see Suddaby et al., 2010: 1238). How economic-oriented organizations justify humanistic and aesthetic practices³⁵: Suddaby et al. (2010: 1239) argued that current institutional theory was

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³² How do organizations attribute meaning to productive activities? (Suddaby, 2010: 18)

³³ How are common templates and isomorphic activities interpreted inside organizations as they are adopted? (Suddaby, 2010: 18)

³⁴ Suddaby *et al.* (2010: 1235) emphasized the shift of perception of organizations from 'products of socially prescribed, rationalized meanings and institutional pressures' to 'reified social structures that exert agency and pressure on their institutional environment'.

How do rational actors inside economically oriented organizations understand and justify humanistic and aesthetic

effective in addressing issues in most not-for-profit organizations but offered little insight into the world of competitive, for-profit organizations, with the suggestion that institutional theory should return to its early empirical focus, since institutional insights tended to be more accessible in empirical contexts How organizations 'store' their historical memories³⁶: this focus generally reflects upon the previous organizational field, which led Greenwood and Suddaby (2006: 28) to suggest that attention needs to be changed to understand 'how individuals and organizations wittingly change the institutions in which they are embedded'. Finally, Why organizations focus on certain institutional environments³⁷ rather than others³⁸: Suddaby et al. (2010) stated that organizations should not only be seen as having a high degree of being taken for granted but should also assume a highly causal position in relation to the broader institutional environment, explaining why organizations would or would not follow a certain group of social norms instead of others. This, to a large extent, can possibly help to motivate a more comprehensive view of the role of institutionalization in organizational change by addressing a wider concern of non-economic factors 39 rather than just legal (legitimacy), commercial (economic rationality) and competitive (marketing and clients' demands) concerns, which may help to broaden the application of institutional theory to a wider research context.

In a specific sense, Suddaby's suggestions on the change of institutional focus provide insightful significance for institutional accounting research (IAR). First of all, the meaning of institution needs to be attributed throughout the organizational operating process. In terms of accounting, Dillard *et al.* (2004) conceptualized institutionalization into three levels: the first is at the economic and political level, disseminating socially acceptable norms through society, whereas the second is an organizational field level, concerning the translation of 'social, economic and political parameters expressed in the

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practices? (Suddaby, 2010: 18)

³⁶ How is history and collective memory "managed" inside organizations? (Suddaby, 2010: 18)

³⁷ I take symbolic environment as institutional environment, as Scott (2003: 132) claimed that institutional environments are 'characterized by the elaboration of rules and requirements to which individual organizations must conform in order to receive legitimacy and support'.

³⁸ Why do organizations attend to some elements of their symbolic environment and not others? (Suddaby, 2010: 18) ³⁹ Specifically in this project, those non-economic factors can possibly be reflected by social and environmental obligations and stakeholder satisfaction, which indicates the limited usefulness of the contemporary institutional framework and the supplementary insights from legitimacy and stakeholder theory.

general taken-for-granted norms into organizational field criteria and more tangible practices'. More specifically, the third concept of the level of institutionalization discovered by Dillard et al. has shown similarities with Suddaby's first key question, which focuses on an organizational level. At this level, organizational field practices are claimed (Dillard et al., 2004; Cruz et al., 2009) to provide a legitimate and regulative basis for action, which generally focuses on mimicking innovative practices. As a result, the process of institutionalization can be achieved by either integrating those mimetic practices into their own operating process or by separating such practices from internal processes. By using Dillard et al.'s model, Hopper and Major (2007) investigated the adoption of activity-based costing (ABC) in a Portuguese company by explicating agency, dialectics, praxis and the nature of accounting practices, with the conclusion that institutional and technique pressures are interwoven and both impact on organizations; whereas power struggles were identified in this selected case as soon as the implementation of a new management accounting system was carried out. On the one hand, ABC was resisted by production department managers as their needs were neglected, so the conversion of ABC into a practical context (i.e. a new management accounting system) led to the decoupling from the technical activities of the production department; on the other hand, the commercial department institutionalized the ABC system for their needs to be met. As a result, Hopper and Major (2007: 90) concluded that the demands for legitimacy and efficiency were in 'dialectical tension', which created further conflicts and resistance to the institutionalization of an imposed accounting system i.e. ABC.

Organizational aesthetics is defined as 'a form of human knowledge yielded by the perceptive faculties of hearing, sight, touch and taste and by the capacity for aesthetic judgment' (Strati, 1999: 2); more specifically, organizational aesthetics is about sensory knowledge 'through which organization's members and visitors intuitively sense what organization is all about, what its main values are, and who the organization sees as the ideal worker' (Wasserman & Frenkel, 2011: 503), containing a creativity in technology, aesthetic practices (architecture, product design) and links to a larger social and environmental context. In that sense, Suddaby (2010) regarded the justification of

humanistic and aesthetic practices as the distinction between technical and social realms of institutional theory i.e. how organizations adopt and justify practices that are non-rational from obvious economic motivations, and practices inside organizations 'that are more clearly in the non-economically rational or institutional realm' (Suddaby, 2010: 18). This concern brings insights in critical accounting research. Critical perspectives (Tinker, 2005: 101) stated that accounting research should contain 'all forms of social praxis⁴⁰ that are evaluative, and aim to engender progressive change within the conceptual, institutional, practical and political territories of accounting'. Critical accounting is claimed (see Deegan, 2006) to contain both human-centred and technical-centred research: with regard to Suddaby's fourth concern, being human- and technical-centred can be understood as humanistic and aesthetic correspondingly, which reflect a controversial role of accounting in social changes. Such a situation indicates that accounting should be critically regarded as either an anti-humanistic (technical – aesthetic) or a humanistic (social – human) practice.

An aesthetic perspective can be illustrated by several aspects. First of all, technical-centred research focuses on the changes in specific (technical) accounting practices within that society: critical perspectives (see Deegan, 2006) regard the role of accounting as maintaining certain social norms/structure rather than changing them, which indicates that introducing new forms of accounting practices (such as SEA) will only help sustain certain norms. Secondly, Deegan (2006: 529) regarded the role of accounting as 'sustaining the privileged positions of those in control of particular resources (capital) while undermining or restraining the voice of those without capital' by regarding accounting as 'a powerful tool in both enhancing the power and wealth of capital and helping to protect this power and wealth from threats arising from the structural instability of capitalism' (Ibid., 533) and cannot produce an objective or neutral representation of the real world. Instead, accounting provides a contested and partisan representation of the economic and social world (Baker & Bettner, 1997). In other words, an aesthetic perspective suggests that any changes in accounting techniques only help to maintain the old social order and is on behalf of minority

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⁴⁰ Deegan (2006) defined social praxis as distinct from the investigation of social practice.

interests in privileged parties (it refers to those in control of dominant capital); whereas accounting tends not to make the world better, which reflects an anti-humanistic nature of accounting.

On the contrary, a human-centred perspective focuses on the changes in practice embodied in terms of social praxis at the broader level of society (Deegan, 2006). In an economic context, the development of double-entry bookkeeping is claimed (Winjum, 1971) to contribute to world economic growth, which shows the significance for accounting in economic development. Then, accounting is regarded (Lovell & MacKenzie, 2011; Mason, 1980: 29) as playing an interdisciplinary role in not only supporting financial decision making, but also reducing social uncertainty and to 'fulfil social demands for the construction of a symbolic order'. Particularly for SEA, this can be seen from Lehman (1995) and Gray's (2001: 11) perceptions on the term of 'accountability', which is seen as new criteria and objectives of SEA, concerning 'identifying what one is responsible for and then providing information about that responsibility to those who have rights to that information'. As a result, accounting is supposed to have an instrumental role in disclosing environmental responsibility for industrial, commercial and social organizations. This perspective views accounting change and innovation in a humanistic way rather than pure technological development, which indicates that accounting is seen as a humanistic practice.

Isomorphic analysis has been widely used in viewing the historical development of organizations in an organizational field context in terms of accounting practices. Nelson (1951) examined how U.S. cities had generally established their own accounting system and how U.S. accounting educational faculties had introduced systematic accounting modules and the trend of governmental and institutional accounting in terms of accrual accounting, encumbrances, statements, accounting administration, recent noticeable development in federal governmental accounting, cost accounting and university instruction. Lee (2006) introduced counterfactual analysis of accounting history, on the basis of the institutional timeline for modern public accounting in Scotland (1853) and

England (1870)⁴¹. However, in correspondence with Suddaby's fourth concern, the review of organizational development as an important area in historical accounting research tends to become an organizational-oriented approach instead of an organizational field approach; thus, I choose to believe that Suddaby's concern is about how a specific organization (or technique) develops within its own institutional environment, which is consistent with Lawrence et al.'s (2011) suggestion to bring the individual back into institutional theory. Siti-Nabiha and Scapens (2005) claimed that management accounting studies often view the process of institutionalization (decoupling more specifically) as an organizational response to implement new routines and practices. They examined the accounting change taking place in the selected case company over a periodic time, which has witnessed both stability and change during that period. Likewise, Burns and Scapens (2000) also conceptualized management accounting change as an institutionalized process about changes in rules and routines in an individual organization. In addition, they argued that positive theories i.e. agency theory or transaction costs of economics in management accounting research might help to suggest new organizational techniques (e.g. ABC is more rational than cost allocated by labour hours); whereas positive approaches generally failed to explain the process of institutionalization i.e. how such technique could be used in an organization, or the nature of resistance to its use (e.g. the process that ABC could be used in this organization but not in others; potential problems and difficulties in the process of the implementation of ABC). This indicates the fact that institutional analysis tends to work better in an interpretive/qualitative approach instead of a quantitative approach (also see Suddaby et al., 2010), as it focuses on a process view of accounting technique change in an individual organization rather than a comparative way in an organizational field.

Compared with the first four key findings in Suddaby (2010), I find the most insightful findings concerning the interpretation of isomorphism as being within organizations, which has barely been mentioned in contemporary accounting studies.

⁴¹ According to Lee (2006: 925), this history can be traced back to 20 January 1853, when eight public accountants in Edinburgh started the formal institutionalization process of modern public accountancy in English speaking countries.

Dillard et al. (2004) classified organizations as innovators or late adopters⁴², which viewed the process of institutionalization as a learning (or copying) process. Carpenter and Feroz (2001) explored how institutional pressures exerted on selected US state governments influenced the decision of those governments to adopt the use of GAAP for external financial reporting. Villiers and Alexander (2014) examined CSR reporting structures through a comparison between Australia and South Africa with different social issues. Edgley et al. (2015) investigated the values or logic that shaped social and environmental reporting and the assurance process, with the discovery that ideas of materiality were changing as they spread from financial reporting to a new institutional field in social and environmental reporting. Solomon et al. (2013) viewed social and environmental reporting in an impression management way, with the discussion that the myth created through stakeholder engagement represented the institutionalization of unaccountability, which re-emphasized findings from previous research (Archel et al., 2011) that stakeholder engagement practices appeared to be exercises in institutionalizing unaccountability instead of genuine engagement and dialogue. Greenwood et al. (2002) examined the role of professional associations (the Canadian accounting profession) in a changing, highly institutionalized organizational field (accounting firms), with the suggestion that the accounting profession played a significant role in institutional and legitimate change.

To sum up, Suddaby's works generally provide a view on how neo-institutional theory can be developed as a critical and comprehensive organizational theory; more importantly, Suddaby's critique on neo-institutional theory (see Suddaby, 2010) has brought significant insights on institutional perspectives in accounting research on a professional basis (see Greenwood & Suddaby, 2006; Greenwood *et al.*, 2002; Suddaby *et al.*, 2007). As a result, Suddaby's institutional perspectives have been used in this project, which indicates a gap for neo-institutional theory and the framework for this project, since institutional theory only explains what factors would lead accounting firms to adopt EA practices; whereas it generally fails to explore how those factors can

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⁴² Dillard *et al.* (2004: 514) classified organizations as innovators: organizations who develop new organizational practices within the boundary of organizational field practices; or late adopters: organizations who adopt the practices of those innovator organizations.

be illustrated within accounting firms. This would possibly suggest a feasible direction for further research focusing on IAR. As a result, Suddaby's last concern has become a potentially significant shortcoming for not only an institutional environment focus (the Big Four generally adopt international standards and specific EA practices because of demands from their international clients with less influences from domestic politics; whereas domestic firms have generally focused on ordinary practices and Chinese standards instead of EA practices and international standards, as they are largely influenced by local clients and national policies, so clients become the barriers for the adoption of EA and international standards i.e. the resistance of EA and international standards adoption) but also leads to my thinking as to what extent can institutional theory be used to explain some certain organizational changes. In addition, Suddaby (2011) mentioned that most neo-institutionalists generally made institutions essential; whereas they generally failed to define terms of institutions i.e. DiMaggio & Powell (1983) stated that organizations tend to model themselves on those organizations perceived to be successful in order to reduce uncertainty and attempted to avoid defining 'successful organizations' and 'uncertainty'. More specifically, institutional isomorphism focuses primarily on most marketing contexts i.e. recruiting strategy, competition, service structure and partial regulative/normative context (standards and regulations); whereas it barely concerns non-marketing issues such as legitimate concerns and engagements from corresponding stakeholders. Apart from that, isomorphic research is claimed (Suddaby, 2010; 2011) to focus on the empirical fact of diffusion (Suddaby also phrased it as communication) and its role in normally mimetic isomorphism (see Tolbert & Zucker, 1983) instead of demonstrating how and why this diffusion happens i.e. institutional theory explains the fact that domestic firms generally resist adopting EA practices; whereas it covers little about why most domestic firms choose not to practice EA. That is to say, institutional theory is generally seen as a largely unarticulated theory of communication, although the key mechanisms (Suddaby classified them as normative rules, social orders⁴³, status hierarchies and institutional

⁴³ Social order refers to a particular set of linked social structures, institutions, relations, customs, values and practices.

logics⁴⁴) of institutional theory lean heavily on an implicit theory of communication. As a result, neo-institutional theory has shown its usefulness, but is a little restricted in describing how EA practices have become institutionalized in the Chinese accounting profession through respondents' professional perceptions. This suggests the necessity to use additional theories to describe the whole picture for the development of EA in the Chinese professional accounting industry. This is why stakeholder and legitimacy analysis will come next.

8.2 Legitimacy and Stakeholder: A Complement

To a large extent, institutional isomorphism has been addressed in most related issues in the whole analysis. On the one hand, institutional isomorphism can reflect how EA practices have been influenced by external factors i.e. policies and regulations, the shift of clients' demands, changes of practical standards, and competitive forces. On the other hand, it is hard to completely use institutional isomorphism to explain how EA has been shaped by non-market factors i.e. legitimacy and stakeholder. This makes legitimacy and stakeholder theory necessary to present a more complete analysis of EA practices. Neo-pluralism (Gray *et al.*, 1995; Held, 2006) is used to illustrate stakeholder and legitimacy effects, as pluralism is claimed (Hopper & Powell, 1985: 443) to be 'a source of fresh ideas and insights' into management accounting research. First of all, pluralism sheds light on how accounts and accounting rules are created, as it suggests that accounts and rules arrive from sectional interests and are then mediated through the political process (Ibid.). Then, pluralistic perspectives in accounting reflect the bargaining between managerial interests⁴⁵. Apart from that, pluralism has been extended

⁴⁴ Logics is defined (Horn, 1983: 1) as 'the underlying assumptions, deeply held, often unexamined, which form a framework within which reasoning takes place'. Organizational scholars (DiMaggio & Powell, 1991; Suddaby & Greenwood, 2005) extended this definition to an institutional level with the observation that higher-order societal institutions (Suddaby referred this as status hierarchies, including family, religion, government and professions) provide distinct and conflict organizing principles that shape ways of viewing and interpreting the world. Suddaby's works (e.g. Suddaby & Greenwood, 2005) generally claim that institutional logics provide guidelines (normative rules) for practical action. Suddaby and Greenwood (2005: 38) emphasized specifically that institutional logics encoded criterion of legitimacy by which role identities, strategic behaviour, organizational forms and the relationship between organizations were constructed and sustained. As a result, Suddaby (2010: 16) stated that institution, in a logical sense, structures social order by 'drawing boundaries between categories' e.g. the distinctions of public and private property are institutionally defined categories.

⁴⁵ Managers develop accounting to support certain perspectives rather than treating it as providing answers through a single calculus (Ibid.); as a result, budgetary control tends to become a means of instituting and promoting bargaining

to industrial relations, as accounting reports are claimed (Foley & Maunders, 1977) to meet trade union and employee wants that serve as distinct inputs to bargaining in the control process. What is more, pluralism offers insights into the significance of accounting data emanating from meetings i.e. accounting data often emerges from political processes and decisions (Burchell *et al.*, 1980) and the management information system is to rationalize decisions and actions already taken (Earl & Hopwood, 1980). Such reflections indicate that accounting is supposed to serve decision-makers and to legitimize their actions instead of reflecting an underlying reality throughout a neo-pluralistic vein (the focus of interest, conflict and power).

Applied to SEA, Gray *et al.* (1995) stated that the uneven distribution of power within neo-pluralism concepts would create a conflict of interests and that the focus of socio-organizational interactions (e.g. CSR and EA) might occur within a controlled system; whereas neo-pluralism prescribes neither where the power lies, nor that there are predetermined 'battle-lines' along class boundaries i.e. predetermined conflicts between classes. As a result, CSR (EA) has been seen (Ibid., 55) as 'forming part of the symbolic universe of language, signs, meanings, norms, beliefs, perceptions and values', which leads companies to use CSR (EA) to 'construct themselves and their relationships with others as they strive to create and maintain the conditions for their continued profitability and growth' (Ibid., 55). Similarly, Lehman (1992) regarded the role of accounting as serving to rationalize and justify a corporate entity by not only describing effective management, but also legitimizing corporate power and maintaining confidence. As a result, this section will describe EA practices from the standpoint of legitimacy and the stakeholder.

8.2.1 Stakeholder Analysis

Stakeholder theory, being inspired from Habermas' (1976, 1984) framework of language and communication, has been widely used by SEA scholars to investigate how SEA information is communicated and how SEA practices are influenced by different interested parties (Roberts, 1992; Tilt, 1994; Edgley *et al.*, 2010; Hung, 2011; Barone *et*

al., 2013). As a result, it is claimed (Deegan, 2002, 2007) that stakeholder theory extends legitimacy arguments⁴⁶ to consider particular stakeholder groups rather than just the society as a whole. Compared with Friedman's (1970) perception, a wider concept of stakeholder has been defined (Freeman & Reed, 1983: 89) as 'other groups to whom the corporation is responsible in addition to stockholders: those groups who have a stake in the actions of corporation', which indicates that the nature of stakeholder has been moved to broader stakeholder groups to whom the corporate entity is responsible, which has developed as the commonly accepted analysis pattern in SEA research. In this project, the main stakeholder group has been classified as clients of accounting firms and standard setters (more precisely, governmental authorities), which will be discussed respectively.

8.2.1.1 Insights from Clients' Demand

Isomorphic factors have been largely reflected in demands from different client groups i.e. listed and non-listed companies, state-owned and private-owned business, larger and smaller enterprises, which becomes very important for the whole analysis. Thus, stakeholder analysis has been selected as another supplementary analytical framework, which can be primarily illustrated in terms of clients' demands. Most domestic firms normally concentrate on a featured service or particular group of clients (mainly old clients) to guarantee their ordinary income, as most of their clients are privatelyowned businesses without any EA demands; whereas international firms and a few large domestic firms have a wider range of clients, including both transnational and domestic clients. One of the important findings about 'localization' can be closely linked to clients' demands and practices in accounting firms as well, which is caused by geographic variation and degrees of economic development. On the one hand, EA demands are generated from mostly south-east coastal areas and first tier cities, thus accounting firms in those areas are more likely to provide correspondent services to satisfy their clients' demands; on the other hand, most inland cities do not have such

⁴⁶ Scholars (Dowling & Pfeffer, 1975; Lindblom, 1994) have identified four strategies for a company to defend its legitimacy as a response to the relevant public, including informing and educating the public about any organizational changes, changing public perceptions by maintaining its own behaviour, deflecting attention from concerns to other issues, and misrepresenting activities of concern to the public.

demands due to a lower level of economic development, thus inland firms, especially domestic firms, do not generally provide EA related services to those current clients. This has eventually led to the localization of Chinese domestic accounting firms, which hinders the development of the internationalization of the Chinese professional accounting industry. To sum up, clients' demands have become an incentive for firms to adopt EA practices, which is how EA can be called a client-oriented practice; likewise, the lack of clients' demands has become a barrier for firms to adopt EA practices. In other words, EA is seen as a client-oriented practice, which is to satisfy clients' needs.

Practices provided in accounting firms are based on clients' special demands i.e. IPO, taxation assurance, and management consultancy. The focus on certain client groups has also led firms to organize corresponding training and recruit particular practitioners, which presents a mixture of stakeholder and institutional influences; whereas institutional isomorphism only describes why firms adopt certain practices and standards (marketing issues). In this case, stakeholder analysis has played an alternative role in institutional analysis by addressing how firms are influenced to adopt such practices and standards (both marketing and non-marketing issues). Secondly, the adoption of EA also requires clients (companies) to be affordable in undertaking certain practices i.e. carbon trade, environmental obligations and other activities or depends on the nature of their industries i.e. manufacturing, energy saving and mining exploration etc., which is generally client information that cannot be fully explained by institutional theory. Likewise, in a practical guideline context, the influences of clients' demands can be more obvious: the adoption of certain accounting standards i.e. IAS, IFRS, CAS is influenced by the localization of clients, which can be also seen as a client-oriented process. What is more, the choice of accounting standards can also reflect a developing strategy of accounting firms i.e. larger firms tend to be globally or nationally influenced; whereas smaller firms tend to be regionally influenced.

Clients' demands also play a significant role in a competitive context, which can be linked back to participant profiles and practices. An internal competitive advantage for the Big Four is their specific focus on industrial changes by email tracking and organizing corresponding training events, which helps them provide more specialized

services for their clients; whereas domestic firms do not generally focus on certain clients, which makes their services more mass production. This has led to an interesting phenomenon: firms might be specialized in either certain practices (SW is good at carbon emission auditing; BDO is good at CSR report assurance) or certain clients (EY is good at clean technology companies; DTT is good at international clients). Moreover, clients' demands also influence firms' recruiting strategies i.e. EA firms may generally set a comprehensive standard for their entrance requirement; whereas ordinary firms generally focus on traditional financial (experienced) workers. This has also eventually caused an unequal development (large versus small, international versus domestic) in the Chinese professional accounting industry, which has hindered the development of Chinese EA practices. As a result, a stakeholder focus has succeeded in describing what these differences are and how these differences have influenced the adoption of EA practices i.e. the nature of particular industries will lead auditors to pay additional attention to potential environmental risks during auditing procedures.

8.2.1.2 A Governmental View

Compared with clients' demands, the indication of EA standard setters and regulators are not often reflected in interviews, since this is not intended to be the primary focus. The government has started to realize the importance of environmental protection and release corresponding documents: a few domestic firms e.g. SW, BDO who have adopted certain EA practices also undertake commissions from government as a means of serving for national interests i.e. accounting body intervention in government policy setting and low-carbon experiments, which makes the government a very unique 'client' that influences their adoption of carbon emission practices. Meanwhile, the support from government also enhances the possibility of legitimacy, which shows that carbon emission is deemed legitimate and acceptable by the government. From SW's example, the government has actually taken part in certain environmental projects as a stake party. Its behaviour reflects how specific EA practices are perceived to be acceptable for an official introduction. Apart from that, the government and industrial associations have set specific rules and guidelines within

CPA practical standards and Chinese Accounting Standards. All those have reflected that the government, as a special stakeholder, has played its role in guiding, supervising and legitimizing EA practices in accounting firms.

While we should definitely notice the contribution of government participation in EA development, it seems that the government has hesitated in building up a practical accounting system and complete EA legislation and regulations. This can be seen by how despite a large amount of respondents there has generally been a lack of implementing strength and supervision power within government agencies. Apart from that, China has not set up an authority or official institution to be in charge of specific EA or CSR reporting practices at the moment, which indicates that standard setters and regulators have played very little importance in developing contemporary Chinese EA practices. As being analysed in coercive influences, accounting firms have not generally adopted EA practices due to a lack of compulsory legal or political requirements, which can be recognized as a lack of practical demands from government clients. David Held (2006: 159), in a democratic context, contributed conceptualizing pluralism that explored the interconnections between electoral competition (government) and the activities of organized interest groups (stakeholder parties) by focusing on relationships between wider 'intermediate' groups⁴⁷ and electoral leadership instead of elites. In this sense, pluralism is claimed (Ibid., 173) to present a diverse range of interest groups seeking political influences i.e. different stakeholder parties (accounting profession, public listed companies, academics, relevant social media and the public) urge the government to speed up EA legislation; power is shared and bartered by numerous interest groups in society, which makes political outcomes ideally satisfactory to all parties i.e. the accounting profession and organizational representatives have been involved in accounting standard setting process as well as government agencies; and governments act to mediate and adjudicate between various demands i.e. superior standard setters i.e. government and CPA association, will take every party's opinion into consideration by the final version of standards. In contrast, neo-pluralism (Ibid.,

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⁴⁷ Held classified those intermediate groups as community associations, religious bodies, trade unions and business organizations; but they are more generally simplified as 'individual citizen' in a micro sense. The group of citizen generally stands in a vulnerable position in a world marked by the competitive clash of elites.

173) has reflected the fact that power is contested by numerous groups, which would cause power distribution unevenly in each group i.e. the national fiscal department tends to become the dominant group in the accounting standard setting process; meanwhile, it tends to illustrate how governments forge their own sectional interests rather than overall interests, which can be identified clearly from this project. On the one hand, to respond to the call of central government, Sichuan local government had released policies related to a low carbon experimental project, which motivated SW's development of their current carbon emission assurance practices and made them involved in environmental policy setting; on the other hand, most domestic firms were more influenced by the national policy of streamlining administration and delegate power to adjust their ordinary practices instead of adopting new practices, which indicates that government focus is not entirely on environment and sustainable transformation.

What can be learned from neo-pluralism is the influence of state power⁴⁸ in shaping corresponding changes in practices provided by accounting firms, which can reflect not only coercion and legislation, but also decentralization and simplifying administration. Governments are claimed (Held, 2006) to specifically seek strategies to resolve economic problems and mediate between growing demands by creating formal and informal bargaining arrangements with representatives of key interest groups. It has been reflected during an interview that China is facing the economic transition from a traditional to a low-carbon economic model, which has been released as policies from central government. In this case, central government approved the establishment of the carbon emission trade market in 2013. Then, the Sichuan province government asked representatives of the qualified accounting association (mainly from accounting firms) to discuss how the Sichuan Fiscal Department could contribute to low-carbon development and air pollution prevention by investigating how to link fund usage efficiency to an industrial index, and how to pursue performance assessment on fund usage efficiency. To achieve this target, accounting firms had to summarize experiences

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⁴⁸ Central government always resolves economic problems as a macro policy setter and controller; whereas local governmental authorities are seen as a meso? micro? policy setter and supervisor, and commercial organizations should be classified as policy practitioners.

in their recent CCS services, which motivated the development of SW's carbon emission assurance practices. With the specialized expertise in CCS practices, the Sichuan Economic and Planning Committee then invited SW to cooperatively work out certain low-carbon experiments after the issuing of corresponding policies by the Sichuan government. Another remarkable memory of decentralization is the commercialization and privatization of accounting/auditing firms, which had been derived from the fiscal and audit system in local government since the later 1980s. Although it can be seen from the participant profile in a number of large domestic firms that, most seniors have held the membership of Chinese Communist Party, reflecting a rather powerful control by the government, most domestic accounting firms were compulsorily required by central government to develop as international intermediary firms since the 1990s; meanwhile, their services had been restructured for subdivision administration purposes. In other words, the reflection of state power indicates that government plays a role in climate change and sustainable development, as both a powerful stakeholder to directly shape and legitimize CCS practices; meanwhile acting as a negotiator with CCS practitioners to help set up policies and practicing guidelines.

It has been discussed by almost all participants that accounting firms are influenced by their own institutional environment (ordinary services in accounting firms are politically-oriented and rely heavily on policies, legal regulations and practical standards), which reflects a coercive influence brought from government. There is generally a lack of institutional environments for EA practices, with almost no legislation and standardization of EA practices. For firms who have adopted certain EA practices (carbon emission and CSR report assurance), the majority of their practical standards are, not surprisingly, international standards; whereas Chinese domestic standards are often seen as generic and abstract, which are commonly used as outlines or guidelines rather than practical codes. On the contrary, such international standards are generally neglected by domestic firms through their existing services and ordinary training, since they neither adopt advanced financial services nor gain international clients. In that sense, stakeholder analysis can be seen as an alternative approach to illustrate how and why domestic firms resist adopting certain standards and regulations.

Indeed, the adoption of EA in the Chinese professional accounting industry can be illustrated in two sides: on the one side, firms (SW, BDO) are influenced by their institutional environments in adopting their EA practices; whereas the rest are also influenced not to adopt certain standards and practices. This is due to the focus of different groups of regulations, divided by firm sizes, practical strengths and their major clients. To sum up here, accounting firms are definitely influenced by governmental rules whereas this pushes back into their institutional environments and causes the resistance of adopting certain standards and practices within most domestic firms. However, such influence in the Big Four can be hardly detected. Thus, I would argue that the government, as a standard setter, played a vague role in the whole story: on the one hand, it strongly supported EA and participated itself; on the other hand, it seemed reluctant to speed up the whole legislation and standardization process, as current policies are less friendly to support accounting profession to become internationally. In a general sense, stakeholder analysis describes how different participants have shaped organizational practices, with the reflection that legitimacy is an important concern for perceptions of EA. Stakeholder analysis provides an alternative way to discuss how competitions and clients demands' can shape EA practices whereas it is not that easy to describe how EA is perceived by stakeholders, which focuses primarily on non-marketing factors i.e. legal and moral concerns. This is how legitimacy has come as a supplementary analysis.

8.2.2 Legitimacy Analysis

The history of legitimacy can be traced back to the early 20th century when Max Weber (1947, 1962, 1978) classified legitimate rules as traditional (power of authority), charismatic (charisma of the leader) and legal (administrative and judicial rules in accordance with known principles). Suchman (1995: 579) had subsequently identified moral legitimacy⁴⁹ that 'parallel Weber's discussion of legitimate authority', containing consequential, procedural, structural and personal legitimacy. He continued arguing that

⁴⁹ Suchman (1995: 579) claimed that moral legitimacy reflected a positive normative evaluation of organizational behaviour, which focused on 'whether the activity is the right thing to do'.

both consequential (pursuit of certain goals) and procedural (fulfilment of rules of proper behaviour) legitimacy reflect legal authority; structural legitimacy (longstanding designation of certain types of actors as worthy of exercising certain types of power) reflects traditional authority; and personal legitimacy (organizational leaders and representatives) as charismatic authority. As such, legitimacy was claimed (see Weber, 1947, 1962; Bendix, 1966; Habermas, 1976) to stem from political theories. This suggests the necessity to review another 'broad' theory, political economy (PE), which is regarded (Gray et al., 1995; Deegan, 2006) as the code for Karl Marx that economic-based research cannot be isolated from 'the social, political and economic framework within which human life takes place' (Gray et al., 1996: 47) and, simultaneously, it places sectional interests, structural inequality, conflict and the role of state at the centre (see Held, 2006). However, another version, bourgeois PE⁵⁰, generally ignores those elements and sees the world in a pluralistic sense. Bourgeois PE is claimed (Tinker, 1984, accepted by Gray et al., 1995: 53) to be exercised by 'relationships between the interest groups of pluralism without explicit recognition of the way in which the forces of the system construct the self-interests as group interests' - shadows of bourgeois PE can be typically reflected from stakeholder theory in a SEA context, as CSR is claimed (Roberts, 1992) to be a successful medium for negotiating the organization-society relationship; whereas such analysis tends to fail to address issues that 'construct the relationship or...to recognize the structural inequities in the 'relationships'' (Gray et al., 1995: 54). Likewise, legitimacy theory concerns itself with organization-society negotiation in a pluralistic world (Preston & Post, 1975; Gray et al., 1995) whereas Gray et al. (ibid) identified a more general application of legitimacy theory (Guthrie & Parker, 1990; Patten, 1992) by systemic response as well as intra-system mediations. This leads legitimacy theory beyond bourgeois PE and returns back to classical PE, which tends to maintain legitimacy of the system as a whole by government intervention in mediation between different parties. In other words, theoretical works of SEA and CSR have produced legitimacy and stakeholder theory as

⁵⁰ David Held (1980) stated that Marxist and bourgeois PE are essentially irreconcilable in that the bourgeois perception treats as important issues which the Marxist would see as insignificant.

the motivation for firms to report or disclose their CSR activities, which reflect that both legitimacy and stakeholder theory stem from PE (Gray *et al.*, 1995; Tilt, 2009).

It is stated by scholars (Baum & Powell, 1995; Suchman, 1995) that there is organizational (also phrased as cognitive) and institutional (sociopolitical) legitimacy. Institutional (sociopolitical) legitimacy focuses on 'how organizational structures as a whole have gained acceptance from society at large' (Tilling, 2004: 3, accepted by Deegan, 2007): in this case, institutionalization is viewed (Meyer & Rowan, 1977; DiMaggio & Powell, 1983) as a process whereby certain activities come to be obligatory; thus, as a state where shared norms and values are 'buttressed by cultural, professional and political expectations or even mandated by law' (see Baum & Powell, 1995: 529), reflecting how legitimacy is supposed to be maintained by government. An organizational legitimacy (cognitive legitimacy) claimed that 'organizations seek to establish congruence between the social values associated with...their activities and the norms of acceptable behaviour in the larger social system...' (Dowling & Pfeffer, 1975: 122), which is generally illustrated (Zucker, 1977; Suchman, 1995; Deegan, 2006, 2007) as a cognitive phenomenon reflected in taken-for-granted assumptions. The term legitimacy generally exists when 'there is little question in the minds of actors that it serves as a natural way to effect some kind of collective action' (Hannan & Carroll, 1992: 34), which indicates that a shared or common understanding or perception (cognition) tends to be a key element of legitimacy. Hargadon and Douglas (2001) claimed that legitimacy is generally needed when an innovation is introduced, which indicates that the emergence of legitimacy is generally accompanied by innovation (institutional change). Zucker (1977; 1989) explained in an organizational sense that legitimacy is seen as a cognitive process through which an entity becomes embedded in taken-for-granted assumptions. As such, legitimacy is claimed (Suchman, 1995; Suddaby & Greenwood, 2005) to contain two cognitive variants: to what extent an organizational form is taken-for-granted and comprehensibility⁵¹.

⁵¹ Comprehensibility (Suddaby & Greenwood, 2005: 37) relates to how legitimacy is acquired in the earlier stage of organizational evolution.

For maintaining legitimacy, Suchman (ibid.: 595) suggested forecasting (monitoring) future changes to guard against unforeseen challenges, including monitoring the cultural environment and assimilating elements of that environment into organizational decision processes; meanwhile, legitimacy is claimed to be enhanced by protecting past accomplishments, containing 'policing internal operations to prevent miscues, curtailing highly visible legitimation efforts in favour of more subtle techniques, and developing a defensive stockpile of supportive beliefs, attitudes and accounts' (ibid.: 595). In contrast, in a macro sense, legitimacy is supposed to be maintained by national government through legal rationality and power of state. Apart from that, legitimacy is claimed (Deegan, 2007: 128) to be based on perceptions: that is to say, to be legitimate is what society collectively knows or perceives about the organizational conduct that shapes legitimacy, which can be reflected through Suchman's moral legitimacy that concentrates on 'whether the thing is right to do'; whereas the criteria for 'right thing' is primarily based on organizational or personal perceptions of certain activities. This reflects an eventual transition from Weberian legitimate authority to a cultural cognitive one. Therefore, legitimacy is claimed to be a measure of the perception of society toward a corporation and its activities, which leads to legitimacy being a positive theory that can be examined from social and environmental information disclosure in organizations and accounting research (Hannan et al., 1995; Patten, 1992; Hackson & Milne, 1996; Deegan, 2002) that have been examined from various viewpoints, such as environmental disclosure in CSR reports, the institutionalization of the accounting/auditing profession (Maroun & Solomon, 2014) and general accounting/auditing practices (Unerman & O'Dwyer, 2004).

As stated by neo-institutionalists (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1995; Greenwood & Suddaby, 2006), organizations tend to model themselves after those successful organizations to enhance legitimacy, which makes legitimacy one of the central principles of institutional theory. In DiMaggio and Powell (1983), legitimacy, often associated with perceptions of success and uncertainty, has become one of the primary criterions for a successful organization, which indicates an indivisible interrelation between legitimacy and institutionalization. Moreover,

Suchman (Ibid.: 576) claimed that both institutionalization and legitimacy 'empower organizations primarily by making them seem natural and meaningful; access to resources is largely a by-product' and regarded legitimacy and institutionalization as synonymous⁵². Neo-institutional theory is claimed (Meyer & Rowan, 1977) to explore different mechanisms through which information about legitimate and socially accepted or organizational behaviour could be transmitted and such behaviour institutionalized in organizations (see Qian et al., 2011: 98), and the essence of (neo)institutional theory is claimed (DiMaggio & Powell, 1983) to achieve legitimacy. Legitimacy is also claimed (Suddaby & Greenwood, 2005) to modify and displace certain logic to establish new criteria for legitimacy. In that sense, legitimacy is regarded (Dowling & Pfeffer, 1975; Dacin et al., 2002; Suddaby & Greenwood, 2005) as a crucial element or resource in the creation and survival of new organizational forms, which leads legitimacy becoming an indispensable element in any form of institutional analysis, since legitimacy is not only the cause of institutional change, but also the goal for the process of institutionalization. As such, legitimacy is generally defined as 'a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions' (Suchman, ibid.: 574), and it has been treated (Dowling & Pfeffer, 1975; Suchman, 1995) as a resource that an organization extracts from its institutional environment. More specifically, legitimacy is summarized as a set of perceptions that organizations and individuals behave in a socially, legally and politically acceptable (preferably desirable) way.

Legitimacy theory concerns itself with organization-society negotiation in a pluralistic world (Gray *et al.*, 1995). Accounting (EA more specifically, see Lehman, 1992) tends to rationalize and justify a corporate entity by legitimating corporate power; whereas a pluralistic focus is on the interests and conflicts between different stake parties. As a result, legitimacy tends to reflect how legitimate concern is perceived by those stake parties i.e. clients, employees and government. In this project, I intend not to directly examine legitimacy through either environmental disclosure or organizational

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⁵² Suchman (1995: 576) stated that legitimacy is not simply extracted from an organizational cultural environment; instead, external institutions construct and interpenetrate the organization in every aspect. Culture determines 'how an organization is built, how it is run, and…how it is understood and evaluated.'

behaviour, as this project is not a positive one; instead, legitimacy is used as a supplement to measure personal perceptions of the EA of respondents that cannot be fully explained by institutional and stakeholder analysis. In general, EA seems to be a stranger for most respondents, which indicates the concern of legitimacy in the adoption of EA in Chinese accounting firms at the moment. This can be reflected through the fact that EA has not yet been formally trained or taught in either training programs or academic teaching modules in Chinese accounting higher education, which indicates that the emergence of legitimacy in both domestic and global firms is from comprehensibility i.e. perceptions of EA through normative training and education.

For global firms who have adopted specific EA practices, EA has been perceived as a legitimate practice within the permission of existing legal regulations and governmental policies, since it has been successfully practised in some state-owned companies, which can show a positive government attitude towards adopting EA practices. This perception can be linked to the discussion of normative and coercive isomorphism i.e. EA is legally acceptable; whereas isomorphic factors generally fail to describe whether or why EA is (not) socially acceptable. Some domestic EA firms (e.g. SW) are concerned that their EA practices have not yet received formal affirmation from relevant authorities, which indicates potential threats of legitimacy. In other words, they are not so sure if their carbon practices are legally and socially acceptable and admirable; thus, their legitimacy normally comes from policy (taken-for-granted), and is primarily maintained in a coercive way by state powers i.e. legislation and policies. Global firms such as the Big Four are not largely influenced by legitimate concerns in local government. They maintain legitimacy through a rather normative way by ordinary training and practical standards. Apart from that, the government has played a role in maintaining the legitimacy of specific EA practices by releasing regulations and policies i.e. SW was motivated by a low-carbon policy to adopt their carbon emission assurance practices; likewise, institutional theory can largely show how and why accounting firms are required to adopt certain practices, but it can hardly reflect the perception for the social and legal acceptability of certain practices. In a domestic context, most accounting firms of a similar size do not

generally adopt EA practices, which eventually becomes an organizational uncertainty for legitimacy (whether it can be understandable or practical) in both the firm itself and its competitors. What is more, government intervention on specific accounting and auditing practices has reflected coercive and normative forces; whereas such institutional factors do not explicitly point out whether this specific project is legally and socially acceptable i.e. the governmental environmental audit will be implemented in earlier 2016 but government is uncertain about how the practice is actually understood. As a result, the government cannot predict the consequences or problems caused by potential practices, which may enhance the difficulty for the government to maintain legitimacy by forecasting future changes; meanwhile, legitimacy can hardly be maintained by protecting past accomplishments, since there is generally a lack of empirical examples to be accomplished. Moreover, China has not yet established a specific accounting system for environmental information measuring and disclosure, which reflects both isomorphic (primarily normative and coercive) and legitimate concerns for the adoption of EA practices. In a competitive context, the adjustments of current practices should also be linked to legitimate concerns, as their new practices should be legally acceptable. For the adoption of specific practical standards, this has suggested the significance of normative and coercive factors in EA competition. On the one hand, normalization is achieved by the effective mechanism of monitoring and legislation; on the other hand, compulsory actions are to guarantee the legitimacy and normalization of EA practices. In general, legitimacy can be measured by uncertainty for the adoption of EA. As a result, legitimacy analysis brings a supplementary view to illustrate how accounting firms resist adopting EA practices alongside institutional and stakeholder analysis, which brings a rather comprehensive illustration of the institutionalization of EA practices in Chinese accounting profession. The next section will draw out corresponding conclusions and implications of the theoretical framework.

8.3 Summary

To start with, coercive isomorphism in the context of environmental accounting suggests that development of EA practices reflects a direct response to an established and mandated social norm or order, such as government mandates. Applied to findings herein it has been explicitly identified that government authorities have strong control upon Chinese domestic accounting firms, and that government policies and regulations do shape accounting firms' adoptions on certain practices. There is no clear indication that the Chinese government has taken part in normalizing and implementing specific EA practices at the moment. From the standpoint of stakeholder and legitimacy, the general lack of legitimate concerns and clients' demands are the main perceptions that lead to the low participation of EA practices among Chinese accounting professionals. Meanwhile, EA related services i.e. CCS in the Chinese market have been almost monopolized by the Big Four, which makes EA a symbol of the Big Four, whereas most domestic firms have failed to realize the significance of adopting non-financial accounting and auditing practices. Moreover, the role that the state government played in shaping EA practices tends to be vague, reflecting from its unclear attitudes towards policy setting process. Such circumstances have reflected a rather strong political-oriented nature of Chinese accounting profession that, accounting firms are heavily influenced by policies and regulations rather than global homogenization; whereas the adoption of EA in Big Four has been influenced less by local government, indicating the leading role of Big Four in Chinese EA market. This generally indicates the inequality for the development of EA in the Chinese accounting profession. It can be therefore clearly identified that coercive factors do hinder the development of EA in Chinese accounting profession.

From a mimetic point of view, organizations tend to model themselves on others which are perceived to be successful as a response to the uncertainty and ambiguity of their goals and practices, so as to enhance legitimacy and competitive strength. Findings herein locate this with respect to the wider adoption of management consultancy services within larger sized domestic firms and, more importantly, become the

incentives of domestic EA adopters i.e. SW and BDO. However, the generally low participation of EA within Chinese domestic accounting firms has caused the slow development of EA practices in the Chinese professional accounting industry, since there is almost nobody to imitate; meanwhile, the low number of clients' demands in certain CCS practices have also caused the low participation of EA in Chinese accounting firms; rather, modelling after Big Four has been perceived as both a successful model and, simultaneously, uncertainty for domestic firms to adopt certain EA practices, which can be largely reflected from domestic perceptions. This, to a large extent, has re-distinguished mimetic forces from coercive isomorphism that domestic firms tend to model themselves after those 'legitimate' and 'successful' firms (Big Four) instead of creating a shared social norm, or challenging the existing social order. This, to a large extent, presents a rather restricted contribution for mimetic factors in promoting the development of EA in China. Rather, the majority of domestic firms tend to resist adopting EA, which reasserts that institutional drivers do hinder the development of EA in Chinese accounting profession.

From a normative point of view, organizations tend to adopt certain practices under the process of normalization and professionalization; whereas the normalization and standardization of EA is less established in contemporary Chinese accounting profession, since the legislation and standardization of the EA system are almost blank in a contemporary Chinese context; meanwhile, the adoption of international practical codes in EA practices has been detected (Owen & Belal, 2007) to be prevalent in a Chinese context. This has thus reflected the leading role of Big Four in shaping the normative process of EA in Chinese accounting profession. Meanwhile, this normative process can be reflected from ordinary training events in the comparison between Big Four and domestics: Big Four have provided a rather systematic and comprehensive training program for employees; whereas domestics tend to organize rather generic and uniform training in terms of ordinary national policies, accounting standards and practicing issues – formal training events were not commonly adopted by smaller firms. This can be rooted back to the discussion of professional competence of EA among Chinese accounting professionals through normative education and training, which

reasserts previous findings (Power, 2004; Spence, 2007; Albelda, 2011; Mistry *et al.*, 2014; Thomson *et al.*, 2014) that there is generally a rather restricted resident knowledge of EA within Chinese accounting profession, since EA was commonly perceived as a supporting tool for managerial decision making and wealth creation. In other words, normative process does hinder the development of EA by restricting accounting professionals' understanding on a wider perspective of EA.

It is clear that each theoretical approach has contributed to a single aspect of SEA practices that eventually construct an abundant picture of SEA studies. Very few studies can evidence the institutionalization of Chinese SEA practices on a professional basis, which can hardly be reflected by theories discussed already. It is essential to notice the process of the institutionalization of SEA practices so as to build up a better understanding of the development of current Chinese SEA practices, as the process of institutionalization focuses on how organizational practices have become homogenized and generally accepted. Apart from that, Suddaby's works have brought critical reviews of neo-institutional theory and its implications for critical accounting research, which indicates not only an innovation, but also an improvement on the current institutional framework. What is more, legitimacy and stakeholder theory, derived from political economy, are two commonly used frameworks of current SEA studies. It is my motivation to take institution, legitimacy and stakeholder effects into account so as to construct a combined framework, which can help to present a comprehensive view of the status quo of Chinese EA practices: how accounting practitioners perceive the significance of SEA in their daily work, how and why firms resemble each other by adopting or not adopting certain EA practices, how different parties are involved in the institutionalized process of EA practices, and the role of government in shaping professional EA practices. Therefore, it is of great importance to recognize (neo)institutional theory of EA studies in a non-western context; meanwhile, legitimacy and the stakeholder as a supplementary framework are interpreted through political theories (neo-pluralism, see Held, 2006) to reflect the role of the state in climate change and sustainable transformation in a Chinese context through the 'mediation, modification and transformation' of certain sectional interests within the current system (Gray *et al.*, 1995: 53), This has eventually led to the construction of this current multi-framework. As a result, institutional theory is distributed to illustrate how the Chinese professional accounting industry generally resists adopting EA practices; meanwhile, stakeholder and legitimacy focus on a pluralistic perspective, which brings a comprehensive view of EA practices in the current Chinese accounting profession.

8.4 Conclusion

This chapter has interpreted Chinese accounting professionals' perceptions on EA by integrating theoretical insights from empirical chapters (Ch.4-7). With detailed discussions on how isomorphic factors have been interpreted in each theme identified from previous empirical chapters, the notion of 'successful organizations' and 'uncertainty' generated through Chinese accounting professionals' perceptions and, simultaneously, stakeholder and legitimacy analysis, it can be identified that while the Big Four have gained the overwhelming competitive strength in Chinese EA market, such institutional drivers have generally led to the resistance in adopting SEA practices within most Chinese domestic accounting firms. This situation has therefore helped drawing out the conclusion that institutional drivers do shape the development of Chinese contemporary EA practices; whereas such influences are somehow negative at the moment. In addition, despite the fact that the current multi-framework has addressed most related issues in this project, this framework is incapable of explaining everything that leads to the general resistance of EA within Chinese accounting profession, which may motivate further research interests on Chinese EA practices. The specific contributions, limitations and prospects for future research arising out of this current study are presented in the next, and final, chapter of the thesis.

Chapter 9 Conclusion

9.1 Findings and Discussions

This thesis has discussed environmental accounting (hereafter EA) practices in the Chinese accounting profession by illustrating how accounting firms tend to adopt or resist EA practices, wherein clients' demands tend to be the major concern for (not) adopting EA. Several primary findings have been identified through the previous chapters; namely: participant profiles, practices, practical standards and competitive contexts. In-depth analyses have been presented in the theoretical discussion chapter. This chapter will now highlight and summarize these findings in detail and will close by identifying key practical and academic implications arising from these discoveries.

Turning firstly to participation, the thesis found generally low levels of participation of EA in Chinese domestic accounting firms, which has resulted in the slow development of EA practices across the Chinese accounting profession. Clients' demands in certain EA practices tend to become the key finding across the whole thesis, which have resulted in the following aspects. First of all, the lack of clients' demands leads to a generally lower level of domestic access to EA, which has led firms to recruit ordinary financial employees instead of using EA expertise to meet their clients' demands. An economically oriented domain has been identified through accountants' perceptions of EA from prior literature. Such perceptions are normally grounded in wealth creation (Parker, 2000; Spence, 2007) i.e. the adoption of EA practices is a response to competitive pressures from the Big Four, managerial decision making (Albelda, 2011; Mistry et al., 2014; Dominic & Martinov-Bennie, 2015; Power, 2004) i.e. auditing for environmental projects is a process that identifies and responds to certain risks, and monetary (or quantitative) measurement (Thomson et al., 2014) i.e. environmental information will be recognized only if it can be financially quantified. However, both Ball (2004) and Thomson et al. (2014) have argued that there is generally a lack of knowledge about accounting-sustainability hybridization among organizational residents, which prevents a full implementation of sustainability: rather,

a financially oriented EA has been implemented. Such reflections have been generally identified through this thesis: the knowledge structures of ordinary accounting and finance practitioners have restricted their perceptions of EA to pure financial measurement that can be reflected through a financially-oriented nature of EA practices (environmental financial auditing) in domestic firms, which tends not to be a fully implemented EA practice. As for accounting professionals' ordinary training, the conduct of certain environmental audits is seen (Power, 1997) by financial auditors as a multidisciplinary subject that needs specific environmental expertise rather than pure financial and accounting practitioners, which suggests the necessity of either 'other specialists' (environmental expertise) or 'applied science (environmental) training' in the accounting profession.

In a client oriented discourse, Gray and Collison (2001: 14) made similar arguments that environmental issues are significantly being embedded within accountants' ordinary training so as help clients 'exploiting energy efficiencies' and 'avoiding environmental risks'. However, the lack of training and knowledge among most medium and small domestic firms has been commonly reflected, which tends to become an important barrier for developing EA further in China. This lack of training and education has also influenced the competence and, more importantly, the personnel gap of EA in Chinese accounting professionals: first of all, larger firms normally adopt formal training events and smaller firms tend to organize informal meetings instead of formal training. Secondly, EA firms normally adopt certain environmental training courses whereas most domestic firms adopt generic training. Such a situation would also reflect a lack of both professional training and applied science expertise within domestic (smaller) firms that possibly leads to their incompetence in certain accounting practices (e.g. EA), since the conduct of certain EA practice is claimed to rely on environmental specialists 'whose competence can be gauged by appropriate qualifications' (Power, 1997: 140). This also reflects a personnel gap between the Big Four and domestic firms in a competitive context, which has led to a corresponding lower quality of EA practices in domestic firms. As a result, this personnel inequity has therefore resulted in a lack of practical competence in EA among Chinese (domestic) accounting professionals, which can be identified through the practical gap between the Big Four and most domestic firms: the Big Four often provide a comprehensive series of services that tend to be client-oriented; whereas domestic services are rather simple and generic. In that sense, clients tend to choose the Big Four for professional services rather than domestic firms, which can be reflected through the trust-relationship between the Big Four and their clients i.e. clients would rather pay a higher price for the Big Four's better services than cheaper domestic firms, which has eventually enhanced the competitiveness of the Big Four in the Chinese market.

Apart from that, this practical gap can be identified through influences from practical standards and regulatory forces. The selection of practical standards practices has reflected this influence brought from local or international clients' demands, which has demonstrated the client-oriented nature of EA in the Chinese accounting profession. Apart from that, the adoption of international EA practical codes is claimed (Belal & Owen, 2007) to be prevalent in the future, since Chinese domestic standards are rather generic and empty. More importantly, the policy impact on the shrinking of the audit market has tended to be less fatal for the Big Four, since such an impact on climate change and sustainability services could be nearly omitted; whereas domestic firms have heavily suffered from it and have focused on their existing services instead of innovation. In that sense, domestic firms tend to stand in a much weaker position in the competitive market; whereas the leadership of the Big Four in the climate change and sustainability market has become seemingly undefeatable. Such a situation has reflected the localization of both the accounting profession and EA clients in China, suggesting that clients' demands are seen as the central focus of the whole analysis. As such, EA in a large sense should be regarded as client-oriented in the Chinese accounting profession and, simultaneously, a Big Four brand.

With the identification of clients' demands, this thesis has reflected that Chinese accounting firms tend to commonly resist adopting EA. In a normative sense, there is generally a lack of guidelines for the adoption of EA, since the legislation and standardization of the EA system have not been established in the contemporary Chinese context; alongside this a general lack of training and education in EA has been

identified in both continuous career education and Chinese accounting higher education, which is likely to cause a more restricted perception of EA among accounting professionals. In a coercive sense, the national government has played a rather ambivalent role in shaping EA in the Chinese accounting profession: on the one hand, the government released policies for low-carbon and sustainable transformation, which motivated co-operation between local fiscal authorities and accounting professionals in a low-carbon experiment and as such, SW adopted their featured EA services; on the other hand, there were no mandatory regulations for the accounting profession to officially adopt EA practices, which may have resulted in the reluctance for both accounting firms and public companies to voluntarily adopt certain EA practices. As such, the lack of coercive forces has led to a general resistance of EA among firms in similar group of size (large, medium and small), since a legally and socially accepted norm has not been established, which slows down the development of EA in the Chinese accounting profession; rather, firms tend to model themselves after those successful cases as a response to reduce uncertainty and enhance their legitimacy. To a large extent, the underdevelopment of EA among domestic firms has led to the domination of the Big Four in the Chinese EA market. With the application of institutional theory as an analytical framework, this thesis has therefore suggested how EA has been found problematic in the Chinese accounting profession, which indicates that institutional drivers are likely to hinder instead of promote the development of EA in the Chinese accounting profession.

This thesis has specifically reasserted that organizations tend to model themselves on others perceived to be successful in response to uncertainty (DiMaggio & Powell, 1983; Scott, 1995; Suddaby, 2010, 2011). In contrast, the clarity of 'successful organizations' and 'uncertainty' becomes the key driver that leads to the process of institutionalization. This thesis is therefore able to demonstrate that institutional drivers do shape the adoption of EA in the Chinese accounting profession by conceptualizing 'successful organizations' and 'uncertainty'. First of all, accounting firms are deemed successful with well-defined technology (i.e. the EA in the Big Four), containing a normalized and professionalized practice, legitimacy, and sufficient understanding of

technology among employees and employers; whereas this definition of 'well-defined' has led to corresponding uncertainty, including concerns of professional capacity in adopting EA, legitimate concerns, environmental concerns, and competitive pressures. Secondly, firms with clearer strategies or goals tend to be a factor. Notably the Big Four are regarded as successful, which can be reflected by the Big Four's market and client strategy in the Chinese market. Likewise, the corresponding uncertainty refers to ambiguous organizational goals, which leads accounting firms to model themselves after those with clearer goals. Another finding indicates that the obtaining of skilled labour (EA expertise) and customers (clients' demands) have become a symbol of successful accounting firms (the Big Four). In contrast, the obtaining of skilled practitioners and a lack of clients' demands are also regarded as uncertainty for domestic firms. Successful firms are also reflected through the completion of institutional construction and professionalization. As such, the notion of 'successful' and 'uncertainty' has suggested the suitability of neo-institutional theory as a dominant explanatory tool for this thesis and, thus, demonstrated that institutional drivers do hinder the development of EA in the Chinese accounting profession.

Whilst institutional theory has contributed to explaining how accounting firms respond to marketing factors, stakeholder analysis tends to reflect how various stake parties have been involved in shaping EA practices in accounting firms. Being one of the main findings, the adoption of EA depends heavily on demands from certain clients, which can be reflected from firms' ordinary practices, their choice of practical standards, recruiting strategies and the competitive context. This is how EA is regarded as a client-oriented practice. In addition, the process of accounting standard setting can be seen (Laux & Leuz, 2009; Chung, 1999) as a political process, which is concerned about the balance between different interested parties i.e. standard setters, industrial associations and public companies. The government is supposed to take part in guiding, supervising and legitimizing EA practices in the accounting profession; meanwhile, the intervention of accounting professionals in governmental policy setting and low-carbon experiments also makes government a unique 'client' that influences firms' adoption of certain EA practices. In a neo-pluralistic view (Held, 2006), the uneven distribution of

power between the government and the accounting profession has resulted in the inequitable development of EA, which makes EA a branded service of the Big Four and very few domestic successors, whereas most domestic firms are not privileged in adopting EA practices. As such, the government tends to literally and strongly support the development of sustainability and, simultaneously, be reluctant to complete the whole legislation and standardization of EA. As such, EA tends to be perceived as a series of practical modes (patterns) that can be replicated. Apart from that, global professional service firms (mainly referring to the Big Four and large accounting firms) tend to operate in ways that '(re)produce global inequalities and colonial-style power relations in the modern world economy' (Boussebaa, 2015: 1227); whereas such imperial efforts would be likely to be restricted by the Chinese local (social, political and economic) situation. In general, stakeholder analysis is used as a supplement of institutional theory to describe whether and how clients' demands and government intervention would influence the adoption of EA.

Institutional and stakeholder analysis have discussed how marketing factors may influence the adoption of EA; however, both fail to elaborate how EA is perceived by accounting professionals, which focuses primarily on legal and moral concerns. As such, legitimacy analysis has been applied to focus on how EA is perceived in responding to institutional change and third parties. More specifically, legitimacy is used to measure participants' perceptions by elaborating on how legitimacy has been created and maintained within the Chinese accounting profession. The emergence of legitimacy is generally from comprehensibility through normative training and the education process. As such, legitimacy is maintained by protecting past taken-for-granted practices, whereas the maintenance of legitimacy depends on different groups of accounting firms. Domestic firms are heavily reliant on governmental policies whereas recent policies show very little effort in supporting the adoption of EA. The Big Four are primarily influenced by international standards and guidelines rather than domestic policies, which indicates that the Big Four would normally maintain their legitimacy by protecting past accomplishments; meanwhile, their legitimacy is maintained and enhanced by regular training. As a result, legitimacy has been examined in participants'

perceptions of EA, which re-emphasizes that legitimacy is seen as both the symbol of successful accounting firms (the Big Four) and, simultaneously, becomes a major uncertainty for domestic firms in adopting EA.

This thesis has identified Chinese accounting professionals' perceptions of EA through institutional, stakeholder and legitimacy analysis, which has demonstrated a rather low environmental awareness in the Chinese accounting profession. First of all, most participants with a pure accounting and financial background have reflected a rather limited understanding of accounting for the environment, due to their educational level and ordinary training, which leads to the general perception that EA is for financially quantified measurements for environmental information. Secondly, most domestic firms are still conventional audit firms, which can be reflected through their ordinary practices and practical guidelines: as such, domestic firms, especially medium and small ones, generally resist adopting EA to sustain this current social (accounting industrial) order. What is more, the vague role government played in shaping EA has become the major legitimate uncertainty for most domestic firms to commonly adopt EA practices. But more importantly, the adoption of EA generally depends on special needs from clients whereas domestic firms have suffered from the Big Four's client capturing strategy. In other words, EA is perceived as a patent or brand of the Big Four whereas the Big Four has already become the entry barrier of the EA market for most domestic firms. As such, the low environmental awareness of the Chinese accounting profession is generally reflected through limited access to EA practices, which results in a lack of professional competence in adopting EA among domestic firms. To sum up, this thesis has demonstrated that institutional drivers have resulted in a rather inequitable EA development in the Chinese accounting profession, suggesting that the Big Four in China have played the leading role in shaping the whole Chinese CCS market in terms of personnel, practicing, regulating and competitions, which can be seen as both the benchmark and uncertainty for domestic practitioners; whereas most domestic firms generally stand in a much weaker position. In other words, EA is demonstrated to enable rather than balance such inequity.

9.2 Contributions

This thesis may bring some potential value for contemporary accounting and EA research. First of all, this thesis would contribute to enrich EA literature by filling the gap of contemporary professional-based EA research, since organizational-based studies (Patten, 1992; Hackson & Milne, 1996; Deegan et al., 2002; Orij, 2010; Cho et al., 2010; Matsumura et al., 2014) have dominated contemporary EA research. Meanwhile, this thesis attempts to illustrate EA practices in a Chinese context, which is likely to make a Chinese regional contribution to EA research. More specifically, the data collected for this project can contribute to filling in the gap of both EA in the accounting profession and EA in China, which shows not only Chinese accounting professionals' perceptions of EA, but also reflects the *status* of organizational-based EA practices (client information) in a Chinese context: in other words, the data has reflected not only the professional context, but also shadows of organizations. Meanwhile, a sample size of 35 can be seen as a unique advantage for this thesis, as very few EA studies have gathered so many in-depth interviews. Compared with the mainstream empirical (positive or quantitative) accounting research, this interpretive (qualitative) approach aims at exploring instead of examining participants' perceptions of EA, suggesting that in-depth EA research in China would better identify whether accounting professionals' perceptions become the key driver for the adoption of EA. As a less critical approach, this thesis has also avoided criticisms of critical accounting research for not providing solutions to certain problems (Deegan, 2006). As for China, who have just started to establish their unique green accounting research and practical field, interpretive research would bring more insights into the construction of the normative and standardized process.

Another main feature of this thesis is the application of institutional theory as a response to the research questions. Institutional theory tends to describe a phenomenon of homogenization by illustrating how organizations tend to adopt similar models from others, whereas such institutional drivers need to be explored in their social, economic and political contexts. As a result, the conceptualization of 'successful organizations'

and 'uncertainty' has led to the discovery of main institutional drivers that hinder the development of EA in the Chinese accounting profession, which makes institutional theory the dominant framework. This discovery may contribute to set out benchmarks for 'successful' accounting firms, which would help the standards and policy setting process. Meanwhile, the criterion of 'uncertainty' would hopefully minimize both governmental and organizational 'cautions' when adopting EA. As a supplementary analytical framework, stakeholder and legitimacy analysis is to what other factors may shape EA in the Chinese accounting profession. The combination of those three theoretical frameworks is therefore an initiative attempt to present a comprehensive view of the development of EA in China, which may bring some insights into policy setting and the pedagogic focus of EA in the Chinese accounting profession. The adoption of this multiple framework has also shown the importance of political economy in EA studies, which can be reflected from neo-pluralistic analysis on stakeholder influences and the origin of legitimacy theory. With the review of diverse theoretical perspectives (see the literature review for more details), it can be identified that this contemporary multi-framework has elaborated on the role of the Chinese accounting profession in climate change and sustainability by exploring how the Chinese accounting profession has developed and, more specifically, how EA practices have been adopted by the Chinese accounting profession. But more importantly, this thesis has evaluated the usefulness of neo-institutional theory by using Roy Suddaby's institutional work (for example, Suddaby, 2010, 2011; Suddaby et al., 2010, 2011; Suddaby & Viale, 2011; Lawrence et al., 2011; Greenwood & Suddaby, 2006; Greenwood et al., 2002). Suddaby's work has not only helped to identify the main institutional drivers and critical evaluation of contemporary institutional frameworks, but has also identified insights into institutional theory, critical accounting and EA research, which I believe is another significant value of it.

While empirical studies (positive accounting research, business case studies) have dominated contemporary EA research through examining certain EA practices, a gap in perception-based EA literature has been identified. This thesis as perception-based research is likely to not only fill this literature gap, but also broaden both accounting

educators and practitioners' perceptions of EA. It can be seen that the usefulness of economic decision-making is perceived to be the primary objective for EA by inquiring about what information decision-makers want, and what is necessary for efficient decision-making (Bebbington et al., 2001; Deegan, 2006). This perception can actually be reflected from a number of empirical studies (Spence, 2007; Albelda, 2011; Mistry et al., 2014) and findings of this research, which generalizes EA as a tool for wealth creation. As derivatives of decision-making, accountability tends to attract EA scholars' attention. Gray's (1992: 413) deep green perspective viewed accountability as 'the right (for stakeholders) to receive [social and environmental] information and the duty (for organizations) to supply it', which regarded accountability as an obligation for companies to specifically provide environmental information for decision-makers. Lehman (1995) regarded accounting as a just and moral discourse and suggested adding justice and moral elements in accountability to put environmental awareness in accountants' minds, so as to 'satisfy a necessarily larger range of accountability relationships' (ibid, 408). Such accountability relationships can be understood as social (socio-organizational), environmental (organizational-environmental) and stakeholder (organizational-stakeholder). Hence, accountability, in its moral and environmental sense, tends to become a more proper objective for EA. As such, EA is not supposed to be perceived merely as a financially quantified measurement for environmental information, which tends to assist decision-making process. Rather, EA would be preferably understood as 'identifying what one is responsible for and then providing information about that responsibility to those who have rights to that information' (Gray, 2001: 11); and 'a relationship between a stakeholder and a firm that specifies moral obligations and duties between them' (Lehman, 1995: 396). Apart from that, EA would be better put in its organizational and social context through diverse theoretical approaches i.e. organizational change, impression management, system theories, actor-network theory, deep green, deep ecology or pure grounded research, which would enable a broadening of the perception of EA in a wider social context. This thesis has proved that the perception of EA is generally restricted to financial measurements or profitability; whereas the role EA played in client communications, carbon trading and,

more broadly, economic restructuring and sustainable society has been identified. Therefore, this thesis has demonstrated Lehman's (1999: 238) arguments that the 'ontological beliefs' of accountants in environment has become the key driver for EA practices, which suggests the necessity to enhance Chinese accounting professionals' environmental awareness by a normative process. As such, this thesis may also contribute to EA research in a pedagogic view, by interpreting how EA knowledge pack has been delivered by accounting educators and learnt by accounting students, so as to possibly suggest a feasible design of EA education models in Chinese accounting higher education. This has therefore made environmental awareness the most featured discovery for this whole thesis.

This thesis may also contribute to the development of contemporary Chinese environmental auditing and carbon related practices. On December 3rd 2014, the 2014 Meetings for the Chinese Environment and Development International Cooperation Committee had passed the launching of the 'government environmental audit system' 53. It is without any doubt that accounting firms will be influenced by this policy; then it is about the development of social environmental audit and specific adoption procedures. As previously mentioned, the popularization of social environmental auditing is likely to be carried out on a step-by-step basis. First of all, larger firms will have this priority to adopt environmental audit practices from 1st tier cities and coastal regions to most inland cities, as larger firms often having this priority to introduce EA practices should be certain, since they have already accomplished their survival mission and are ready to fulfill their social responsibility and serve for national economic transition. Smaller domestic firms will then follow successful practical experiences of large firms. As for the development of carbon emission assurance practices in the accounting profession, the Chinese government has published several administrative statements for carbon trade activities; meanwhile, some specific guidelines for carbon emission have been

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⁵³ According to the time schedule confirmed during the 2014 meeting, there should be three steps for the launching of the government environmental audit system: the first step will be completed until 2015, which focuses on the research and exploration process; then, with the completion of relevant legal regulations and practical standards, some selected regions will become experimental units for the launching of environmental audits, which is regarded as the 2nd stage (2016-2020). After necessary assessments and the revision of outcomes for experimental units during past years (around three years), environmental audit practices will be officially launched in the whole of China, which will be no later than 2030 after the completion of the 13th Five Year Plan.

published in public. With the development of the Chinese carbon trade market, several administrative documents have been issued as practical guidelines⁵⁴, which indicate a continuous improvement on the normalization and legitimation of Chinese current carbon trade activities. However, while the China Classification Society of Certification (CCSC) is one of the few independent certification and inspection agencies, which also provides services for the assurance of non-financial reports i.e. CSR reports, most applicants are specific environmental technology enterprises, consultancies and research institutes. In other words, the participation of accounting professionals in carbon emission assurance is very limited. But the good news is, since the time schedule of Chinese environmental audits have been published, the corresponding social environmental audits will be developed shortly. In addition, the wide adoption of environmental auditing would possibly suggest a potential increase in environmental awareness among accounting professionals.

9.3 Implications

Several implications have been identified through this thesis. The first is about the sample region. The location of the Big Four and their major clients are normally based in economic developed regions i.e. the original first-tier cities (Beijing, Shanghai, Guangzhou, Shenzhen) and south-east coastal areas, whereas Chengdu is in western China, a less developed area. Despite the fact that Chengdu is at its developing stage of globalization with many global enterprises and service agencies and has now been shortlisted in first-tier cities, the overall development in the west has led to climate change and sustainability practices being less representative than eastern China, which indicates a lack of practical experiences of EA in both organizational and professional contexts. To minimize such an impact, the criterion for firm selection is preferably with

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⁵⁴ In December 2014, the Department of Climate Change under the National Development and Reform Commission (NDRC) has published the document, 'Temporary Administration for Carbon Emission Permits Trade' on their website. In November 2014, the Beijing Development and Reform Commission has published 'Announcements for Open Selection of Third Assessment Party in Energy and Carbon Emission Administrative System' ([2014] no.2510) on their main website, which is definitely a great opportunity for accounting firms to take part in carbon emission activities, since accounting firms have already proved to be competent in carbon emission assessment practices. Until 5th December 2014, 34 of 55 third party companies have applied for energy administrative system assessment; whereas 23 of 37 companies have applied for the third party assessment for carbon emission administrative system.

those of either a large scale or having a longer commercial history; whereas it has been identified that EA was found to be poorly understood by selected respondents, which may imply an incorrect respondent recruiting strategy. In addition, Shanghai was then selected as a make-up choice, but only five respondents were successfully invited, and what is more, the focus of Chengdu and Shanghai as small areas may also cause the research to be less representational. This suggests that such an impact can be hardly eliminated, which may result in a loss of precision for the whole research. As a result, further research might consider a broader eastern area on a multi-city basis. On the other hand, successful attempts of EA in the east may imply a growing demand for climate change and sustainability activities in the west as a response to the 'Go-West Campaign's' national strategy, which may make future research much easier.

Another implication is about the application of institutional theory in Chinese EA practices. EA and its explanatory theories are supposed to be the outcomes of western 'colonialism' under the influences of local histories, societies, conflicts and politics (see Belal & Owen, 2007; Karma et al., 2012); whereas it may cause uncertainty to directly foist western theories (models) for EA on another nation under a completely different social, historic and cultural background. This might result in potential dangers by creating social conflicts and also preparing ground for new 'colonialism' where western models are always perceived to be hopeful or optimistic. Roy Suddaby's works have also pointed out the restricted usefulness of institutional theory. All of the above comments may suggest the potential use of neo-institutional theory to be problematic. To assess the usefulness of EA itself, Gray and Tinker (2001) raise their concerns on whether EA interventions are successful. Critical perspectives (Gray et al., 1988; Tinker et al., 1991; Deegan, 2006) even regard EA as a wasted tool that merely sustains the current social order instead of challenging or improving it. Gray (2006) discovers that the modern international financial capitalism and its supported principle organs were to maximize environmental destruction and the erosion of social justice, which might result in the inappropriateness of conventional accounting in sustainability assessment (Gray, 2010). The findings in this thesis have suggested that EA tends to become one of the major outcomes of the 'imperialism' of the Big Four, since EA is primarily designed for multinationals through the demands from clients and the adoption of 'global' practical codes (see Boussebaa, 2015). In contrast, the fitness of professional-based EA practices in a Chinese context tends to be problematic. Thus, further attention could be either drawn on the assessment of feasibility on adopting EA in certain industries, or contribute to critical studies in Chinese EA literature.

This thesis has demonstrated the branding effect of EA in the Big Four, which indicates that the Big Four have already monopolized the Chinese market. Subsequently, an offshore⁵⁵ hint has been identified in a competitive context, which is about the trust between the Big Four and their ordinary clients. With the access of online CSR assurance reports, PwC has taken CSR assurance practices for the Bank of China as well as its IPO audit for the Bank of China (reflected by participants), which reflects a strong relationship and trust between PwC and its clients. In addition, CSR report assurance in the Ping'An Group has been done by EY since 2011 on a continuous basis. What is more, EY has undertaken CSR assurance of the Industrial and Commercial Bank of China from 2009-2013; KPMG then took over from 2014. It can be reflected that the CSR assurance service in the banking and finance industry has been monopolized by the Big Four in the past decade. Meanwhile, their clients seem to trust those firms who have provided them with EA services for a long time. This could possibly be explored through the Big Four's reputation brought from their long commercial history: the development of the Chinese professional accounting industry was not been popularized until the 1990s. Some famous Chinese firms such as SW have been developed for approximately 30 years, whereas the Big Four have been developed for more than 100 years and entered the Chinese market for 20-30 years. The long commercial history has reflected a corresponding higher reputation, and thus indicated the possibility for the competence of EA practices. As such, it is worthwhile extending further EA research to the development of the Chinese accounting profession. This could largely explain how domestic firms are defeated by Big Four's client's capturing strategy and their competence in EA; whereas little efforts have made to elaborate this relationship of trust and, thus, reduces the colorfulness of competitive analysis. As such,

⁵⁵ Offshore hint refers to additional findings that are not discovered through formal research process.

it is worthwhile looking for further research in the competitive market by theorizing or conceptualizing this trust relationship as a criterion of 'successful organizations' for the Big Four, or 'uncertainty' for domestic firms.

This thesis may also suggest further implications on the glocalization of EA and the Chinese accounting profession, which is derived from the identified localization in the Chinese accounting profession and EA clients. With the discovery of new imperialism in the internationalization of global accountancy, Boussebaa (2015) has also identified that the imperial efforts by such global professional service firms (such as the Big Four) are frustrated by local resistances (normally economic and cultural issues), which indicates the difference in demands from their clients (localization). For guideline adoption, a mixture of international standards and domestic regulatory documents has been identified; whereas domestic firms tend to adopt more local documents instead of international standards because of source of clients. For practices, domestic firms tend to focus on single practices based on local demands (carbon and CSR reporting); whereas the Big Four have provided a comprehensive service package to satisfy both local and international clients, which has, again, indicated the global trend in the Big Four and local trend in domestic firms. Likewise, the ordinary training has also indicated this local trend within EA adopters, whereas the training variance seems not very significant. In other words, Chinese accounting professionals have started on their way to globalization ever since the very beginning, whereas their clients' demands have determined the phenomenon of glocalization of EA in the Chinese accounting profession. Alternatively, glocalization can be used to enable the identification of EA as a client-oriented practice; whereas a wider social impact may also bring about the glocalization of Chinese accounting professionals. More specifically, the glocalization (Chinese-style) of EA in the Chinese accounting profession is likely to be examined through comprehensive versions i.e. the Chinese accounting higher education, accounting qualification assessment, continuous chartered accountant education, comparison between IAS and Chinese accounting standards, forms of professional accounting bodies, historical and cultural movements, ideology, and environmental governance. Such indications have suggested the possibility to motivate further research on glocalization of either certain accounting practice (organizational-based EA) or the accounting profession (professional-based EA). This implication may also bring further insights on smaller accounting practitioners, since very little attention has been found (Carter *et al.*, 2015; Ramirez *et al.*, 2015) to be paid to smaller accounting firms i.e. whether small practitioners are engaged in mundane accounting tasks and whether they are sources of new ideas and innovations (see Carter *et al.*, 2015: 1210).

This thesis has identified a rather low environmental awareness (or a lack of sufficient understanding on EA) among Chinese accounting professionals. As discussed in the data analysis chapters, the main service structure for current Chinese domestic accounting firms also indicates the main focus of financial services. This has reasserted findings from prior studies (see Ball, 2004; Thomson et al., 2014) that there is generally a lack of knowledge about EA within the Chinese accounting profession (especially within domestic firms), leading to only a partial and incomplete implementation of such an accounting-environment/sustainability hybrid of the accounting system. As a result, such a lack of EA knowledge has, to a large extent, led to the development of rather poorer EA, which eventually becomes one of the most significant obstacles in developing EA further in China; whereas accounting professionals' education and training tends to become the first priority. As one possible and feasible solution, education and the advertisement of sustainability and EA would need further improvements, so that accountants are likely to be more competent and thus take an active role in the development of environmental sustainability, so that Chinese accounting professionals' environmental awareness can be initially improved through education. More importantly, the development of EA has been perceived to be associated with the national economy, which would suggest the significance in the linkage between sustainability and economic development. Larger firms have already encompassed national and world economics in ordinary training, which suggest a possible improving way for smaller firms to include economics in their formal or informal training events. Apart from that, the launch of Chinese environmental protection tax laws tends to become an inevitable trend, which suggests the possibility of the wider involvement of accountants in the process of climate change and sustainable

transformation. The participation of accountants in the accounting-sustainability hybridization is supposed to be maintained through regular training and education, which indicates the significance of delivering both environmental special expertise and knowledge skills (see Power, 1997; Gray and Collison, 2001) as a whole package to enhance environmental awareness among the Chinese contemporary accounting profession. As such, it is feasible to extend contemporary Chinese EA research towards pedagogic and economic focus, so as to improve the Chinese accounting professionals' perceptions of accounting for climate change and sustainability.

To sum up, a good research and practical field for EA has been established in the western world whereas China, as a core case study in environmental pollution and global economy, seems to be an unexplored area. Accounting researchers are surely capable of developing China as a crucial case in the contemporary social and environmental accounting research database. It is crucial for China to formulate a suitable and sustainable way of development. It is fundamental to improve the environmental awareness of accounting educators and practitioners by making climate change and sustainability 'understandable and relevant to their members' (Lovell & MacKenzie, 2011: 725), so that practitioners will no longer be 'naive' about EA and academics will stop asking about the meaning of EA. In that sense, an understandable and meaningful EA would be expected to be delivered, which will possibly enable Chinese accounting professionals to respond to Rob Gray's (2010: 47) concern: 'Is accounting for sustainability actually accounting for sustainability...?'

Appendices

Appendix I: Participant Profile

Item	Description	No. of			
		participants/firms			
Age	20-24;	1			
	25-30;	8			
	31-35;	5			
	>35	20			
		Total: 35			
Years of Work	<1;	0			
	1-2;	4			
	3-5;	5			
	>5	26			
		Total: 35			
Gender	Male	24			
	Female	11			
		Total: 35			
Educational Level	Undergraduate	20			
Level	Postgraduate (Master & PhD)	10			
	Other (College)	5			
		Total: 35			
Major Background	Accounting, auditing & finance	33			
Dackground	Non-accounting	2			
		Total: 35			
Working Department	Auditing	31			
Department	Management Consultation	2			
	Tax	2			
		Total: 35			

Organizational Type	Accounting firm (LLP.):						
	Large	5					
	Medium and small	0					
	Accounting firm (LTD.):						
	Large	2					
	Medium	4					
	Small						
		Total: 15					
Working	Chengdu	30					
Location	Shanghai	5					
	Other (please specify):	0					
		Total: 35					

Appendix II: Interview Guideline

Part I. To start interview: introduction

- Personal information collection, i.e. age, job title, major background;
- Brief introductions on accounting firm: commercial histories, size, services.

Part II. Interview in details: general enquiries

- What are your typical EA practices?
- What common approaches are you using?
- What guidance and standards do you mainly rely on?
- What professional trainings have you undertaken?
- Who are your normal clients?
- What are your perceptions on environmental issues in your everyday practices?

Part III. Issues related to theoretical framework: target oriented

- What are your colleagues' perceptions on environmental issues in your everyday practices? Any indications of imitating behaviors or other factors?
- Does each theoretical factors influence your practices, and how? For example, how
 does the latest accounting/auditing standards influence your ordinary practices; the
 importance of environmental trainings to your practices; how do your colleagues
 influence your ordinary practices; what do you think the importance of
 environmental issues in general financial and CSR report.
- The reasons / motivations to adopt similar practices among individuals and different accounting firms: factors other than institutional isomorphism, e.g. legitimate forces and stakeholder influences.

Part IV. Interview completion

- What's your critique on current standards/principles related to environmental matters? Good or bad? Useful or useless?
- How do you generally perceive your current practices related to environmental matters? Is this necessary for you?

•	Is there anything	that you	ı think	could	be	done	better	in	your	ordinary	practices
	related to environ	mental m	atters?								

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