AN INVESTIGATION OF ENTREPRENEURS' ETHICAL VALUES, SOCIAL INSURANCE, AND START-UP SUCCESS IN CHINA.

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AN INVESTIGATION OF ENTREPRENEURS' ETHICAL VALUES, SOCIAL INSURANCE, AND START-UP SUCCESS IN CHINA.

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Abstract

This research aims to investigate ethical values, social insurance, and start-up success in China. Recent research into entrepreneurship, e.g., Woiceshyn (2011), focuses on the relationship between ethics and the success of entrepreneurship, and proposes that an entrepreneur’s ethical values are a critical factor for his or her entrepreneurial success. However, this critical success factor (“CSF”) belief has not been fully explored in scholarly discussion, in the context of the entrepreneurial world. The CSF belief is based on rational egoism, which assumes ethics as a necessary guidance to long-term self-interest such as success in business. This thesis is intended to examine the validity of the CSF belief through elaborating a mediation model of how entrepreneurs’ ethical values affect their start-up success in China.

I will test whether or not an entrepreneur’s ethical values (familism, integrity, work ethics, anti-individualism, and emphases on reputation, trust, and reciprocities) are related to his or her start-up performance (in terms of growth percentage of total incomes/revenues) and success (in terms of survival time), through the mediation of his/her practices of social insurance to employees in start-up.

I will draw on existing researches on the ethical decision-making of entrepreneurs, and in particular on Solymossy and Masters (2002), to propose a model of social insurance decision-making by small business entrepreneurs. I suggest some ways (i.e., the need for the integration of cash or financial considerations, ethical tolerance, technological impact, ethical implementation, and the relationship to performance and success) in which the social insurance framework of entrepreneurs may differ systematically from that of other businesses.

The investigation of the social insurance decision-making model shows that Chinese entrepreneurs tend to follow rational or material (short term or long term), ideological and reputational criteria, when making social insurance decisions. However, cash or financial considerations seem to stand out but not to dominate ethical concerns with respect to their impact on social insurance decisions. Aside from the considerations of cash or financials, once the confounding effects of ethical tolerance and technological impact are controlled, ethical values have a true effect on social insurance decisions. Furthermore, social insurance implementation can be influenced as a result of ethical
considerations in small and medium enterprises (‘SMEs’) overall. My investigation has demonstrated that ethical values are related to social insurance decisions.

An in-depth analysis of the research results has suggested that entrepreneurs’ ethical values influence the performance or success of a new venture. Meanwhile, some less ethical implementation actions, eg, circumventing and escaping, and pushing for a minimum standard of social insurance have significant but negative correlations with the growth rate, and/or with survival time. The mediation effects are therefore dependent on the implementation conditions.

The analytic procedures have revealed a mediation model: the ethical value of work ethics (rejecting others’ indolence and wallowing in luxuries and pleasures) are positively related to the start-ups’ survival time, by means of not trying to lower insurance premiums through reducing employees’ total wages. Future studies will explore this mediation model.

My investigation has, to certain extent, validated the argument that entrepreneurs’ ethical values are a critical factor in the success of entrepreneurship, although I acknowledge that this mediation model will need future research in order to be fully justified.

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Chapter 1 Overview

1.1 Introduction

This research aims to investigate ethics as a critical success factor of entrepreneurship.\(^1\) There is a widely held belief that personal qualities of entrepreneurs play a pivotal role in affecting start-up outcomes (Tomczyk, Lee, & Winslow, 2013). Many researchers have studied the success factors in entrepreneurship, which include personality traits, education, background, career-related/professional experience, luck, religious factors, and ethics. However it seems that ethical values have not been taken as the core in these research agendas for success factors, despite contemporary research has revealed that ethical values and entrepreneurial success are closely connected (Timmons, 1994). Even though this intersection of entrepreneurs’ values and start-up success is receiving an increasing scholarly attention, little is done so far concerning their mediating relationship (Tomczyk et al., 2013).

The vast majority of successful entrepreneurs believe that high ethical standards and integrity are exceptionally important to long-term success.

- Timmons and Spinelli (2009)

Timmons and Stevenson (1984) conducted a study of 128 entrepreneurs in which 72% stated that high ethical standards were regarded as the single most important factor in their long-term success. Many Chinese entrepreneurs have believed in ethical values as their success factor as well. Chung and Ip (2008) claim that the moral dimension of entrepreneurs is gaining increasing recognition. They suggested that the repellent character of an entrepreneur that is not morally acceptable could destroy the possibility of being trusted by others. This indicates or suggests that entrepreneurs must behave morally in order for their enterprises to survive for a longer term in the business world. Chow (2003) suggests that spiritual values and fate often unconsciously affect an entrepreneur throughout the quest for success. Tong (2010) argues that Confucian moral culture is central to merchant culture and is the key to establishing a peaceful and benign win-win commercial norm and order, making social development sustainable. When Chia (2012) explored the transformation of technologists into entrepreneurs, he found integrity to be the single most significant trait in helping an entrepreneur achieve

\(^1\) Critical success factor (“CSF”) is a term that originated from information technology research but has pervaded to entrepreneurship research.
his/her real business successes. Whether or not this is true, these entrepreneurs’ critical success factor belief in ethics and entrepreneurship (hereafter referred as the CSF belief), deserves further research in the academia.

Decision making provides a useful mediator to investigate this CSF belief in ethics and entrepreneurship. It is a key activity in the creation of new ventures, ranging from daily decisions and ethical decisions, to long-term decisions of new ventures (Mullins, 2005). Ethics is simply too abstract a concept to impact entrepreneurship, unless it is manifested in concrete and tangible decisions. In such a case, the concrete decisions of start-ups mediate between the ethical institution and the performance of start-ups ((Bain, 1956) in (Fazio, 2010)). All aspects of decision making must, in general, be proficiently managed, in order to be successful (Casson, 1982). The better entrepreneurs are at making decisions, the stronger their comparative advantages in decision making (Hébert & Link, 1988), and the more they are successful (Schultz, 1980). Decision making thus serves as a mediator between ethics and entrepreneurship. In fact, if ethics do not impact decision making in entrepreneurship, how can the CSF belief in ethics and entrepreneurship be defended at all? Therefore, how entrepreneurs make ethical decisions, and how ethical decisions impact start-up success are central research questions in entrepreneurship research.

Existing offered ethical decision making models, for example, Rest (1986), Treviño (1986), or Jones (1991), are general models of individual ethical decision making and behaviours that are developed from organizational settings. Their general models are then based to develop an entrepreneurial model in Solymossy and Masters (2002). They propose a model of ethical decision making for small business entrepreneurs. The transferability of these models from organizational settings to small business owners is questionable, as not many entrepreneurial elements are integrated into these models. First, their models do not seem to integrate particularly well with cash or financial criteria, which are salient to the ethical decision making of entrepreneurs. Cash or financial criteria might dominate ethics with respect to the impact on ethical decisions. These cash or financials trade-offs can invalidate the CSF belief. Second, ethics is not often sufficiently recognized as a dilemma that includes confusion and inconsistencies, in which the extent of expecting and accepting these ethical uncertainties is a factor to impact the ethical decision stages. Ethical dilemmas are common in an entrepreneurial context, so ethical tolerance towards the uncertainties might have implications for the
ethical decision. The confounding effects of ethical tolerance can nullify the CSF belief. Third, their models do not take into consideration information-technological impact, which is nearly synonymous with entrepreneurial activities in modern society. Some implications of technology might ripple through ethics to ethical decision. These complicating factors of technological impact may call into question the CSF belief. Fourth, their models do not discuss the details of ethical implementation in new ventures. Ethical policies and processes are mostly developed in the entrepreneurial stage. Those influences posited to directly affect the steps toward moral behaviour might impact the ethical implementation for the small to medium enterprise (SME) as well. These impacts of ethics on ethical implementation can strengthen the CSF belief. Fifth, their models have not proposed a formal relationship between ethical decision and entrepreneurial performance and success of new venture. Positive consequences of ethical leadership to managerial performance and organizational effectiveness can lead to high growth percentage, and long survival time of start-ups. A proven ethical impact to these start-up performance and success will thus support the CSF belief. These research gaps of ethical decision making of entrepreneurs lead us to raise our interesting research questions.

While these general models have been proposed for ethical decision making, they may not be useful in terms of explaining ethical decision making in some areas where context is important. These general models are often built on hypothetical settings and contexts, which may differ significantly from real contexts. Although we often want to build up a general model, I argue that we should place our consideration in real contexts which can be taken as a solid base for an entrepreneurial model. I therefore investigate the impact of ethics on ethical decision making by taking into account a specific decision.

The decision of interest must be both ethical and entrepreneurial to be selected in our context. The selected decision has to be ethical because an ethically neutral decision does not have ethics as a dimension for decision; the selected decision has to be entrepreneurial, as the decision has to be widespread across entrepreneurs. Preferably, the selected decision should be a critical one that impacts in the long term, in order to be put into our context. These two sets (ethical and entrepreneurial) of decisions, however, do not intersect with each other very often. Not many business decisions are both ethical and entrepreneurial in nature. In this intersection, ethical dilemmas of entrepreneurial
management in relationships, such as employee well-being, customer satisfaction, and external accountability (Payne & Joyner, 2006), that might arise are considered particularly critical decisions to the new venture context. Besides, as the employee management is the single most important issue to deal with in building a new venture, ethical and legal errors made early on can be extremely costly for a new company down the road (Barringer & Ireland, 2012). Decisions related to employee infrastructure (e.g., rewards and incentives, stock, salaries, fringe benefits, and social minimum) seem to meet the above criteria.

Social minimum decision (Rawls, 1971), which is, in fact, mainly implemented as social insurance in China, is deemed an important decision in this thesis. On the one hand, ethical values are related to the social insurance decision. The ethical concept of an entrepreneur is considered to affect his/her own compliance for social insurance (Ma & Ortolano, 2000; Makkai & Braithwaite, 1994; Solinger, 2002). In addition, Chinese entrepreneurs must encounter this social insurance decision in mainland China. On the other hand, social insurance as a compensation practice is “one of the primary HR practices firms use to elicit and reinforce desired behaviours from employees” (Latham & Wexley, 1981), and is “the least malleable features” (Rousseau & Greller, 1994) of the firm’s employment contract. It is also, by its nature, a critical decision that impacts in the long term, because one of its main aims is to provide social security to the employees after their retirement. Compliance decisions are also considered an ethical decision, due to the fact that employers have a higher degree of freedom on compliance with social insurance obligations, given that there is a weak surveillance and enforcement mechanism in China (Maitra, Smyth, Nielsen, Nyland, & Zhu, 2007). Social insurance compliance decisions are, therefore, our central decision of interest for the purposes of presenting an adequately detailed decision context for this research.

Social insurance compliance decisions are the decision of an entrepreneur, when setting up a new company, whether or not he or she will apply for social insurance registration, and whether or not he or she declares and pays social insurance premiums on time and in full amount. Non-compliance decisions are ones that are not compliant to the law at full; else full-compliance to the law will be considered as compliance decisions.

This research aims to extend these ethics and entrepreneurship works with research questions as follows (see Section 1.3).
1.2 Research Direction

This section sets out our research direction before stating our research questions in the following section.

One way to state our research direction is to point out what this research is not about, which helps clarify the directions that will be both not-followed and followed in this thesis.

This thesis is not about moral philosophies. Moral philosophers such as business ethics scholars might find it interesting to pursue research about the ethical virtue per se, while providing a stronger philosophical account of the virtue. Livingstone (2003) offers an overview of the philosophical underpinnings of ethics and a decision-making framework. This philosophical direction, albeit interesting, is left to philosophers, which is not pursued in this thesis.

This thesis is not about normative ethics. Normative ethics scholars argue that entrepreneurs should make ethical decisions. This is not our research aim. This thesis is not intended to show effective or ineffective handling of ethical decisions or ethical business processes. Rather, I am interested in pursuing the descriptive direction in order to investigate the actual relation between ethics and ethical decisions instead.

This thesis is not about endogenous research. Endogenous and exogenous researches are two different ways in which researchers study ethics and entrepreneurship (Parker & Nielsen, 2009). Endogenous research treats the understanding and conceptualization of ethics and entrepreneurship as endogenous to the project (Parker & Nielsen, 2009). In endogenous research, the research objective is how ethics and entrepreneurship are understood and conceptualized either with interpretative or constructivist foci (Parker & Nielsen, 2009). The interpretative focus is to discover the plural meanings of ethics and entrepreneurship that exist among business entrepreneurs, while the constructivist focus is to uncover the network of social construction processes that create understandings of ethics and entrepreneurship and on the power relations between the entrepreneurs involved (Parker & Nielsen, 2009). This endogenous focus is, however, not pursued. In contrast, exogenous research treats the understanding of ethics and entrepreneurship as exogenous to the task (Parker & Nielsen, 2009). The concepts of ethics and
entrepreneurship are predefined in line with generally accepted definitions or understandings (Parker & Nielsen, 2009). These concepts are fixed variables which are then used as either a dependent or an independent variable in discovering causal relations between these concepts and other variables (Parker & Nielsen, 2009).

This thesis is not about political science. Although the decision context is about social insurance, it is argued that social insurance policies per se are not the research objective of this thesis. I will neither offer an account of policy process nor comparative public policy (Dixon, 1981; Esping-Andersen, 1990; Goodman & Peng, 1996; Jones, 1993; Walker & Wong, 2005). I am not concerned with the theory and practice of policy analysis and I will not provide globalization theories to explain China under the globalized world.

This thesis is not about area studies, in spite of our area focus on China. The area focus is not our main aim; it rather serves as our ethical and entrepreneurial context. This point is raised because area studies works are often deemed cultural studies, which is not our research aim. What I will do is maintain a strong discipline focus on ethics and entrepreneurship, with an area focus on China as an example in this thesis.

1.3 Research Question

In this section we will outline the main research questions this thesis will seek an answer:²

- How do entrepreneurs actually make a social insurance decision?
- How are cash or financial considerations compared with ethics with respect to the impact on social insurance decisions?
- How does ethical tolerance implicate social insurance decisions?
- How are the implications of technology rippled to social insurance decisions?
- How can social insurance implementation be impacted as a result of ethics in the SME?
- Is social insurance decision making linked to entrepreneurial performance and success?

² See the details about the research gap, research question, and significance of research in Section 2.3.3.
I may consider the questions at the individual level of analysis to help me restrict my research scope.

In business research, five levels—individual or firm, micro or industry, meso or cluster, macro or national (regional), and meta or supranational—are often delineated to for understanding and assessing firm performance (Enright, 2002). Additionally, three levels—firm, industry and national—are proposed as the focus of analysis in an integrated framework for key issues facing both SMEs and entrepreneurs (Farhoomand, 2005). Similarly, three levels of analysis—individual, firm, and aggregate—are examined to understand the dimensions involved in entrepreneurship (Wennekers & Thurik, 1999). Because ethics is understood to be an individual or firm-level driver of entrepreneurial performance in addition to its relevance to the firm’s management and leadership, which is particularly important in our context (Enright, 2002), the individual or firm level will be the main focus here.

The individual level of analysis is more attractive than that of the firm because of the following reasons related to entrepreneurship.

First, the entrepreneur is really the core concern in a start-up firm.

“Entrepreneurship is really about one thing and one thing only: the entrepreneur… the heart of the start-up is the person…and what really matters for this person is his or her POS [personal operating system], his or her characters and root qualities. What he or she really is” (Chung & Ip, 2008).

I presume that it is the man who makes the difference: he sets the conditions, the boundaries, the characteristics and, ultimately the value creating ability of the newly founded firm (Van Praag, 2003).

Van Praag (2003) presumes that it is the entrepreneur who makes the difference of the newly founded firm. In the start-up firm, it is the entrepreneur who influences the firm, but not the other way around as in the big companies (Hofstede, 1993; Porter, Bigley, & Steers, 2003). The firm is deemed an extension of the founder (Chandler & Hanks, 1994; Peteraf & Shanley, 1997; Reuber & Fischer, 1999). The ethical decisions of business
start-ups to a large extent, therefore, depend on the entrepreneurs themselves. This entrepreneurial significance is the main reason why most published entrepreneurship research are positioned at the individual level in terms of the number of contributions (Davidsson & Wiklund, 2007). The aggregate levels are sometimes left to management research, though institutions or the state have recently been brought in to entrepreneurship research (Smallbone & Xiao, 2009).

Second, an individual-level model is more convincing than a firm-level model. New ventures are under the transition of constructing their institutions in contrast to developed ventures. This weak institutionalized environment (Rivera, 2010) where regulations and standards have not become fully institutionalized is particularly valid in new ventures (Baron, Dobbin, & Jennings, 1986; Friedland & Alford, 1991; Tolbert & Zucker, 1983). That means individual aspects ought to offer a more convincing explanation than institutional aspects in the start-ups. In addition, institutional aspects can be subject to big changes when start-ups develop and transform in the future. This can undermine the explanatory power of these institutional aspects for the new ventures.

Third, the individual-level model helps build a solid foundation for the firm-level model. I consider that entrepreneurs are the agents of the institution of firms, if I mask the complexities involved between their agency-principal relationships. A better understanding of the individual-level model thus helps us achieve a better understanding of the firm-level model. In addition, an invalid individual assumption can make a firm-level model unconvincing to readers. An individual-level model, therefore, convinces us more about a firm-level model.

Our individual focus does not mean to oppose either a firm-level model or an aggregate-level model, which can be useful as well in explaining ethical decisions. I presume a mediating relationship to exist between individual and aggregate models. These individual- and firm-level models, therefore, ought to have the ability to be integrated with each other. This argument will be returned in the section 5.2 in this thesis.

Now that I have taken a brief account of the research questions of this thesis, I will move on to the definitions of key words and terms that are used throughout and I will describe the research approach and method that are used to build my evidence base in section 1.4 and section 1.5 respectively. Next, I will summarize the research contents,
together with the structure of the thesis in section 1.6. My final note here is that the research questions stated in this section will be further described in the Chapter 2, which positions this thesis within the current literature.

1.4 Definitions

In spite of the fact that this thesis is not exogenous research, a clear definition of terms must be offered for a better clarification.

Ethics

Not being taken as an academic discipline, ethics has been defined in a variety of ways in relevant background literature:

For example, Carroll (1991) and Freeman and Gilbert (1988) define ethics as “the conception of what is right and fair conduct or behaviour” (Joyner & Payne, 2002). Railborn and Payne (1990) describe it as “a system of value principles or practices and a definition of right and wrong”. Velasquez (2011) defines it as normative judgments which state or imply that something is right or wrong.

In light of their definitions, we will use ‘ethics’ in this thesis as:

The personal value in accordance with which an entrepreneur should or should not behave.

With this definition of ethics in mind, I would like to discuss related concepts in order to clear up any possible misunderstandings surrounding this concept.

First, ethics is considered the same as morality. The two words are deemed cross-referable with each other (Joyner & Payne, 2002). This interchange of terms is common in the literature (Freeman & Gilbert, 1988). In other words, ‘ethical’ is the same as ‘moral’, and acting or thinking ethically is the same as acting or thinking morally. Second, this definition means that ethics is equal to a moral ideal, which is connected to concepts such as values, beliefs, and principles (Andrews, 1987; Mason, 1992). Some works have distinguished ethics from these related value concepts (Irwin & Baron, 2001). This is, nonetheless, acceptable for our purpose. Third, ethics is not equal to ethical behaviour, in contrast to some works which define both as the same. Fourth, this
definition means that ethics can be ethical values and is not restricted to business ethics (De George, 2009), which is a term describing a research area in our context. In addition, as defined in this thesis, ethical value is neither the terms such as corporate social responsibilities (Singer, 1993) nor environmental or social sustainability.

Entrepreneurship
The definition of entrepreneurship is debatable as well in relevant background literature (Sassmannshausen & Gladbach, 2011).

Wennekers and Thurik (1999) understand “entrepreneurship is an ill-defined, at best multidimensional, concept”. Distinct roles for the entrepreneur can be identified in the economic literature (Hébert & Link, 1989). The roles of the entrepreneur can be condensed into three major intellectual traditions in the field of entrepreneurship: the German tradition, the Austrian tradition, and the neoclassical tradition (Wennekers & Thurik, 1999).

Frank Knight views entrepreneurs as persons who assume the risk associated with uncertainty in neoclassical tradition (Wennekers & Thurik, 1999). In the Austrian tradition, they are the persons who perceive and exploit opportunities for profit (Wennekers & Thurik, 1999). The most influential view of entrepreneurship currently used is that entrepreneurs are persons who drive innovation, as proposed by Joseph Schumpeter from the German tradition (Wennekers & Thurik, 1999).

All three historical views towards entrepreneurship seem to have a relationship with the moral dimension. Risk lovers view that the risk of moral breach is low, hence, more moral breach; profit exploiters trade-off profits for morals (Kets de Vries, 1985; Kuratko, Hornsby, & Goldsby, 2007; Longenecker, McKinney, & Moore, 1988, 1989; Osborne, 1991), and; innovators, a distinct role of technological entrepreneurs, seem to be the rule-breakers of morals (Brenkert, 2009; Zhang & Arvey, 2009). These three views seem to point out that ethics and entrepreneurship are two opposite terms, which is not coherent with the CSF belief at all.

The definition of entrepreneur I will be using in this thesis is that:
The persons who assume a clock builder role to build or organize a company that will survive for a long time in the future.

This definition is brainstormed from the book of Collins and Porras (2011). Clock builders are found to “concentrate primarily on building an organization – building a ticking clock” (Collins & Porras, 2011). They take an architectural approach and concentrate on building the companies. The primary output of their efforts is the new company itself and what it stands for. The created companies survive to last for a long period of time in the future without them.

The clock builders view that a core ideology – core values and sense of purpose – is a fundamental element to “guide and inspire people throughout the organization and remain relatively fixed for long periods of time” (Collins & Porras, 2011). Most core ideologies are, in fact, ethical. Coca-Cola lives their values – leadership, collaboration, integrity, accountability, passion, diversity and quality – to serve as a compass for their actions and describe how they behave in the world (Coca-Cola, 2013). IBMers value dedication, innovation and trust (IBM, 2013). The value items, integrity and trust, as have shown up on the list, are ethical. In short, clock builders and core ideologies do have a close relation indeed. This close relation between ethics and entrepreneurs, thus, makes this fourth definition proper to use throughout the remaining chapters.

Then, with respect to this clock builder definition of entrepreneur, who the private entrepreneurs are would need more clarity (Solymossy & Masters, 2002). The term entrepreneur and small business owner/manager are often used interchangeably, but the conceptual distinctions between the groups have been sensed (Carland, Hoy, Boulton, & Carland, 1984). Brenkert (2009) understands entrepreneur as not only one to run a business for oneself (Davis, 1998), but also as people in larger firms being entrepreneurial; however, he excludes a person who inherits a business and serves as a caretaker owner, while he permits social and political entrepreneurs for discussion as well. Rauch and Frese (2000) agree with Gartner (1988) to use founders and owners who manage small-scale enterprises as their focus of review. They do not differentiate between entrepreneurs, small business owners, and founders, but they do differentiate these with CEOs (Carland et al., 1984). Size and specific selection of small scale enterprises, for example, high tech firms, innovative firms, and fast growing firms have been differentiated as well (Rauch & Frese, 2000). Whether or not these research
objects are the private entrepreneurs can be clarified through our definition of entrepreneur.

Entrepreneurs, small business owners, people who inherit a business and serve as a caretaker owner, founders and owners of small-scale enterprises, and CEOs are considered our subject, as these people can assume a clock builder role to build or organize a company. In contrast, intrapreneurs, small business managers, people in larger firms being entrepreneurial, managers, researchers, and developers are not our interest. In addition, the size and specific selection of enterprises do not matter, as long as a clock builder role is assumed. Year of establishment does not exclude entrepreneurs from our interest for the reason that they are really the ones who have built or organized a company. A company that has survived to last for a long period of time up to now only shows that this company is a success.

The clock builder definition of entrepreneur, therefore, helps us to revise Wenneker and Thurik (1999) to our definition of entrepreneurship as follows:

The manifest ability and willingness of individuals, on their own or in teams, to build or organize a company, the success of which is to survive for a long period of time in the future.\(^3\)

**Success**

Current literature does not have an unique definition of entrepreneurial success (Van Praag, 2003). Are new ventures a success on establishment? A first sale? A break even? A payback? When it puts on an initial public offering? A new venture has a number of milestones that can be deemed a success in its lifetime.

Van Praag (2003) has summarized a number of measures of success: the observed entrepreneurial earnings (Schiller & Crewson, 1997), firm size, firm growth, the probability that one has remained an entrepreneur for a certain period of time (Bates, 1995; Brüderl, Preisendörfer, & Ziegler, 1992; Cooper, Gimeno-Gascon, & Woo, 1994; Schiller & Crewson, 1997), the number of employees or rate of growth (Bosma, Van Praag, & De Wit; Brüderl et al., 1992; Cooper et al., 1994; Sapienza & Grimm, 1997; Van Praag & Cramer, 1999), subjective empirical measures of individual business

\(^3\) A new definition of entrepreneurship is called for by Babson College (see define.babson.edu).
success (Luk, 1996; Sapienza & Grimm, 1997), and duration in business (Brüderl et al., 1992; Pennings, Lee, & Witteloostuijn, 1998). In her paper, she has an alternative definition of business success: the longer an individual can survive and prevent involuntary exit, the more successful one is (Van Praag, 2003). This long-term business survival is identified as a measure of success in other works as well (Lumpkin & Dess, 1996; Van de Ven, Hudson, & Schroeder, 1984).

The definitions of entrepreneurship and success should be coherent. The survival time thus seems to be one of the best definitions for use. While Van Praag (2003) defines business success as the survival time of an individual, this definition is revised to the survival time of a new venture in order to be coherent with our definition of entrepreneurship. This concept of entrepreneurial success is thus defined for reference in our discussion.

**Decision Making**

Decision making, in accordance with Parsons (1995), is defined as ‘when choices are made or a preferred option is selected for [decision]-makers’. Herbert Simon, one of the founding fathers in the research of decision making, whose literature crosses a number of disciplines (Simon, 1996), describes decision making in his book Administrative Behaviour (Simon, 1945) as,

> All behaviour involves conscious or unconscious selection of particular actions out of all those which are physically possible to the actor and to those persons over whom he exercises influence and authority (Simon, 1945).

Decision making has a close relation as the mediation to ethics and entrepreneurship. This decision making concept, placed under an ethical context, points to the selection of all those available ethical alternatives, which then leads to an ethical decision. The term selection, however, does not have an implication of a conscious or deliberate process. This selection can either be a simple intuitive action without consciousness, or a complex process to select an ethical decision.

The decision making studies are cross-disciplined. On the one side, most economics and politics scholars take a rational or material view of decision. This rational or material
view of decision assumes that entrepreneurs have a set of ethical alternatives from which they can select. Entrepreneurs would have a perfect knowledge of the ethical alternatives on hand and would have a perfect capability to process that knowledge from which they can select the best ethical decision. This selection process would be dominated by reason and rationality (Parsons, 1995). Psychological scholars, on the other side, investigate the non-rational or non-material view of ethical decision. Their models reject the assumption of an entrepreneur being a purely economic man or woman who is completely rational in decision making, but they accept passions, instincts and subconscious feelings and anxieties to have a role in the selection process of ethical decision (Parsons, 1995). These two sides both offer a useful view to us to look at an ethical decision; hence our approach here is cross-disciplined as well.

Note that the term ethical decision is used to describe a selection or decision in which ethics is of interest. This deduces no normative worth, given our descriptive direction. In other words, an ethical decision does not mean that a decision is ethical. Both ethical and unethical decisions are referred as “ethical decision”. In contrast, Jones (1991) defines ethical decision as a “decision that is both legal and morally acceptable to the larger community”, which is adopted in Chau and Siu (2000) as well. Their definitions of ethical decision have a normative worth that is not satisfactory for our research purposes.

**Social Insurance**

On the other hand, while I have focused on individual decision rather than public policies, since the two are connected, hence I have to offer a clear description of social insurance for a better clarification to the readers.

Social insurance, for our purpose, refers to the social insurance policies in China. To be explicit, social insurance is a contributory benefit, which aims at the alleviation of poverty, redistribution of income and fostering social cohesion, to maximize the well-being of the people (Walker, 2005). That means social insurance should be classified in the area of social protection policies. This thesis will maintain a high level description of social insurance policies, with little concern about the specific mechanisms, effectiveness, or efficiency of social protection policies, because our thesis is not about the research of social protection policies.
1.5 Research Method

The research method of both qualitative and quantitative methods, that is, a mixed methods research, will be used in this thesis (Bryman, 2001). This mixed method combines the two research strategies to allow various strengths and weaknesses to be capitalized or offset (Bryman, 2001). There are three proposed approaches to mixed methods research: triangulation, facilitation, and complementarity (Hammersley, 1996). Triangulation entails using more than one method or source of data in the study of business phenomena (Bryman, 2001). Facilitation is the aid of one method to another, while complementarity is that two methods complement to dovetail different aspects (Hammersley, 1996). A combination of these three approaches is used here. It is argued that this mixed methods research makes informed judgments more objective and reliable, when the research results are interpreted later.

The sampling will be an obstacle to the fieldwork research in this thesis. Researchers’ using interviews and questionnaires conducted with entrepreneurs in localities chosen for convenience is a situation most accepted and quite tolerated in China (Manion, 1994). This is partly because entrepreneurs are elites who are less accessible to researchers, partly because there is a common distrust to unfamiliar researchers, and partly because of the restricted freedom of doing research with some political elements in the region, which will impose difficulties to data collection and analysis in China. This situation is “unlikely to change in the near future” (Manion, 1994). I tried to obtain a random sample of the Chinese entrepreneurs’ population, but this obstacle was too high to overcome for the scope of this thesis.

I started my fieldwork project to work with participants on March, 2012 and completed the project on February 28, 2013. The fieldwork project was continuous for the whole time period, except for a short termination from August 17, 2012 to August 20, 2012, when there was a sudden Internet censoring on all the potentially sensitive questionnaires without notice on online research portals, likely due to the then-upcoming 18th National Congress of the Communist Party of China on November 8, 2012. A then-audit, fortunately, did not deem my questionnaire as illegal. Thus, my online questionnaire was republished and resumed. My fieldwork method used both interviews and self-completion questionnaires (Bryman, 2001; Healey, 2008).

I will briefly outline my study design/method, data collection, and analysis step-by-step.
First, I scheduled a meeting with each of the 15 entrepreneurs that are identified for a study. In the meeting, I let each read the letter of informed consent (which indicated that the purpose of the survey would be for academic research only, outlining the aims of the research and possible benefits, who I was recruiting, what would happen if they agreed to take part, and arrangements for ensuring anonymity and confidentiality), before I conducted a study (with both an interview and a questionnaire). The results of both methods were used for: 1) triangulation; 2) revision of the fieldwork materials (rewording of some interviews and survey items and addition of several items to improve readability) for quantitative data collection and analysis later, and; 3) investigation of different aspects, for example, attributes and weights. Of the 15 entrepreneurs, 13 of them completed both an interview and a questionnaire, one of them did not have sufficient time to do the interview but completed the questionnaire, whereas one of them did not manage time for a meeting.

Second, I sampled some entrepreneurs via two methods: random method and exchange method in the full study. In the random method, I identified 150 randomly selected target companies from local business directories (China Telecom, 114chn.com, www.yellowurl.cn, and China Yellow Pages Online). I then posted, called, and emailed a questionnaire to the companies asking for their entrepreneurs to respond. In the questionnaire I prepared all survey items in simplified Chinese. Within the total 150 companies selected, only one company responded online, resulting in a 0.67% return rate. This low return rate is worsened by the high postage fees. This random method was therefore neither time- nor cost-effective to me, so I changed to the exchange method. In the exchange method, I used the exchange function of an online research portal (Sojump) to select target entrepreneurs. Many entrepreneurs published employee satisfaction surveys or market research on the online research portal. I identified all those entrepreneurs that published questionnaires from March, 2012 to February 28, 2013 from the portal. Then I filled in their online surveys or messaged them to invite them to fill in my own online survey. A total of 464 entrepreneurs responded from these two sampling methods.

Third, I removed firms which had either missing or inaccurate information in the response. This removal procedure yielded 144 entrepreneurs with complete data for
analysis. The filtered companies covered different strata of industry, different types of institutions, different operation status, and different status of registration.

The participants studied were divided into three groups. Fourteen participants from a convenient sample were studied; while random method returned one response, and 449 came from the exchange method. The total number of participants was, thus 464, from which 144 valid participants were chosen. This final sample size was justified according to the rule of thumb in research. Small projects, for example, doctoral theses often take tens to hundreds of samples in general, while large surveys can take thousands of samples, for example, 2,873 samples in China for World Values Survey (“WVS”) (Inglehart, 2009). My final sample size was approximate to those of similar entrepreneurship projects. In addition, it was sufficient to meet my main aim of this research, that is, to infer relationships between parameters, but not population parameters (Manion, 1994).Inferring relationships between parameters does not require a large sample size which is needed for inferring population parameters. Then, the selection criteria of participants were adults between the ages of 18 and 70 who built or organized a company. They were identified and approached via personal networks, posts, telephone calls, or emails while their information sharing was carried out in their offices at their organization or online, at their discretion.

The issues of bias, reliability and the validity of my research techniques are central to my consideration of a research method:

First, interviewing dealt with the concern of validity (the accurate performance of a measure) better than self-completion of a questionnaire. The underlying reason was the high flexibility of an interview. This increased the extent to which observations reflected the true aspect in the dimension under study. In other words, the interview had a high measurement validity (or construct validity) (Bryman, 2001). In order to maintain high measurement validity in the questionnaire, it was designed to fit my purpose. Specifically, the survey questions were asked in a way that directly linked back to my concepts, for which it was hard to get a surrogate variable from other researchers’ data. In order to obtain such measures, I needed to use a questionnaire instead.

Second, in terms of reliability (the consistent performance of a measure), the relative position of interview and questionnaire was reversed. Small differences in interview
questions could imply a different answer, despite all of my efforts to conduct a structured interview. In addition, it was difficult for an interviewer to be exempt from the implicit subjectiveness during the interview. This might, for instance, involve an unintentional selection of interview scripts to support an argument. Such a selection could undermine the convincingness of an argument. Indeed, the separation of a personal worldview was often difficult in an interview. In contrast, the questionnaire was a standardized edition, which had smaller variations that affected the outcomes. The use of a statistical tool was also more reliable. Numeric figures in the statistical results left less room for subjective interpretation. Sometimes, enthusiastic scholars might advance an argument far beyond the evidence base, but such a subjective deduction was often more controlled.

Third, comparing the two research methods, internal validity (causality) was higher in the interview, whereas the questionnaire had a higher external validity (generalizability) (Bryman, 2001). In an interview, asking for direct causality judgments was possible, in contrast to the difficulties in establishing causal direction in the cross-sectional data of a questionnaire (Bryman, 2001). Despite the causality issue, generalizability was stronger in the case of the questionnaire. In an interview, often non-random methods of sampling were employed, in which a question towards its generalizability might be raised (Bryman, 2001). A higher randomness on sampling was often required in the questionnaire method, so a greater generalizability could be seen. This randomness of sampling could therefore be an appropriate criterion for the evaluation of research (Yin, 2008). In my research, though, I aimed to use random methods of sampling; unfortunately the random sampling was not effective, which forced me to switch to the exchange method. In the exchange method, instead of doing any sampling, all the target users were asked to respond to my questionnaire. This full sampling still had a bias however. The bias of the exchange method lies on the set of users on the online research portal. This set of users was a little biased towards male (52%) and age 26 – 30 (29.33%). About 330,000 (12.69%) users came from Guangdong province, the highest number among the regions. While the number of users on the portal was over 2.6 million, nevertheless, this user population was not the entire set of the population. In other words, the user community itself was a sample of the population in China; hence its subjection to bias needed to be taken into account.

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4 For details, see Sojump’s website: http://www.sojump.com.
My defence for the research design—most obviously sampling—are as follows. First, although my sampling method was not the best one, it was argued that this is a more feasible sampling method given the restrictions in doing my research project in China. The region was well known for its speech censoring. The whole climate of distrust and fear made the data collection and analysis difficult, unless I had strong relationships with respondents. My step-by-step procedure helped minimize my difficulties of fieldwork in the region. Second, the bias of my sampling method had been taken into account of. My exchange method was neither a convenient sampling method nor a random sampling method. This sampling method could not help me infer the population’s values; however, the population values, for example, average gender, age, and education of entrepreneurs, were not my main interest here. What I was most interested in was the relationship between variables, for example, the correlation between ethical values and the age of establishment. For my focus on the relationships between variables of decision in general (Baron, 2000), even a non-probability sample could yield reliable answers generalizable to a population if my sampling had not selected elements unusual in terms of the theorized relationships (Manion, 1994). That meant my sampling needed to meet two assumptions: the explanatory variables were uncorrelated with the error term, and; the expected value of the error for each observation was zero (Manion, 1994). Errors were tolerable when the sampling variable was not an explanatory variable, or it did not censor observations on the dependent variable (Manion, 1994). In my exchange method, the sampled respondents were those who published a questionnaire and voluntarily accepted an invitation to continue filling in my questionnaire on the portal. The fact that an entrepreneur was a user of the portal did not seem to explain his ethical decision or entrepreneurial success, or to censor unethical or failed start-ups. The unrepresentative character of my sample neither violated the two suppositions about the error term, which was thus a case of benign biases (Manion, 1994). My non-random fractions therefore did not inherently threaten the generalizability of findings about relationships between ethics, ethical decision, and entrepreneurial success. Third, even a violation of the assumptions (manageable threats) might be remedied through statistical techniques (Manion, 1994). My sample could be subjected to weight and post stratification, such that the major demographic parameters of the sample resembled those of the population. In addition, if errors had a systematic pattern, depending on the violation, either the sampling variable of portal user could be added to the model accounting for the correlation, or I could avoid selecting samples on the basis of values on the dependent variables of ethical decision or start-up success.
Fourth, in the case when the violation could not be remedied purely statistically (fatal blows), the additional collected data could remedy such a sample selection bias (Manion, 1994).

Given that both the interview and the questionnaire each had its own pros and cons, it would be better to remedy the biases of a single method through triangulation, which would enhance the reliability and validity of research results (Bryman, 2001). This methodological triangulation aimed to reduce bias to increase the generalizability of my research.

1.6 Thesis Structure

This section aims to list the research propositions to make it clearer for the readers who would find it simpler to follow the arguments before submersing themselves into the ocean of texts in the remaining chapters. To substantiate the research propositions made in this section, this thesis will be structured into the following chapters:

Chapter 2, Literature Review

Chapter 2, as derived from Section 1.1 of the current chapter, will give a brief introduction to ethics and entrepreneurship to provide better knowledge about this research area before I proceed to the main body of the thesis. This research area is interesting because of the belief that ethics is a critical success factor of entrepreneurship. I will extend the scholarly discussion on this critical success factor belief, which includes Timmons (1994), Timmons and Stevenson (1984), Chung and Ip (2008), Chow (2003), and Chia (2012). In particular, Chung and Ip (2008) establish an relevant connection between Confucian ethics and entrepreneurial success in Chinese and Asian societies. Then, I will describe ethical decision as a mediator between ethics and entrepreneurship. The decision context will be both ethical and entrepreneurial, while it will be a critical one that impacts in the long term. I will discuss how social insurance compliance meets my criteria of a representative case, to present an ethical decision context in this thesis. The remaining sections will review the literature on ethical decision making of entrepreneurs and the ethical decision context in China.

I will learn about published research on ethics and entrepreneurship and will list the structure and approach through a literature review. I will explain why I focus on the individual level in the current literature on ethical decision, thus those individual ethical
decision making models in descriptive ethics literature will be my focus. These models can be approximately categorized into two groups—‘stages’ models and ‘criteria’ models. In ‘stages’ models, I will start with Rest (1986)’s four-stage model, which laid down a foundation for later models, for example, Treviño (1986), Jones (1991), McDevitt, Giapponi, and Tromley (2007), Barsky (2008), and Solymossy and Masters (2002). In ‘criteria’ models, I will examine models such as Reidenbach and Robin (1990), Strong and Meyer (1992), Vyakarnam, Bailey, Myers, and Burnett (1997) and Longenecker, Moore, Petty, Palich, and McKinney (2006).

Most of these current ethical decision making models often do not focus only on entrepreneurs, thus I will identify the research gaps that are relevant to the models of entrepreneurs. I will show cash or financials, ethical tolerance, technological impact, and ethical implementation as the research gaps of current models. These research gaps will be connected to our research questions. I will also give an idea about how this investigation of research gaps can help me verify the CSF belief. I will recognize a lack of discussion on entrepreneurial performance and success in these models as well. In addition, I will argue for the importance of a real context in these models.

Accordingly, because of the importance of context, I will bring the ethical decision making models into a real context, that is, the social insurance decision of entrepreneurs. I will investigate the relevant ethical values in social insurance. These relevant ethical values will be picked up from three sources (Chinese tradition, Marxism, and globalization). Last, I will expand my description about social insurance in China, which will provide a Chinese context to my research.

Chapter 3, Theoretical Model

Chapter 3 will propose a theoretical model for the social insurance decision making of entrepreneurs, which will help to explain this multi-criteria compliance decision of social insurance. Our research model will describe the role of ethics in informing entrepreneurs for social insurance compliance.

I will draw from our reviewed literature, in particular, Solymossy and Masters (2002), to develop a model on entrepreneurial and small business’s social insurance. Solymossy and Masters (2002) propose a model of ethical decision making for small business entrepreneurs with three stages and one criterion: recognizing moral issues, making
moral judgments, cognitive moral development, and engaging in moral behaviour. I will examine the steps and determinants of ethical behaviour in entrepreneurs from this base model, with the research gaps filled in, in order to explain a real context. In the remaining sections, I will discuss rational or material (short term and long term), ideological and reputational influences on awareness, judgment/intent, behaviour and implementation, in a social insurance context.

I will centre on the rational (at least bounded rational) assumption to build my research model. A thick (material) assumption will be associated with the rational model, while only a thin rational intention will be assumed in ideological and reputational models to describe decision making. Rational or material criteria will be described as a perspective to compare compliance alternatives. Cost control for social insurance premiums, and the probability and the punishment of conviction will be considered as short-term rational criteria in explaining non-compliance decision in most non-compliance models. In contrast, a few rational models will deem long-term rational criteria, for example, recruitment and retention as an explanation of compliance decision.

In the ideological and reputational models, I will explain the hardware of the mind (the structure of the mind) of entrepreneurs. This hardware of the mind depicts the structure or organization of ethical values, that is, the psychological structure in the mind. Then I will describe how ethical ideologies or ethical reputation impact social insurance decisions. These depictions are neutral about the content of relevant ethical values in the mind (the software of the mind), thus the content with their relationships will be illustrated, using the cultural dimension theory from Hofstede (1980), Hofstede and Hofstede (1991), and Hofstede, Hofstede, and Minkov (2010). The relevant ethical values will be matched to the cultural dimensions, which have consequences to work-related management behaviours. In addition, I will briefly describe how the ethical ideologies and ethical reputation impact the awareness, judgment/intent, behaviour, and implementation of the compliance stages in the social insurance as well.

These various decision criteria (rational or material, ideological and reputational) will be integrated in explaining compliance decisions in social insurance. My integration will be founded on the multi-attribute utility theory (“MAUT”) (Baron, 2000). I will contextualize the theory to the compliance decision in social insurance in my research model.
Chapter 4, Empirical Model

Chapter 4 will propose an empirical model that will validate the role of ethics in informing social insurance compliance decisions. I will cover the main evidence of rational or material (short term and long term), ideological, and reputational criteria in explaining compliance. The main evidence came from the databases of interviews and questionnaires, together with other researchers’ data and official statistics.

I will begin to describe and provide the information of our fieldwork and dataset. The operationalization method of rational or material, ideological and reputational criteria and compliance stages through our questionnaire will also be depicted. These variables will be examined with descriptive statistics and the tests of (approximated) normality. The chapter structure of the theoretical model will be reused in the empirical model. Each model will find its respective evidence from interviews and questionnaires to support its explanation of compliance in social insurance.

These evidences will then be integrated into two parts: criteria weights and multiple regressions. For the criteria weights, I will investigate these criteria through trade-off weights and asked weights of these criteria in the interview findings. This will be complemented by the findings of the asked weights of criteria from the questionnaire as a triangulation. The regression coefficients of multiple regressions will be followed by to understand the strength of relationships between criteria weights and compliance behaviour in social insurance.

Chapter 5, Discussion

Chapter 5 will provide a coherent account about the social insurance compliance decision, outer level drivers, and critical success factors.

I will discuss how the research questions (see Chapter 1.3) are answered at the individual level from the findings. First, I found that entrepreneurs consider rational or material (short term and long term), ideological and reputational criteria to make social insurance decisions. Second, I discovered that cash or financials seemed to stand out but not to dominate ethics with respect to the impact to social insurance decisions. Third, I became aware of an ethical tolerance’s implication to social insurance decisions. Fourth, I learned that some implications of technology rippled to social insurance decisions.
Fifth, I realized that social insurance implementation could be impacted as a result of the ethics in the SMEs.

My discussion focus is on the individual-level drivers of the social insurance compliance, but I will also discuss some outer-level drivers, for example, the state capacity, public shaming, economic, social, and political contextual influences in explaining social insurance compliance with different contexts.

I will also examine whether or not ethics is a critical success factor of entrepreneurship. I will imitate Tomczyk et al. (2013) to elaborate a mediation model. The summarized results seemed to provide ethical values with some grounds to impact entrepreneurial success, that is, not being traded off, true effects (controlling or partial-ing out ethical tolerance and technological impact), and having impacts to compliance implementation actions in social insurance. This will be a confirmation for ethical-value-social-insurance path (“IV-M path”). I will also discuss the three other mediation paths. On the one hand, I will investigate the associations between social insurance practices and start-up performance and success variables (“M-DV path”). On the other hand, I will associate ethical values with start-up performance and success (“IV-DV path”).

I will also propose the mediation models according to the analytic procedures for the use of a mediator (Baron & Kenny, 1986). In addition to the IV-M path and the IV-DV path, I will explore the associations between social insurance practices and start-up performance and success variables controlled for ethical values (“M-DV’ path”), in order to propose specific mediation models for the CSF belief. Overall, ethics, in terms of ethical values, seemed to have some grounds, through social insurance practices, to be a critical performance and success factor of entrepreneurship.

**Chapter 6, Conclusion**

Last but not least, Chapter 6 will conclude this thesis with the significance of this research, its problems and limitations, and its future directions.

I will take stock of research gaps, research results, and the significance of research at last. I will structure according to the main research results on ethical decision making of entrepreneurs and the CSF belief. In each sub-section, I will begin with a brief summary of what was known about the topic prior to this research. This will then be followed by
a recap of what the research has established. Finally I will recap the key contributions of this thesis and link the research to the Tomczyk et al. (2013).

I will structure some problems and limitations in the following: research method, definitions, and research approach. The research methodological curb will be concerned with the research design and method used, which will restrict our finding’s generalizations. Then, the ambiguous nature of terms will be our second difficulty. Third, the particular approach I use to deal with the questions in this thesis will be connected to the research approach discussion.

Lastly, although this research will explore mediation models by studying a group of entrepreneurs in both interview and questionnaire approaches, I will acknowledge that I should seek to further test the mediation models to improve my research in this area. The last section of the chapter will aim to indicate some future directions on ethics and entrepreneurship (see Section 6.3) to conclude this thesis.
Chapter 2 Literature Review

2.1 Introduction

This research aims to investigate ethics as a critical success factor of entrepreneurship. There is a widely held belief that personal qualities of entrepreneurs play a pivotal role in affecting start-up outcomes (Tomczyk et al., 2013). Many researchers have studied the success factors in entrepreneurship, which include personality traits, education, background, career-related/professional experience, luck, religious factors, and ethics. However, it seems that ethical values have not been taken as the core in these research agendas for success factors, despite contemporary research has revealed that ethical values and entrepreneurial success are closely connected (Timmons, 1994). Even though this intersection of entrepreneurs’ values and start-up success is receiving an increasing scholarly attention, little is done so far concerning their mediating relationship (Tomczyk et al., 2013).

The vast majority of successful entrepreneurs believe that high ethical standards and integrity are exceptionally important to long-term success.

- Timmons and Spinelli (2009)

Timmons and Stevenson (1984) conducted a study of 128 entrepreneurs in which 72% stated that high ethical standards were regarded as the single most important factor in their long-term success. Many Chinese entrepreneurs have believed in ethical values as their success factor as well. Chung and Ip (2008) claim that the moral dimension of entrepreneurs is gaining increasing recognition. They suggested that the repellent character of an entrepreneur that is not morally acceptable could destroy the possibility of being trusted by others. This indicates or suggests that entrepreneurs must behave morally in order for their enterprises to survive for a longer term in the business world. Chow (2003) suggests that spiritual values and fate often unconsciously affect an entrepreneur throughout the quest for success. Tong (2010) argues that Confucian moral culture is central to merchant culture and is the key to establishing a peaceful and benign win-win commercial norm and order, making social development sustainable. When Chia (2012) explored the transformation of technologists into entrepreneurs, he found integrity to be the single most significant trait in helping an entrepreneur achieve his/her real business successes. Whether or not this is true, these entrepreneurs’ critical
success factor belief in ethics and entrepreneurship (hereafter referred as the CSF belief),
deserves further research in the academia.

This critical success factor belief is not rare in the Chinese context. Some Chinese
entrepreneurs refer to Confucianism for their success eg, 
Chung and Ip (2008) and Tong (2010), in which Chung and Ip (2008) are the ones who are more systematic in
explaining the connection between ethics and entrepreneurship. Chung and Ip (2008)’s
work is therefore reviewed in detail.

Chung and Ip (2008) state that the moral dimension of entrepreneurs (the characters and
root qualities of entrepreneurs, in their term) counts to the survival of entrepreneurs.
This moral dimension is connected to repellent characters. The entrepreneurs with
repellent characters will destroy the trust and creditability from all the stakeholders –
garage team, employees, customers, suppliers, and investors (Chung & Ip, 2008). The
trust from the stakeholders must be acquired by the entrepreneurs for them to become
successful in the business world (Chung & Ip, 2008).

The repellent characters of entrepreneurs are (Chung & Ip, 2008):

1. Unkind to people
2. Unfair to people
3. Rude to people in front of people
4. Do stupid things and get people in trouble
5. Lie to people
6. Betray people
7. Leave people to face the music
8. Corrupt
9. Have no sense of shame
10. Bad to their parents
11. Bad to their brothers and sisters
12. Refuse to correct their mistakes
13. Hold a grudge against people for months

Chung and Ip (2008) mentioned this list of repellent characters as anti-virtues, which are
comparable to the famous list of the thirteen Confucian virtues (in Chinese: 仁義禮智信

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These repellent characters of entrepreneurs made people not to follow them. The positive characters are nice to haves, but the repellent characters are must not haves. The entrepreneurs with the repellent characters will not survive very long. Their stakeholders will sooner or later find out and abandon the venture.

The moral dimension of entrepreneurs is gaining increasing recognition (Chung & Ip, 2008). Lennick and Kiel (2007) point out that, when the entrepreneurs consistently lack a level of moral intelligence, the business will falter or fail completely. The entrepreneurs should be guided by a sense of moral (Chung & Ip, 2008). Those entrepreneurs without morals engraved on their hearts will not consider the repellent characters as such. Therefore they will not remove their repellent characters from their hearts (personal operating system, in their term), and these repellent characters will destroy others’ trust towards entrepreneurs.

Assuming Chung and Ip (2008)’s proposal is correct, entrepreneurs must have a sense of moral in order to survive in the business world. This proposal therefore centres the concept of moral right at the heart of entrepreneurship. Chung and Ip (2008) make this proposal based on their own entrepreneurship experiences in the context of China and Asia, but they suggest that it is not only applicable to Asian societies, but also considered to be appropriate regardless of countries or cultures.

On the other hand, in non-Chinese contexts, Solymossy and Masters (2002) note that the predictors of ethical behaviour and entrepreneurship are strikingly similar. They argue that the same characteristics to predict the recognition, judgment and behaviour of individuals on moral issues, distinguish entrepreneurs from non-entrepreneurs, and also predict entrepreneurial success (Solymossy & Masters, 2002). Such characteristics – imagination, creativity, novelty, and sensibility – that are systematically and theoretically crucial to ethical decision-making are argued to be qualities required for successful entrepreneurship (Buchholz & Rosenthal, 2005). Moral imagination is one of these requirements for entrepreneurial success too (Dunham, McVea, & Freeman, 2008).

In other words, these scholars argue for an indirect relationship but not a cause-and-effect between ethical behaviour and entrepreneurship. Some research shows a more direct relationship instead. Sapienza and Korsgaard (1996) argue that an ethical virtue – procedural justice – is an important element to impact the entrepreneur-investor
relations in four outcomes: 1) the trust of investors; 2) decision commitment; 3) monitoring, and; 4) investing (see Figure 1), although their impact to entrepreneurial success has not been investigated further.

Figure 1: Procedural Justice in Entrepreneur-Investor Relations (Sapienza & Korsgaard, 1996)

Chung and Ip (2008) and Sapienza and Korsgaard (1996) seem similar in arguing for the importance of the trust of stakeholders. Their difference is that the former uses a list of repellent characters, whereas one similar virtue in the list (the fairness of procedure) is used in the latter instead. Chung and Ip (2008) contend that any one of the repellent characters destroys the trust of stakeholders, but only procedural justice is said to impact the trust of investors in Sapienza and Korsgaard (1996), together with decision commitment, monitoring and investing of investors.

This thesis therefore has two accounts on ethics and entrepreneurship. The former one is based on the Chinese and Asian context (Chung & Ip, 2008) and the latter one bases on the entrepreneurship research from a non-Chinese, mainly American context eg, Sapienza and Korsgaard (1996). Originated from two national or cultural contexts, both argue for a relationship between ethics and entrepreneurship.
This claim in ethics and entrepreneurship must have a mediator, which is considered to be decision making. Decision making provides a useful mediator to investigate this CSF belief in ethics and entrepreneurship. It is a key activity in the creation of new ventures, ranging from daily decisions and ethical decisions, to long-term decisions of new ventures (Mullins, 2005). Ethics is simply too abstract a concept to impact entrepreneurship, unless it is manifested in concrete and tangible decisions. In such a case, the concrete decisions of start-ups mediate between the ethical institution and the performance of start-ups (Bain, 1956) as in (Fazio, 2010). All aspects of decision making must, in general, be proficiently managed, in order to be successful (Casson, 1982). The better entrepreneurs are at making decisions, the stronger their comparative advantages in decision making (Hébert & Link, 1988), and the more they are successful (Schultz, 1980). Decision making thus serves as a mediator between ethics and entrepreneurship. In fact, if ethics do not impact decision making in entrepreneurship, how can the CSF belief in ethics and entrepreneurship be defended at all? Therefore, how entrepreneurs make ethical decisions, and how ethical decisions impact start-up success are central research questions in entrepreneurship research.

Existing offered ethical decision making models, for example, Rest (1986), Treviño (1986), or Jones (1991), are general models of individual ethical decision making and behaviours that are developed from organizational settings. Their general models are then based to develop an entrepreneurial model in Solymossy and Masters (2002). They propose a model of ethical decision making for small business entrepreneurs. The transferability of these models from organizational settings to small business owners is questionable, as not many entrepreneurial elements are integrated into these models. First, their models do not seem to integrate particularly well with cash or financial criteria, which are salient to the ethical decision making of entrepreneurs. Cash or financial criteria might dominate ethics with respect to the impact on ethical decisions. These cash or financials trade-offs can invalidate the CSF belief. Second, ethics is not often sufficiently recognized as a dilemma that includes confusion and inconsistencies, in which the extent of expecting and accepting these ethical uncertainties is a factor to impact the ethical decision stages. Ethical dilemmas are common in an entrepreneurial context, so ethical tolerance towards the uncertainties might have implications for the ethical decision. The confounding effects of ethical tolerance can nullify the CSF belief. Third, their models do not take into consideration information-technological impact, which is nearly synonymous with entrepreneurial activities in modern society.
implications of technology might ripple through ethics to ethical decision. These complicating factors of technological impact may call into question the CSF belief. Fourth, their models do not discuss the details of ethical implementation in new ventures. Ethical policies and processes are mostly developed in the entrepreneurial stage. Those influences posited to directly affect the steps toward moral behaviour might impact the ethical implementation for the small to medium enterprise (SME) as well. These impacts of ethics on ethical implementation can strengthen the CSF belief. Fifth, their models have not proposed a formal relationship between ethical decision and entrepreneurial performance and success of new venture. Positive consequences of ethical leadership to managerial performance and organizational effectiveness can lead to high growth percentage, and long survival time of start-ups. A proven ethical impact to these start-up performance and success will thus support the CSF belief. These research gaps of ethical decision making of entrepreneurs lead us to raise our interesting research questions.

While these general models have been proposed for ethical decision making, they may not be useful in terms of explaining ethical decision making in some areas where context is important. These general models are often built on hypothetical settings and contexts, which may differ significantly from real contexts. Although we often want to build up a general model, I argue that we should place our consideration in real contexts which can be taken as a solid base for an entrepreneurial model. I therefore investigate the impact of ethics on ethical decision making by taking into account a specific decision.

The decision of interest must be both ethical and entrepreneurial to be selected in our context. The selected decision has to be ethical because an ethically neutral decision does not have ethics as a dimension for decision; the selected decision has to be entrepreneurial, as the decision has to be widespread across entrepreneurs. Preferably, the selected decision should be a critical one that impacts in the long term, in order to be put into our context. In other words, both ethical impact and entrepreneurial impact are high in the selected decision (see Figure 2) (McVea, 2003).
On the vertical axis, the ethical impact of a decision reflects the relative ethical seriousness of the principles that are at stake in the decision (McVea, 2003). The entrepreneurial impact of a decision on the horizontal axis reflects the relative entrepreneurial universalities of particular decisions. These two sets (ethical and entrepreneurial) of decisions, however, do not intersect with each other very often. Not many business decisions are both ethical and entrepreneurial in nature, which contain decisions that are potential mediators between ethics and entrepreneurship in this quadrant.

Dees and Starr (1992) point out some ethical dilemmas of entrepreneurial management: promoter, relationship, innovator and other dilemmas (Timmons, 1994). First, the promoter dilemma consists of elements in entrepreneurial euphoria, impression management, and pragmatic versus moral considerations. The issues like the honesty when promoting an innovation, the requirement of complete disclosure of the risks and uncertainties, the requirement of a dispassionate analysis of the situation, and the influence tactics of manipulation and coercion that arise, falls into the promoter dilemma. Second, the conflicts of interest and roles, transactional ethics and Guerrilla tactics are the relationship dilemma. Third, the innovator dilemma contains “Frankenstein’s problem”, new types of ethical problems (the ethically pioneering situations (McVea, 2003)), and ethic of change. Fourth, the finders-keepers ethic, conflict between personal values and business goals, and unsavoury business practices were other dilemmas that might arise in entrepreneurship.
Ethical dilemmas of entrepreneurial management in relationships, such as employee well-being, customer satisfaction, and external accountability (Payne & Joyner, 2006), that might arise are considered particularly critical decisions to the new venture context. Besides, as the employee management is the single most important issue to deal with in building a new venture, ethical and legal errors made early on can be extremely costly for a new company down the road (Barringer & Ireland, 2012). Decisions related to employee infrastructure (e.g., rewards and incentives, stock, salaries, fringe benefits, and social minimum) seem to meet the above criteria.

Social minimum decision (Rawls, 1971), which is, in fact, mainly implemented as social insurance in China, is deemed an important decision in this thesis. On the one hand, ethical values are related to the social insurance decision. The ethical concept of an entrepreneur is considered to affect his/her own compliance for social insurance (Ma & Ortolano, 2000; Makkai & Braithwaite, 1994; Solinger, 2002). In addition, Chinese entrepreneurs must encounter this social insurance decision in mainland China. On the other hand, social insurance as a compensation practice is “one of the primary HR practices firms use to elicit and reinforce desired behaviours from employees” (Latham & Wexley, 1981), and is “the least malleable features” (Rousseau & Greller, 1994) of the firm’s employment contract. It is also, by its nature, a critical decision that impacts in the long term, because one of its main aims is to provide social security to the employees after their retirement. Social insurance compliance decisions are, therefore, our central decision of interest for the purposes of presenting an adequately detailed decision context for this research.

On the one hand, social insurance compliance is an ethical decision. Ethics does not necessarily restrict to individual ethics, but also includes social ethics too. Social ethics concerns “one’s role in society and the relationship one is meant to have within it” (Vyakarnam et al., 1997). Two main groups of dilemmas of social ethics are connected to the conflicts regarding the set of stakeholders to respond, and the distinction between legal and moral obligation. In particular, organizational culture or employee well-being, which existed in the form of employee assistance programs, employee benefits, employee training programs, and employee empowerment, needs to be consistent with societal standards of ethics (Payne & Joyner, 2006). The compliance to social insurance is therefore an ethical decision.
On the other hand, social insurance compliance is entrepreneurial. Entrepreneurs often run the whole show, leading all the core functions including human resources (“HR”) management of the start-up (Chung & Ip, 2008). The entrepreneurs and small business owners see employees as a high ranked area and specific topics of management that are important to them (Malach, Robinson, & Radcliffe, 2006). In addition, entrepreneurs are hard to claim themselves as such, if they had not built a start-up with employees. The hiring of the first employee will follow with a number of employee related decisions eg, employee contract, minimum wage, and social insurance when operating a start-up.

Last but not least, social insurance compliance is a critical decision that impacts in the long term. Social insurance as a compensation practice is “one of the primary HR practices firms use to elicit and reinforce desired behaviours from employees” (Latham & Wexley, 1981), and is “the least malleable features” (Rousseau & Greller, 1994) of the firm’s employment contract. Different from the short term cash or financial decisions, or the medium term strategic decisions, social insurance compliance, by its nature, is a long term one. The time frame of social insurance compliance decision is often decades, because one of its main aims is to provide social security to the employees after their retirement. The compliance decision to social insurance is therefore a critical one that impacts in the long term.

Compliance decisions are also considered an ethical decision, due to the fact that employers have a higher degree of freedom on compliance with social insurance obligations. If a firm is not complying with the regulations, the prospect of it getting caught in the annual audit is quite low. If firms are audited and found not to have paid, it can make the outstanding payment within 15 days, and there is no further penalty. Therefore, employers have a higher degree of freedom on compliance with social insurance obligations, given that there is a weak surveillance and enforcement mechanism in China (Maitra et al., 2007).

Social insurance compliance decisions are the decision of an entrepreneur, when setting up a new company, whether or not he or she will apply for social insurance registration, and whether or not he or she declares and pays social insurance premiums on time and in full amount. Non-compliance decisions are ones that are not compliant to the law at full; else full-compliance to the law will be considered as compliance decisions.
2.2 Structure of the Review

Published research on ethics and entrepreneurship dates back to past several decades but remains relatively embryonic (Harris, Sapienza, & Bowie, 2009). While reviewing the published research connecting ethics and entrepreneurship, these literature can be classified into three broad themes: entrepreneurial ethics, social entrepreneurship, entrepreneurship and society (Harris et al., 2009). The theme of entrepreneurial ethics, because of its higher relevance to traditional business administration, management and entrepreneurship disciplines, is of more interest to scholars in such disciplines. This stream of research asks six key questions: entrepreneurs versus non-entrepreneurs, ethical decision making of entrepreneurs, ethical dilemma in entrepreneurship, technological impact and ethics, formation of ethical implementation in new ventures, and stakeholder theory of entrepreneurship (Harris et al., 2009).

Much existing literature in the theme of entrepreneurial ethics takes these questions with an assumption about the link between ethics and entrepreneurship. Most of them have a normative assumption that considers ethics as important in its own right; therefore ethics should be focused at the entrepreneurial level. A few argue with a utilitarian perspective: ethics is useful to entrepreneurs eg, Chung and Ip (2008), hence entrepreneurial ethics should be looked at. Either one of them is often assumed to justify their research; else their investigation of entrepreneurial ethics would not be interesting to them, who would have turned to different areas of entrepreneurship research instead.

The research built upon the normative assumption is different from the one constructed upon the utilitarian assumption. This assumption difference can result in variations of model in ethical decision making. Ethical decision making literature often assumes ethics to be important in its own right, representing an advancement of human beings. Kohlberg (1969) is one such example. He proposes a cognitive moral development (“CMD”) theory, in which the moral judgment is classified into hierarchical stages and sequences of development. This supposition is inherited when the CMD theory is used in other models (c.f. Rest (1986), Treviño (1986) and Jones (1991)). This notion of ethical importance is later extended to an entrepreneurial context in Solymossy and Masters (2002). While there may be a difference of CMD level between entrepreneurs and other groups (Teal & Carroll, 1999), the suitability of extending CMD theory to entrepreneurs may be a problem too. The normative assumption seems naïve to the entrepreneurs. An entrepreneur with a high CMD level can be forced to make unethical
business decision in order to survive. Therefore the CMD theory might be not applicable to the ethical decision making of entrepreneurs. When the normative assumption is less valid, different concepts will be needed in order to revise the entrepreneurial models. In particular, because the CSF belief itself is actually a utilitarian assumption, it is interesting for us to see how the utilitarian assumption would change the entrepreneurial model of ethical decision making.

Accordingly we will adopt a conventional approach as follows to undertake literature reviews of the field of entrepreneurial ethics. To acquire substrate for this literature review, we will search the databases and journals using ‘ethical decision making of entrepreneurs’ as the search term. The databases covered Business source complete, Emerald, ProQuest, Springer, Questia, Wiley Online Library, Elsevier and relevant databases, and the journals cover Journal of Business Venturing, Journal of Business Ethics, Journal of Small Business Management and relevant journals. This review aims to examine the individual ethical decision making models in the literature of entrepreneurial ethics, rather than those models at the firm or outer levels. It will also focus more on theoretical models that integrate different concepts but less on distributed empirical findings. While we examine the present state of the ethical decision making models, we will think about the above key questions, to check for research gaps of these models, when they are used in the entrepreneurial context. We will also consider how the investigation of these model gaps can help us verify the utilitarian assumption of the CSF belief. Because of the importance of context, we will then bring the ethical decision making models into the entrepreneurial context in China. Our aim, by the end of this chapter, is to form the basis for the research and development of our model in explaining ethical decision making of entrepreneurs in the next chapter.

2.3 Ethical Decision Making of Entrepreneurs

2.3.1 Individual Level

Individual level is one of the main levels in the existing literature to explain the ethical decision making of entrepreneurs (Davidsson & Wiklund, 2007). This individual approach deals with the individual ethical decisions of entrepreneurs, while the others engage themselves into the decision making of a firm or of some units at higher aggregated levels. A distinction of the level of our research helps us restrict the focus in this thesis.
The former approach focuses on entrepreneurs as an individual in the ethical decision making process (Davidsson & Wiklund, 2007). This approach will consider the role in which the entrepreneurs might play in making their ethical decisions. It operates at a micro level, specialized in examining the influence of entrepreneurs to ethical decisions, rather than the influence of firms to ethical decisions (Hodgkinson & Starbuck, 2008). Relevant background literature in cognitive science or decision science might offer descriptive/psychological, prescriptive and normative insights to this former approach to ethical decisions of business start-ups.

In the latter approach, the ethical decision making of start-ups is framed within its business environment (Davidsson & Wiklund, 2007). This approach operates at higher aggregated levels, focusing on the function, the mechanism and the extent of environmental influence to business start-ups. The environmental influence might be used alongside various institutionalist theories when analysing the ethical decision of business start-ups.

Our interested level is restricted to the former individual one. The term individual, for our purpose, means a single entrepreneur or one of the founders of the start-ups. Though, because an entrepreneur is really his/her start-up in an entrepreneurial stage, the term might sometimes take a firm as a whole in its broadest usage instead, treating it as a single actor of ethical decision making.

### 2.3.2 Relevant Model

Existing descriptive ethics literature (in contrast to normative ethics literature) has been advanced by some ethical decision making models eg, Rest (1986)’s four-stage model for ethical decision making, Treviño (1986)’s individual variables and organizational variables, and Jones (1991)’s concept of moral intensity in past several decades. These models of ethical decision-making made a high impact to the literature. Their high impact can be revealed by their pervasive use in categorizing the empirical findings within the field. According to their independent variables (individual variables, organizational variables and moral intensity) and dependent variables (awareness, judgment, intent and behaviour), empirical findings were systematically reviewed for the field, such as those in 1994 (Ford & Richardson, 1994), in 2000 (Loe, Ferrell, & Mansfield, 2000), from 1996 to 2003 (O'Fallon & Butterfield, 2005), in 2011 (Rajeev, 2011), and from 2004 to 2011 (Craft, 2012).
These ethical decision making models can be approximately classified into two groups – ‘stages’ models and ‘criteria’ models. ‘Stages’ models describe the individual ethical decision making in different stages. One of the most popular ‘stages’ models is Rest (1986)’s four-stage model for ethical decision making, which will be discussed in this section. Because of their straight-forward intuitiveness to understand ethical decision making, these ‘stages’ models are often used in lectures and textbooks of the field, so their popularities as models of ethical decision making. While, ‘criteria’ models examine different criteria of a phase in the ethical decision making process. Numerous constructs (individual factors, moral intensity, and organizational factors) are found to influence Rest (1986)’s four stages. These ‘criteria’ models summarize the main factors that have a causal relation to the four stages. These two groups of models – ‘stages’ and ‘criteria’ models – are nonetheless an approximate classification in structuring our literature review, because we understand that sometimes the lines between these two groups are rather blurred.

Another point we want to make is that, these ethical decision making models all come from the business field, given our business context. Most of them are developed from an organizational setting, but it is not surprising to observe a growing interest of transferring these models to the setting of small business owners. Some elements from organizational models are integrated in the models for small business entrepreneurs such as Solymossy and Masters (2002). These entrepreneurial models on ethical decision making will be reviewed in this section as well.

2.3.2.1 The ‘Stages’ Model
To begin with, Rest (1986)’s four-stage model for ethical decision making writes that individual ethical decision making and behaviour have four stages or components – 1) recognizing the moral issue; 2) making a moral judgment; 3) resolving to place moral concerns ahead of other concerns (establishing moral intent), and; 4) acting on the moral concerns (see Figure 3). These four stages can be described in plain text as follows (Solymossy & Masters, 2002). When a moral issue arises, first, an individual recognizes it. He or she then based on his or her moral concerns to make a moral judgment, before he or she integrates other concerns together, which resolves with each other to establish a moral intent. Once he or she has established his or her moral intent, he or she decides whether or not to act on his or her moral concern, which contributes his or her moral
action. Rest (1986) argues that each stage in the process is distinct, such that the former does not imply the latter. It is further argued that, while each stage increases the likelihood of its later stage, the former stage is “neither a necessary nor sufficient condition for later success” (Solymossy & Masters, 2002). In other words, some stages can be missing even an individual has a moral action in the end.

Figure 3: Four-Stage Model for Ethical Decision Making (Rest, 1986)

Rest (1986)’s four-stage model for ethical decision making has a question that exists arguably across all ‘stages’ models – that is, what the right number and sequence of the steps are in such models. In particular, in his model, the second and the third steps – making a moral judgment and establishing moral intent – seem to confuse readers. The difference between these two steps does not seem clear at first sight in his model. The four-stage model also seems too structured given the dynamic nature of decision making for entrepreneurs. Solymossy and Masters (2002) therefore combine these two steps into one step in their entrepreneurial model (see later this section). In addition, the four-stage model for ethical decision making stops at a single and simple moral action. It does not distinguish a simple action from a complex implementation. However, an ethical decision and an ethical implementation are two different things. For example, an entrepreneur who had made an ethical decision at one time might not be patient enough to spend long time to build an ethical institution that will guide future ethical decisions (Fiorelli & Tracey, 2007). Yet the consequences of one-time ethical behaviour cannot be comparable to the implementation of ethical institution at all (Treviño, Weaver, & Reynolds, 2006). New ethical decision making models must therefore account for ethical institution (see Section 2.3.3). In other words, Rest (1986)’s four-stage model for ethical decision making has not led readers to research ethical institution in business.

Then, Treviño (1986) proposes an interactionist model of ethical decision making in organizations with three components: ethical dilemma, cognitions, and ethical/unethical behaviour (see Figure 4). It is argued that, when an ethical dilemma arises, the individual reacts with cognitions determined by his cognitive moral development (“CMD”), which determines his process of deciding ethical/unethical behaviour in a
business situation (Treviño, 1986). Treviño (1986) does not state these components as stages; however, when comparing Rest (1986) and Treviño (1986), high similarities can be seen, especially that the awareness and behaviour stages/components reconcile. Their only difference is on the combination of judgment and intent stages to a cognition component. In this cognition component, CMD theory is heavily relied (Kohlberg, 1969; Kohlberg & Candee, 1984; Kohlberg & Kramer, 2005). The CMD theory provides three broad levels for six stages of CMD of an individual. First, preconventional level is composed of obedience and punishment orientation, and naively egoistic/self-interest orientation (Kohlberg, 1969). The individual is concerned with concrete consequences at this level. Second, conventional level is made up of good-boy/interpersonal accord and conformity orientation, and authority and social-order maintaining orientation; whereas, in the third level of principled level, it is formed by contractual legalistic/social contract orientation, and conscience or principle/universal ethical principles orientation (Kohlberg, 1969). At the conventional level, the individual conforms to the expectations of good behaviour of the society, while he or she will establish universal values or principles if he or she is at the principled level. When this CMD level is transferred to Treviño (1986), its role in her model is however confusing. In particular, this CMD level can be viewed as both an input and an output component, or as a stage in the process. Her model confusion thus needs to be accounted for in new models (see Section 3.1). Back to her model, the CMD’s determination of ethical behaviour is moderated by the combination of individual moderators (ego strength, field dependence and locus of control), and situational moderators (immediate job context, organizational culture, and characteristics of the work). These individual and situational moderators will be described one by one. Ego strength, is the strength of conviction or self-regulating skills, which keeps the consistency between judgment and behaviour (Treviño, 1986). Field dependence is the extent of using external social referents to guide behaviour (Witkin & Goodenough, 1977), whereas Rotter (1966)’s locus of control is the perception of how much control is exerted over the events in the individual’s life. For the situational moderators, in the immediate job context, it included reinforcement contingencies (specific rewards and punishments) (Hegarty & Sims, 1978), and other personal cost and external pressures (Rest, 1984). Of interest here it is the personal cost pressure. We think that it is too indirectly integrated (as other external pressure under the immediate job context as a situational moderator) in Treviño (1986). It is neither integrated because of its own right (but as other external pressure), nor it is integrated as an individual independent variable (but as a situational moderator),
not even mentioning its peripheral nature in her interactionist model. We will discuss more on this personal cost pressure in Section 2.3.3. Apart from the immediate job context, the situational moderator of organizational culture comprises normative structure (collective norms about appropriate behaviour), referent others (the model of others), obedience to authority (the acceptance of legitimate authority), and responsibility for consequences (an awareness and ascription of responsibility for the consequences of behaviour) (Treviño, 1986). While, for the characteristics of the work, the opportunities for role taking (taking account of the perspective of others), and the responsibility for the resolution of moral dilemmas (or moral conflicts) are situational moderators that explain and predict ethical/unethical behaviour too (Treviño, 1986). Nevertheless, some of these individual moderators and situational moderators might not be useful for the entrepreneurial context, which will be discussed in Solymossy and Masters (2002) later in this section.

**Figure 4: Interactionist Model of Ethical Decision Making in Organizations (Treviño, 1986)**
After that, Ferrell and Gresham (1985)’s contingency framework for ethical decision making in marketing, Hunt and Vitell (1986)’s general theory of marketing ethics (see Section 2.3.2.2), Dubinsky and Loken (1989)’s ethical decision-making model, Ferrell, Gresham, and Fraedrich (1989)’s synthesis of ethical decision models for marketing, and Bommer, Gratto, Gravander, and Tuttle (1987)’s behavioural model of ethical and unethical decision making (see Figure 5) are synthesized to assess their collective strengths and weaknesses by Jones (1991) (see Figure 6).

Figure 5: A Behavioural Model of Ethical/Unethical Decision Making (Bommer et al., 1987)
In his synthesis, Jones (1991) shows that these models have not included characteristics of the moral issue itself, as either an independent variable or a moderating variable to moral decision making and behaviour. He thus proposes an issue-contingent model containing the notion of moral intensity that influences every component of moral decision making and behaviour (see Figure 7). Moral intensity “captures the extent of issue-related moral imperative in a situation”. The notion has six components – magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect (Jones, 1991). First, moral issues with a high magnitude of consequences have a large sum of the harms/benefits done to victims/beneficiaries (Jones, 1991). Second, social consensus is the degree of social agreement of evilness or goodness, while the probabilities of a moral issue’s taking place and of causing the predicted harm or benefits jointly explains the third component – the probability of effect. Fourth, temporal immediacy is the length of time between the behaviour and consequences. Whilst, the feeling of nearness, in terms of social, cultural, psychological, or physical, for victims or beneficiaries is about the fifth component of proximity. The sixth and the last component is concentration of effect, which is “an
inverse function of the number of people affected… of given magnitude” (Jones, 1991). These six components illustrate that the construct of moral intensity is the subjective and abstract moral imperative of various situations. This construct focuses on the abstract level without a concrete context, despite of its high enthusiasm of generalizing various contexts. Thus, although these six components might seem complete to describe a situation, it is argued that such abstract components cannot cover all the concrete details important in a situation. These abstract characteristics are in fact rather detached from the concrete circumstances, so their abilities and usefulness to capture the situation of a context are at question. Its presentation is likely because of the want for a general model across contexts, though the existence of such a model is debatable (see Section 3.1).

Figure 7: An Issue-Contingent Model of Ethical Decision Making in Organizations (Jones, 1991)

Next, drawing from Janis and Mann (1977), McDevitt, Giapponi, and Tromley (2007) develop a model of ethical decision making that integrates decision-making process and the content variables considered by individuals facing ethical dilemmas (see Figure 8).
The decision-making process is divided into two phases, each of which consists of three main categories: antecedent conditions, mediating processes, and decision outcomes. In phase I, simpler ethical decisions are decided, leaving more complex problems to phase II, in which more information search and alternative solutions are considered. The phase I’s mediating process begins with the risk assessment of an ethical action, then the assessment of an unethical action, to the justification of the unethical action. If the unethical action is not justified in phase I, the conflict needs to be faced in phase II. All relevant variables and affected parties are considered for possible solutions. This rationalized vigilance can result in either an ethical or unethical action. Standing back, their mediating processes seem to describe a sub-stage of judgment or intent (in which different concerns are considered) within Rest (1986)’s model, in addition to integrating content variables eg, individual, job context, organizational context and external environment that influence the process into their model. In other words, instead of a merely process model, their model has some criteria contents, though these Janis and Mann (1977)’s content variables seem fairly general.

Figure 8: A Model of Ethical Decision Making: The Integration of Process and Content (McDevitt et al., 2007)
Afterwards, Barsky (2008) proposes a theoretical model linking attributes of goals and goal-setting practices to the unethical behaviour among employees in organizations (see Figure 9). He understands that Jones (1991)’s issue-contingent model is incomplete in discussing the cognitive processes from forming intentions to acting ethically, so he draws from social cognitive theory of moral disengagement (Bandura, 1997, 1999) and neutralization theory (Sykes & Matza, 1957) to synthesize his model. In his model, proximal antecedents for unethical behaviour are ethical recognition, moral disengagement, and ethical intentions. These antecedents seem similar to Jones (1991)’s stages, except moral disengagement. This moral disengagement is a cognitive process in which individuals justify or rationalize their disengagement of personal and social sanctions for unethical action in two major ways (moral justification and displacement of responsibility). Moral justification involves cognitively reconstructing the behaviour, whereas denying responsibility of actions because of uncontrollable circumstance uses the displacement of responsibility for unethical behaviour. In addition, three aspects in goal-setting, the presence of individual goals, the attributes of the goals, and enacted goal-setting practices, are discussed as distal antecedents of unethical behaviour. Two attributes of goals (the difficulty and specificity of goals), two contents of goals (behavioural or outcome, and the ethicality of the content), and two attributes of goal-setting practices (participation in goal-setting, and the reward tying of goal attainment) are linked to unethical behaviour. Additional mediators and moderators such as individual difference factors (one’s goal-commitment, and conscientiousness), and ethical climate as one of the organization factors are blended into his model as well. These goal-setting attributes, however, can be seen as a component in Jones (1991)’s moral intensity, because both of them describe the characteristics of the moral issue indeed, better capturing the moral imperative in a situation.
Subsequently, Solymossy and Masters (2002) raise an interesting question of whether or not ethical decision making models of managers or executives in big companies are as same as those of entrepreneurs in new ventures. Therefore, they propose a model of ethical decision making for small business entrepreneurs, with three stages and one criterion: 1) recognizing moral issues; 2) making moral judgments; 3) cognitive moral development, and; 4) engaging in moral behaviour (see Figure 10).
These stages and criterion are developed by past researchers. For example, the three stages – awareness, judgment (intent) and behaviour – are a contracted version of the Rest (1986)’s four-stage model, whereas the cognitive moral development is built on from Kohlberg (1969)’s CMD theory. Apart from these, the notion of moral intensity is used according to Jones (1991)’s issue-contingent model, acting as the characteristics of the issue that influence the process; whilst the combination of individual moderators and situational moderators is utilized as stated by Treviño (1986)’s interactionist model, capturing individual characteristics and situational characteristics that moderate the relationship between the CMD and ethical orientations. These individual characteristics and situational characteristics are deemed generally transferable from managers to entrepreneurs, despite of some differences that are found in entrepreneurs eg, their direct responsibilities of ethical decisions, more competitive pressure, more independence and accountability (Solymossy & Hisric, 1996; Teoh & Foo, 1997), more sensitivities to the expectations of society, more criticalness of own performance, more employment of own personal values (Humphreys, Robin, Reidenbach, & Moak, 1993), and less legalistic or rule oriented structures. Also, some recent works about social relationship with others from Brass, Butterfield, and Skaggs (1998)’s social network model are used. The social relationships with other people, in terms of their types and
their structures, interact with other factors in influencing ethical outcomes. The type of relationships is varied in strength (a combination of the frequency of interaction, the emotional intensity and intimacy of relationship, and the reciprocity of feelings), multiplexity (the number of linkages in one relationship), and symmetry (the extent of reciprocity of trust and emotional involvement). Moreover, these relationships occur within a larger social structure. Its social structure will interact to influence ethical outcomes too. If there is no link between actors in a social structure, this social structure is referred as structural holes. In a social structure, centrality is the extent of reaching all other actors in the smallest number of links, while network density refers to the percentage of actual ties between actors over all possible ties. These two relationship factors – relationship types and relationship structure – are therefore argued to moderate ethical outcomes. Furthermore, Solymossy and Masters (2002) employ the concept of cognitive dissonance as well. This cognitive dissonance will happen when an individual’s values or belief cannot be consistent with his behaviour owing to a requirement of the context of a decision, which then creates a desire for change (Solymossy & Masters, 2002). This change may be on his behaviour, the situation, the cognition or the beliefs. In this way, the cognitive dissonance therefore feeds back to the CMD level in their model.

Then Solymossy and Masters (2002) suggest some ways, particularly to the process, in which the ethical framework of managers and entrepreneurs may differ systematically. These ways are connected to the difference at each step of the process (Longenecker et al., 1989; Teal & Carroll, 1999; Vyakarnam et al., 1997); nonetheless, they suggest that there is no need to create separate processes and influences on the processes to explain the ethical decisions of small business owners (Solymossy & Masters, 2002). In other words, they argue that though the content of an entrepreneurial model is different, the structure of an entrepreneurial model remains the same.

Followed by, Woiceshyn (2011) based on 19 chief executive officers’ strategic decision making data, to propose a model for ethical decision making in business, which employs rational egoism for the interaction between reasoning (conscious processing) and intuition (subconscious processing) through forming, recalling, and applying moral principles (see Figure 11). The conscious level is essentially a stage model – recognition of a moral dilemma, identification of applicable moral principles, application of principles in thinking and action, and resolution of the dilemma – with the process of
spiralling interaction with the subconscious level. In the subconscious level, the critical element is “integration by essentials”, which yielded principles applied in subsequent decision making (Woiceshyn, 2009). These interactions are similar in both ethical principles and principles of strategies. In other words, the same processes are employed in making decisions involving ethics and making long-term decisions affecting the companies. This connection between ethics and long-term strategies is consistent with the ethical theory of rational egoism (Woiceshyn, 2011). The rational egoism is therefore argued to be consistent with the requirements of long-term success in business.

Figure 11: An Integrative Model for Ethical Decision Making (Woiceshyn, 2011)

To sum up, these ‘stages’ models have a common characteristic shared across: their inclination to a process view towards ethical decision-making, sequenced into ‘stages’ about the recognition and awareness of its ethical objectives beginning with ethical ideas, or thought and resting with action and behaviour (Colebatch, 1998). These models can be more than a single path of stages – for example, stages organized as a cycle is possible too. From simple models of few stages to a more complex phased approach, this stage concept has nonetheless been used to structure their process thinking on ethical decision-making, serving as a foundation for these models in extensive discourse.

2.3.2.2 The ‘Criteria’ Model

On the other hand, ‘criteria’ models examine different criteria considered in one single phase of the ethical decision making process. Numerous constructs (eg, individual factors, moral intensity, and organizational factors) are found to influence Rest (1986)’s four stages: awareness, judgment, intent, and behaviour. These main factors that have a causal relation to the four stages are summarized in the ‘criteria’ models.
To start with, Reidenbach and Robin (1990) develop from a content analysis of five contemporary moral philosophies (justice theory, relativism, deontology, egoism in teleology, and utilitarianism in teleology (Reidenbach & Robin, 1988)) a three-dimensional scale of eight items: a moral equity dimension, a relativism dimension, and a contractualism dimension, that are considered to influence moral decision. These moral philosophies (justice theory, relativism, deontology, egoism in teleology, and utilitarianism in teleology) are briefly described here. Justice theory states six principles of distributive justice: 1) distribute to each person an equal share; 2) according to individual need; 3) according to that person’s rights; 4), according to individual effort; 5) according to societal contribution, and 6) according to merit (Arnold, Beauchamp, & Bowie, 2012), and three forms of procedural justice: 1) pure form that guarantees just outcomes in all occurrence; 2) perfect form that provides a fair result in every case, and; 3) imperfect form in which its rules represent the best attempt to produce fair results but sometime its outcomes are unjust (Reidenbach & Robin, 1988). Relativism talks about all normative beliefs as a function of an individual or culture, in which no universal ethical rules exist, while deontology suggests that individuals have a duty to satisfy the legitimate claims or needs of others (Reidenbach & Robin, 1988). In teleology, egoism measures morality based on the consequences of actions to the individual, in contrast to utilitarianism, which considers the consequences to all of society (Reidenbach & Robin, 1988). Then these moral philosophies are studied through a pre-test of three scenarios to 218 business students and through sent questionnaires to 218 managers in a business association, in order to work out a three-dimensional scale (a moral equity dimension, a relativism dimension, and a contractualism dimension). Moral equity dimension is comprised of four items: fair/unfair, just/unjust, acceptable/acceptable to my family, and morally/not morally right. Relativistic dimension is comprised of two items: traditionally acceptable/unacceptable, and culturally acceptable/unacceptable, while other two items: violates/does not violate an unspoken promise, and violates/does not violate an unwritten contract, comprise the contractualism dimension. These three distilled moral-philosophical dimensions show the ethical criteria that would be used to evaluate different scenarios of ethical actions in positive ethical theories. The concepts of formal justice, procedural justice, and substantive justice, for example, are relied heavily in the authority and social-order maintaining orientation, contractual legalistic/social contract orientation, and conscience or principle/universal ethical principles orientation respectively in Kohlberg (1969)’s CMD theory (Reidenbach & Robin, 1988).
After that, Hunt and Vitell (1986, 1996, 2006)’s general theory of marketing ethics is a moral philosophy-based positive ethical theory too (see Figure 12). They draw from both deontological and teleological ethical traditions in moral philosophies, to provide a general theory of ethical decision making in their model. However, the validity of these moral philosophies has not been completely supported. When Marta, Singhapakdi, and Kraft (2008) examine the influences of these personal moral philosophies on the ethical intentions of small business managers in companies with 500 employees or fewer, their results reveal that neither idealism (the assumption that a morally right action can obtain desirable consequences (Forsyth, 1980)) nor relativism dimension of personal moral philosophies is a significant predictor of a manager’s ethical intention. Thus, the impact of these contemporary moral philosophies to ethical decision making of entrepreneurs is worth further investigation.

**Figure 12: Hunt-Vitell Theory of Ethics (Hunt & Vitell, 2006)**

Next, Strong and Meyer (1992) present an integrative, descriptive model of ethical decision making of managers (see Figure 13). This model shows three distinct groups of restraints on ethical decisions: environmental restraints (competition, regulations, laws, economic conditions, social norms, and industry structure), and internal rational
restraints and internal moral restraints of executive and manager (Hansen & Wernerfelt, 1989). Internal rational restraints are comprised of intelligence, biases of information, boundedness, belief persistence, experience, and risk adversity. While, in internal moral restraints, Treviño (1986)’s interactionist model and Kohlberg (1969)’s CMD theory are incorporated with components such as values, beliefs, locus of control, internalized social norms, and moral development. These three distinct groups of restraints are then imposed to four different corporate social responsibilities (which include legal, ethical, economic and discretionary (or philanthropic) responsibilities) (Carroll, 1979).

Figure 13: Managerial Decision Making Model of Corporate Responsibility (Strong & Meyer, 1992)

Afterwards, Vyakarnam et al. (1997) explores ethics from the perspective of small business owners and proposes a web of filters used in an inter-connected way as a mechanism for resolving ethical dilemmas (see Figure 14). These identified filters have four main themes: situational ethics, quality of relationships, consequentialist (reputation and economic considerations), and reference to external sources of advice for resolution. Situation ethics is linked to the use of context and time in resolving an ethical dilemma, but the quality of relationships are associated to the identities of key stakeholders, the likeness, and the future development of the relationship with stakeholders. While both reputation and economic considerations appear in the consequentialist concern, an external source of authority is used for the resolution of ethical dilemma as well. These complex interconnections of filters for resolving ethical dilemma demonstrates that small business owners are likely to have an incomplete
picture of their dilemma at any one time, or only to move around the web of filters to think through before resolving their dilemma.

**Figure 14: Web of Filters Used to Resolve Ethical Dilemmas (Vyakarnam et al., 1997)**

Subsequently, Longenecker et al. (2006) offer a theoretical framework of ethical behaviour in small businesses (see Figure 15). This framework incorporates Treviño (1986)’s interactionist model to present two sets of major factors of ethical behaviour: personal factors and situational factors. Personal factors consider the entrepreneurial act, cognitive moral development, locus of control, need for achievement, Machiavellianism, and social/reputational costs. The entrepreneurial act is connected to the identification of untapped opportunities, which requires creative practice that walks out from the boundaries established by social convention or the law. Such a creative and rule-bending nature of entrepreneurs can sometimes result in unethical behaviour. The CMD has been mentioned (see Section 2.3.2.1) so it is left out here. Same is to locus of control. Need for achievement has not been mentioned; however, it has an unclear connection to ethics. One line of argument for need for achievement is that, its influence on business priorities and achievement may influence entrepreneurs to sacrifice their ethical values; but it is offset by another reasoning in which need for achievement has a positive link with the CMD (thus ethical behaviour) (Glover, Bumpus, Logan, & Ciesla, 1997; McClelland, 1967). These two offsetting factors hence make the connection of need for achievement and ethics uncertain. Another personal factor impacting ethical standards is Machiavellianism. This factor relates to “a willingness to influence others
for the sake of personal achievement” (Longenecker et al., 2006). Without being restraint by adequate accountability, Machiavellian entrepreneurs can be master manipulators (King & Roberts, 1992). The association of Machiavellianism and manipulation tendencies can suggest that these entrepreneurs are less likely guided by high ethical standards, which in turn leads to an exploitation of others and ethical compromise (Morris, Schindehutte, Walton, & Allen, 2002). The personal factor of social costs focuses on business relationships and personal networks of small company owner-managers, which couples with their reputations and trust with their suppliers, customers, and creditors to impact ethical behaviour (Aldrich & Fiol, 1994). While these above factors concern the personal level, situational factors relate to environmental factors, institutional factors, and agency factors at the situational level instead. Environmental factors are outlined by cash reserve limitations, narrow offerings dependence, and limited market presence. Together with the institutional factor of ethical institutional infrastructure, they have an unfavourable influence on ethics for small firms. In contrast, in agency effects, the non-separation of ownership and management in small business can suggest an impact to ethical perceptions, although its implications are not apparent. The non-separation can either lower the possibility of managerial opportunism for greater compensation, or the separation can shift founder’s focus from self-interest to ethical correctness. These two cases have opposite effects, making agency effects minor comparing with other situational factors. Taking personal and situational factors as a whole, there are both for and against arguments for higher ethical standards in small businesses, which thus makes an imperceptible difference in terms of ethical standards comparing with large firms. This small difference can be found when comparing small business owner-managers with large firm managers in their ethical responses in 1993, while no significant difference can be found in 1985 and 2001 (Longenecker et al., 2006).
Followed by, Sinha & Mishra (2012) identify Bommer, Gratto, Gravander, and Tuttle (1987)’s behavioural model of ethical and unethical decision making as a comprehensive model to examine social, Government and legal, professional, work, and personal environments, as well as individual attributes and values as factors that affect the decision making of executives in organizations. One of the most influential factors is the individual attributes and values, which is considered to have an enduring effect on the behaviour of corporate executives. Apart from this individual factor, five factors of environment are thought to affect ethical decision too. Within the personal environment, family and peer groups of personal life frame behavioural norms of individual executives. This personal environment falls outside the working organization. In the working organization, cultures of corporations of the work environment, and values and norms attached to the profession in the professional environment, can determine its ethical issues. In addition, these ethical issues can be further mandated as laws for compliance as a part in the Government and legal environment too. The social environment has a role as well. Norms, duties, and commitments, for instance, can be internalized into executives and can be reflected on the behaviour of them in the corporate setting.
In summary, these ‘criteria’ models can group different main factors into different categories in their models of ethical decision making. Their contributions to ethical decision making, however, invariably overlap and interact. There is often a common ground between these frameworks. The categories of individual factors, moral intensity, and organizational factors, for example, are often used in these theoretical frameworks. In addition, these categories of criteria are often reconcilable to the stages models in Section 2.3.2.1 as well.

2.3.3 Research Gap

Section 2.2 has mentioned that we will adopt a conventional approach to undertake literature reviews of the entrepreneurial ethics. We acquire substrate for this research through using ‘ethical decision making of entrepreneurs’ as the search term. The search results nonetheless return individual ethical decision making models not only limited to entrepreneurs but also to managers in organizations.

Most current ethical decision making models often do not only focus on entrepreneurs. In ‘stages’ models, Rest (1986), Treviño (1986), Ferrell and Gresham (1985), Jones (1991), McDevitt et al. (2007) and Barsky (2008) propose their models from moral psychology, in organizations, in marketing, from management context, and in organizational setting respectively. Reidenbach and Robin (1990) and Strong and Meyer (1992) also present their ‘criteria’ models from normative philosophies, and of managerial corporate responsibility. In spite that these ethical decision making models are not specific to entrepreneurs, they are reviewed, because 1) sometimes these models
are applied to entrepreneurs eg, the application of Treviño (1986)’s interactionist model to owners/managers of small business in Quinn (1997), and; 2) their model elements are frequently used to develop entrepreneurial models eg, Solymossy and Masters (2002). We have come across entrepreneurial models like Solymossy and Masters (2002), Vyakarnam et al. (1997) and Longenecker et al. (2006) as well. In spite of their focuses on small business owners and entrepreneurs, their model elements are highly similar to those of managerial models, without many entrepreneurial elements being integrated into them. Solymossy and Masters (2002), which will be the base model of our research model (see Section 3.1), in their investigation of how entrepreneurs differ from non-entrepreneurs with respect to ethics, suggest that “we do not need a separate model to explain the ethical decisions of small business owners”. We partially agree and partially disagree with their suggestion - while Rest (1986)’s four-stage model can be re-used for entrepreneurs, their entrepreneurial model as well as other reviewed models can have some research gaps, for building a complete profile about the ethical decision making of entrepreneurs.

The reviewed ethical decision making models are summarized to identify their research gaps (see Table 1). Rest (1986)’s four-stage model – due to its high impact to these models – is used to summarize these models. The four stages of awareness, judgment, intent and behaviour are put in the columns of table. And the categories of individual factors, moral intensity, and organizational factors are used in the rows of table. These stages and categories thus form the horizontal and vertical structure of table. This review structure has in fact been used in a review of the ethical decision-making literature in Craft (2012) as well.
### Table 1: A Review of the Ethical Decision-Making Model

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The above review table of ethical decision-making models shows some research gaps for entrepreneurial models as follows. These research gaps include the lack of integration of cash or financials, ethical tolerance, and technological impact as the criteria, the lack of details of ethical implementation as the stage, the lack of a formal relationship between ethical decision and entrepreneurial performance and success in these entrepreneurial models. These entrepreneurial models have to acknowledge the importance of context as well.

2.3.3.1 Cash or financials versus ethics
First, the review table of ethical decision making models shows that the existing models seem to only integrate cash or financials to a small extent, so these models cannot sufficiently explain the ethical decision making of entrepreneurs.

Cash or financials are often considered as a dominating criterion to the decision making of entrepreneurs. Entrepreneurs have to stay lean to survive (Chung & Ip, 2008). Most start-ups are bootstraps that run on tight cash budgets without other alternatives (Chung & Ip, 2008). Cash shortage is almost an all-time reality. Limited financial resources are often experienced by start-ups (Boyd & Gumpert, 1983). Cash or financials are thus considered as the golden rule of decision making (Nyland, Smyth, & Zhu, 2006) for survival of new ventures (Chung & Ip, 2008). Cash or financials are therefore expected to also account for the ethical decision making of entrepreneurs.

The scarcity of financial resources can impact the ethical standards of entrepreneurs (De Clercq & Dakhli, 2009). Longenecker et al. (1988, 1989) suggest that personal financial gain, either at others’ expense or at the expense of norms of fairness, is emphasized more in smaller firms than larger firms. This financial emphasis can lead to unethical attitudes in small businesses, which is deemed as the ‘dark side’ of entrepreneurs (Kets de Vries, 1985; Kuratko, 2007; Osborne, 1991).

Cash or financials, however, is an entrepreneurial element that is largely missing, unanswered, or ignored in the current models, had it been not underplayed, as shown in the review table (see Table 1).

In ‘stages’ models, for example, Treviño (1986) follows Staw and Szajkowski (1975) to propose that in an immediate job context, other external pressures (eg, job pressures
of time, scarce resources, competition, or personal costs) will moderate the relationship between ethical cognition and ethical action. The moderation role of scarce resources and personal costs is accepted, but it seemed too indirect as a factor integrated into her interactionist model. Cash or financials is neither integrated in its own right, but as an example of other external pressures; nor is it integrated as an individual moderator, but as a situational moderator. Such the integration is also peripheral in her interactionist model. Jones (1991) does not take financial benefits in the magnitude of consequences of moral intensity too, which is focused more on moral consequences instead. No other financial benefits are discussed in the organizational factors of his issue-contingent model (Jones, 1991), except the scarce resources and personal costs of Treviño (1986). McDevitt et al. (2007) describe operating practibilities (the competition for scarce resources among employees) (from Treviño (1986)) as a content variable to understand ethical decisions. In addition, their model notices that rewards and sanctions can sometimes motivate unethical actions by the pressure of financial goals (Carson, 2003; Shelby & Vasquez-Parraga, 1993; Treviño, Brown, & Hartman, 2003), and that competitive/economic factors can create environmental uncertainty that leads to unethical decisions (Morris, Rehbein, Hosselni, & Armacost, 1995). Their scattered discussion of financial rewards and economic factors, however, does not reflect the real significance of cash or financials in ethical decision. Barsky (2008) reviews Schweitzer, Ordóñez, and Douma (2004)’s notion that goal-setting impacts ethical decisions to argue that goals interfere with ethical recognition that leads to unethical behaviour. These goals can either have or have no economic incentives (Schweitzer et al., 2004), but their attributes (difficulty, specificity, outcome/process and content) will impact ethical recognition, thus indirectly impact unethical behaviour. In other words, he does not focus on the goals themselves, but the attributes of goals. Thus, his conceptual model is not a “rational self-interested motivation” perspective that focus on financial interest (Barsky, 2008). Solymossy and Masters (2002), whose model is focused on entrepreneurs, refer Treviño and Youngblood (1990) and Delaney and Sockell (1992) to involve other pressures (eg, scarce resources, time pressures, competition) as a situational characteristic to moderate the link between cognitive moral development (“CMD”) and moral behaviour. Again, cash or financials does not have a deserved position (ie, direct, individual and central position) in their moral behaviour model. Not only this cash or financial gap exists in ‘stages’ models, but also it is present in ‘criteria’ models as well. Although Strong and Meyer (1992) state economic conditions as an environmental factor to restraint managers’ ethical decision in their managerial decision
making model, it is argued that this relevant factor has not been explained as an individual factor instead. Economic wants are not considered as a basic individual want in their model. A similar problem on economic factors happens in Vyakarnam et al. (1997) as well. In their web of filters, economic growth and prosperity is accounted for easier ethical resolution, contrasting with the difficulties under the survival of the fittest in a recession. Such an economic consideration is nonetheless not a self-concern, but a consequentialist concern in their web of filters. Longenecker et al. (2006) outlines Morris, Schindehutte, Walton, and Allen (2002)’s cash reserve limitations as an environmental force to which entrepreneurs are subject. Cash reserve limitations result in conditions of cash shortfalls that differentiate between venture' survival and failure, which therefore encourage or justify ethical compromises, when there is no payoffs for ethical behaviour (Morris et al., 2002). Longenecker et al. (2006) recognize that “the incentive to compromise ethically may seem impossible to overcome, especially when slack resources are limited and the margin for error is squeezed”. Yet, these cash reserve limitations are a subordinate of environmental force, while their position is not dominant apparently in their framework.

The ignorance of cash or financials in the existing models makes them seem naïve and unrealistic (Carson, 2003). These models do not presume persons as economic or rational beings, but anticipate persons as ethical beings. In Kohlberg (1969)’s CMD terms, these models do not view persons at the preconventional level, but consider them to have developed to the principled level instead. Even when cash or financials is integrated in the existing models, it often serves for an indirect, situational, and peripheral role, unlike what we have seen in the real world. In addition, the existing models do not discuss the utilization and trade-off of both non-financial and financial forms of reasoning tactics within one decision (Martin & Parmar, 2012), which can invalidate ethics as a concern in ethical decision making of entrepreneurs.

Cash or financials are therefore singled out as a research gap in existing ethical decision making models. This specific criterion should be provided with sufficient attention given its criticalness in entrepreneurship. The existing models without this criterion would seem naïve and unrealistic. Singling out this criterion also helps examine its impact weight in comparison with other factors in ethical decision making of entrepreneurs. Financials and profits are commonly considered to dominate ethics, which can be sacrificed in an unethical decision. This domination of financial profit can
thus drive ethics out from having a role in an ethical decision. In that case ethics cannot impact the ethical decision of entrepreneurs at all. Such an inability of ethics to impact the ethical decision of entrepreneurs can therefore place a strong doubt over the criticalness of ethics to the success of entrepreneurs. In other words, ethics should not be traded-off in the ethical decision making of entrepreneurs, had the argument that ethics is a critical success factor of entrepreneurship been authoritative.

2.3.3.2 Ethical tolerance
Second, the review table demonstrates that the current models do not often describe ethics as a dilemma with confusions and inconsistencies, in which the extent of expecting and accepting these ethical uncertainties is a factor to impact ethical decision stages.

Treviño (1986), McDevitt et al. (2007) and Solymossy and Masters (2002) seem to assume implicitly that the definition of ethics has been fairly articulated, so they have not explained what ethical or unethical behaviour is in their models. In other words, they think ethical behaviour is reasonably detailed, with little confusions and inconsistencies; therefore the extent of expecting and accepting these ethical uncertainties is not integrated in their models. Jones (1991) is different from them. He follows Hamilton and Kelman (1990) to describe an ethical decision as “a decision that is both legal and morally acceptable to the larger community” (Jones, 1991). His notion of moral intensity thus includes social consensus, which is the degree of social agreement with whether a proposed act is evil (or good). This social consensus influences ethical stages in his model. His relativist description of morality entails confusions and inconsistencies. The more is the social consensus, the less are confusions and inconsistencies. The confusions of the issue are, however, different from one’s tolerance of these confusions. Then, his ethical definition is relied by Barsky (2008), who defines unethical behaviours as those “generally considered wrong (eg, lying, stealing, harming those who are defenceless, etc.) within a given society”. Strong and Meyer (1992) seem not to assume ethics as explicit too. Their construct of corporate responsibility from Aupperle, Carroll, and Hatfield (1985) develops a relative importance measure in their model. Their relative morality view, nevertheless, has not been extended to place uncertainty tolerance as a factor of their model. Similarly, Vyakarnam et al. (1997) emerge four major themes of ethical dilemmas without a factor of the feeling on ethical clarities too. Longenecker et al. (2006) seem to agree with the
relativities of ethics in different communities too. They measure the relativities of ethics through a six-page questionnaire containing 16 vignettes of a business decision having ethical overtones of a seven-point scale. Then they compute an overall ethical index for each individual. Their relative measurement of ethics, nonetheless, is not expanded to the usage of an ethical ambiguity tolerance factor in their model.

The definite nature of ethics supposed in most current models does not fit the ethical decision making of entrepreneurs. When untapped opportunities are identified and exploited by entrepreneurs, there are vast ethically grey areas. Only confused and inconsistent boundaries exist between inside and outside the social convention, or even inside and outside the law (Longenecker et al., 2006). These ethically blurred regions might be opportunities accessed only by entrepreneurs, when most people would hesitate to open them (Morris et al., 2002). Those entrepreneurs who expect and accept these ethical uncertainties can sometimes find it difficult to separate entrepreneurial from which is arguably unethical (Longenecker et al., 2006). In other words, their tolerance of ethical uncertainties is a factor that influences the ethical decision making stages. This ethical tolerance factor is implicitly connected to the risk taking act of entrepreneurs, which is often an anchor for entrepreneurial success.

This ethical tolerance seems to act against ethical effect, thus it needs to be controlled or partial-ed out to study the true effect of ethics on ethical decision. Finding the true effect of ethics on ethical decision is important – if ethics is only a moderator of ethical tolerance to ethical decision, it can only be a moderator to entrepreneurial success too, given that risk taking is often considered critical to entrepreneurial success as well.

2.3.3.3 Technological impact

Third, the review table illustrates that current ethical models do not have (information) technological impact being integrated as a factor to impact ethical decision stages.

The technological impact is emphasized due to its influence to ethical decision from empirical evidence. This technological influence on ethical decision has three possible methods: 1) technological-related spirit eg, imagination, creativity, novelty and sensitivity that are often brought together with moral decision making (Buchholz & Rosenthal, 2005); 2) technological disciplines or backgrounds of entrepreneurs, which
seem to connect with their ethical behaviour, and; 3) technological knowledge of entrepreneurs, which is argued to be the enabler of their ethical decision as well.

In the technological related spirit, Buchholz and Rosenthal (2005) try to develop a framework that brings together imagination, creativity, novelty and sensitivity and moral decision making. Their philosophical framework aims to show that the spirit of entrepreneurship is the same to the qualities of moral decision making. Buchholz and Rosenthal (2005) argue that moral decision making involves working from moral experience and decision making toward guiding moral propositions. This working of moral propositions can only be provided through moral sensitivity and moral imagination. Moral sensitivity is “the ability to perceive and treat as legitimate the interests and concerns of all stakeholders affected by managerial decisions” (Buchholz & Rosenthal, 2005). To be aware of the moral dimension involved in decision making, this requires imagination and creativity. This specific ability to perceive a web of moral relationships, which means “becoming sensitive to ethical issues in business decision making… [and] searching out places where people are likely to be hurt by decision making or the behaviour of managers”, is referred as moral imagination (Carroll, 1987). These two qualities of moral decision making, the sensitivity to all stakeholders and the imagination of relationships, are thus deemed relevant to the situations of entrepreneurs and the activity of entrepreneurship. In other words, imagination, creativity, novelty and sensitivity that characterize entrepreneurship help maintain ethics in moral decision making too. Their argued relationship between creativity and the qualities of moral decision making can find its empirical support in Bierly, Kolodinsky, and Charette (2009). In contrast with Marta et al. (2008), who examine the relationship between personal moral philosophies (idealism and relativism) and ethical intentions (Forsyth, 1980, 1992), Bierly et al. (2009) develop their understanding of the relationship between creativity and these two individuals’ ethical ideologies (idealism and relativism) instead. Some researchers argue that creative people have creative personality that is less other-centred (Eysenck, 1993, 1995; Feist, 1998; Feist & Barron, 2003; Helson, 1996), and that has the needs to be different (Joy, 2004), thus it is contrasted to a genuine concern for others, a characteristic of idealism (Forsyth, 1992; Forsyth, Nye, & Kelley, 1988). In spite of their argument, a positive relationship between creativity and idealism dimension is found support from business students in Bierly et al. (2009). In addition, the argument that creative people who have talent for divergent thinking are more likely to reject conformity or rigid following of rules (Henle, Giacalone, &
Jurkiewicz, 2005), hence positively associated with relativism, is found support in Bierly et al. (2009) too. In other words, creative people are more caring about others (high idealism), but are less likely to follow universal rules (low relativism) in moral decision making. In Forsyth (1980, 1992)’s term, that means creative people are situationists, who rely on their own personal values and perspectives when examining the specifics of each situation individually, with a behavioural emphasis on avoiding harm (Bierly et al., 2009). In view that entrepreneurs are often deemed as creative people, such a positive relationship between creativity and ethical ideologies (idealism and relativism) are expected for the case of entrepreneurs as well. In contrast, there is a common belief that creative people tend to be less ethical (Bierly et al., 2009), which particularly connects creativity to relativism dimension. Hall and Rosson (2006), for example, think that creative people, such as entrepreneurs, having the propensity to serve themselves and to bend the rules, are likely to challenge established industrial morals and laws. Hannafey (2003) also identifies a bad reputation of rule-bending among creative and imaginative business leaders. In spite that these two sets of researches have opposite arguments, both further support the relationship between creativity and ethical ideologies for entrepreneurs, which thus should be integrated in the existing model as well.

In the technological disciplines or backgrounds, O'Clock and Okleshen (1993) report that ethical beliefs and behaviour of engineering graduates are higher than those of their peers graduating from business majors. This difference exists in three aspects: 1) engineering graduates believe those actions that affect co-workers are more unethical compared with business graduates; 2) there is a higher belief of engineering graduates that those items that impact the company is unethical, and; 3) engineering graduates report a lower frequency of practicing actions that are directed against individuals eg, giving or taking gifts contrasted with business graduates. In a situation of whether or not to report others’ violations of organizational policy ie, whistle blowing, undergraduates in engineering majors are less tolerating and have higher tendency to report when compared with business students, despite these differences cannot be found at the graduate level (O'Clock & Okleshen, 1993). O'Clock and Okleshen (1993)’s results nevertheless indicate a probable factor of technological impact to ethical decision.

In the technological knowledge, such the knowledge is argued to enable ethical decision. The technological knowledge that goes into performing the activities of a start-up
supports the positioning of a start-up (Enright, 2002). Through superiority in knowledge bases, combinations of knowledge bases, or knowledge systems, a start-up create value for customers and beat its competitors, achieving a competitive advantage (Enright, 2002). This competitive advantage helps a start-up retain sufficient profits, thus then enabling the cost-demanding ethical decision. An entrepreneur can have other criteria to consider an ethical decision, but these sufficient profits more likely produce an ethical decision.

Chemnitz (2007) based on Rogers (2010)’s decision model from innovation diffusion theory, analyses an ethical decision in compliance. The specific ethical decision is a small primary producer’s compliance decision to food quality standards of the tomato sector. Technical innovations were adopted to advance its production, in terms of higher food quality and better information transfer of product and process, rather than technical efficiency that is common in non-food industries. These two determinants (higher food quality and better information transfer) in turn affected the amount of costs and benefit, hence the decision of compliance. Technical level, as identified as farm size, however, only had a low correlation to both non-recurrent and recurrent costs of compliance. In addition, Kyobe (2009) investigates the factors influencing SME’s compliance decision of technological regulations from Government as well. He argues that technological factors eg, technological skills, technological resources, and content and complexity of electronic information influence technological compliance in the SMEs. These technological factors, nonetheless, were found to have the lowest influence to technological compliance, among other factors in business, industry, economic, sociological, and psychological areas. Furthermore, these technological factors seem specific for their technological context, thus their generalizability to other compliance contexts need further research as well.

These three methods – technological-related spirit, technological disciplines or backgrounds, and technological knowledge – have not been integrated in current models such as Treviño (1986), Jones (1991), McDevitt et al. (2007), Barsky (2008), Strong and Meyer (1992) and Vyakarnam et al. (1997). Solymossy and Masters (2002) neither have a factor of technological impact, but they propose that different entrepreneurial approaches in innovation can imply different ethical perceptions of them (Longenecker & Schoen, 1975). Longenecker et al. (2006) also mention that the entrepreneurial act of
creative practices can cross the boundaries established by social convention, or even those by the law too.

These technological impacts seem to have both ethical and performance effects (Rosenbusch, Brinckmann, & Bausch, 2011), thus they need to be controlled or partial-ed out to study the true effect of ethics on ethical decision. Again, finding the true effect of ethics on ethical decision is important – if ethics is only a moderator of technological impacts to ethical decision, it can only be a moderator to entrepreneurial success too, given that technological impact is often considered as a success factor of entrepreneurship as well.

2.3.3.4 Ethical implementation

Fourth, the review table helps us clarify that current models often stop at the stage of ethical decision, while not to continue the research on the details of ethical implementation in new ventures.

This ethical implementation is a step forward in ethical stages. In particular, simple ethical decisions and complex ethical implementation should be considered as two different stages. An entrepreneur who makes an ethical decision at a single time might not manage a detailed implementation in his new venture. Such an ethical implementation focus on how individual ethical decision of different members is made in a new organization eg, implementation actions, which extends the emphasis on individual behaviour to an organizational one. These organizational behaviours communicate the importance of ethics within the organization (Cohen, 1993; Treviño, Hartman, & Brown, 2000), developing and forming organizational ethics for future ethical behaviours (Fiorelli & Tracey, 2007). In other words, ethical implementation can be deemed as “the organizational element that contributes to an organization’s ethical effectiveness” ie, ethical infrastructure (Tenbrunsel, Smith-Crowe, & Umphress, 2003). Organizational elements such as formal systems (ethical codes of conduct, performance appraisal, evaluations, salary or bonuses), informal systems (ethical conversations, peer surveillance, or group pressure), and organizational climate (shared perceptions for ethics, respect, and procedural justice of organizational members (Chan, 1998; Joyce & Slocum, 1984; Schneider, 2009)) are needed to comprise an effective ethical institution (Tenbrunsel et al., 2003).
This ethical implementation and infrastructure is however regarded as a criterion, but not as a stage in the current models, most likely due to their organizational nature. In ‘stages’ models, Treviño (1986) provides organizational culture (normative structure, referent others, obedience to authority, responsibility for consequences, and codes of ethical conduct) as an explanation and a prediction of ethical decision making behaviour in her interactionist model. She argues that formal codes of ethical conduct should be consistent with the organizational culture, and should be enforced in order to be effective in affecting ethical behaviour (Treviño, 1986). This factor of code of ethics, however, does not seem too relevant in affecting entrepreneurs, given its usual absence in a new venture’s context. In addition, though the codes of ethics can be regarded as an ethical implementation, it is integrated as a factor to guide organizational members’ ethical behaviour, rather than as a stage to be explained and predicted in her model.

Jones (1991) presents organizational settings (group dynamics, authority factors, and socialization processes) as a challenge to moral decision making too. These presented factors, because of their organizational nature, are less pertinent for entrepreneurs, not to mention their treatment as independent variables in his model. McDevitt et al. (2007) include formal codes of ethics as an influence for ethical choices (McCabe, Trevino, & Butterfield, 1996), nonetheless with a problem similar to Treviño (1986). Barsky (2008) neither constitutes ethical implementation as a basis in his model. His concept of ethical behaviour in organizations is not associated to ethical implementation, whereas his ethical climate of organizations, or the normative systems and the systemic responses for ethical dilemmas (Victor & Cullen, 1988), is less applicable for entrepreneurs. Once again, these organizational implementations are not accounted for as a dependent variable in his conceptual model. Likewise, Solymossy and Masters (2002) posit that codes of conduct is a significance factor in moderating the influence of situational characteristics on ethical behaviour. However, their entrepreneurial model also uses codes of conduct to explain and predict ethical behaviour, not regarding such an implementation as a stage neither. In ‘criteria’ models, Strong and Meyer (1992) state regulations as an environmental restraint to managerial decision making, without depicting it further in their model. Neither does their model detail their use of Aupperle et al. (1985)’s 20-set, 80-item measurement tool of corporate responsibilities. In this case, determining whether or not these constructs measure ethical implementation is therefore difficult to us. Vyakarnam et al. (1997)’s four major themes (entrepreneurial activity, social responsibility, conflict of interest, and personality issues) do not seem to directly related to ethical implementation too. Though their model includes professional
codes, e.g., industry norms, professional ethics, the use of mentors, revelation ethics, and balancing legal and moral duties, they are mostly external-based codes that are not necessarily aimed at small business (Vyakarnam et al., 1997). The implementation of these codes of business ethics seems not a stage in their model too. In contrast, Longenecker et al. (2006) note the inappropriateness of some institutional factors in guiding ethical standards and actions in small businesses. Formal ethical decision-making enhancements such as ethical policies and an established code of ethics, for example, are less prevalent in small businesses than large corporations (Robertson, 1991). Informal systems in ethical decision-making that are evolved naturally seem to be more appropriate as an institutional factor in a new venture. Though, when small businesses grow with public accountability, organizational norms and reward systems, their ethical decision-making will be more formal and more shaped. Their model nonetheless follows a similar line of thought in usual organizational models, regarding institutional infrastructure as a factor to impact ethical standards, but not explaining how institutional infrastructure is explained by entrepreneurial ethics.

The lack of discussion on the ethical implementation in current models might be explained by their general and organizational nature, which makes it hard to integrate specific implementation actions as an implementation stage into their models. Even if these implementation actions are integrated, their infrastructural outcome is regarded as an established factor to impact ethical behaviour of organization members, given their focus in organization context. To the entrepreneurs, these implementation infrastructures are something to be built in their new venture, in their transition to established organizations. Thus these implementation infrastructures are not a criterion, but a stage in entrepreneurial models. In addition, consequences of ethical and unethical behaviour are not comparable to those of ethical implementation, which will develop and form organizational ethics for future ethical behaviours (Fiorelli & Tracey, 2007). These long term ethical behaviours can result in “increased trust with customers, employees, and business partners… as well as [lowered] business costs” (Detert, Treviño, Burris, & Andiappan, 2007). In other words, ethical implementation has long term benefits to businesses. Therefore, this stage of ethical implementation has to be accounted for in the current models, when making the argument that ethics is a critical success factor of entrepreneurship authoritative in the new venture’s context.
2.3.3.5 Entrepreneurial Performance and Success

Fifth, the review table gives us the idea that existing models have not proposed a formal relationship between ethical decision and entrepreneurial performance and success of new ventures.

Treviño (1986) mentions a lack of formal relationship between ethical decision and managerial performance and organizational effectiveness in organization as well. Whether or not managers’ ethical decision making is connected to more general measures of managerial performance and organizational effectiveness are called for research (Treviño, 1986). Moral judgment development might predict managerial performance in jobs with complex ethical problems, while unethical or illegal decisions might leave an organization to face lawsuits with severe financial consequences and bad public image (Treviño, 1986).

The minority of consequences of individual-level ethical/unethical decision making as in the research has been pointed out in Treviño et al. (2006) too. Positive consequences of ethical leadership begins with positive employee attitudes, willingness to report problems to management (Brown, Treviño, & Harrison, 2005), increased trust with customers, employees, and business partners, fewer cases of stealing and wasting of organizational resources by employees that leads to lowered business costs (Detert et al., 2007), and higher level of job satisfaction for employees (Román & Munuera, 2005). Negative consequences are also studied eg, negative fate of employees that risk reporting misconduct (Miceli & Near, 1992; Treviño & Victor, 1992), and negative consequence of management fraud on various stakeholder groups (Zahra, Priem, & Rasheed, 2005). These positive and negative consequences of ethical/unethical behaviour are thought depending on an organization’s normative environment (Treviño, 1986). Solymossy and Masters (2002) also connect their process outcomes (ie, awareness, judgment/intent and behaviour) to these consequences as antecedents (Reidenbach & Robin, 1988). To them, process outcomes and consequences are two distinguishable concepts in their model. Whether these two concepts show discriminant validity and inter-influences is an important focus in the research (Solymossy & Masters, 2002).

These consequences of managerial performance and organizational effectiveness can however be regarded as means to ends of entrepreneurial performance and success such
as net profits, total incomes/revenues, growth percentage, and survival time of start-ups (see Section 5.3). A proven ethical impact to managerial performance and organizational effectiveness will thus support the critical success factor belief, although these managerial performance and organizational effectiveness, unlike financial performance, are seldom considered as entrepreneurial or business success, therefore ethical impact to entrepreneurial performance and success such as growth percentage, and survival time of start-ups will need future research.

These above research gaps of entrepreneurial models of ethical decision making are then summarized in the following table (see Table 2). The left column shows the research gaps of existing models in the table. These research gaps of models are then connected to the middle column of our research questions. We will also give an idea of how such the investigation of model gaps can help us verify the CSF belief in the right column of table.

<table>
<thead>
<tr>
<th>Research Gap</th>
<th>Research Question</th>
<th>Significance of Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash or financials are only integrated to a small extent in the existing models</td>
<td>How are cash or financial considerations compared with ethics with respect to the impact on ethical decision?</td>
<td>Cash or financials trade-offs with ethics can invalidate the CSF belief</td>
</tr>
<tr>
<td>Ethical tolerance is not integrated</td>
<td>How does ethical tolerance implicate ethical decision?</td>
<td>Ethical tolerance’s confounding effect can invalidate CSF belief</td>
</tr>
<tr>
<td>Technological impact is not integrated</td>
<td>How are the implications of technology rippled to ethical decision?</td>
<td>Technological impact’s confounding effect can invalidate CSF belief</td>
</tr>
<tr>
<td>Not to continue the research on the details of ethical implementation</td>
<td>How can ethical implementation be impacted as a result of ethics in the SME?</td>
<td>Ethical impact to the ethical implementation can strengthen CSF belief</td>
</tr>
<tr>
<td>No relationship between ethical decision and entrepreneurial performance and success</td>
<td>Is ethical decision making linked to entrepreneurial performance and success?</td>
<td>The link between ethical decision and entrepreneurial performance and success can strengthen CSF belief</td>
</tr>
</tbody>
</table>

2.3.3.6 The Importance of Context

Ethical decision making models are a powerful tool for us, whose minds have cognitive limits, to frame the ethical decision making of entrepreneurs. That said, a model per se defines certain assumptions of the real world and compasses perspectives of the real
world in which it is valid and pertinent. In this light, these models represent a simplified world so that we can understand and look into the real world. The simplicity of these models has two sides of a coin though. On the up side, these models help open a door for us to know about ethical decision making; however, on the down side, people tend not to examine the assumptions and assess the alternatives of these models further, when such models are used in a new context (McCaskey, 1991). Due to the fact that most of these models are developed from a large corporation context, so when used in a small business context, the context can have an impact on these models. The importance of context is integrated through two ways in the existing models. One way is to include the characteristics of moral issue itself as moral intensity (Jones, 1991), while integrating the characteristics of situation as situational characteristics is another way in these models (Kelley & Elm, 2003; Treviño, 1986).

Jones (1991) argues that “these [ethical decision making] models are collectively reasonably comprehensive”, but “none of the previous models of ethical decision making explicitly includes characteristics of the moral issues itself as either an independent variable or a moderating variable”. He contends that ethical decision making is issue contingent. That means “the characteristics of the moral issue itself are important determinants of ethical decision making and behaviour” (Jones, 1991). He then uses the moral intensity with six characteristics (magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect) to capture their relationships with ethical decision making and behaviour. Such the role of moral intensity as the substitute of a real issue is however subject to question. The key query is whether the moral intensity is valid to capture a real issue. The former is only the characteristics of the latter, but not the latter per se. However, moral intensity is often supposed sufficient to capture a real issue, in terms of their impact to ethical decision. These current models thus integrate moral intensity into them, as if it has accounted for a real issue.

Kelley and Elm (2003) also point out the distinction between moral intensity and a real issue’s context, whose importance is played down in current models. The context is argued to give meaning to decisions and problems (Beach & Connolly, 2005; Marshall & Dewe, 1997) that have a role in decision-making process (May & Pauli, 2002; Weber & Wasieleski, 2001). Their model follows Treviño (1986) in describing organizational setting and organizational factors eg, group dynamics, authority factors, and
socialization processes, as organizational context. This construct of organizational context has been documented as a factor influencing decision making (Kelley & Elm, 2003). This organizational context is posited to affect moral intent and behaviour (Jones, 1991), while contextual effects have been demonstrated to help frame and make decisions (Kahneman, Slovic, & Tversky, 1982). Apart from these contextual effects on decision making, it is argued that moral intensity is affected by organizational context as well (Kelley & Elm, 2003) (see Figure 17). In other words, there is interplay between moral issue and organizational situation in their model.

**Figure 17: Reconfigured Issue-Contingent Model of Ethical Decision Making in Organizations (Kelley & Elm, 2003)**

These two ways of integrating the context into current models have a common research gap – the validity of these abstract constructs as a substitute of a real context. Moral intensity uses six characteristics of moral issue to substitute moral issues, similar to the use of situational characteristics to substitute a situation. Both moral issue and situation are, however, only part of a real context. These current models are also often tested through hypothetical vignettes, but not real situations. Hence, the use of vignettes does not inject a full background information and detail into an ethical decision (Fritzsche & Becker, 1982), such that these vignettes cannot examine assumptions and assess
alternatives of these models in real situations. The validity of these abstract constructs as a substitute of a real context is therefore under question. In other words, moral intensity and situational characteristics might not be able to capture the complexities of a real context.

These abstract constructs are common because of the want to generalize current models across different contexts. Thus the validity of these constructs in capturing a real context can undermine the generalizability of these models across different contexts. Assumptions and alternatives held valid in one context might not be appropriate for the others. The extension of these models from a large corporation context to a small business context proves the importance of context, because it invalidates nearly completely the organizational characteristics as a factor to impact the ethical decision of small business. Therefore, although moral intensity and situational characteristics are used in the current models, it is argued that these current models should be studied in real contexts instead. The examination of these models in real contexts helps clarify the limits within which the generalization of these models is valid.

Accordingly, because of the importance of context, we will bring existing ethical decision making models into a real context ie, social insurance decision of entrepreneurs.

2.4 Chinese Context
Existing literature has not contributed much in investigating ethics and entrepreneurship in China. In this century, the centre of gravity of economic growth and competitiveness is shifting toward China. There is a rise of research interest and publications on ethics and entrepreneurship in China among high quality academic journals. Brown (2002), for example, investigates the positive or negative effect of Chinese entrepreneurs on social justice and business ethics in China. In the 2013, Business Ethics also call for papers on business ethics, to address a wide range of relevant issues for family and non-family firms, privately held and publicly traded firms alike. These business ethics issues will be reliant for sustainable growth and development of these firms, in one of the largest economies in the world.
2.4.1 Ethical Values

Chapter 1 has stated that, our research direction is not about endogenous research, but exogenous research of ethics, so we will provide a brief account of our understanding of ethics (ie, ethical values), from which we will examine the theories of causation between ethical values and social insurance (Parker & Nielsen, 2009).

This thesis understands ethics as ethical values – ie, ethical values but not ethical decision of individuals. Ethical values of individuals are ideas that can govern individual’s conduct. Numerous ethical values are however out there, hence the need to select relevant ethical values for a context. These relevant ethical values should be considered critical to the entrepreneurial success, while retaining their relevance to the social insurance context. Our aim is to bring together ethical values that connect to the entrepreneurial success through social insurance practices. These relevant ethical values should also come from common moral sources in China.

The scholars that argue for the critical success factor belief do not often state the relevant ethical values explicitly. Timmons (1994), for example, only affirms the importance of high ethical standards and integrity, but he does not detail the relevant ethical values critical to long-term success. Timmons and Stevenson (1984) neither detail their focused ethical values. Chow (2003) observes that the gospels of religious belief of businesspersons affect their ethical values in doing business, while Chia (2012) found integrity as the single most important trait to take in helping an entrepreneur to achieve real business successes. Neither of them explains their meaning of ethical values further. Chung and Ip (2008), however, detailed the Confucian list of repellant character of an entrepreneur that is not morally acceptable, which can destroy the possibility of being trusted by others, in order to long-term survive in the business word (see Section 2.1). This list of repellant characters comes from moral sources in Chinese tradition.

The emergence of and development of entrepreneurial ethics are driven by four moral sources in China (Xiaohe, 1997). These four moral sources are: the inheritance of Chinese traditional ethics, the influence of Marxist philosophy and ethics, the reflections on the economic reform, and the influence of business ethics from abroad (Xiaohe, 1997). The Chinese traditional ethics often refers to Confucianism, but includes Daoism, Mohism, Hundreds Schools of Chinese philosophies and other
Chinese philosophies from Han dynasty even to Republic era. The Marxist philosophy and ethics work with Leninism, Maoism and other Socialist philosophies and ethics to form a Marxism source. The latter two sources – the reflections on the economic reform, and the influence of business ethics from abroad – can be deemed as economic values, and political or social values from the reflections and influences of globalization. Therefore these three moral sources (Chinese tradition, the Marxism, and the globalization) will be briefly described to select relevant ethical values in this section.

2.4.1.1 Chinese Tradition

Confucius defines familism, in particular, xiao (filial piety) (孝) as the stem virtue among moral virtues in Chinese tradition. This familism virtue is the most critical one in Confucianism, also a common virtue in Chinese tradition too. Familism can be directed to both parents and other family members, for instance, the idea of parental duty to ‘train’ children and the idea of fraternal respect. Three family relations – between father and son, between husband and wife, and between old and young – are also involved in five constant relationships (Fetzer & Soper, 2007). These three family relations are the root of other two non-family relations – between sovereign and minister, and between friends – as well. In addition, filial piety is described as “the root of all benevolence actions” in the Analects (Fetzer & Soper, 2007). Thus, these preferences of loyalty to the family ie, family loyalty, is a distinguished component of Confucian values (Fetzer & Soper, 2007).

The familism value is also connected to ethics and entrepreneurship. Anti-familism virtues ie, bad to their parents, and bad to their brothers and sisters are deemed as repellent characters of entrepreneurs, which will make them not survive very long (Chung & Ip, 2008), as their stakeholders will sooner or later find out and abandon the venture. In addition, family relationship is the basis of particularistic relationships and guanxi connections too, which are deemed important to Chinese entrepreneurs (Brown, 2002).

The entrepreneurs who subscribe to familism value will prefer family as a unit to provide protection to elderly and to provide nurturing to children. That means family should take care of the welfare of its members, rather than the society. This point of view thus connects familism to social insurance. Strongly familist entrepreneurs tend to believe that, individual welfare is the responsibility of family rather than that of society;
hence they tend not to support social insurance, particularly basic endowment insurance and maternity insurance. This opposition attitude towards social insurance and social policies popularizes Confucian welfare states as a label for the unique welfare model of nations in Chinese Cultural Sphere (Andersen, 1999; Aspalter, 2001; Dixon, 1981; Esping-Andersen, 1990; Goodman & Peng, 1996; Holliday, 2000; Jones, 1990, 1993; Kwon, 1997; McLaughlin, 1993; Walker & Wong, 2005). Thus we propose that familism should be included as an ethical value that influences the social insurance decision of entrepreneurs.

The Chinese traditional ethics has a focus on integrity as well. The anti-virtues of integrity eg, lying and being dishonest to people is deemed as a repellent character of entrepreneurs, thus connects integrity to entrepreneurship (Chung & Ip, 2008). Credit and trust are regarded as a crucial and important factor in the formation of solid business relationships for long term success (Chow, 2003), while integrity is also found as the single most important trait to achieve real business successes (Chia, 2012). The entrepreneurs who subscribe to integrity will emphasize proper behaviour to employees, so they will provide social insurance as a basic protection to their employees.

There is also an old and recurrent relationship between “Yi” and “Li” in Chinese traditional ethics (Xiaohe, 1997). Yi means the principle or norms of fairness and Li refers to benefits or profits (Xiaohe, 1997). The notion of fairness is argued as indissoluble to that of profits (Chen & Chung, 1994), because fairness is understood as a noble character more attended to achieving profits in a moral way (Xiaohe, 1997). The entrepreneurs who subscribe to fairness will prefer distributing a basic protection of social insurance to their employees, instead of retaining profits completely for themselves.

2.4.1.2 The Marxism
This traditional values about the relationship between fairness and profits is further strengthened by the understanding of Marxism in China (Xiaohe, 1997). In particular, the tendency to value fairness more than profits is reinforced. Communist morality is held together with economic changes, which stimulates entrepreneurs to combine fairness and profits in economic reforms (Xiaohe, 1997). That said, the stem value of Marxism, work ethics, seems to be overlooked in Xiaohe (1997).
Marx states that the labour time required to produce the wage and benefits of a staff is the determination of their value in work (Marx, 1875). A labour who works harder and longer should receive more value of work than his colleagues. Hard work is therefore tightly connected with the value of work. In addition, hard work is deemed as a main concept in “socialist core value system” in China too. This hard work concept is launched among the list of Eight Honours and Disgraces as the moral and ideological foundations for social harmony in China (Yan, 2006):

- Love the country; do it no harm.
- Serve the people; never betray them.
- Follow science; discard ignorance.
- Be diligent; not indolent.
- Be united, help each other; make no gains at others' expense.
- Be honest and trustworthy; do not sacrifice ethics for profit.
- Be disciplined and rule of law; not chaotic and lawless.
- Live plainly, work hard; do not wallow in luxuries and pleasures.

This list promotes diligence, plain life, hard work, no indulgence, no wallow in luxuries and pleasures as socialist values in China. The entrepreneurs who subscribe to these work ethics will prefer their staffs to work hard earning for their livings and protection, thus opposing social insurance (Lane, 2001).

In contrast, Marx has a famous maxim, ‘from each according to his ability, to each according to his needs’, as his principle of distribution (Marx, 1875). This principle followed, he ought to be supportive towards social insurance and social policies, because these policies maintain a distribution justice in his communist ideal. Thus, there are two opposite influences of Marxism to social insurance. One side is work ethics, which opposes social insurance. Another side sits Marxist morality on distributive justice, which supports social insurance instead. Hence, the net influence of Marxism to the decision of social insurance is not clear.

The net influence of Marxism, however, might not be too pertinent to us, since our main aim is to select relevant Marxist ethical values that are connected to both social insurance and entrepreneurial success. In this case, work ethics are more relevant. Hard work is suggested to distinguish successful entrepreneurs from unsuccessful
entrepreneurs (Timmons, Smollen, & Dingee, 1977). This hard-working value is claimed as an importance success factor by half of the interviewees in Chow (2003) too. Therefore work ethics is the more relevant ethical values in Marxism. In contrast, Marx’s supportive view to social protection is less irrelevant for our purpose. In particular, it does not seem to have a big role for entrepreneurial success, thus it is excluded from our examination of social insurance. Therefore we only propose that work ethics will influence the decision of social insurance of entrepreneurs.

2.4.1.3 The Globalization

The emergence and development of business ethics in China are increasingly influenced by the western economic, political and social values that come with globalization as well. These western values are discussed separately, because of their divergent effects to social insurance. Economic values (eg, economic man, invisible hand, utilitarianism and free market) are pervasive among entrepreneurs and businesses in the economic reform era. These values can be the deterrent for business ethics in the past decade in China. The main assumption in these economic values is individualism (or rationalism), which has an increasing acceptance in China. Contrast to the popularity of economic values is western political and social values. These political and social values such as democracy, interdependence, rule of law, distributive justice, business ethics or social protection cannot find a solid root to flower in China (Whitcomb, Erdener, & Li, 1998). In other words, individualist culture seems to have a stronger influence to China, which was regarded as a collectivist society traditionally (Hofstede, 1980; Peterson, Rodriguez, & Smith, 2000; Yeh & Lawrence, 1995).

The entrepreneurs influenced by individualist cultures are relatively more biased toward alternatives favouring individuals, instead of options favouring members of less explicitly defined and longer-lasting in-groups eg, societies in collectivist cultures (Peterson et al., 2000). Their individualist focus will emphasize independence of staffs in social insurance. These staffs should look after themselves and their families, making compliance of social insurance unlikely. In contrast, the opposite ie, collectivist focus of entrepreneurs stresses role-based decisions (Weber & Hsee, 2000; Weber, Tada, & Blais, 1998) and connectedness (Tse, Lee, Vertinsky, & Wehrung, 1988) in a social context. The strong ties of entrepreneurs to their societies will increase their compassion for their staffs, making their compliance of social insurance likely (Lane, 2001). Besides, this individualist or independence value is found to be a motivational factor to entrepreneurs.
(Oakey, 2003), being a key driver for the success of entrepreneurs (Thérin, 2007). Thus we propose that individualism will negatively influence the decision of social insurance, in contrast to the positive influence of anti-individualism ie, collectivism.

The political and social values of rule of law and distributive justice from western values of globalization have obvious relationships to social insurance too. We therefore do not explain the relationships further. Rule of law is nonetheless chosen as a relevant ethical value, due to its relevance to entrepreneurial success. Breach of law, for example, can close an entrepreneur’s start-up, but a dishonour of distributive justice seldom fails a venture. The entrepreneurs who agree with rule of law (Rawls (1971)) therefore will hold legal compliance to social insurance in China.

The above discussion of three moral sources therefore results in following relevant ethical values with their relationships to social insurance compliance of entrepreneurs (see Table 3). In the table, the left column shows the relevant ethical values, while their connections to social insurance compliance are shown in the right column of the table.

<table>
<thead>
<tr>
<th>Ethical Values</th>
<th>Social Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familism</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Integrity</td>
<td>Compliance</td>
</tr>
<tr>
<td>Work ethics</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Anti-individualism</td>
<td>Compliance</td>
</tr>
<tr>
<td>Rule of law</td>
<td>Compliance</td>
</tr>
</tbody>
</table>

These relevant ethical values – familism, integrity, work ethics, anti-individualism and rule of law – which are rooted from Chinese tradition, the Marxism and the globalization, are proposed to influence the compliance decision of social insurance. Each ethical value has its own direction of impact to social insurance. Most existing ethical decision making models however assume ethics to have a single direction of impact to ethical decision. This nonetheless masks the complexities involved in social insurance decision-making. The divergent directions of impact of relevant ethical values to social insurance decision show that more in-depth analysis of ethical values is needed in social insurance context (see Section 3.4.4).
To sum up, while the above brief account of our understanding of ethics might not be complete for doing an endogenous research of ethics, we do not want to engage too much on the social construction of ethics, otherwise our focus of grasping the causation between ethics and social insurance will be diverted. The above brief account of ethics should therefore be sufficient for us to move on our research agenda.

2.4.2 Social Insurance

In September 2004, the State Council Information Office ("SCIO") launched an official publication about China’s Social Security and Its Policy (2004) (State Council Information Office, 2004). This publication stated that “social security is one of the most important socio-economic systems for a country in modern times”. Thus the social security system was established and improved to include social insurance, social welfare, special care and placement system, social relief and housing services. In particular, social insurance was considered “the core of the social security system” in China (State Council Information Office, 2004). On 29 June 2007, it was stated that a labour contract should include the social security as a clause, and where an employer failed to pay social security premiums for the employees, its employees might dissolve the labour contract, in the labour contract law (Standing Committee of the 10th National People's Congress, 2007).

On 28 October 2010, the Standing Committee of the 11th National People’s Congress issued Social Insurance Law of People’s Republic of China in its 17th meeting (Standing Committee of the 11th National People's Congress, 2010). This social insurance law, together with The Several Provisions on Implementing the Social Insurance Law of the People's Republic of China that was deliberated, adopted and promulgated on 29 June 2011 (Ministry of Human Resources Social Security, 2010), came into force on 1 July 2011. This law was formulated for the purpose of regulating social insurance relations. A social insurance system was established to include basic endowment insurance, basic medical insurance, employment injury insurance, unemployment insurance, and maternity insurance, to guarantee the rights of citizens to legally obtain material assistance from the state and society in case of old age, illness, work-related injuries, unemployment, and childbirth (Standing Committee of the 11th National People's Congress, 2010).
The basic endowment insurance is established to “guarantee the basic living standards of the elderly and safeguard their legitimate rights and interests”, through “a multi-level basic endowment insurance system marked by sustainable development” (State Council Information Office, 2004). This basic endowment insurance is improved and reformed in the law: 1) the insurance for enterprise employees in both urban and rural areas is reformed, with different systems across the country unified and a social-pool-plus-personal-account scheme implemented; 2) the coverage of insurance is expanded, from only state-owned enterprises and collectively-owned enterprises in urban areas, to foreign-invested enterprises, private enterprises and other types of enterprises, persons engaged in individual businesses of industry or commerce, all those who were employed in a flexible manner, rural residents, and urban residents who were not employed; 3) joint premium payment by both enterprises and employees is practiced, and; 4) the management and services for the insurance are socialized from enterprises to the government. In the basic medical insurance, it combines social pool and personal accounts for both urban and rural employers and employees, which covers employees and retirees of all government agencies, public institutions, enterprises, mass organizations and private non-enterprise units (State Council Information Office, 2004). Then, the established employment injury insurance for work-related injuries includes work-related injury prevention, compensation and recovery (State Council Information Office, 2004). All enterprises and all individual businesses engaged in industry and commerce with employees have to participate in the insurance, and pay insurance premiums for all their employees, permanent as well as temporary. Individual employees are not required to pay such premiums. The rates of these premiums are differential according to the degree of risk of work-related injuries involved in different sectors eg, insurance payment usages and occurrence rates of such injuries. While, the unemployment insurance is set up to guarantee the basic livelihood of employees after they lose their jobs, and to help them find new jobs (State Council Information Office, 2004). All enterprises and institutions in both urban and rural areas and their employees have to participate in this insurance, including farmers-turned-contract-workers who are employed by enterprises and institutions in urban areas. In the maternity insurance, the insurance program is introduced to cover both urban and rural enterprises and their employees, and employees of government agencies, public institutions, mass organizations and enterprises (State Council Information Office, 2004). Employers, whether or not participating in this insurance scheme, will still be responsible for providing relevant insurance benefits.
The social insurance law compels an employer to pay social insurance premiums in accordance with it (Article 4). The social insurance premiums of employers include all the five social insurances, while the basic endowment insurance, basic medical insurance and unemployment insurance are jointly paid by employers and employees (Articles 10, 23, 33, 44 and 54). These insurance premiums have to be paid by an employer as per the percentage of the total wages of his/her employees prescribed by the state (Article 12) (see Table 4).

**Table 4: Social Insurance Premiums (Bai, 2012)**

<table>
<thead>
<tr>
<th>Social Insurance</th>
<th>Employee Premiums (%)</th>
<th>Employer Premiums (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Endowment Insurance</td>
<td>8%</td>
<td>~20%</td>
</tr>
<tr>
<td>Basic Medical Insurance</td>
<td>2%</td>
<td>~6%</td>
</tr>
<tr>
<td>Employment Injury Insurance</td>
<td>0%</td>
<td>0.5% - 2%</td>
</tr>
<tr>
<td>Unemployment Insurance</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Maternity Insurance</td>
<td>0%</td>
<td>&lt;= 1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11%</strong></td>
<td><strong>~31%</strong></td>
</tr>
</tbody>
</table>

An employer has to, within 30 days from the date of its formation, apply to the local social insurance agency for social insurance registration upon the strength of its business license, registration certificate or official seal (Article 57). This registration is required within 30 days from the date of employment as well (Article 58). A critical article is – employers have to voluntarily declare and pay social insurance premiums on time and in full amount, and no postponement, reduction or exemption of payment is allowed without any force majeure or other statutory cause (Article 60), as it defines non-compliance/compliance of employers. In spite that 110% of the amount of premiums payable by the employer will be determined in declaration failure (Article 62), and that the payment or makeup of the deficit of premiums will be required in payment failure (Article 63), existing social insurance supervision is not too effective in compelling a complete execution of the law by employers. The stated legal liabilities (Article 84) are not necessarily able to force the employers compliant to the social insurance law.

An entrepreneur has to, when setting up a new company, decide whether or not he or she will apply for social insurance registration. This registration will be required when he or she employs a new employee. Whether or not he or she declares and pays social
insurance premiums on time and in full amount will also be a social insurance compliance decision. Non-compliance decisions are ones that are not compliant to the law at full; else full-compliance to the law will be considered as compliance decisions. In particular, not handling social insurance registration, and circumventing or escaping are deemed as non-compliance actions of implementation, whereas providing a minimum standard, and an improved implementation of social insurance are considered as compliance actions of social insurance implementation.

Current literature does not have sufficient information about social insurance registration and compliance in China. A researcher must have a strong relationship with the Government in order to access official social insurance auditing statement. Nyland et al. (2006), for instance, have the Shanghai 2001 data for 2,234 randomly sampled firms, due to the backup of Shanghai Bureau of Labour and Social Security (“SBLSS”). This official social insurance auditing database includes the industry, ownership, size (number of employees), social insurance compliance (whether the firms underpaid, paid or overpaid prescribed amount), and the respective paid amount of the firms. The same Shanghai 2001 data is also reported together with 2002 to 2004 data in Maitra, Smyth, Nielsen, Nyland, and Zhu (2007) and Nyland, Hartel, Thomson, and Zhu (2012).

Nyland et al. (2006)’s results suggested that 1,586 (70.99%) firms paid less than prescribed amount, 106 (4.74%) firms paid the prescribed amount and 542 (24.26%) firms paid more than prescribed amount in Shanghai 2001. The size of firm, ownership structure and industry (the incidence of risk) are evidenced to influence employer evasion behaviour in social insurance payments. Maitra et al. (2007) then examined why firms complied or over-complied with social insurance obligations in a weak regulatory environment from 2001 to 2002. A higher probability of being re-audited for non-compliance firms was found to reduce the extent of underpayment, and to increase likelihood of complying in order to return to the compliance category on the audit record. Nyland et al. (2012) subsequently drew on 2001 to 2004 audited data to argue that the impact of the industry (sensitivity to shaming) could not be supported, such that shaming did not appear justified as an important social insurance enforcement mechanism in China.

These current studies, however, seldom investigate social insurance compliance decision at the individual level of entrepreneurs, general managers, chairmen, or etc.
(Maitra et al., 2007; Nyland et al., 2012; Nyland et al., 2006; Rickne, 2013). Instead, these three articles utilized firm demographic variables (size of firm, ownership structure and the industry) to explain employer responses to social insurance regulations (Maitra et al., 2007; Nyland et al., 2012; Nyland et al., 2006). These demographic variables are only a representation of decision criteria, but not the real criteria that are considered for the compliance of employers. Thus these results can only claim that a particular set of employers (in terms of demographic variables) can have similar decision criteria that impact their compliance, but it is hard to construct the direct thesis that a particular decision criterion would impact their compliance. One way to fill in this research gap is to extend our understanding of compliance decision to individual level.

Nyland, Thomson, and Zhu (2011) therefore aim to expand the current literature by providing an employer model of regulatory compliance in social insurance. Their article utilized Shanghai 2006 data for eight case studies, to detail how employers responded to social insurance. The construction of an effective social insurance policy, levelling playing field, cost control, firm reputation, and recruitment and retention are five employer concerns in their perception and response to social insurance regulation; whereas risk factors, skill composition of their workforce, and form of ownership are also three enterprise features associated with employer compliance behaviour. Due to their use of qualitative method, their findings and their model requires further evidence – hence their research is further examined by both qualitative and quantitative methods in our research (see Chapter 5.2).

At the time of writing, no literature has researched compliance decisions under the new social insurance law of 2011, thus we consider it to be of research interest. Some high level information is nonetheless available on The Ministry of Human Resources and Social Security (“MOHRSS”). The MOHRSS, for instance, organized a collection of social insurance registration and compliance special auditing actions irregularly from 2005 to 2012 (see Table 5).

<p>| Table 5: Official Social Insurance Auditing Statement (Ministry of Human Resources Social Security, 2013) |
|-------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| <strong>Year</strong> | <strong>2005-2007</strong> | <strong>2010</strong> | <strong>2011</strong> | <strong>2012</strong> |
| Total Audited Companies | 1,230,000 | 2,210,000 | 2,040,000 | 2,120,000 |
| Total Involved Workers | 110,200,000 | 141,850,000 | 162,870,000 | 175,150,000 |</p>
<table>
<thead>
<tr>
<th>Total Underreporting Workers</th>
<th>8,610,000</th>
<th>6,760,000</th>
<th>6,670,000</th>
<th>8,160,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Unpaid Premiums (Rmb)</td>
<td>5,400,000,000</td>
<td>2,700,000,000</td>
<td>3,500,000,000</td>
<td>3,500,000,000</td>
</tr>
<tr>
<td>Total Recovered Premiums (Rmb)</td>
<td>5,100,000,000</td>
<td>2,500,000,000</td>
<td>3,400,000,000</td>
<td>3,200,000,000</td>
</tr>
<tr>
<td>Worker Compliance Percentage</td>
<td>92.19%</td>
<td>95.23%</td>
<td>95.90%</td>
<td>95.34%</td>
</tr>
<tr>
<td>Underreporting Workers per Company</td>
<td>7</td>
<td>3.06</td>
<td>3.27</td>
<td>3.85</td>
</tr>
</tbody>
</table>

From 2005 to 2012 the MOHRSS has increased its social insurance supervision in terms of number of total audited companies and total involved workers. Using the data of total involved workers and total underreporting workers, we discovered that worker compliance percentage increased from 92.19% for 2005-2007 to 95.23% in 2010, and then remained stable at 95.90% in 2011 and 95.34% in 2012. The worker compliance percentage was thus similar before and after the 2011 law. However, since the data of total underreporting companies is not announced, hence we cannot use it to determine company compliance percentage during this period.

Comparing Shanghai 2001’s SBLSS and national 2005-2012’s MOHRSS data, the respective compliance percentages are rather different. The firm compliance percentage (29%) in Shanghai 2001 (Nyland et al., 2006) did not have a similar magnitude to the worker compliance percentage (~95%) nationally in 2005-2012 (Ministry of Human Resources Social Security, 2013). Though this firm-to-worker comparison is an apple-to-orange comparison, their difference (29% versus ~95%) requires some explanations. Assuming both the Shanghai 2001 and national 2005-2012 data are correct, there can be two explanations for such the incoherence. The regional or time difference of data might be an explanation, but this is less probable given a large difference in these percentages. Another probable explanation is that, while these firms have a small number of non-compliance workers ie, three workers per company, there are a large number of compliance workers in these firms. In that case, despite that most workers would be compliance, most firms would nonetheless be non-compliance then, as shown in the Shanghai 2001 and national 2005-2012 data.

The social insurance discussion in this section will therefore offer a context for us to examine the individual level compliance of entrepreneurs after the 2011 law.
Chapter 3 Theoretical Model

3.1 Towards a Research Model

Chapter 2 has reviewed the literature on the ethical decision making of entrepreneurs and social insurance decision’s context in China. Past research concerning ethical decision making of entrepreneurs, in particular, Solymossy and Masters (2002), will be drawn from to develop a model on entrepreneurial and small business’s social insurance. This entrepreneurial model on social insurance will then be connected to our findings on entrepreneurs’ and small business’s social insurance in the next chapter.

Most current ethical decision making models often do not only focus on entrepreneurs. One of few models is Solymossy and Masters (2002). Solymossy and Masters (2002) propose a model of ethical decision making for small business entrepreneurs with three stages and one criterion: recognizing moral issues, making moral judgments, cognitive moral development, and engaging in moral behaviour (see Figure 10). Their entrepreneurial model has been briefly discussed in Section 2.3.2.1. Beginning their work on small business ethics, however, they suggest that “we do not need a separate model to explain the ethical decisions of small business owners”, because the “processes and influences on the processes are the same” between non-entrepreneurs and entrepreneurs, despite the differences in “the issues they recognized, their judgments concerning those issues, and their level of cognitive moral development” (Solymossy & Masters, 2002). We partially agree and partially disagree with their suggestion – while Rest (1986)’s four-stage model can be based on for entrepreneurs, the reviewed models seem to have some research gaps (see Section 2.3.3), from a complete profile of entrepreneurs in our view. The research gaps of current models – cash versus financials, ethical tolerance, technological impact, and ethical implementation – are considered particularly relevant to entrepreneurial context. In addition, the impact of real context through moral intensity and situational characteristics has a validity issue in substituting a real context as well. The importance of context leads us to bring the ethical decision making models in to the social insurance decision of entrepreneurs.

Solymossy and Masters (2002) is our base model as a result, to develop a new model of the ethical decision making of entrepreneurs, with the research gaps filled in, in order to explain a social insurance context. Then the steps and determinants of ethical behaviour
in entrepreneurs are examined. The original ones are retained as appropriate, with the research gaps filled up by the new ones.

First and foremost, we examine the stage and the step of ethical decision making model of entrepreneurs in Solymossy and Masters (2002). Unlike the Rest (1986)’s model which has four steps – recognizing the moral issue, making a moral judgment, resolving to place moral concerns ahead of other concerns (establishing moral intent), and acting on the moral concerns, these four steps are combined into three steps – recognizing moral issues, making moral judgment (establishing intent), and engaging in moral behaviour – together with cognitive moral development (“CMD”) in Solymossy and Masters (2002). Solymossy and Masters (2002) recognize that “the proponents of these models disagree on the number and sequence of the steps as well as the antecedents which influence each step, [while] they agree that individuals can differ at each of the steps”, and that “CMD is viewed variously as an input to the process, as a step in the process, as an outcome of the process, or as some combination of the three”. They nonetheless have not explained why their number of the steps is three and why CMD is viewed as some combination of an input to the process and a step in the process. Our research model retains their three steps – recognizing moral issues, making moral judgment (establishing intent), engaging in moral behaviour – not only because of they are our base model, but also because small business is different in these three steps, hence their relevance to our entrepreneurial context. In the recognizing moral issues step, small business owners seem to define differently what ethical dilemmas they face from other business people (Vyakarnam et al., 1997). Four themes of ethical dilemmas – entrepreneurial activity itself, conflicts of personal values with business needs, social responsibility and the impact of owners’ personality on business ethics – are identified (Vyakarnam et al., 1997). Owners have significant differences on the moral perceptions on 12 of the 16 scenarios from managers as well (Longenecker et al., 1989). The differences of how small business owners resolve ethical dilemmas are also found in Vyakarnam et al. (1997). The moral judgment and intent is found vary significantly with size of the business in the step of making moral judgment step (establishing intent) too (Enz, Dollinger, & Daily, 1990; Murphy, Smith, & Daley, 1992). In the engaging in moral behaviour step, Solymossy and Masters (2002) do not found studies that compare moral behaviour between entrepreneurs and other business people, except Humphreys, Robin, Reidenbach, and Moak (1993). Humphreys et al. (1993) found entrepreneurs are more consistent between moral judgment and moral behaviour than their customers. The
difference of small business thus justifies the retaining of these three steps in our research model.

Second, we concern with the role of cognitive moral development in Solymossy and Masters (2002) too. The role of CMD is fuzzy in their model. On the one hand, the CMD is viewed as a step after judgment/intent and before behaviour in the process in their text. On the other hand, the level of CMD is also viewed as an input to the three steps in the process in their figure. Some combination of these two views makes their model confusing and incoherent. This confusion and incoherence is owing to a problem of the definition of CMD in relation to the process. Looking at the Rest (1986)’s model, the judgment and intent steps are the integration of relevant concerns to reach a moral intent in the process. This integration has in fact been done in Kohlberg (1969)’s CMD theory. In the CMD theory, the six different stages and sequences of moral development – the preconventional level of obedience and punishment orientation and naively egoistic/self-interest orientation, the conventional level of good-boy/interpersonal accord and conformity orientation and authority and social-order maintaining orientation, and the principled level of contractual legalistic/social contract orientation and conscience or principle/universal ethical principles orientation (Kohlberg, 1969) – are, in our opinion, different integration of relevant concerns. In other words, the moral concern and other concerns are integrated into a composite index ie, the level of the CMD. The CMD level is comprehensive in integrating relevant concerns, so that it has a high correlation with the established moral intent in the intent step. On the theory, that means the CMD level should be an integrated input to the process, but not a step in the process; however, owing to its comprehensiveness, it is often used as a variable to represent a step in the process, or an outcome of the process from the empirical. The CMD level is thus viewed as an input to the process, to maintain theoretical clarities in our research model.

Third, we discuss the proposed influences on this process in Solymossy and Masters (2002). Solymossy and Masters (2002) posit two influences – the entrepreneur’s level of CMD and the characteristics of the moral issue – to directly affect the steps toward moral behaviour. These two influences are discussed one by one.

The CMD theory (Kohlberg, 1969) is in fact guided by three basic human wants – rational or material, reputational and ideological wants. In the preconventional level’s
obedience and punishment orientation, the fearful of punishment and dependence on obedience is a rational want of deference and avoiding conflicts with power or prestige, or trouble (Kohlberg, 1969). This rational want is similar to the one that satisfies self’s needs in the self-interest orientation. The preconventional level is guided by rational or material want of avoiding costs and keeping benefits. In the conventional level, the desires for approval, pleasing and helping others in interpersonal accord orientation, and the desires for ‘doing duty’, showing respect for authority and maintaining the given social order for its own sake in social-order maintaining orientation, are actually reputational wants (Kohlberg, 1969). In addition, the needs for “an arbitrary element or starting point in rules or expectations for the sake of agreement” ie, contracts or laws in social contract orientation, and the aspires for “principles of choice involving appeal to logical universality and consistency”, and the aspires for conscience and mutual respect and trust in universal ethical principles orientation are indeed ideological wants under the principled level (Kohlberg, 1969). In general, the labels of preconventional, conventional and principled can be replaced by the labels of rational, reputational and ideological respectively. These three human wants exist in all the three levels. The three levels are only different in terms of their dominating wants. Self-interest people can still rescue a baby from a well out of conscience, but they are directed by self-interest for their conducts most of the time; or, people can still think of their own financial interests, even though they try to appeal to universal ethical principles in their ethical decisions. In other words, these three human wants have been integrated in the CMD level, with dominant wants that are different across the three levels. Indeed, the integration of different wants has a particular term ie, trade-off from the decision making literature.

The fuzzy and integrative role of CMD in Solymossy and Masters (2002)’s model drives us not using the CMD but the three human wants – rational or material, reputational and ideological criteria in our research model. First, the input-step-outcome fuzziness of CMD disappears. In our research model, the three criteria are our inputs, but not a step, with the ethical preference as our outcome. The use of three criteria clarifies our theoretical model. Second, using a single composite index ie, the CMD level has a disadvantage. Conflating all human wants into a single composite index for use might obscure the extent to which different components might have divergent effects. These divergent effects of different components can only be measured through breaking down the composite index. Third, the three constituent levels in the CMD are, to some extent, subjectively selected. Different levels of moral development have been
indicated by other writers eg, McDougall (1908), Fromm (1955) or Riesman, Gitlin, Glazer, and Denney (1950) (see Kohlberg (1969)). Breaking down the CMD level can make constituent level selections more flexible in our research model. Fourth, the extraction of self-interest orientation fills up the cash or financial research gap as well. On the theory, as financial concern is a main criterion to entrepreneurs, it worth an independent position in our model. In addition, the self-interest orientation of respondents is often calculated by defining issues test (“DIT”), which uses hypothetical moral dilemmas to measure the CMD level on the empirical. These hypothetical moral dilemmas cannot well probe the self-interest orientation, unless a real moral dilemma is used. The extraction of self-interest orientation render the DIT (that measures the CMD level) useless. This pushes us to search for financial measures that fit for the rational or material criteria of the specific ethical decision instead. Fifth, the CMD theory does not distinguish the concept of attributes and weights in the MAUT theory at all. Most CMD literature operates at a generalized level with little contexts, such that the real attributes are not available. In that case, the CMD measures often probe the weights or the product of attributes and weights instead. In contrast, breaking down the CMD level can let us use both the concept of attributes and weights in our research model. Sixth, the resulted three criteria can link the ethical decision literature to management decision literature as well. In the ethical decision area, the CMD theory is no wonder one of the most valuable legacies; however, it does not talk too much with the MAUT theory, which is the most common decision theory in management. Our three criteria thus enabled the ethical decision making model to import the insights of MAUT theory as appropriate.

On the other hand, the moral intensity (Jones, 1991) is a construct to “capture the extent of issue-related moral imperative in a situation” with six components – magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. This construct is however only the moral imperative of issues, but not the issues themselves. This construct also focuses on abstract characteristics but not concrete circumstances. While these six components can seem complete in describing an issue, such components detach the issue from concrete details that can be important to an ethical decision. The validity of moral intensity to capture a real issue is therefore under question. The moral intensity thus should not stop us from looking at a real issue. Though the moral intensity cannot substitute a real issue, it can be used together with a real issue instead. That means the construct can measure the
subjective moral imperative of various individuals on a real issue, but not excluding the steps or determinants that are specific to a real issue.

Fourth, we consider the individual characteristics, situational characteristics and social relationships with others that would moderate the CMD-decision relationship. The individual characteristics that include ego-strength, field dependence and locus of control (Treviño & Youngblood, 1990), need for achievement, risk propensity, Machiavellianism, high or low Mach of individuals are argued to moderate the relationship. The three broad areas of immediate job context, organization’s culture, and the nature of the work itself in situational characteristics from Treviño (1986), which moderate the relationship between CMD and moral behaviour of managers, however, might not be all pertinent to entrepreneurs. In the immediate job context, the reinforcement contingencies (specific rewards and punishments) seem not applicable, as these are heavily dependent on upper management – the entrepreneur himself. Other personal cost and external pressures eg, competitive pressure however have a stronger impact to entrepreneurial firms. Organizational culture, eg, norms, the behaviour of referent others, insistence on obedience to authority, and responsibility for consequences, in general, is less connected to entrepreneurs whose start-ups have not been well established and organized. In contrast, those characteristics eg, opportunities for role taking, and the responsibility for the resolution of moral dilemmas in the work seem to work well for entrepreneurs as well. Solymossy and Masters (2002)’s model have then mentioned some differences found in entrepreneurs eg, direct responsibilities of ethical decisions, competitive pressure, independence and accountability (Solymossy & Hisric, 1996; Teoh & Foo, 1997), sensitivities to the expectations of society, criticalness of own performance, employment of own personal values (Humphreys et al., 1993), and legalistic or rule oriented structures. In addition, the relationships with other people (Brass et al., 1998) are explicitly incorporated as an influence in their model as well (Solymossy & Masters, 2002). These moderators (individual characteristics, situational characteristics and social relationships with others) can be largely retained in our model. Though, similar to the moral intensity, these moderators cannot substitute a real context, but they can be used together instead. Current models, for instance, have not mentioned outer level drivers eg, industry or national context for their moderations on CMD-decision relationship. These outer level drivers eg, state capacity are found to have indirect influences to the decision making in social insurance context (see Section 5.2). The role of these moderators is clearer after we have broken down the CMD into
three criteria. Initially it is difficult to specify the exact moderation of these characteristics to a composite index, which is however made possible, when there are separate pairs of criteria-decision relationship currently. There are further possibilities to specify which criteria components, attributes or weights, these characteristics would moderate in our model too.

Fifth, we think about how the research gaps can be filled up by new steps and determinants in our research model. One, cash or financials are now integrated as a rational or material want, following the break-down of the CMD concept. This independent role of cash or financials emphasizes its importance in the entrepreneurial context in our model. Two, the dilemma nature of ethics with confusions and inconsistencies is fit in to our model, the tolerance of which is viewed as an ethical tolerance factor in the ideological criteria. Three, the technological impact can be viewed either as an ideological or a rational attribute, depending on which impact (technological related spirit, technological disciplines or backgrounds or technological knowledge) we are talking about. Four, a new step – implement ethical infrastructure – is appended at the end of our research model, to research on the details of ethical implementation as well. Five, the importance of context is well acknowledged in our research model. Both moral intensity and situational characteristics are retained, together with an addition of outer level drivers eg, start-up/firm, industry, and national drivers (as briefly discussed in Section 5.2) to our model. The influences of real context form the background of our model too. Our research model is then brought to the social insurance decision of entrepreneurs for detail research.

Our ethical decision making model are contextualized to a social insurance decision making model, as shown in the Figure 19 and Figure 20.

In the following sections, we will discuss the three components – rational or material, ideological and reputational criteria – in detail, with influences on the awareness, judgment/intent and behaviour, in a social insurance context. These three criteria will formulate some testable hypotheses. In particular, this description will help explain how our research model will be contextualized to understand the multi-criteria social insurance decision making of entrepreneurs.
3.2 Rational Assumption

This section will examine the rational assumption when building our research model, before describing the main components of our model in the remaining sections of this chapter. A rational assumption is often associated with a material assumption. This rational-material association is also a common one in rational choice (Fearon & Wendt, 2002). The extent of rational-material association is a function in rational choice models, dividing them into thin and thick models on the two sides of a spectrum (Fearon & Wendt, 2002). Thin rational choice is the theoretical model of intention to describe decision making, without describing the content of wants and desires (interests). Thick rational choice furthers such a thin model with an association with materialism, which assumes complete information and content of interests. These two rational choice models need to be distinguished when clarifying our research model.

On the one hand, in our model, rational criteria are associated with material criteria to a large extent. That means a thick rational assumption exists for our rational criteria. Thick rational choice tends to understate ethical values for materialism in explaining decision making. This strong association to thick theories of interests means that material criteria are the drivers of rational or material model. Most of these material criteria are monetary. Cash flow, income, asset, financials, cost and benefits, profits, cost control or various financial criteria are the material criteria to drive compliance decision. Some less financial perspectives eg, the probability and the punishment of conviction, and recruitment and retention are criteria concerned in compliance decision as well, although these less financial criteria can often be deemed leading ones of financial criteria.

On the other hand, thick rational association cannot be applied to ideological and reputational criteria (see Section 3.4). The rationale is that material or monetary interests are not the drivers of these two criteria; however, non-material interests eg, ethical values are the drivers in these two criteria. A thin rational version is assumed, due to our aim described as follows.

Our research originates from the aim of examining whether or not ethics is a critical success factor of entrepreneurship. This CSF belief is in fact rational egoism (Woiceshyn, 2011). The ethical theory of rational egoism “starts from the premise that ethics is a necessary guide to life” (Woiceshyn, 2011). Ethics shows people how to
flourish and live a happy life. How to achieve good goals can be shown by the moral code of egoism, which “consists of a set of principles that promote long-term self-interest, such as honesty and justice” (Woiceshyn, 2011). This rational egoist theory is transferrable to entrepreneurial context. In particular, ethics is proposed to help owners of business firms to pursue their self-interest for long-term profit maximization (Jensen, 2002). In other words, it connects ethics and long-term strategies for the companies (Woiceshyn, 2011). The rational egoism is therefore consistent with the requirements of long-term success in business.

Rationality is the primary virtue of rational egoism:

Egoism has one primary virtue—primary in the sense that each person’s life literally depends on it and that the rest of the virtues are all derived from it: rationality.

- Woiceshyn (2011)

Rational egoism considers entrepreneurs as a rational man who pursues their self-interests. Ethics is consistent with their long-term self-interests, which thus results in their ethical decisions, when they want to achieve long-term success in business. That means rationality is the primary driver to ethical decision.

This rational assumption can either be a thin one or a thick one, depending on one’s definition of long-term success. Thin rational version can define long-term success as “achievement of a desired end”, without describing the content of desired long-term interests (Chow, 2003). Such a definition is contrasted with the strong association with materialism eg, “wealth” in thick rational version (Chow, 2003). Given that entrepreneurial success is defined as the survival time of a new venture (see Section 1.4), our own definition of rationality is therefore slightly more than a pure thin-rational assumption (since the content of desired long-term interests is described), but considerably less thick than a material assumption instead (because of long-term survival as long-term interests).

Thin rational assumption would thus need to transfer from rational egoism to ideological and reputational criteria of our research model, had our model been used for ethical decision making of entrepreneurs to help us verify a rational egoist claim (ie,
CSF belief) between ethics and entrepreneurship. Most existing models eg, Solymossy and Masters (2002), nonetheless, have not stated explicitly their rational assumptions in their models, aside from Woiceshyn (2011)’s employment of the theory of rational egoism. On the one hand, the lack of explicit rational assumption may suggest that these ethical decision making stages and criteria are neutral towards the thin-versus-thick rationality debate. In other words, thin-rational entrepreneurs may be as similar as thick-rational entrepreneurs in their steps and determinants of ethical behaviour. Their neutral stand of rationality seems acceptable for these process-driven models. On the other hand, the sociological root of these ethical models can implicitly advise their non-thick sociological assumption instead. Their accounts of explaining steps and determinants seem to strengthen our idea of their implicit sociological assumption. In particular, it is evident from their use of some constructs eg, CMD theory from sociological theories (Kohlberg, 1969). The sociological assumption of CMD theory may not be transferrable to our rational model, thus, the use of CMD would need a revision to a rational account of how it impacts ethical decision. So, the CMD construct is broken down into rational, reputational and ideological criteria, with a rational account of how these three criteria impact ethical decision.

The thick rational assumption of rational or material criteria, and thin rational assumptions of ideological and reputational criteria are therefore important in building our rational egoistic research model, in order to validate the rational egoist claim of CSF. Furthermore, such a rational assumption in our research model is coherent with multi-attribute utility theory (“MAUT”) in decision making literature as well.

### 3.3 Rational or Material Model

#### 3.3.1 Survive versus Last

This section will describe rational or material criteria, which is “a rational perspective according to which [compliance] alternatives may be compared, usually representing a material interest, concern or point of view” (Belton & Stewart, 2002). These rational criteria are associated with materialism to a large extent. Thus a thick rational assumption is taken for these rational criteria. Thick rational choice affirms materialism to account for decision making. This strong association to thick theories of interests means that material criteria are the drivers of rational or material model. Most of these material criteria are monetary. Cash or financials, cost control, social insurance costs, corporate profits or various financial criteria are the material criteria to drive
compliance decision. Some less financial rational perspectives eg, the probability and the punishment of conviction, and recruitment and retention are criteria concerned in compliance decision as well, although these less financial perspectives can often be deemed leading ones of financial criteria.

Cost control is a common rational or material criterion in explaining non-compliance decision in most non-compliance rational models. Those entrepreneurs who try to survive must consider cost control as their golden rule of decision making without other alternatives. Since many start-ups have monthly payroll as the largest component of their fixed cost and overhead (Chung & Ip, 2008), cost minimization will thus be directed to labour costs. In these labour costs, mandatory social insurance contributions of employers and employees can sum up to about 40% of total wage bill (see Section 2.4.2), which is ranked the 13th highest social insurance premiums among 173 countries or regions (Bai, 2012). These compliance costs are also a larger burden faced by small businesses (Chittenden, Kauser, & Poutziouris, 2003) relative to bigger companies (Slemrod & Venkatesh, 2002). Social insurance contributions are hence, an important factor for cost control (Nyland et al., 2011). Controlling social insurance contribution costs properly can reduce the total costs of start-ups while retain their cash or financial assets on hand. This helps make a start-up more flexible to deal with its uncertain environment, as “flexibility is often the only competitive advantage for a start-up” (Chung & Ip, 2008). Therefore, cost control dominates other concerns in these business start-ups that struggle for their survival in a short term, which is particularly salient in non-compliance rational models.

On the other hand, a few rational models do not aim to explain non-compliance decision, but compliance decision instead eg, Maitra et al. (2007). These compliance rational models often mention less financial perspectives eg, recruitment and development as decision criteria for compliance. These less financial aspects will create long-term financial value for companies (Kaplan & Norton, 1992), which can be a long-term aim in these compliance models.

The balance between short term and long term rational criteria is hard to strike in a social insurance compliance decision. Although these two are both rational criteria, their respective impacts to compliance decision can be different. Short term criteria nonetheless can override long term concern. Thus the total impact of these rational
criteria to compliance decision is difficult to identify, which is one of the complexities involved in compliance decision-making.

In the sub-section 3.3.2, we will describe short term monetary interests eg, cash or financials, cost control, profits, social insurance costs or various financial criteria as rational criteria in driving non-compliance decision. In contrast, those less financial interests that lead to financial interests in the long term will be used to explain compliance decision in compliance rational models, as described in the subsection 3.3.3 instead.

3.3.2 Non-Compliance

3.3.2.1 Cost Control
The rational principle of cost control is followed up in most rational accounts of non-compliance of social insurance for business start-ups, because entrepreneurs have to stay lean and run on tight cash budgets and limited financial resources to survive (Boyd & Gumpert, 1983; Chung & Ip, 2008). Cost control is regarded as a dominant concern for business start-ups. Start-ups that are weak on financials can evade social insurance contributions in order to reduce their labour costs (Maciejovsky, Schwarzenberger, & Kirchler, 2012), while through which prosperous start-ups can increase their profits (Nyland et al., 2006). The simple delay of payments can also generate some interest returns or profits, particularly during a high inflation economic period (Nyland et al., 2006). This myopic behaviour of placing a high value on labour costs and profits than future labour relationship provides strong motivations for start-ups to evade their contribution obligations (World Bank, 1994).

The actual labour costs and profits (ie, the attribute of cost control), however, may not be appropriate constructs to predict contribution obligations in social insurance, because of a causality issue. The evasion of contribution obligations lowers labour costs and increases profits, while encouraging social insurance compliance can result in high labour costs and low profits. That means, taking cost control as the cause and compliance decision as the effect, the two will have a negative relationship; else if the cause and effect reversed, the two will have a positive relationship instead. These two theoretical predictions on cost control and compliance decision are both valid arguments, which can lead to opposite hypotheses.
The two arguments, nevertheless, can be distinguished when using the construct of the placed importance on controlling labour costs and profits (ie, the weight of cost control) instead. This construct of weight will have a negative influence to compliance decision; however a compliance decision seems to have little effect to the weight of cost control in compliance decision. The relationship between placed importance (weight) of cost control and compliance decision is thus expected to be negative.

**Hypothesis 1**

*High level of cost control consideration has a negative impact to the level of social insurance compliance.*

### 3.3.2.2 The Probability and the Punishment of Conviction

*Becker (1968)* is among one of the economics scholars who takes the concept of cost control further and proposes an economic model of crime and punishment, which is considered extendable to compliance (*Allingham & Sandmo, 1972*).

Under his economic model of non-compliance offenses, based on the review of theories about determinants of number of offenses, he contends that all the diverse theories agree that, an increase in the probability of conviction or the punishment if convicted of business executive will decrease the number of offenses the executive commit, with difference only on their extent (*Becker, 1968*). And he generalizes from the diverse theories that, a change in the probability has a greater effect than a change in the punishment to the number of offenses (*Becker, 1968; Radzinowicz & Hood, 1948; Shawness, 1965*).

His theoretical work then follows to assume that business executives are an economic man, such that if the expected utility of offense exceeds the expected utility of time and resources spent in other activities, these executives will commit offenses (*Becker, 1968*). In other words, if the benefits of offense are higher than the costs of offense, whosoever executives can become a ‘criminal’, irrespective of their basic motivation (*Becker, 1968*).

He defines the expected utility of an offense as (see Equation 1) (*Becker, 1968*):
Equation 1

\[ EU_j = p_j U_j (Y_j - f_j) + (1 - p_j)U_j(Y_j), \]

where \( p_j \) is the probability of conviction per offense, \( U_j \) is the utility function of an executive \( j \), \( Y_j \) is the profit income of an offense, and \( f_j \) is the punishment if convicted per offense.

There is a potential to develop his economic model of non-compliance offenses further to a decision model (see Equation 2):

Equation 2

\[ EU_j = O_j (p_j U_j (Y_j - f_j) + (1 - p_j)U_j(Y_j)) + (1 - O_j)U_j(X_j), \]

where \( O_j \) is 1 if an executive \( j \) would commit and 0 if not, and \( X_j \) is the profit income of a compliance. \( Y_j > X_j \) because cost is controlled in an offense, but \( p_j \) and \( f_j \) limit the expected utility of offending. Such a cost and benefit calculation results in the expected utility of an offense for an executive \( EU_j \), in accordance with which the executive will act.

His economic approach therefore contends that these economic factors – the probability of conviction, the punishment if convicted, and residual influences eg, profit income available in legal activities, the form of punishment, and the rule of lawness due (Becker, 1968) – will account for the offenses of business executives; while, it presumes that a change in the probability has a greater response than the punishment to these offenses (Becker, 1968).

Other models of non-compliance offenses follow to introduce the probability and the punishment of conviction as an important decision variable to crime (Anderson & Lee, 1986; Milliman, 1986; Stigler, 1974; Sutinen & Andersen, 1985). Meanwhile, when organizations are more concerned with regulatory sanctions, they are more likely to comply with Government regulations (Xie, Shen, & Wang, 2013). In addition, Casey and Scholz (1991) extends these models by suggesting that how risks and preferences are described and expressed can also alter the weights placed on the probability of conviction and the punishment of conviction in tax compliance; therefore their analysis of tax is hypothesized for an application in social insurance.
Since entrepreneurs are commonly deemed as more risk-loving as they start a new venture, and as more creative as they bend the rules and challenge established industrial morals and laws (Hall & Rosson, 2006), they would have a lower concern on the probability and the punishment of conviction. With such a lower conviction concern, entrepreneurs are more responsive to take advantage of a weak surveillance and enforcement mechanism in China (Maitra et al., 2007).

**Hypothesis 2**

*Low level of the probability and the punishment of conviction concern has a negative impact to the level of social insurance compliance.*

The economic models, however, do not have the main purpose of explaining individual compliance per se, but to elucidate the amount and type of resources and punishments used to enforce compliance (Becker, 1968). Thus evidences are needed for an application of the economic factors, in particular, the probability and the punishment of conviction if convicted, in social insurance compliance.

### 3.3.2.3 Admin Cost

The economic account of social insurance compliance is further developed to an administrative account to explain social insurance contribution evasion as well (McGillivray, 2001). This administrative account consider various administrative costs under the administrative complexities of compliance procedures in social insurance (McGillivray, 2001).

One of the distinctive features of entrepreneurs and executives is their lack of time and resources in the business world. Thus, aside from their assessment on their risk of being caught, and the severity of consequent financial penalty should they be caught, it is expected that these executives, in face of complex administrative compliance procedures, will also choose to evade paying social insurance contributions (McGillivray, 2001). Firms sometimes do not have adequate records of their employees to determine their contribution payable, which is worsened further by separate assessment and collection arrangements for different social insurances, and multiple collection agencies to which must be allocated and remitted (McGillivray, 2001). These administrative design features of social insurance scheme can thus sometimes encourage
evasion (McGillivray, 2001). In addition, these executives will minimize their opportunity cost (personal time spent on compliance) or monetary cost (other employees’ amount of time spent performing compliance tasks) of compliance as well (Spall & Szerb, 2006).

The details of social insurance scheme can influence the administrative costs of the whole scheme as well. The wordings of social insurance policies, a vague policy definition, complex policies, and a lacked clarity of policies and regulations are often criticized by non-compliant business firms (Nyland et al., 2011). Such a lack of clarity and fairness is a sign of ineffective social insurance policies. It decreases the executive confidence to the legitimacy and equity of social insurance scheme, which hence increases their evading the contribution obligations (McGillivray, 2001). This issue about the failure of the construction of an effective policy can come up significant to influence non-compliance decision of social insurance in China (Nyland et al., 2011).

3.3.3 Compliance

Business executives do not always evade social insurance obligations, but sometimes they will comply or over-comply with social insurance obligations in the weak regulatory environment of China (Maitra et al., 2007). This compliance or over-compliance behaviour is an interesting area in the current literature, which can be explained by some rational compliance accounts. Note that, while the non-compliance models focus on short term material interest of business (eg, labour costs, profit income, expected punishment and compliance cost), in this section, as we will see, long term strategic interest is the focus of the compliance models instead.

3.3.3.1 Recruitment and Retention

Recruitment and retention concern is regarded as a long term strategic interest that leads to the compliance of social insurance.

Getting workers is often a start-up’s biggest problem (Hornsby & Kuratko, 2003; Williamson, 2000), due to its lower organizational awareness and attractiveness to potential applicants (Kraus, Harms, & Fink, 2010), its inabilities to offer career advancement prospects, and to provide high compensation and benefits comparable to large firms. Many start-ups are providing just the bare minimum of facilities and benefits for workers, if the labour market is in favour of employers. However, if a start-
up wants to get better employees, investing money and effort in building staff welfare e.g. social insurance will convey management and strategic benefits (Goodall & Warner, 1997; Warner, Goodall, & Ding, 1999). Provision for the well-being of company workers through staff welfare can also lower staff turnover and increase workplace morale for a start-up’s staff, which is crucial for the long term strategic interest of start-up. Certain technological enterprises, for example, which have a high requirement to recruit and retain technological employees, even continue to offer traditional work-unit (danwei) benefits in China (Naughton, 1997).

Nyland et al. (2011) detail employers’ utilization the social insurance scheme as an employee management tool before the 2011 law. In spite of their reflections on their firm’s capacity to control costs, these employers utilized different models of social insurance for different workers, to design effective employee management programmes for their firms (Nyland et al., 2011). A Chinese manufacturer, for example, was found to create a “one firm, two systems” policy – two models of social insurance covering urban and rural workers (Nyland et al., 2011). Having said that, different models of social insurance have been integrated by the new 2011 law, thus such an urban-rural segment by a utilization of different models of social insurance will be less common. Although some segment-specific eg, age-specific recruitment strategies can still be adopted (Zhu & Nyland, 2004), employers’ capacity of using a segmental provision of insurance benefits to workforce as an employee management strategy has been undermined by the new universal regulations.

In the new universal social insurance regulations, how entrepreneurs manage the social insurance needs of employees, and how to respond to state-imposed social insurance requirements therefore require remedy in the literature (Zhu & Nyland, 2004). Since the segment-specific compliance strategies are undermined, henceforth the original employee management concern may change to the new concern (competition for staff with other start-ups and enterprises) instead, for the provision of compulsory social insurance benefits to employees in the start-up. In addition, commercial pension insurance on top of the legal social insurance scheme can be a longer-term labour retention strategy in Chinese start-ups, given that those benefits will not materialize until employees retire (Nyland et al., 2011).
In view that the labour market has generally been in favour of employees in the case of start-ups, recruitment and retention concern is therefore hypothesized in deciding the dispatch of social insurance benefits by entrepreneurs.

**Hypothesis 3**

*High level of recruitment and retention concern has a positive impact to the level of social insurance compliance.*

### 3.3.3.2 Rival’s Costs

In addition to recruitment and retention concern, the business strategies of raising rival’s costs are analysed in Salop and Scheffman (1983) as well. The legal rule of a practice for the social insurance law can be considered as a manner that raises rivals’ costs (Salop & Scheffman, 1983). A similar case of industry-wide wage contract is shown to raise the costs of more-labour-intensive competitors more than the costs of more-capital-intensive firms (Williamson, 1968). So, the costs of more-labour intensive competitors can also be raised by the social insurance law. This cost-increasing strategy, though, needs the firm to have a clear understanding of its industry structure in order to benefit, such that its profits can be increased immediately and its effect can be made irreversible (Salop & Scheffman, 1983). And Barrett (1991) also shows that companies will find regulation able to benefit them directly, by restricting entry to their industry, or by limiting supplies in a way that raises their prices. Social insurance law, as a regulation that indirectly restricts entries and limits supplies by increasing rival’s costs, can increase profits for a regulated industry (Buchanan & Gordon, 1975; Maloney & McCormick, 1982).

### 3.3.3.3 Consumer Sales

The business firms can also choose to voluntarily comply with social insurance regulations for nurturing the sales to consumers who care about fair business. Some customers are willing to pay more to fair business firms. Loureiro and Lotade (2005), for example, look at consumer response to reveal their preferences for ethically sound labelling programs in coffee. Their results suggest that consumers are very receptive toward fair trade coffee labels, so willing to pay higher premiums for these labelling programs (Loureiro & Lotade, 2005). This consumer value of fair business can be used to explain compliance. Arora and Gangopadhyay (1995) elucidates that although all consumers value fair business, they differ in their willingness to pay. Their willingness
to pay depends on their income levels and the publicly available information on fair business. Publicly available information enables them to identify fairer firms. In their model, a governmental minimum standard binding on unfair firms will have the effect of improving the performance of the fairer firms (Arora & Gangopadhyay, 1995). Consequently, social insurance law can also have such a performance improving effect on the compliance firms.

3.3.3.4 Political Supervision

On the other hand, Decker (1998) argues more about the political aspect of compliance instead. He believes that business firms agree to voluntary social insurance compliance, in order to weaken the supervision and inspection of government on their compliance with social insurance laws and regulations in the future (Decker, 1998; Lutz, Lyon, & Maxwell, 1998; Segerson & Miceli, 1998). Some business firms might also do compliance for a weakened supervision and inspection in other labour laws and regulations (Decker, 1998; Welch, Mazur, & Bretschneider, 2000). When these business firms succeed in escaping from the radar screen of auditing organs and regulatory committees, these business firms succeed in transferring the supervision and inspection to their rival firms (Decker, 1998).

3.3.3.5 The Probability of Being Re-audited

The static models of enforcement are taken forward to a dynamic repeated-game model of enforcement in Harrington (1988) as well. His dynamic repeated-game model proposes that a regulated firm and an enforcement agency can react to previous actions by the other (Harrington, 1988). Business firms that have not complied with social insurance regulation and have been found liable for non-compliance, will be classified to high risk firms by the enforcement agency (Harrington, 1988; Maitra et al., 2007). These high risk firms will receive more frequent supervision and inspection, and heavier fines, which can impose a higher level of cost to these firms. In contrast, business firms that have complied with the regulation will be classified to low risk firms. Hence a lower level of supervision and inspection and a lower level of fines will be placed on them. Thus, although non-compliance fines can be less than compliance cost, it is argued that business firms will still choose for social insurance compliance (Maitra et al., 2007). This model is then used to investigate the compliance with social insurance regulations in China (Maitra et al., 2007). Their results appear to follow the expected prediction of the model – when the firms that had been found non-compliance in the
first audit in 2001 were re-audited in 2002, although these firms continued to underpay social insurance contributions, but the extent of their underpayment of contributions was significantly reduced (Maitra et al., 2007). Their prediction of the positive impact of the probability of being re-audited is therefore expected after the 2011 social insurance law as well.

Nonetheless, the above rational compliance models might not be too applicable (in terms of complete information and content of interest) to an entrepreneur’s decision making of social insurance. In terms of complete information, entrepreneurs cannot have too much time and resources to calculate all these rational factors relevant to their compliance decision. While the rational factor on the recruitment and retention of staffs can be a close concern, but rival’s costs, consumer sales, political supervision, and the probability of being re-audited can be rather remote rational factors to some start-ups. Conversely, in terms of content of interest, entrepreneurs can be influenced by non-material factors such as moral values and the social influence from their geographical environment as well (Dowell, Goldfarb, & Griffith, 1998; Hatcher, Shabbar, Olivier, & Elizabeth, 2000; Kuperan & Sutinen, 1994; Sutinen & Kuperan, 1999).

The section that follows will therefore describe some thinner rational models which relax these two thick rational assumptions in explaining how ethical ideologies and ethical reputation influence the compliance decision of social insurance.

### 3.4 Ideological and Reputational Models

This section will describe the ideological and reputational criteria used to compare compliance alternatives in social insurance. The subsection 3.4.1 will explain the “hardware” of the mind, in contrast to the “software” of the mind of entrepreneurs (Hofstede & Hofstede, 1991; Hofstede et al., 2010). The hardware of the mind depicts the structure or organization of ethical values in the mind ie, the psychological structure. Then we will describe how these ethical values (in terms of ethical ideologies or ethical reputation) influence ethical decision in subsection 3.4.2 and 3.4.3 respectively. The subsection 3.4.4 will illustrate the software of the mind ie, the content of ethical values in the mind (Hofstede & Hofstede, 1991; Hofstede et al., 2010). The illustration of the software of mind is needed, given that general ethical standards are indicated to have little prediction on ethical behaviour in specific situations (Arrington & Reckers, 1985; Haan, 1975). The specific relationship between relevant ethical values and Hofstede
(1980)’s cultural dimensions will thus be advised. These relevant ethical values can be
matched to the cultural dimensions, which have been found to have consequences to work-
related management behaviours in different cultures and nations.

3.4.1 Hardware of the Mind
This section will describe the structure or organization of ethical values, which are core
to provide an ethical account for the decision making of entrepreneurs.

In an entrepreneur’s mind, values and the like can be organized hierarchically as a ring
with concentric attachments to a central core called ideologies (see Figure 18) (Young,
1977). These ideologies are an immutable core that represents the most generalized
symbolic representation of the world and its relations to the individual (Young, 1977).
These core ideologies are less likely to be changed compared with outer values ie,
attitudes and opinions – even if this core is sufficiently disturbed by the environment,
the individual would not concede change, but he or she would act upon the environment
instead (Young, 1977). These core ideologies are similar to protected values (“PV”)
(Irwin & Baron, 2001). The protected values of an entrepreneur are his strong feelings
about certain moral issues, whose strength of protection can be reflected by his refusal
to trading off a moral benefit for another (Irwin & Baron, 2001). In outer values,
adaptive attitudes manage the concrete world presented to individuals, while changeable
opinions forge circumstantially and represent specifically in the day-to-day encounters
with the world (Young, 1977). These outer values are changeable from time to time in
various contexts. Then the sources of values from outer environment originate from the
societies.

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5 This model of the ‘assumptive worlds’ of decision-makers is adapted to a moral context from a political
context.
This organization of values compares to the structure of beliefs in the decision making of public policies as well (Sabatier, 1988, 1991). Deep core can be described as fundamental norms and beliefs which apply to all outer systems, near core as fundamental positions and strategies for attaining core values, whereas secondary aspects are referred as instrumental decisions and information searches necessary to implement the core (Sabatier, 1988). These two models of mind nonetheless deliver a same message ie, core values or beliefs are less likely to change, while change or modification is more likely to take place at the outer levels instead.

The relevant ethical values ie, familism, integrity, work ethics, anti-individualism and rule of law, depending on their level of internalization, can either be considered as ideologies, attitudes and opinions, or from the moral sources of Chinese tradition, Marxism or globalization in the environment. The level of internalization of ethical values determines how they influence the ethical decision of entrepreneurs.

Strong internalization of ethical values to ideologies make them philosophical principles that define what it means to be an ethical entrepreneur and [to] lead an ethical life (Littlejohn, Shailor, & Barnett Pearce, 1994). These ethical values can work with other ideologies eg, four models (authoritarian, republican, utilitarian and expressivist) (Bellah, 1985) or six worlds (the world of inspiration, domestic world, the world of opinion, civic world, merchant world and industrial world) (Boltanski & Thévenot, 2006), using preferred principles, subjects, objects, and figures to shape the decision.
making of entrepreneurs (Boltanski & Thévenot, 2006). This shaping of decision making is mainly through ethical ideologies (see Section 3.4.2). Weak internalization or no internalization leaves them stay as attitudes and opinions, or values from the environment. The influence of values from the environment can also be integrated, such as the social consensus in moral intensity, or the organizational culture in situational moderators to ethical decision models. These environmental influence is important to ethical decision as well (McDevitt et al., 2007). Those ethical values from the environment, in contrast, mainly influence ethical decision through ethical reputation instead (see Section 3.4.3).

3.4.2 Ethical Ideologies

Ethical ideologies have a distinctive influence to compliance decision. This ideological influence can be understood through our thin-rational (non-material and bounded) ideological model. These ethical ideologies bind the rationality of entrepreneurs in compliance decision such that this bounded rationality of entrepreneurs limits the scope of compliance decision possibilities in social insurance.

An entrepreneur is a single, isolated individual who is subject to bounded rationality when building a new company.

It is impossible for the behaviour of a single, isolated individual to reach any high degree of rationality. The number of alternatives he must explore is so great, the information he would need to evaluate them so vast that even an approximation to objective rationality is hard to conceive. Individual choice takes place in an environment of ‘givens’ – premises that are accepted by the subject as bases for his choices; and behaviour is adaptive only within the limits set by these ‘givens’ (Simon, 1945).

This bounded rationality departs from the objective rationality in three aspects:

First, the “[objective] rationality requires a complete knowledge and anticipation of the consequences that will follow on each choice” (Simon, 1945) (c.f. the thick rationality that assumes complete information (see Section 3.2)). This complete knowledge functions to determine the consequences of each choice. An entrepreneur, however,
often does not know directly the consequences that will follow upon his compliance decision, else there happens an issue of reverse causality (Simon, 1945). Incompleteness of knowledge, as a result, bounds the rationality of entrepreneurs, because of the incomplete and fragmented nature of knowledge, unknown consequences, or the incapacity of making valuation on alternatives (Parsons, 1995). Second, since these consequences are laid on the future, imagination must be used to experience the feelings of consequences when attaching values to them (Simon, 1945). Even if an entrepreneur knows the consequences, to imagine his happiness and pleasure is different from his real experience. This is about the ability to expect the utilities. This difficulty of anticipation comes from the limits of attention of entrepreneur, in which his mind cannot grasp the consequences in full at one time. The third aspect is the scope of decision possibilities. Simon (1945) argues that, in spite of the presence of an unlimited number of possibilities for alternative decisions, in real case, only a small number of these alternatives ever come to an entrepreneur’s mind. The failure of conceiving all the possible decisions limits the number of possible decisions at stake during decision making (Simon, 1945). This limited scope of decision possibilities is owning to both individual and social reasons, such as the limits on the memory capacity of an entrepreneur’s mind, habit and routine, limited attention spans, the decision persistence, and the business environment that frames the decision making (Simon, 1945).

Sabatier (1988) then relies upon the bounded rationality model to develop the belief system model later. The structure of the belief system of elites is outlined to three categories (see Section 3.4.1). Deep core defines the fundamental norms and beliefs which apply to all outer systems, and near core identifies fundamental positions and strategies for attaining core values, whereas secondary aspects are referred as instrumental decisions and information searches necessary to implement the core (Sabatier, 1988). These elites ought to have relatively complex and internally consistent belief systems in their areas of interest (Putnam, 1976). Thus, their salient beliefs or their egos result in cognitively consistent decision (Sabatier, 1988). Even in the face of countervailing empirical evidence or internal inconsistencies, these beliefs are resistant to change owing to powerful egodefence (Abelson, 1968; Festinger, 1962; Janis, 1982), which instead results in selective perception and partisan analysis when making decision (Fiske & Taylor, 2013; Innes, 1978; Mazur, 1981; Nelkin, 1979; Smith, 1968).
This belief system model is transferrable to an entrepreneurial context, because entrepreneurs are often deemed as business elites, while compliance decision has its relevance to public policies too. The belief system model thus helps explain the ethical ideologies’ impact on compliance decision. On the one hand, an entrepreneur’s rationality is bounded through some premises that set the limits of their compliance decisions (Simon, 1945). These premises reside in the internal environment of an entrepreneur. Such an internal environment, on the other hand, is determined and established by core ideologies in the belief systems of entrepreneurs (Sabatier, 1988).

The ethical ideologies can be internalized to the core ideologies of entrepreneurs, which they believe in and behave in accordance to. In this perspective, entrepreneurs construct an internal psychological environment for themselves (Simon, 1976). Their internal environment then serves as a mediating level between them and external environment. They will receive ethical ideas from the external environment – however, not all ethical ideas will be internalized to their core ideologies and some of them will be ignored (Kahneman et al., 1982). Through their internal environment, the internalized ethical ideas influence their compliance decisions. Once if the ethical ideas are internalized, entrepreneurs will make conscientious improvements in order to follow their ethical ideologies (c.f. the conscience or principle/universal ethical principles orientation (Kohlberg, 1969)).

Once the ethical ideologies are accepted as the core ideologies, because of different ideological performance for different compliance decisions, these ethical ideologies will lower the utility of those non-compliance decisions, which will place an ideological limitation on the scope of compliance decision possibilities to an entrepreneur. To the extreme, this limitation constructs the knowledge of reality and develops accepted ways of habits of actions (Berger & Luckmann, 1966), which can leave the entrepreneur to face a decisionless choice situation or a choiceless decision situation (Salancik & Cooper Brindle, 2002). The decisionless choice is a situation in which the entrepreneur ‘faces more than one choice but is not free to choose any but one particular alternative’ (Salancik & Cooper Brindle, 2002), whereas the choiceless decision is a situation in which ‘selections among alternatives are being made by the [entrepreneur], but none of the alternatives are considered to be part of the choice’ (Salancik & Cooper Brindle, 2002). These two extreme situations both show the limitations on the scope of decision possibilities (Rojot, 2008). Thus, these ethical ideologies can be taken as a restraining
force to the assumed impossible non-compliance decisions, rather than a driving force to possible compliance decisions (Greer & Downey, 1982). In addition, these ideological limitations are resistant to change owing to powerful egodefence, which results in selective perception and partisan analysis, even in the face of countervailing empirical evidence or internal inconsistencies (Sabatier, 1988).

The ethical ideologies of entrepreneurs will therefore influence compliance decision (Chan, Troutman, & O’Bryan, 2000; Reckers, Sanders, & Roark, 1994). Etzioni (2010) presents an argument that ethical values “screen or set bounds on choice possibilities and limit the means available to achieve desired outcomes” in the decision process (Reckers et al., 1994). These ethical values reduce the effort in the choices’ selection (Carroll, 1992). Those morally unacceptable alternatives are thus not considered or selected (Smith & Kinsey, 1987). These ethical ideologies also discount other possible options that may be preferable from the viewpoint of maximizing material utility (Etzioni, 2010). Therefore the concerns for both material goals and ethical ideologies need to be included in the notion of utility (Scholz, 1985); adding a simple loss in utility from unethical behaviour, adding a loss in utility relative to an ethical norm, adding loss aversion, or using a prospect theory approach (Alm & Torgler, 2011). While their arguments focus on taxpayer compliance (Chan et al., 2000; Reckers et al., 1994), their explanations are relevant to social insurance compliance as well.

3.4.3 Ethical Reputation

Ethical reputation also has a distinctive influence with compliance decision. This reputational influence are relevant to the concepts of name eg, the Chinese concept of ming (name), or the western concepts of pride, honour, respect, admiration, credit, reputation, tribute, brand and the like, among many other social influences. The ethical reputation of an entrepreneur is a boundedly rational strategy for his stakeholders to use when choosing which entrepreneur to work with, such that it limits the scope of compliance decision possibilities in social insurance.

The stakeholders of entrepreneurs will use ethical reputation in their business decisions with the entrepreneurs. These stakeholders cannot know too much about a start-up, which has no track record, no brand, but a doubtful idea, when choosing the start-up to work with. For example, members in a garage team will ask themselves whether they will follow an entrepreneur to build a start-up. Employees ask themselves whether they
can work closely with an entrepreneur. A customer, who has little direct knowledge or experience with a start-up, concerns about purchasing product/service from an entrepreneur (Doney & Cannon, 1997; Zucker, 1986). A supplier is also involved in supplying materials to an entrepreneur. An investor, not surprisingly, worries about whether to put his capital into a start-up. The ethical reputation of entrepreneur that can characterize their held perception of a specific entrepreneur thus has a role in their business decisions (Fuller, Serva, & Benamati, 2007). Favourable ethical reputation of an entrepreneur can reduce their concerns regarding working with him (Li, Browne, & Chau, 2006; McDonald & Slawson; Resnick, Kuwabara, Zeckhauser, & Friedman, 2000; Standifird, 2001). The ethical reputation is thus the information that helps them choose which entrepreneur to work with. The use of ethical reputation is therefore a rational strategy for these stakeholders to interact with entrepreneurs in their business decisions (Gigerenzer & Todd, 1999). These messages convey that, for the stakeholders’ business decisions, the ethical reputation of entrepreneur is important (Fuller et al., 2007). This situation makes the entrepreneurs to have a self-interest preference on ethical reputation (Lindenberg, 2001a) and places ethical reputation among the ordered preferences of self-interest goods on the side of the entrepreneurs (Lindenberg, 2001b).

The interaction between the trust of stakeholders and the reputation of entrepreneurs has been identified from the information tech literature (Ba & Pavlou, 2002; David, 2000; Standifird, 2001; Zucker, 1986). Rao, Greve, and Davis (2001) predicts that stakeholders will rely on the business actions of other stakeholders with entrepreneurs. Such the stakeholders’ insight of the business actions of other stakeholders is in fact, the reputation information, which will generate their trust on the business environment with entrepreneurs (Ba & Pavlou, 2002; Fine & Holyfield, 1996). This important role played by the reputation of entrepreneurs in building the trust of stakeholders is deemed similar between the information tech and entrepreneurial contexts.

Trust is defined as “the willingness of a [stakeholder] to be vulnerable to the actions of an [entrepreneur]” (McKnight, Choudhury, & Kacmar, 2002). McKnight et al. (2002) suggest that trust can be used in four high-level constructs – disposition to trust, institution-based trust, trusting beliefs and trusting intentions. Disposition to trust is “the extent to which a [stakeholder] displays a tendency to be willing to depend on others across a broad spectrum of situations and persons” (McKnight et al., 2002). This construct is indeed the trust-related character of a stakeholder. Institution-based trust is
“the belief that needed structural conditions are present to enhance the probability of achieving a successful outcome” (McKnight et al., 2002), while trusting belief is “the perception that an [entrepreneur] has attributes that are beneficial to a [stakeholder] (McKnight et al., 2002). These two constructs differ in the way that, the former is the belief on the business environment but the latter is the belief on the attributes of a specific entrepreneur. Trusting intentions, on the other hand, is that “a [stakeholder] is securely willing to depend, or intends to depend, on an [entrepreneur]” (McKnight et al., 2002). The former three constructs will connect to the last construct of trusting intentions. The last construct of trusting intentions is more in line with our definition of trust. With trusting intentions, trust-related behaviours result (McKnight et al., 2002) - “the actions that demonstrate dependence on an [entrepreneur], that make one vulnerable to the [entrepreneur], or increase one’s risk” (Mayer, Davis, & Schoorman, 1995; McKnight et al., 2002; Zand, 1972).

The trusting intentions to entrepreneurs can be used to distinguish out fair from unfair entrepreneurs (Mui, Mohtashemi, & Halberstadt, 2002). This fairness distinction is integral to the stakeholders for expecting whether reciprocative actions eg, not doing harm to each other, will be regularly performed by the entrepreneurs (Kreps, 1990; Milgrom, North, & Weingast, 1990; Ostrom, 1998). Thus, a development of trust increases these stakeholders’ willingness to participate in reciprocative interactions with those fair entrepreneurs (Dasgupta, 2000; Selnes, 1998; Tadelis, 1999). This idea of reciprocities can be compared to the idea of relationship ie, guanxi (Mavondo & Rodrigo, 2001; Zhao, Flynn, & Roth, 2006). Guanxi is the reciprocative exchange of treatment, favours and obligations (Lee, Pae, & Wong, 2001). These studies of guanxi have their theoretical bases from transaction cost economics theory (Williamson, 1975), resource dependence theory (Pfeffer & Salancik, 2003) and relational exchange theory (Davies, Lassar, Manolis, Prince, & Winsor, 2011; Morgan & Shelby, 1994; Smith, Carroll, & Ashford, 1995; Zaheer & Venkatraman, 1995). When the reciprocative treatment, favours and obligations are not returned within a short time, those non-reciprocating entrepreneur will lose face or reputation (Lee et al., 2001; Tadelis, 2007). The establishment of this guanxi network is considered critical for starting up new venture in China (Wong, Tjosvold, & Yu, 2005).

The stakeholders have an explicit situation of risk and asymmetric information in their business decisions with the entrepreneurs, hence their use of the reputation as
information, which make the entrepreneurs to have a self-interest preference on ethical reputation too, as assumed in the theory of rational egoists (Lindenberg, 2001a). Given the reputational evidence available to them, these stakeholders estimate the objective probabilities of uncertain outcomes when working with the entrepreneurs, which thus places ethical reputation among the ordered preferences of self-interest goods on the side of the entrepreneurs (Lindenberg, 2001b).

How the ethical reputation has an impact to compliance decision can be explained in the social rationality model (Gigerenzer & Todd, 1999; Lindenberg, 2001a, b). Although our reputational model inherits a thin rational assumption ie, self-interests drive entrepreneurial decisions, it is argued that these self-interests are not theoretically specified and are not restricted to material goods, even they are often taken as such (Lindenberg, 2001a). The concept of self-interests can also cover heterogeneous goals eg, satisficing and altruism in real-life contexts (Simon, 1997). On the one hand, satisficing is an operational goal to improve one’s condition. One’s condition has a reference point and a social comparison with social standards, which are thus crucial to his utility of goal achievement (Lindenberg, 2001a). Therefore, the prevention of the deterioration of ethical reputation, or the limitation of the loss of ethical reputation, together with the improvement of one’s ethical reputation, can be a self-interest operational goal. On the other hand, altruism is a substantive goal of social well-being to entrepreneurs (Lindenberg, 2001a, b; Lindenberg & Frey, 1993). Altruism produces some form of social approval that leads to social well-being eg, status, behavioural confirmation, and affection (Lindenberg, 2001a). So, these social approvals eg, ethical reputation, trust, reciprocities, relationships and guanxi can be self-interest substantive goals, which can be higher level goals to reach. Hence, these two concepts of self-interest goals place reputational limitations to the scope of compliance decision possibilities to the entrepreneurs ie, to choose a social insurance option that can be defended with argument or moral justification, or that can be consented with the stakeholders.

The ethical reputation of entrepreneurs will therefore influence the compliance decision (Bobek, Hageman, & Kelliher, 2013). The focus of entrepreneurs is often to strive for, at least, not to damage their ethical reputation or maintain their ethical reputation when making a compliance decision, since they often do not have sufficient resources to push for a high ethical reputation from their compliance decisions (Doney & Cannon, 1997;
Standifird, 2001). Since their own ethical reputation can substantially affects the one of their start-ups (Zhu & Chang, 2012), some entrepreneurs care most about the effect on their ethical reputations from their actions (Mayo, 1991), which can find support in the compliance decision (Sacconi, 2007; Xie et al., 2013) and decision with a focus on the employee-employer relationship as well (Fernandez & Underwood, 2009). The ethical reputation of entrepreneurs can therefore influence their compliance decision in social insurance (Nyland et al., 2011).

The side-line point to note is that our reputational model does not conflict with stakeholder theory. Harris et al. (2009) describe that the entrepreneurs are centred around with unique and intensely personal stakeholder relationships eg, tightly linked close, personal association and relationships. The social contracting with their family and friends, for instance, has been presented as investors and employees for resource co-optation for entrepreneurs (Starr & MacMillan, 1990). This particular characteristic of new venture gives rise to an emphasis on the ‘names and faces’ to entrepreneurial stakeholders (McVea & Freeman, 2005). McVea & Freeman (2005) argue that start-ups with foci on individual relationships, strategic decision making and entrepreneurial value creation, will “incorporate ethics as an inherent part of the decision making process… [and] develop more value-creating strategies”. This importance of reputation is therefore coherent in both our reputational model and the application of stakeholder theory to new ventures.

3.4.4 Software of the Mind

This section will describe the content of ethical values for the ethical decision making of entrepreneurs in social insurance. The relevant ethical values eg, familism, integrity, work ethics, anti-individualism, and rule of law (see Section 2.4), through ethical ideologies and reputation, seem to be connected to cultural dimensions (Hofstede, 1980), which have a role of influencing ethical decision-making (Lu, Rose, & Blodgett, 1999; Sims, 2009; Vitell, Nwachukwu, & Barnes, 1993; Zhuang, Thomas, & Miller, 2005). The connection of these cultural dimensions and social insurance or social policies also support their impact to compliance decision-making of social insurance.

Hofstede (1980) proposes that the cultural dimensions can be used to understand the differences among business cultures. He used International Business Machines (“IBM”)’s employee survey data from 40 countries, to obtain four cultural dimensions:
power distance, uncertainty avoidance, individualism, and masculinity dimension. Power distance reveals the level of different societies’ different agreement to human inequality (Hofstede, 1980). This dimension shows the “extent to which the less powerful members of institutions (like the family, school, and community) and organizations accept and expect that power is distributed unequally” (Hofstede & Hofstede, 1991). Uncertainty avoidance “deals with a society's tolerance for uncertainty and ambiguity” (Hofstede & Hofstede, 1991). Individualism is “the degree to which individuals are integrated into groups” (Hofstede & Hofstede, 1991), while the distribution of emotional roles between the genders is referred as masculinity dimension (Hofstede & Hofstede, 1991). Hofstede and Bond (1988) then based on Chinese Value Survey (“CVS”), which aimed to reduce Western biases, to find one more dimension – Confucian dynamism, which was later renamed to long-term orientation in Hofstede and Hofstede (1991). Long-term orientation fosters “pragmatic virtues oriented towards future rewards, in particular saving, persistence, and adapting to changing circumstances”, contrasted with “virtues related to the past and present such as national pride, respect for tradition, preservation of face, and fulfilling social obligations (Hofstede & Hofstede, 1991). In 2010, Hofstede, Hofstede, and Minkov (2010) based on World Values Survey (“WVS”) data from 93 countries, to add a sixth dimension – indulgence versus restraint. Indulgence “allows relatively free gratification of basic and natural human drives related to enjoying life and having fun”, while “[suppression] of gratification of needs and regulation of it by means of strict social norms” situate the restraint side of this dimension (Hofstede et al., 2010).

The relevant ethical values, in terms of ethical ideologies and reputation, can be connected to the cultural dimensions (Hofstede, 1980) (see Table 6). In particular, some representative ones ie, familism, work ethics, and anti-individualism, can be principally attached to one specific cultural dimension ie, power distance, long-term orientation, individualism, and uncertainty avoidance, respectively. Some minor links (in bracket) can be seen too, whereas there can also be an absent link between these values and dimensions. Such a partial overlapping is expected, since these two sets of ethical values and cultural dimensions have been developed for different purposes.

Table 6: Ethical Values (Ethical Ideologies or Reputation), Cultural Dimensions and Social Insurance

<table>
<thead>
<tr>
<th>Ethical Values (Ethical Ideologies or Reputation)</th>
<th>Cultural Dimensions</th>
<th>Social Insurance</th>
</tr>
</thead>
</table>

- 134 -
3.4.4.1 Familism

Familism is the ethical value in which filial piety and family relations eg, between father and son, between husband and wife, and between old and young are emphasized, which are also the root of other non-family relations eg, between sovereign and minister, and between friends. This ethical value can have two components: hierarchical value and group dominance value. These two components can be connected to two cultural dimensions (power distance and collectivism) that have divergent effects to compliance decision-making of social insurance.

On the one hand, the hierarchical value is acquired unconsciously including our basic values of power distance from families. The filial piety of children, for instance, is their obedience towards the power of their parents. The respect for parents and other elders is important, which lasts through their adulthood, as long as their parents are alive (Hofstede & Hofstede, 1991). Such the pattern of dependence on seniors of families will pervade to similar patterns at school, in the workspace, and with the Government too. This dependence pattern is strongly needed by people who carry familism as a power distance dimension (Hofstede & Hofstede, 1991). These familist people expect individuals to support their parents in old age or infirm financially and practically (Hofstede & Hofstede, 1991). These unequal relationships between people are thought to maintain the stability of society (Hofstede & Hofstede, 1991).

A high hierarchical value seems to relate to some relevant anti-social insurance values in a large power distance dimension. In the family, respect for parents and older
relatives, as we have mentioned, is a basic and lifelong virtue (Hofstede & Hofstede, 1991). In contrast to small-power-distance societies, where children play little role in the old-age security of parents, children are a source of old-age security to parents in large-power-distance societies (Hofstede & Hofstede, 1991). This value in power distance decreases the support of social policies and social insurance in the society. In the workplace, the hierarchy in organizations reflects existential inequality between higher and lower levels (Hofstede & Hofstede, 1991). This workplace hierarchy results in a wide salary (rewards’ and incentives, stock, salaries, fringe benefits, and social minimum) range between the top and bottom of the organization. This can explain the selection of segments of the workforce to receive greater social insurance benefits as indicated in Nyland et al. (2011). In the Government, the hierarchical value accepts income inequalities. Hofstede and Hofstede (1991) list out income differentials and tax system as the differences between small- and large-power-distance societies. Large income differentials are accepted in both a large-power-distance individual and society, which are further increased by the tax system (Hofstede & Hofstede, 1991).

On the other hand, the group dominance value is also connected to the cultural dimension of collectivism. Familist people are integrated into strong, cohesive families or in-groups, which protect them in exchange for unquestioning loyalty to the group (Hofstede & Hofstede, 1991). We must be careful about this familism-collectivism connection however. In particular, though the group dominance value of familist people is often strong, cohesive for their families or extended families, it is seldom extended beyond their families to their society. Their strong, cohesive collectivist integration to the society, if any, can lead to their support to social policies and social insurance (Hofstede & Hofstede, 1991).

These two value components of familism therefore seem to have divergent effects to compliance decision-making of social insurance. The hierarchical value of familism opposes the social insurance, which is supported by the value of group dominance in familism instead. On the whole, the hierarchical value seems to prevail over the group dominance in its effect to social insurance, because the group ties and integration of families might not be extended to the society.

This opposition attitude towards social insurance and social policies popularizes Confucian welfare states as a label for the unique welfare model of nations in Chinese
Cultural Sphere (Andersen, 1999; Aspalter, 2001; Dixon, 1981; Esping-Andersen, 1990; Goodman & Peng, 1996; Holliday, 2000; Jones, 1990, 1993; Kwon, 1997; McLaughlin, 1993; Walker & Wong, 2005). Thus we propose that familism should be included as an ethical value that influences the social insurance decision of entrepreneurs.

Hypothesis 4

High level of familism has a negative impact to the level of social insurance compliance.

3.4.4.2 Integrity

Integrity is the ethical value that is focused as well, although it seems not be connected to the cultural dimensions. The anti-virtues of integrity eg, lying and being dishonest to people is deemed as a repellent character of entrepreneurs, thus connects integrity to entrepreneurship (Chung & Ip, 2008). Credit and trust are regarded as a crucial and important factor in the formation of solid business relationships for long term success (Chow, 2003), while integrity is also found as the single most important trait to achieve real business successes (Chia, 2012). The entrepreneurs who subscribe to integrity will emphasize proper behaviour to employees, so they will provide social insurance as a basic protection to their employees.

Hypothesis 5

High level of integrity has a positive impact to the level of social insurance compliance.

3.4.4.3 Work Ethics

Work ethics is the ethical value that promotes hard work. Some related values eg, diligence, plain life, hard work, no indulgence, and no wallow in luxuries and pleasures are highly mixed with those values eg, persistence (perseverance) and thrift in long-term orientation dimension. The long-term orientation highlights sustained efforts toward slow results, and being sparing with resources (Hofstede & Hofstede, 1991). These aspects show a close connection between work ethics and long-term orientation. Note that, however, work ethics does not totally cover long-term orientation. Work ethics can seem less relevant to some non-work aspects in long-term orientation; nonetheless, work ethics and these non-work values form a combined cluster for a single long-term orientation dimension (Hofstede & Bond, 1988).
Hard working people expect old age to be a happy period and to start early (Hofstede & Hofstede, 1991). These people think their children should learn how to be thrifty. They will work hard in order to become better off for their retirement, hence less their need for social protection from the society. So these people expect their staffs to work hard for a better-off retirement too. While their staffs will consider social insurance as savings for retirement, to these entrepreneurs, it will be a fixed cost in the long term. They will deem social insurance as a fixed cost that hurts their profits in the long term, which are important to their businesses (Hofstede & Hofstede, 1991). Their aspirations for long-term profits are deemed necessary (Hofstede & Hofstede, 1991), therefore these owners will not support social insurance. Although Hofstede and Hofstede (1991) also list out that wide social and economic differences are undesirable to long-term orientation societies, which can back social insurance, it is argued that since work ethics does not totally cover long-term orientation, this desire of social insurance is not relevant to work ethics, but only pertinent to long-term orientation.

On the other hand, work ethics is connected to indulgence versus restraint dimension too (Hofstede et al., 2010). Hard work tends to curb and regulate the free gratification of basic and natural human desires related to enjoying life and having fun in its norms (Hofstede et al., 2010). Those hard working people support thrift as a desirable trait across people (Hofstede et al., 2010), hence their expectation on all people to work hard for their own retirement, which opposes social insurance as well.

**Hypothesis 6**

*High level of work ethics has a negative impact to the level of social insurance compliance.*

### 3.4.4.4 Anti-individualism

Anti-individualism is the opposite dimension of individualism, which is a rational assumption in economic models (eg, economic man, invisible hand, utilitarianism or free market). This ethical value has an obvious connection with individualism in cultural dimension. Individualism dimension is attached to work goal items such as personal time, freedom, and challenge in the IBM database (Hofstede & Hofstede, 1991). Then the CVS study adds some individualists’ values such as tolerance of others, harmony with others, non-competitiveness, a close, intimate friend, trustworthiness,
contentedness with one’s position in life, solidarity with others, and being conservative, into the relationship with this dimension (Hofstede & Hofstede, 1991). Individualism is seen more a separate dimension from collectivism for our analysis, as these two dimensions can be less opposite at the individual level in contrast to the society (or country) level. Our level of analysis is individual entrepreneurs within societies, but not the entire society, therefore, the opposite dimension of individualism is described as anti-individualism, but not collectivism.

Individualistic people expect everyone grows up to look after himself and only his immediate (nuclear) family at family level (Hofstede & Hofstede, 1991). This independence value decreases their support of social policies and social insurance in the society. Individualistic entrepreneurs will expect their employees to be individualistic too, eg, their employees will only pursue their mutual interest with them, their employees have a higher occupational mobility, and their relationship with their employees is a contract between parties on a labour market (Hofstede & Hofstede, 1991). These expectations lower their incentives to provide social insurance to their employees. These entrepreneurs also back the restraint placed on the role of the Government in the economic system, prevail the ideologies of individual freedom over ideologies of equality, and have a strong support of native and individualistic economic theories (Hofstede & Hofstede, 1991). These values are opposite to social policies and social insurance at the Government level.

In contrast, anti-individualistic people do not expect everyone grows up to look after himself and only his immediate (nuclear) family at family level (Hofstede & Hofstede, 1991). These people support social policies and social insurance in the society. Those anti-individualist entrepreneurs have their incentives to provide social insurance to their employees (Hofstede & Hofstede, 1991), and have a weak support of native and individualistic economic theories (Hofstede & Hofstede, 1991). These ethical values of anti-individualism are parallel to social policies and social insurance at the Government level.

**Hypothesis 7**

*High level of anti-individualism has a positive impact to the level of social insurance compliance.*
3.4.4.5 Emphasis of Reputation

The emphasis on reputation is in connection with face and shame in collectivism dimension. On the one hand, face is described as “the proper relationship with one’s social environment, which is as essential to a person (and that person’s family) as the front part of his or her head” (Hofstede & Hofstede, 1991). Losing face is expressed as being humiliated when an individual fails to meet essential requirements of his social position (Ho, 1976), whereas giving honour or prestige is articulated as giving someone face (Hofstede & Hofstede, 1991). This importance of face is considered as “the consequence of living in a society very conscious of social context” (Hofstede & Hofstede, 1991). On the other hand, a person who has infringed upon the rules of his group or society will base on a sense of collective obligation to feel ashamed in a collectivist society (Hofstede & Hofstede, 1991). This source of shame is less of the infringement, but more of being known by others (Hofstede & Hofstede, 1991). These two collectivist concepts, face and shame, nonetheless, are also virtues related to short-term and long-term orientation respectively, which thus makes the emphasis of reputation difficult to be classified in the long-term orientation dimension.

The emphasis on reputation leads to the support of the social insurance. People who emphasize reputation mean that they are very socially-conscious ie, collectivist. Unlike familism, these collectivist values can be extended to the workplace and the Government. In the workplace, collectivist entrepreneurs can deem employees as members of in-groups, which is taken into account for hiring and promotion decisions, such that their employer-employee relationship is more important, like a family link (Hofstede & Hofstede, 1991). They own their companies with their families or collectives, and prefer equality over individual freedom for the Government (Hofstede & Hofstede, 1991). These collectivist values thus prefer the systems of social policies and social insurance.

Hypothesis 8

*High level of emphasis on reputation has a positive impact to the level of social insurance compliance.*

3.4.4.6 Emphasis of Reciprocities

Reciprocities, relationships and guanxi related ideas are in association with the dimension of femininity instead. An individual might be labelled as feminine (this label
is irrespective of genders) when he or she is supposed to be “modest, tender, and concerned with the quality of life” (Hofstede & Hofstede, 1991). As similar as the case of individualism and collectivism, since our level of analysis is individual entrepreneurs within societies, but not the entire societies, femininity is seen more a separate dimension from masculinity for our analysis, as an individual can be both feminine and masculine at the same time (Bem, 1975; Hofstede & Hofstede, 1991). In addition, these reciprocal ideas in relation to in-groups minorly connect to collectivist values too.

The ideas of reciprocities, relationships and guanxi provide support to social policies and social insurance. Entrepreneurs who consider relationships as important and focus on relationships tend to reward employees based on equality (Hofstede & Hofstede, 1991). Their employees are attached to employment security in order to work for their companies as long as their employees want to (Hofstede & Hofstede, 1991). They deem relationship to prevail over task (Hofstede & Hofstede, 1991). In the Government, they prioritize solidarity with the weak rather than reward for the strong (Hofstede & Hofstede, 1991). They strive for welfare society as their ideal and help for the needy (Hofstede & Hofstede, 1991). Most of them feel that society should provide a minimum quality of life for everyone, whose financial means to this end are collected from those in society who have them (Hofstede & Hofstede, 1991). Their political views are thus placed slightly more to the left of centre (Hofstede & Hofstede, 1991). These feminist and collectivist values place themselves more support for social policies and social insurance.

On the other hand, these network-related ideas also connect to the dimension of long-term orientation. This networking idea is considered as a horizontal cooperation (Redding, 1993), which is a source of efficiency and failure to Chinese entrepreneurs (Redding, 1993). These entrepreneurs deem their personal network of acquaintances as essential for their success (Hofstede & Hofstede, 1991). Instead of the price or quality of their tendered product or service, their connections with the right people are often deemed more important in their business decision making (Yeung & Tung, 1996). Thus, personal networks, guanxi, is their life-long investment (Hofstede & Hofstede, 1991). This long-term orientation of these entrepreneurs can lead to their support to social insurance.
Hypothesis 9

*High levels of emphases on reciprocities, relationships and guanxi have a positive impact to the level of social insurance compliance.*

3.4.4.7 Ethical Tolerance and Technological Related Spirit

Ethical tolerance and technological spirit, on top of the above relevant ethical values, can be connected to the cultural dimensions as well *(Hofstede, 1980)* (see Table 7).

<table>
<thead>
<tr>
<th>Decision Criteria</th>
<th>Cultural Dimensions</th>
<th>Social Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical tolerance</td>
<td>Uncertainty avoidance</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Technological related spirit</td>
<td>Uncertainty avoidance</td>
<td>Compliance</td>
</tr>
</tbody>
</table>

Ethical tolerance is the extent of expecting and accepting ethical uncertainties, and technological related spirit brings to imagination, creativity, novelty and sensitivity. Both of them can influence through the cultural dimensions to ethical decision making stages. These two concepts both seem to connect to the dimension of uncertainty avoidance.

On the one hand, ethical uncertainties are the ambiguous nature of ethics supposed by other people, or ambiguities of ethics supposed by the assumed transcendental forces that control man’s personal future *(Hofstede & Hofstede, 1991)*. These ethical uncertainties are a threat to be deal with for low ethical-tolerating people. Ethical intolerant people do not identify and exploit untapped opportunities in ethically grey areas, and do not access and open these opportunities, for their prevention and defence against ethical uncertainties.

On the other hand, technological related spirit can have divergent effects to the tolerance to these ethical uncertainties. These technological entrepreneurs can be willing to develop technology to avoid uncertainties caused by nature, because of their intolerable anxieties for uncertainties. Thus these entrepreneurs will also be intolerant to ethical uncertainties. In view that technological entrepreneurs are often deemed as creative people, there is a common belief that these creative entrepreneurs can be more enthusiastic to uncertainties. These two sets of opposite arguments thus support differing relationships between technological related spirit and uncertainty avoidance.
dimension for entrepreneurs. However, because the negative relationship between creativity and uncertainty avoidance is more like a supposition on creative people, therefore creativity should have a positive effect to uncertainty avoidance dimension.

The entrepreneurs who prefer the avoidance of uncertainties incline to provide social insurance in order to lower changes of employees. They have an emotional need for rules of social insurance, which are considered as necessary, because the social insurance alleviates their intolerable anxieties for ambiguities in their responsibilities of the retirement of their employees. We therefore expect that high ethical tolerance or low creativity spirit, which both connect to low uncertainty avoidance, can explain the low preferences to towards social insurance compliance of entrepreneurs.

**Hypothesis 10**

*High level of ethical tolerance has a negative impact to the level of social insurance compliance.*

**Hypothesis 11**

*High level of technological related spirit has a positive impact to the level of social insurance compliance.*

### 3.5 Compliance Stages

The ethical values, in terms of ethical ideologies and ethical reputation of entrepreneurs, bind the awareness, judgment/intent and behaviour of compliance stages in the social insurance.

To begin with, Rest (1986)’s four-stage model for ethical decision making has four stages or components – 1) recognizing the moral issue; 2) making a moral judgment; 3) resolving to place moral concerns ahead of other concerns (establishing moral intent), and; 4) acting on the moral concerns (see Section 2.3.2.1). These stages and steps are then examined in the ethical decision making model of entrepreneurs (Solymossy & Masters, 2002). This entrepreneurial model combines the four steps into three steps: recognizing moral issues, making moral judgment (establishing intent), engaging in moral behaviour (see Section 3.1). Our research model retains their three steps – recognizing moral issues, making moral judgment (establishing intent), engaging in moral behaviour – because of their relevance to our entrepreneurial context. Followed
by, a new step – implementing ethical infrastructure – is appended at the end of our research model, to research on the details of ethical implementation as well (see Section 2.3.3 and 3.1).

When a social insurance issue arises, first, entrepreneurs recognize it. They then based on their ethical concerns to make a compliance judgment, before they integrate other concerns together, which resolves with each other to establish compliance intent. Once they have established their compliance intent, they decide whether or not to act on their compliance concern, which contribute their compliance actions. Their compliance actions can lead to their implementation of social insurance infrastructure in a long term as well.

3.6 Research Model

This chapter has described theoretical models (rational or material, ideological and reputational models) of compliance decision in social insurance. These models consider various human wants of entrepreneurs in explaining compliance decision, while they also submerge themselves into a deep ontological debate of what really drives the decision of social insurance.

Rational models of compliance decision propose that material interest is the main driver of entrepreneur’s non-compliance or compliance in China. Material interest represents the basic human want that directs human decisions. This material interest can be described as material goods eg, social insurance costs to entrepreneurs. The importance of material goods is common in rational models. Materials goods are often regarded as the sole dimension of material interest too. This assumption is the cornerstone of existing rational models, with material interest being the dominating cause of entrepreneur’s decisions, if not the sole one. This dominating of material driver is considered as the null hypothesis in most existing literature on compliance decision (Goodin & Klingemann, 1998). On the other hand, ideological and reputational models propose non-material drivers for the entrepreneur’s compliance decision in China instead. Ethical ideologies and ethical reputation of entrepreneurs are argued to govern compliance conduct.

Not ideas, but material and ideal interests, directly govern men’s conduct.
Yet very frequently the ‘world images’ that have been created by ‘ideas’
have, like switchmen, determined the tracks along which action has been
pushed by the dynamic of interest (Weber, 1948).

I am sure that the power of vested interests is vastly exaggerated
compared with the gradual encroachment of ideas (Keynes, 1936).

It is ideas, not vested interests, which are dangerous for good or evil
(Keynes, 1936).

This material and non-material driver debate is a long-time research topic, in which the
dominating one is considered different across the contexts of research. Material drivers
seem to dominate in business & economics, or management disciplines, while more
emphasis on non-material drivers can be seen in social sciences and public policy
discipline. This has suggested that different disciplines link different drivers to
compliance concerns and behaviours (Rivera, 2010). The difference does not only exist
across the disciplines, but also across the nationalities. Non-material drivers of
compliance are often emphasized by Chinese scholars. Other scholars, on the other hand,
do not believe in non-rational drivers as the sole explanation, but often reside to those
material drivers of compliance instead. Although scholars often keep their
enthusiasm/detest at bay, they cannot dissociate themselves from the cultural values in
practice even if they appear to be neutral and even-handed. The existing literature in
social security policies, therefore, has long been criticized for gaps and biases in our
knowledge (Finer, 2001, 2003; Jones, 1993).

This ontological topic is relevant to help us decide the importance of ethics in
entrepreneurship. Ethics is argued to influence entrepreneurship. If the material-based
drivers are stronger than non-material-based drivers in compliance decision, then ethics
will have little impact to entrepreneurship, else more impact can be possible. There is
still no guarantee that the strength of ethics in compliance decision will increase the
success of entrepreneurship but at least it has a shot there. As a result, this ontological
topic is critical in strengthening the CSF belief.

The various material and non-material interests are however seldom integrated together
as multiple drivers of compliance decision in existing models. These uni-attribute
models often originate from a single discipline (Gibbs, Gore, McGarrell, & Rivers, 2010)
eg, economic models (Dowell et al., 1998; Etienne, 2010, 2011; Hatcher et al., 2000; Kuperan & Sutinen, 1994; Sutinen & Kuperan, 1999) or sociological models (Nyland, Thomson, & Zhu, 2009; Nyland et al., 2011). Some of them can notice multiple attributes of decision; however, these multiple drivers are integrated to a minor extent in the models. The net impact of these multiple drivers to compliance decision is neither discussed. Also, these models often focus only on the macro level of social insurance.

The research model of this thesis should therefore be integrated decision making models. Such integrated decision making models have not been found in the existing literature. We thus use multi-attribute utility theory (“MAUT”) (Baron, 2000) to build our model. The foundations of MAUT is available in French (1993). This multiple criteria approach to decision making helps to capture the preferences of multiple criteria for compliance decision in social insurance. The problem and limitation of MAUT is that it has not been contextualized. The ethical decision making models with the MAUT are thus contextualized in order to construct an integrated decision making model in social insurance.

The research model, in terms of the ‘stages’ version and the ‘criteria’ version, is shown in the Figure 19 and Figure 20 respectively.
Figure 19: Theoretical Model (The ‘Stages’ Model)
Figure 20: Theoretical Model (The ‘Criteria’ Model)
This research model can be compared to cognitive mapping, a tool in operational research ("OR") that captures a person's view about a situation, represented in the form of a network of statements, expressing ideas, means and ends, linked together by arrows indicating the direction of connections between statements or cause-and-effect relationships (White, 2006). The modelling device is used for eliciting and recording individuals' views, aggregating and negotiating various views and developing high levels of ownership for a problem situation (Daellenbach & Christchurch, 2001; Mingers & Rosenhead, 2004; Rosenhead, 1989, 1996). This cognitive mapping, thus, helps us to provide an empirical model (Eden & Ackermann, 2006) (see Chapter 4.1).

The ‘stages’ version of model proposes that social insurance decision making of entrepreneurs have four stages or components – recognizing the compliance issue, making a compliance judgment (establishing compliance intent), engaging in compliance behaviour, and implementing compliance infrastructure in social insurance. The first three stages in the process is standing on the shoulders of giants in ethical decision making eg, Rest (1986), Treviño (1986), Jones (1991) and Solymossy and Masters (2002) who describe the elements of models. The last stage in the process is built on the last research gap (see Section 2.3.3). A move from a former stage to a later stage is influenced by rational or material, ideological and reputational criteria (Longenecker et al., 2006; Strong & Meyer, 1992; Vyakarnam et al., 1997).

The ‘stages’ version of model is then zoom-able at the point of advancement in the process for the ‘criteria’ version of model. The rational or material criteria have two dimensions – short term and long term in social insurance (see Section 3.3). The short term dimension considers cash or financial criteria eg, cost control (Hypothesis 1), the probability and the punishment of conviction (Hypothesis 2), and admin costs. In contrast, strategic criteria eg, recruitment and retention of employees (Hypothesis 3), rival’s costs, consumer sales, political supervision, and the probability of being re-audited are deemed as the long term dimension of rational criteria. These two short term and long term rational criteria can be accorded to evaluate a compliance alternative (Belton & Stewart, 2002). Then, the relevant ethical values (familism, integrity, work ethics, anti-individualism and rule of law) influence through ethical ideologies and ethical reputation as ideological and reputation criteria respectively (see Section 3.4). The ethical ideologies consider familism (Hypothesis 4), integrity (Hypothesis 5), work ethics (Hypothesis 6), and anti-individualism (Hypothesis 7) of entrepreneur, while the
emphases on reputation (Hypothesis 8), trust, and reciprocities, relationships and guanxi (Hypothesis 9) are deemed as the issues of ethical reputation. Ethical tolerance and technological impact are also brought out from the three criteria to light in the model. The ethical tolerance regards uncertainty avoidance as consideration (Hypothesis 10) (see Section 2.3.3 and 3.4.4), whereas the technological impact eg, technological knowledge, technological disciplines or backgrounds, and technological related spirit have been proposed to affect the compliance decision as well (Hypothesis 11) (see Section 2.3.3 and 3.4.4). The last criterion to be considered in the process is the moral intensity of the social insurance issue.

Our research model can never be a comprehensive one, but we have tried our best to focus on those stages, criteria and components that seem to be most relevant to our social insurance context.

### 3.7 Critical Success Factors

This section is written about the only one paper (to our best knowledge) relevant to mediation model that have been published on Journal of Small Business Management (Tomczyk et al., 2013). This mediation model investigated number of benefits as the mediation between the personal values of entrepreneurs and high growth firms’ performance.

Tomczyk et al. (2013) recall that chief executive officers (“CEOs”) are widely believed to have a critical role in affecting organizational outcomes eg, strategic choices and performance levels (Finkelstein, Hambrick, & Cannella, 2009; Hambrick & Mason, 1984; Hatton & Raymond, 1994). The individual characteristics of CEOs such as personality, demographics, functional expertise, trait, cognition, and personal values have been examined in considerable published research accordingly. Personal values provide the reason for choice and behaviour (Mele, 1995), judgment, preference and choice (Williams, 2008), decision (MeGLino & Ravlin, 1998), and policies and processes (Baron & Shane, 2007). This considerable research about the relationship between personal values, and organizational structure and strategies is, however contrasted to the little research between personal values and firm performance. Only two relevant papers were found by Tomczyk et al. (2013): Ling, Zhao, and Baron (2007) investigate the effects of collectivism and novelty on companies’ post-start-up performance, while Berson, Oreg, and Dvir (2008) examine the relationships between CEO values (self-
directive values, security values and benevolence values) and firm performance (sales growth, organizational efficiency and employee satisfaction). However, these two studies did not examine the mediating variables, and they simply demonstrated correlations between variables (Tomczyk et al., 2013).

Tomczyk et al. (2013) therefore elaborate a model of how entrepreneurs’ values affect firm performance through compensation practices (see Figure 21).

**Figure 21: The Model of Entrepreneurs’ Values, Compensation Practices and Firm Performance (Tomczyk et al., 2013)**

This mediation model argues that entrepreneur values (ie, other-caring values) are significantly related to firm performance, which is mediated by compensation practices. On the left mediation path, entrepreneur values are considered crucial in the formation of compensation practices offered to their employees (Tomczyk et al., 2013). On the right path of mediation, compensation practices that reinforce or match corporate strategies are seen to partially determine the firm performance (Gomez-Mejia, 1992; Youndt, Snell, Dean, & Lepak, 1996).

Tomczyk et al. (2013)’s results discovered that other-caring instrumental values (forgiving, helpful, loving, and polite) and other-caring terminal values (a world at peace, equality, freedom, national security, and family security) (Rokeach, 1973) impacted the firm performance (Tomczyk et al., 2013). Other-caring instrumental values were found to positively impact sales growth, but not employee growth; whereas, other-caring terminal values had a negative effect on both the sales growth and employee growth in the business (Tomczyk et al., 2013). As a result, the beginning of mediation path that could explain the correlation between other-caring values and the total number of benefits offered is not supported by the data. Thus, although the relationship between total number of benefits offered and firm performance was shown, the mediation pathway was not supported by their statistic (Tomczyk et al., 2013).
Tomczyk et al. (2013) is significant to our research model due to as follows.

First, Tomczyk et al. (2013) position the mediation model within considerable research on the individual characteristics of CEOs, entrepreneurial personality research, trait and cognition approach in the entrepreneurship research domain, which is compared to the positioning of our research model. The ethical values such as familism, integrity, work ethics, anti-individualism, emphases on reputation, trust, and reciprocities, relationships and guanxi can be considered as personal values as well. These psychological characteristics of entrepreneurs are common topics in the entrepreneurship research domain.

Second, our mediation models are alike structurally when compared. Their model tests the mediation path from the values of the entrepreneur, through the number of benefits offered, to high growth firms’ performance, while the mediation path from the ethical values of entrepreneur, through social insurance decision making, to start-ups’ performance and success is investigated in our model instead. The mediation of compensation practices is similar to the social insurance as our mediation too.

Third, there are also some contrasts on the selection of values, compensation, firm performance, and the used data between their model and our model (see Section 6.1). Tomczyk et al. (2013) use data from the top 500 fastest growing entrepreneurial firms in America, which is different from our 144 entrepreneurial start-ups in China. Thus, although the mediation pathway was not supported by their statistic (Tomczyk et al., 2013), with different values, compensation, firm performance, and the used data, the mediation model of entrepreneurs may differ systematically in different regional contexts.

The following sections that are written about critical success factors (see Section 5.3) will therefore be revised in terms of structure and content, in order to compare consistently the mediation models between Tomczyk et al. (2013) and this thesis.
Chapter 4 Empirical Model

4.1 Fieldwork Description

This chapter would cover the main evidence of rational or material (short term and long term), ideological and reputational criteria in explaining compliance. These main evidences came from the data bases of interviews and questionnaires, together with other researchers’ data and official statistics. The external data and statistics used were a Chinese Communist Party (“CCP”) survey in 2004 (Chen, Li, & Matlay, 2006) and China Statistical Yearbook in 2012 (National Bureau of Statistics of China, 2012). These data sources are fitted into my empirical model as appropriate. Then the empirical model would support the research hypotheses put forward in this thesis.

What I would begin is to describe and provide the information of my fieldwork and data set.

The fieldwork dates began on March, 2012 and ended on February 28, 2013. The sample type covered adults between the ages of 18 and 70 (born between 1942 and 1994), who established or managed a start-up in the cities of the China. The fieldwork methods were face-to-face interviews and questionnaires, in addition to online questionnaires. The sample size was targeted for approximately 150 to 1,000 eligible entrepreneurs, while the sample drawn from the field was 464 and the completed, valid questionnaires were 144, which resulted in a valid response rate of 31.0%. The spoken language was either Cantonese or Mandarin, and the written language was either simplified or traditional Chinese. My fieldwork could not weight my sample on some major demographic variables eg, age and gender, but on level of education, as the latter data were accessible in the CCP survey; while the region of legal entities in the population was accessible from the census as well. Weight and post stratification were done on level of education, and region of legal entities, as following. First, the number of entrepreneurs by level of education was obtained based on the 2004 CCP survey data; Second, the ratio of each level of education over the total was calculated: \( r_1 \); Third, the similar ratio of respondents for the sample was calculated: \( r_2 \); Fourth, the post stratification weight of level of education was obtained: \( \text{pweight}_1 = \frac{r_1}{r_2} \); Fifth, the post stratification weight of the region of legal entities was obtained similarly: \( \text{pweight}_2 \), and; Sixth, the product of \( \text{pweight}_1 \) and \( \text{pweight}_2 \) got the final weight (V259) of respondents in the dataset.
The sample cases were filtered according to the criteria as follows: 1) the 14 face-to-face interviews and/or questionnaires were counted as completed, valid responses, because these respondents assumed a clock builder role to build or organize a company, which met the definition of entrepreneur I used in this thesis; 2) the respondents were really entrepreneurs. The respondents should neither be employed as full time employees nor part-time employees, but they should be self-employed at the time of response. This meant V7 = 3 in the dataset. Their responses would be further confirmed through sending emails to them, and their replies would be used to correct their responses if necessary. This whole process was to confirm that they were really entrepreneurs; 3) the time spent was equal or more than 3 seconds for a question ie, total 225 seconds; 4) their ages were between 18 and 70; 5) the start-ups had been established or would be established before or on 2013, because a target post-2013 establishment was too remote to be included; 6) the total social insurance costs percentage over total wage costs should be from <=4% to 45% - 54%, despite a full <=4% to >100% choice is available. The over-compliance choices are only used to trap unreliable responses, as these choices were not deemed reasonable to entrepreneurs; 7) via manual checking, unreliable responses were filtered out eg, the abnormal names of start-ups, zeroes in all answers, the lowest values, middle values or the highest values in all answers, stepping down or stepping up in all answers, or comments that hinted unreliable responses. These filtering criteria resulted in 144 final completed, valid samples.

The profile of the 14 met entrepreneurs for data analysis were described in the Table 8 as follows and in Exhibit 1; while the demographic variables (age, gender, and level of education) of the 144 filtered entrepreneurs were reported in the Table 9 and Exhibit 2.
### Table 8: Sampling Report (The Profile of Entrepreneur)

<table>
<thead>
<tr>
<th>Number</th>
<th>Title &amp; Industries</th>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vice General Manager</td>
<td>The Vice General Manager and the acting General Manager of heat technologies start-up (hereafter referred as the heat technologies entrepreneur) was one of the three founders to set up their company. His heat technologies start-up was established with Rmb 4,350,000 as a limited liability company (natural person investment or holding) on April 5, 2006 in Panyu, Guangzhou. He was a 44 years old male at a college level. His partner, the General Manager, had passed the whole business management to him, while acting as a shadow investor now, who just demanded a fixed ratio of annual dividend from the start-up. His start-up had a technological cooperation in manufacturing with a Spanish group, specializing in the heat pump technological research and application.</td>
</tr>
<tr>
<td>2</td>
<td>General Manager</td>
<td>The Chairman of electronic technology corporation was a partner with the heat technologies entrepreneur. This chairman came from South Korea so let me call him the Korean entrepreneur. His electronic technology start-up was established with US$ 4,500,000 as a limited liability company (foreign investment) on June 29, 2010 in Zhongshan. He had one more precision mould start-up in Wuxi as well. But he focused on the start-up in Zhongshan instead of in Wuxi, because of the newness of Zhongshan start-up and the weak control of Wuxi start-up. His start-up specialized in designing and manufacturing precision die and electrical equipment.</td>
</tr>
<tr>
<td>3</td>
<td>Chain Manager</td>
<td>The Chain manager was a co-investor with the heat technologies entrepreneur in pharmaceutical start-up as well (hereafter referred as the pharmaceutical entrepreneur). His pharmaceutical start-up was established in 2004 in Guangzhou. He was a 44 years old male at a college level. He was responsible for the whole business management of the start-up, which was part of a pharmaceutical chain.</td>
</tr>
<tr>
<td>4</td>
<td>Managing Director</td>
<td>The Managing Director of jewellery start-up (jewellery entrepreneur) had his business both in Hong Kong and Panyu, Guangzhou. The Hong Kong start-up was established as a local private company on December 17, 1992, which served as the sales office of the jewellery workshop in Panyu, Guangzhou. He was a 64 years old male at a senior secondary school level. His start-up sold products of gold &amp; silver ornamental jewellery. In the 2011, he decided to retire from work, selling his start-up to his partner. Then, upon the transfer of</td>
</tr>
</tbody>
</table>

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6 From 1995 to June 2005, the Chinese yuan was linked to the US dollar in a fixed exchange rate system at a rate of US$1 = Rmb 8.11. From June 2005 the yuan has been linked to a basket of currencies. On 1 September 2010 the exchange rate was US$1 = RMB6.80.
| 5 | General Manager  
Lighter | The General Manager of lighter start-up set up his factory in 1998 in Wenzhou. He was a 39 years old male at a college level. His start-up was one of his family businesses, which comprised of Chinese medicine as well. |
|---|---|---|
| 6 | The Son of General Manager  
Trading | The son of the General Manager of trading start-up, who was the vice-General Manager too (hereafter referred as the trading entrepreneur), inherited his start-up from his father. His start-up was founded by his father as a local private company in Hong Kong, who established four mainland factories in 1999 in Dongguan and Huizhou. He was a 31 years old male at a higher level. He managed the four mainland factories of start-up. |
| 7 | General Manager  
Textile  
Information technology  
Trading | This entrepreneur established three start-ups in the textile, information technology and trading industries as local private companies from 2010 to 2011 in Hong Kong. Let me call him as serial entrepreneur to help the following discussion. He was a 32 years old male at a college level. He shared the net profits of information technology side to expand the trading side at the moment. The serial entrepreneur was, most of the time, based in Hong Kong, but he had to sometimes hire the staffs for textile trading in Shenzhen. |
| 8 | Owner  
Gourmet restaurant | The Owner had a co-investment with the heat technologies entrepreneur in gourmet restaurant. The gourmet restaurant was established in 2001 in Guangzhou. She was a 43 years old female at a senior secondary school level. The heat technologies entrepreneur was a hidden shareholder who passed the restaurant management to the restaurant owner. Her restaurant had not stricken for a break even, before she decided to spend more time on her son, closing her restaurant in the 2011. |
| 9 | General Manager  
Realty agency | The General Manager of realty agency start-up (hereafter referred as the realty agency entrepreneur) founded his company with the pharmaceutical entrepreneur. His start-up was established with less than Rmb 10,000 as a limited liability companies division on August 21, 2003 in Guangzhou. He was a 46 years old male at a senior secondary school level. He was the main decision maker of his company, though the two companies of his and his partner’s were located closely to each other. |
| 10 | Executive Vice General Manager  
Plastic Industry | The Executive Vice General Manager of the start-up in plastic industry (hereafter referred as the plastic industry entrepreneur) was one of the founders in his organization. His organization was established with Rmb 8,000,000 as a limited liability company (natural person investment or holding) on May 15, 1997 in Guangzhou. He was a 47 years old male at a higher level. He was responsible for the entire execution of the factory, but less for the sales to customers. |
<table>
<thead>
<tr>
<th>11</th>
<th><strong>General Manager</strong></th>
<th><strong>Information tech</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The General Manager of information tech start-up (the information tech entrepreneur) had two companies – one was his own information tech company and the other was the Guangzhou regional office of a Beijing information tech company. His own start-up was established with Rmb 1,000,000 as a limited liability company (natural person investment or holding) on October 28, 1999 in Guangzhou. He was a 43 years old male at a college level.</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>12</th>
<th><strong>General Manager</strong></th>
<th><strong>Marketing &amp; research consultants</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The General Manager of marketing &amp; research consultant start-up (hereafter referred as the marketing &amp; research consultant entrepreneur) co-founded his firm in the research industries. His firm was established with Rmb 500,000 as a limited liability company (natural person investment or holding) on February 28, 2001 in Guangzhou. He was a 45 years old male at a college level.</td>
<td></td>
</tr>
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<table>
<thead>
<tr>
<th>13</th>
<th><strong>General Manager</strong></th>
<th><strong>Property management</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The General Manager (hereafter referred as the property management entrepreneur) founded two property management start-ups as well. One was his original start-up, established in 1997, whose assets were transferred to establish his new start-up, while leaving liabilities in his original one. His new start-up was established with Rmb 503,000 as a limited liability company (natural person investment or holding) on December 5, 2000 in Guangzhou. He was a 44 years old male at a college level. His start-up targeted on various large hospitals, administrative office buildings, business buildings, banks and communities.</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>14</th>
<th><strong>General Manager</strong></th>
<th><strong>Management consulting</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The General Manager of management consulting start-up (hereafter referred as the management consulting entrepreneur) was the sole proprietor of his firm. His firm was established with Rmb 100,000 as a limited liability company (natural person sole proprietorship) on March 29, 2007 in Guangzhou. He was a 37 years old male at a higher school level.</td>
<td></td>
</tr>
</tbody>
</table>
On the one hand, these 14 met entrepreneurs took the titles at the top levels of a company. In small businesses, owners and founders were often not distinguished from CEOs and GMs, because there was a lack of segregation of powers (Chen et al., 2006), so these titles would be treated as entrepreneurs. Vice-GMs and the alike that were members of the entrepreneurial team would also be included. Those that inherited a business but were responsible to build or organize a new subsidiary would be embraced too. Capital and date of establishment of a start-up less mattered to the sampling, as long as these entrepreneurs were really the ones who have built or organized a company, while these entrepreneurs had a sustaining impact to their companies. In other words, an older venture or a bigger enterprise would still be interesting. These entrepreneurs mostly came from Guangdong, except one from Zhejiang province.

On the other hand, those 144 filtered entrepreneurs were distributed in age, gender and education as shown in the sample statistics of my data. My data found most respondents were 18-29 years old male at a college and higher level in my sample. 69.4% of my sample were 18-29 years old, 62.5% were male, and 72.9% were at college level. These sample parameters seemed to be consistent with our common sense about the entrepreneurs.

### Table 9: Demographic Variables
(The number and percentage were not weighted)

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 29</td>
<td>100</td>
<td>69.4</td>
</tr>
<tr>
<td>30 – 39</td>
<td>21</td>
<td>14.6</td>
</tr>
<tr>
<td>40 – 49</td>
<td>19</td>
<td>13.2</td>
</tr>
<tr>
<td>50 – 59</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>60 – 70</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Total Population</td>
<td>144</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>90</td>
<td>62.5</td>
</tr>
<tr>
<td>Female</td>
<td>54</td>
<td>37.5</td>
</tr>
<tr>
<td>Total Population</td>
<td>144</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
</table>

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The concepts of rational or material (short term and long term), ideological and reputational criteria, and compliance decision were operationalized through my questionnaire. Relevant questions were stated in questionnaires and the responses to
which indicated the attribute or the attitude of respondents. The operationalized decision criteria and compliance decision then became the independent variable $X_i$ and dependent variable $Y_i$ respectively in my empirical model.

Rational or material criteria represented the material interest, concern or point of view, according to which compliance decision might be compared. Thus, I had to operationalize the rational criteria with the attributes and measures that evaluated the material interest. The better attributes and measures should represent the level of material interest consideration that impacted compliance decision. Three operationalization methods were probable but the selection from them laid some difficulties. First, the simplest one was those measures that evaluated the current level of material goods. This current level of material goods is a material fact (Baylis, Smith, & Owens, 2005), which was more objective and authoritative; however, it represented only a sunk interest, which were less direct in terms of impact than prospective interest. Second, the prospective interest could be evaluated through net present value (“NPV”) of compliance decision. This NPV concept came from corporate finance. The basic idea was about “how much value created or added today by undertaking a [decision]” (Ross, Westerfield, & Jordan, 2007). In spite of its attractiveness, it was difficult to be put to practice. The benefit and probability of alternatives were often unknown when calculating their present value. This calculation had a high demand on information, making it less popular for use in a real decision, not even mentioning its use in our meeting. Third, I had to evaluate the material concern or point of view as well. This was about one’s weight of the importance of material criteria for a compliance decision. Though, one might not be able to tell me what his/her true attitudes really were (Young, 1977), thus its successful use relied on research techniques ie, swing weights, trade-off method, or asking for direct importance judgments (Zarghami & Szidarovszky, 2011).

The rational or material model (see Section 3.3.2 and Hypothesis 1), the material concern or point of view should be a better way to represent rational or material criteria. I nevertheless used both the current level rational measures ie, the level of social insurance costs, total wage costs, total costs, the probability and the punishment of conviction, and the recruitment and retention, and the rational or material weights ie, asked direct importance judgments of rational or material criteria for a decision, as a completion here. These measures were described one by one as follows. First, although cost-related measures, such as social insurance costs, wage costs, and total costs were in
fact combinable with total revenue to a single measure – net profits, it was argued that
the rationale of using these cost-related components was to examine their divergent
effects (Chang, Chu, & Tsai, 2005; Fetzer & Soper, 2007). Second, the level of the
probability and the punishment of conviction concern was signified through hukou
(provinces/municipalities/autonomous regions) (as the substitute of the location of start-
up), institution of occupation, and industries. National central cities (Beijing, Tianjin,
Shanghai, Guangzhou in Guangdong, Chongqing and Hong Kong), state owned
enterprises (“SOE”), and Government agencies, party agencies and social organizations
were expected to experience higher level of probability and punishment of conviction
than other locations, institutions, and industries, thus higher conviction concern. Third,
the level of the recruitment and retention was characterized by number of employees,
including existing and new employees. The indirect measure of existing employees ie,
firm size was often used in literature; however, a large existing employee base could be
stable with a low turnover rate, hence a low level of recruitment and retention. In
contrast, new employees could be a more direct measure instead. Fourth, despite that
some other mentioned variables could be used as rational measures too – the level of
admin costs, the level of rival’s costs, the level of consumer care on the fair business,
the level of supervision and inspection in the future, the probability of being re-audited
or etc. – I was selecting the more relevant variables here as my rational measures, else
my number of rational measures would be too many for my scope. Fifth, three direct
methods could be used to measure the weights: swing weights, trade-off method or
asking for direct importance judgments (Zarghami & Szidarovszky, 2011). Comparing
the three methods, asking for direct importance judgments was the simplest method, but
swing weights and trade-off method were better ways to elicit criteria weights instead.
However our measuring method was restricted by the research method. In the format of
interviewing, the trade-off method could be used, but it was difficult to implement in the
self-completion questionnaire. In contrast, since asking method was simple, it could be
used in both the interview and questionnaire as well. In spite that the asking method did
not force entrepreneurs to think hard about trade-offs, which might make the asked
weights not behaving like swing and trade-off weights (Zarghami & Szidarovszky,
2011), such a simple way to elicit attribute weights should be good enough for our
purpose.

Ethical ideologies eg, familism, integrity, work ethics, and anti-individualism were
often operationalized in the current surveys eg, Moody (1994), Robinson (1999), Tang
(2005) or World Values Survey (WVS). Most of them, however, were stated in a positive way. In other words, it was specified as whether or not an entrepreneur agreed with a value. This positive way might only reflect partially the true values. These values could be stated through a negative way indeed – whether or not one rejected an oppositely stated value (Irwin & Baron, 2001). In comparison, positive measures seemed weaker than negative ones in impacting decision making. In this case, while only the positive measures of familism, integrity, and work ethics were used in WVS, I employed both positive (as same as those in WVS) and negative ones of familism and work ethics to construct a value from different perspectives. Other ethical ideologies, anti-individualism were represented by negative measures too. On the other hand, ethical reputation was stated in terms of the emphases on reputation, trust, and reciprocities, relationships or guanxi to the people as well.

The notion of moral intensity was not my specific focus; hence only one (magnitude of consequences) out of the six components was measured. The magnitude of consequences was identified as the number of employees. A large existing employee base meant that a compliance decision would have a large sum of harms/benefits to them, in contrast to a small employee base. The size of employee base thus measured the degree of magnitude of consequences in moral intensity.

Then, ethical tolerance and technological impact were denoted in two different ways instead. On the one hand, ethical tolerance had a negative connection with the uncertainty avoidance dimension (Hofstede & Hofstede, 1991) (see Section 3.4.4). An ethically tolerant person is deemed not to value rule too much. In that case, the emphasis on rule was thus usable for the ethical tolerance. On the other hand, technological impact was indicated by three methods, in parallel to the three influences of them. Technological related spirit was represented by an emphasis on the thinking of new ideas, whereas technological disciplines or backgrounds were corresponded to by the engineering discipline. Technological knowledge, however, was difficult to be characterized. Thus, I could only denote it through entrepreneurs’ industries. Since information tech industries were often classified to telecommunication services, hence the transport, storage, postal & telecommunication services industries were employed to itemize technological knowledge.
These decision criteria (rational or material, ideological and reputational criteria) and determinants were expected to influence decision stages – recognizing compliance issues (awareness), making a compliance judgment/establishing compliance intent (judgment/intent), engaging in compliance behaviour (decision) and implementing compliance infrastructure (implementation) in the process of social insurance.

Compliance awareness was operationalized as the recognition of whether or not the current Government social insurance provisions were adequate. The high recognition meant that the entrepreneurs were more aware of social insurance as an important issue. If the current Government social insurance provisions were adequate, the provisions were developed, and then compliance would be more aware of as a standard by the entrepreneurs. Compliance judgment/intent was measured as the level of preference to social insurance provisions. Compliance decision, for my purpose, was represented through the reported decision of social insurance behaviour. This social insurance decision was reported as whether or not entrepreneurs implemented the five provisions (basic endowment, unemployment, medical, employment injury, and maternity insurances). These five decisions were then summed up into one decision. My logic was that, any non-compliance in the five reported decisions would make a non-compliance decision in the recoded variable, as all five compliance decisions were needed for compliance in social insurance law. On the other hand, current literature often focused on simple decisions, but not detailed implementation actions, thus these actions were operationalized in my research design too. There were four broad groups of 19 implementation actions: not to handle social insurance registration, circumvent or escape, minimum standard, and improved implementation of social insurance. Not to handle social insurance registration, and circumvent or escape were deemed as non-compliance groups of implementation actions, while the minimum standard, or improved implementation of social insurance were considered as compliance implementation action groups. The minimum standard group, though legal, was less ethical than the improved implementation group of social insurance. The improved implementation group showed that the entrepreneur would improve the infrastructure for the social insurance, thus denoting compliance implementation construct (see Section 4.6).

On the one side, not to handle social insurance registration was a self-explanatory implementation action. In circumvent or escape group, there were eight implementation
actions. Partial social insurance implementation actions eg, handling of some but not all employees’ social insurance registration, issuing of a partially correct certificate of employment relationship, issuing of a partially correct certificate of employment wage, and late or partial amount of payment of social insurance premiums were within this group. Some entrepreneurs might supplement gifts to employees or give gifts to Government to excuse for their partial compliance. Few entrepreneurs might continue with partial compliance – if they were “unfortunately” convicted or punished, then they would accept imposed fine as normal cost to their start-ups. Many others would use the grey area of provisions too. This exploitation of the unclear area of provisions could be deemed as circumvention or escape of social insurance. In contrast, some entrepreneurs conducted some six legal implementation actions to provide a minimum standard of social insurance. Some actions were connected to the composition of workforce eg, recruitment of rural residents, recruitment of part-time employees and other persons in flexible employment, the staff governed analogically by the Civil Servant Law, foreign migrant workers or foreigners, who have low insurance contribution level, and provision of different insurance contribution levels to different segmentation of workforce. Some actions such as the reduction of reduced employees’ total wage, recruitment, or total bonus would reduce total social insurance costs, making them affordable. On the other side, some entrepreneurs provided an improved implementation of social insurance. On the basis of the legal social insurance registration, additional business social insurance registration might be provided by entrepreneurs. Different insurance schedules could be selected by workers, or if workers’ performance was high, then the insurance level could be high as well. The last implementation action in this improved implementation group was the comprehensive improvement of insurance contribution level in the start-ups – in other words, the amount of payment of social insurance premiums was over the necessary level stated in the social insurance provisions.

The reported behaviour was regarded as the more possible operationalization method, since using the questionnaire restricted the use of actual behaviour as my better compliance measure, if available. Here I thus assumed a speech-behaviour consistence. Unless an entrepreneur lied to me, this assumption should be fair. This assumption was justified because of my guanxi with met entrepreneurs, or the virtual identity of online respondents. In addition, there must be a past or present social insurance decision in place to report, regardless of the future one (Majone, 1998).
Next, these different measures could be segmented into different dimensions for reporting, which would worth a brief description here. My main dimension used was the regional dimension, which was critical for a large size and highly populated nation such as China. The nation consisted of Chinese Mainland disaggregated into 31 province level regions (4 municipals, 22 provinces and 5 autonomous regions), Hong Kong, Macau and Taiwan. All provinces had their own history and culture such that the provincial variations could be large. As a result, each province would be treated as a separate region for comparison if appropriate. In contrast, since the latter three regions had often been reported as separate regions in the international sources, no special treatment was needed for them. In addition, these 31 province level regions, Hong Kong, Macau and Taiwan could sometimes be aggregated to 6 greater administrative areas (North China, Northeast China, East China, South Central China, Southwest China and Northwest China). In that case, the last region, Taiwan, would be reported as in East China for a geographical reason.

The above attributes and dimensions were showed with details in a codebook (the code details of variables) (see Exhibit 3 and 4). The codebook explained variable names, variable codes, variable labels and values (Medrano, 2009) of these variables. This section presented a nominal variable V2 (sex), an ordinal variable V5 (education) and a scale variable V3_V237 (age) as an example (see Table 10).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
<th>Label</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>V2</td>
<td>Sex</td>
<td>Sex</td>
<td>[1, male; 2, female]</td>
</tr>
<tr>
<td>V3_237</td>
<td>Age</td>
<td>Age</td>
<td>18-70</td>
</tr>
<tr>
<td>V5</td>
<td>Education</td>
<td>Highest educational level attained</td>
<td>[1, No formal education; 2, Primary school; 3, Secondary school: technical/vocational type; 4, Secondary: university-preparatory type; 5, University-level education, with degree; 6, University-level education, with postgraduate degree; 7, Any other]</td>
</tr>
</tbody>
</table>

The codebook of a nominal variable showed the values and the value labels. In the V2 (sex) variable, two valid values were seen: male and female. The codebooks were similar between nominal and ordinal variables. The variable V5 (education) had seven
valid values: no formal education, primary school, technical/vocational type of secondary school, university-preparatory type of secondary school, university-level education with degree, and university-level education with postgraduate degree. In contrast, the codebook of a scale variable would list the range of values instead. In the V3_237 (age) variable, the respondents had the value from 18 to 70. The codebooks of more nominal, ordinal and scale variables were appendix-ed (see Exhibit 3 and 4).

The ordinal and scale variables were then followed by an examination with the tests of (approximated) normality, conducted through the statistical tests of Kolmogorov-Smirnov test and Shapiro-Wilk test. Since the weights were non-integer, and the weighted sample size lied over 50, I would not use Shapiro-Wilk test, but Kolmogorov-Smirnov test instead. Table 11 presented the test of normality statistical results for the demographic variables V3_V237 (age) and V4 (YearEducation) as an example.

Table 11: Data (Tests of Normality)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kolmogorov-Smirnov*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.250**</td>
</tr>
<tr>
<td>YearEducation</td>
<td>.181**</td>
</tr>
</tbody>
</table>

* p <= .05. ** p <= .01.

The test of normality table of V3_V237 (age) showed that, the Kolmogorov-Smirnov test statistic was 0.250, df was 124 and p (obtained) value was less than 0.0005 rounded to 0.000. p (obtained) value of 0.000 was smaller than p (critical) value of 0.05. There was not a significant normality of the variable V3_V237 in the data from the Kolmogorov-Smirnov test. The acceptance or rejection of relevant normality was asterisked in the last column Kolmogorov-Smirnov in the table. Asterisk meant that there was not a 95% significant normality of the variable in the data. No asterisk indicated a 95% significant normality of the variable. In addition, the V4 (YearEducation) neither showed a significant normality. I see that in Kolmogorov-Smirnov tests, all the 70 ordinal and scale variables did not have a significant normality in the data. In general, these tests of normality revealed that my sample data are not normal. The full tests of normality statistical results were appendix-ed in the Exhibit 6.
A non-normal distribution of entrepreneurs was expected, as private entrepreneurs were often 20s or 30s years old at the higher education levels (Chen et al., 2006). The distributions of age and YearEducation were thus skew; however, a non-normal distribution of population did not violate the normality assumption of sampling mean in parametric tests. It would thus be acceptable to use both parametric (eg, Pearson’s r or linear regression) and non-parametric tests (such as binomial test, chi-square test, Kolmogorov-Smirnov test, and Spearman’s rho), which could produce similar results in that case.

Last, the empirical model to be tested was shown in the Figure 23 and Figure 24 to close this section.
Figure 23: Empirical Model (The Left Section)

- V10.1 (Family important)
  - V10.6 (One of main goal in life has been to make my parents proud)
  - V19.5 (More emphasis on family life)
  - V20.4 (People qualities: neglect family in their life)
- V21.4 (Schwartz: Important to this person to always behave properly)
- V19.2 (It's humiliating to receive money without having to work for)
  - V18.3 (People who don’t work turn lazy)
  - V19.4 (Work is a duty towards society)
  - V20.2 (People qualities: indolent and wallow in luxuries and pleasures)
  - V20.1 (People qualities: selfishness)
  - V20.3 (People qualities: dependence)

- V21.5 (Schwartz: Important to this person reputation)
- V21.3 (Schwartz: Important to this person being trusted)
- V21.2 (Schwartz: Important to this person to be reciprocal or relate to the people)

- Compliance Decision
- Ethical Ideologies
- Ideological Criteria
- Ethical Reputation
- Reputational Criteria
- Emphasis of Reputation
- Emphasis of Trust
- Emphasis of Reciprocity

- V10 (Number of employees)
- Moral Intensity
Figure 24: Empirical Model (The Right Section)
Section 3.6’s theoretical model (the ‘criteria’ version) was used to build the empirical model in this section. One empirical model focused on one of the stages (awareness, judgment/intent, decision and implementation) in compliance at a time. The decision of compliance was focused in the Figure 23 and Figure 24, but other stages in compliance would have similar empirical models. Selected determinants were operationalized through the variables attached in the child nodes. Some variables could be used to represent different determinants in the empirical model, so these variables would be repeated in different child nodes in the figure too.

4.2 Rational or Material Criteria

The rational or material model (see Section 3.3), in terms of the three hypotheses (social insurance costs, the probability and the punishment of conviction, and recruitment and retention), can be respectively evidenced by findings from interview and questionnaires, in usefully explaining compliance in social insurance. Our evidence will be described in three sections. Section 4.2.1 will describe the rational or material criteria considered by those entrepreneurs that were not complying with social insurance. Those rational criteria concerned by social insurance complying entrepreneurs will be depicted in Section 4.2.2. These two sections will illustrate mainly the interview scripts; whereas both the interview and questionnaire findings will be mixed together as a triangulation to test the rational or material model in the third part of discussion (see Section 4.2.3).

In Section 4.2.3, each subsection will first compare in brief the rational or material criteria of the 13 interviewed entrepreneurs and then will try to draw out what can be learnt from their relevant experiences. We will identify the similarities and dissimilarities by concentrating on the in-depth comparison of some key rational criteria, particularly the social insurance costs, the probability and the punishment of conviction, and recruitment and retention, among two groups of these entrepreneurs (non-compliance and compliance). Lastly, the structure and results of comparisons and the hypothesized relationships between these variables will be summarized. The interview data will be organized and investigated using NVivo 10.0 (Bazeley, 2007).

Each subsection will then investigate the rational or material criteria of the 144 entrepreneurs from their questionnaires, through the statistical inferences of bivariate measures of association. This statistical association will examine the relevant rational models, of whether independent variables \(X_i\) (rational criteria) and dependent variables
Y_i (compliance stages) are independent, or whether there are associations between each other. This statistical procedure will run as follows. First, the independent variables (rational criteria) will be matched with the dependent variables (compliance stages). Then, the controlled variables (age, sex, education, location and age of start-up) will be selected in the second step. Third, these independent, dependent and controlled variables will be fitted to a correlation matrix for correlation coefficients (Spearman’s rho) (to measure association between non-normal variables). Fourth, this matrix of Spearman’s rho correlations will be read as the input data to compute the partial correlation coefficients, p-value and sample size N ie, partial rank correlations (to describe the monotonic relationship between two variables while controlling for the effects of one or more additional variables). Lastly, the significant associations will be highlighted for the hypotheses. The questionnaire data will be subjected to analyses using SPSS 21.0 and STATA 12.0.

The partial rank correlations were used instead of multiple regressions in examining the associations between independent variables and dependent variables. Both the partial rank correlations and multiple regressions controlled for demographic variables in computing the correlations between independent variables and dependent variables. The benefits of partial rank correlations were non-parametric, which was more appropriate for my sample data that had not been normal, and; non-linear, which described the monotonic relationship between two variables. The costs of partial rank correlations were not controlling for other independent variables, and the inability of showing the strength of relationships between independent variables and dependent variables, as compared with multiple regressions. However, due to the fact that similar independent variables in one construct could be dependent, which undermined the assumption of multiple regressions, the benefit of controlling for other independent variables in multiple regressions was less valid. Though, to compare the relative effects of independent variables on dependent variables, multiple linear or logistic regressions were used instead.

These subsections of Section 4.2.3 will be structured according to the three rational or material models (social insurance costs, the probability and the punishment of conviction, and recruitment and retention), instead of interview cases or evidence bases.

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7 For details, see the Technote (troubleshooting) reference # 1474822: [http://www-01.ibm.com/support/docview.wss?uid=swg21474822](http://www-01.ibm.com/support/docview.wss?uid=swg21474822) for SPSS 21.0. The Spearman correlation type was also available if we assigned a variable to the partial variables role.
This thematic arrangement that had been common in the literature will enable us to focus more on the themes that arise, and to triangulate different evidences for these themes, although at the expense of less clear profiles for the entrepreneurs themselves.

### 4.2.1 Non-Compliance

Our rational model’s description will begin with those entrepreneurs that were not complying with social insurance. Table 12 showed a list of entrepreneurs not complying with social insurance law. We will first describe the two entrepreneurs that were at the cash burn stage striving for a break even ie, the serial entrepreneur and restaurant owner, before we describe how the three rational criteria were considered by other non-compliance entrepreneurs. In general, we can see that those non-break-even entrepreneurs had a serious concern on the costs or cost-related concerns (social insurance costs, wage costs, and total costs) in considering social insurance compliance, whereas rational criteria dominated other non-rational criteria for their non-compliance decision.

**Table 12: Non-Compliance Entrepreneurs**

<table>
<thead>
<tr>
<th>Title</th>
<th>Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice General Manager</td>
<td>Heat technologies</td>
</tr>
<tr>
<td>Chain Manager</td>
<td>Pharmaceutical</td>
</tr>
<tr>
<td>The Son of General Manager</td>
<td>Trading</td>
</tr>
<tr>
<td>General Manager</td>
<td>Textile, Information technology and Trading</td>
</tr>
<tr>
<td>Owner</td>
<td>Gourmet restaurant</td>
</tr>
<tr>
<td>General Manager</td>
<td>Realty agency</td>
</tr>
<tr>
<td>Executive Vice General Manager</td>
<td>Plastic Industry</td>
</tr>
<tr>
<td>General Manager</td>
<td>Property management</td>
</tr>
</tbody>
</table>

The serial entrepreneur who managed three different start-ups in the textile, information technology and trading industries talked about his consideration on the admin costs of social insurance law. He located his three start-ups in Hong Kong, but he had to hire staffs in Shenzhen for two reasons. On the one hand, he had to hire some contract staffs to set up trade booths for sales and marketing (“S&M”). On the other hand, he had to hire a full-time staff to manage the distribution eg, package and post operations of textile goods. These staffs were recruited to support the sales and distribution of textile trading in China.
About his trade booth staffs, as the trade booth’s job tasks were temporary (around one week’s time per trade event), although such positions might be filled through direct hiring, freelance workers were often hired with the help of some human resources (“HR”) agencies or event organizers. The reason of this particular hiring decision was attributed to high admin costs involved in direct hiring, such as the administration of staff contract, staff registration, social insurance, and low management resources. The necessary HR efforts of direct hiring were too heavy for his small-size start-ups. Instead, hiring through HR agencies could save the HR efforts for other areas of his start-up, or his other start-ups, transferring such HR efforts to HR agencies or event organizers. His HR efforts, however, might not be outsourced completely to agencies or organizers. Low-standard HR agencies or event organizers could create other efforts in vendor management instead. The serial entrepreneur once met an unethical staff working in these agencies or organizers. This vendor staff made a proposal to the entrepreneur that, he could hire those trade booth staffs with a lowered wage by Rmb 400, but some ratio of the wage difference should be paid to his personal account. This was likely the hidden agenda of this vendor staff, rather than the institutionalized norms of the vendor. The serial entrepreneur refused to corrupt with this vendor staff, whom was made discontented, hence this vendor staff used different excuses (e.g., the hiring difficulties of trade booth staffs, booth schedule, booth materials and etc.) not to cooperate well in setting up the trade booth on time and with qualities. The serial entrepreneur had no alternative but to hold the second half of payment to the vendor. In the end, the vendor staff, due to the order from his manager, needed to surrender to the serial entrepreneur, completing the rest of the trade booth work for the payment settlement. This was not an unhappy ending, but the serial entrepreneur had consumed high efforts in vendor management, only to make a simple trade booth completed.

About his distribution staff, it was a full-time position; however, as the serial entrepreneur explained, the turnover rate was too high that the admin process of the registration of social insurance was not worthwhile for him. The serial entrepreneur once hired a full-time distribution staff. This distribution staff had worked for a few months with satisfied performance, before he asked for his social insurance. On consideration, the serial entrepreneur agreed to accept the distribution staff’s request, but later, the distribution staff decided to leave the start-up before the admin process of social insurance was completed. This distribution staff likely left the start-up for a personal reason, not relating to the social insurance, however, this high turnover rate
made the entire admin process a practical overhead. In particular, his start-up had no regular managers to help with the admin process in Shenzhen, while it was difficult to manage the process remotely in Hong Kong. To the serial entrepreneur, hiring a trustable mainland-based manager is difficult, as in some criminal cases, the involved staff could betray the start-up with only a small sum of money, from as little as a price of a meal (~Rmb 200) to as much as an iPad (~Rmb 2000-3000). Therefore, to avoid these overheads, the serial entrepreneur decided not to pay social insurance to his distribution staff ie, non-compliance.

The serial entrepreneur had some other cost-related concerns as well, but the troublesome admin of the social insurance law in China was quoted as the main reason of compliance decision. This main reason, related to the troublesome admin and non-trustable staffs, accounted to 50% of his whole concerns. This case showed that admin process is the first cost (the first, not necessarily the highest) among the costs involved in social insurance compliance. These admin costs could be a negligible amount for big companies with sufficient staffs to manage the admin process; however, these costs could be a big overhead to small start-ups, like the small office established by the serial entrepreneur in China.

The second and common cost-related concern was whether break-even has been achieved or not ie, net profits by the start-ups. The restaurant owner was a typical case for illustration. She opened a gourmet restaurant in the south bank of Pearl River in Guangzhou. Her restaurant had hired a restaurant manager, some kitchen cooks and reception staffs.

She talked about the concern of not being break-even as a dominating reason of her social insurance non-compliance.

*If the restaurant cannot earn profits, then we cannot talk about this kind of staff benefits (social insurance) at all.*

- Owner, Gourmet restaurant

The costs and revenue had to be break even, before social insurance could be provided, she stated. Though, after she had run the start-up for around two to three years, she could not strike for a break even. At last, because of both profit reason and family
reason (taking care of her son), she had to close down her restaurant. Over the operation period of the restaurant, she had not registered social insurance for her staffs i.e., non-compliance. She had one single reason of non-compliance decision - net profits. This profit concern dominated all other concerns, when we asked about her opinion in other concerns. The risk of inspection from the Government, for example, was not a big concern, as the officials often only inspected the condition of restaurant eg, extractor hood or hygiene, but not labour condition or social insurance. The non-compliance was also not important to the hiring of restaurant staffs. These restaurant staffs often come from places outside Guangzhou eg, a town or village in Guangdong, or Guangxi, who did not often demand for social insurance. Even the restaurant manager, who had a higher wage of around Rmb 5000 per month, did not request for social insurance too. Neither ethical ideologies nor ethical reputation were considered important to her non-compliance of social insurance as well.

The break even status was also considered as an important criterion for the non-compliance decision of the serial entrepreneur. His social insurance premiums expected to contribute, which was an addition of around 10%-30% of costs, could only be covered by the sale of an addition of 200 clothes. This additional sale would be difficult for his start-up. This net profit criterion thus accounted for 30% of his whole concerns.

To the serial entrepreneur, the admin costs and the net profits, suppressed other rational criteria eg, the probability and the punishment of conviction, and recruitment and retention in social insurance non-compliance. He weighed the probability and the punishment of conviction as low in terms of importance for his non-compliance. Either his staffs were hired through the HR agencies or event organizers, so that his legal liabilities were passed to those vendors; or his staffs had already left his start-up, leaving no plaintiffs for a legal case. However, he would keep mindful for this legal issue, as the strictness of supervision varied. It depended on the officials of the Government to a large extent. He argued that, these officials could “pick up a bone from an egg”, if they wanted to do against the start-ups. Also, he had little concern over the recruitment and retention for his decision too. He thought that wage and salary were more useful than social insurance in attracting his staffs, although most of his degree-level staffs (who did business writing or product sourcing tasks) had asked for social insurance for working in his start-up. Though, he did not want to reiterate the previous

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8 To pick up a bone from an egg is an idiom in Chinese, which means to nitpick in English.
bad admin experience (his staff had left the start-up before the admin process completed). Thus, only when his staffs had worked well and would work long, then he would consider helping them to register their social insurance. Other than these rational criteria, the serial entrepreneur has talked about ethical ideologies and ethical reputation as his concern for social insurance non-compliance too, which will be further discussed in Section 4.3.

These two non-break-even entrepreneurs ie, serial entrepreneur and restaurant owner had similar rational or material concerns as other non-compliance entrepreneurs. Their most frequently referred rational concerns were the social insurance costs, wage costs, and total costs, which had a negative impact to their non-compliance decision in social insurance.

The level of social insurance costs and the profit financials, for example, were considered by the trading entrepreneur and his family for around 70%-80% of their whole concern of non-compliance decision. The importance of the staff cost expense was also agreed by the property management entrepreneur, when he decided not to comply with the social insurance. Although he deemed some social insurance schemes were helpful to his start-up eg, work injury insurance and medical insurance, which could lower the insurance risks of his start-up, it was argued that the level of social insurance costs were too high for his start-up to afford. His concern on high social insurance cost was also closely linked to his concern on low selling price. He argued that his selling price or his sales revenue was too low for his start-up to cover the social insurance premiums mandated in the law. He claimed that if his selling price could be high enough, then his start-up would contribute the social insurance premiums. These two concerns, high social insurance cost and low selling price, together contributed to 20% of his whole concerns. The cost control was weighed as a more important criterion (60%) by the pharmaceutical entrepreneur and the realty agency entrepreneur. They both reflected to us that social insurance was a cost and a burden to their start-ups. If they could choose, they would not do social insurance at all, and they had not done either. That said, both of them claimed that they were running a non-black-and-white out-of-paper rule of the local Government ie, if their start-ups had at least one person registering social insurance, then their start-up would be fine. It was not certain whether this unofficial rule was just a rule of thumb summarized by these two start-ups, or it was really an informal communication from the local Government. These social insurance
rules were also reiterated as a firm burden by the plastic industry entrepreneur. He judged this social insurance burden as an even more important criterion, contributed to 70% of his consideration, when he decided not to do social insurance compliance for his start-up.

These cost-related rational concerns were however less worried by the heat technologies entrepreneur. He had registered his company in Panyu Guangzhou (Panyu had been a county-level city before incorporated as a district of Guangzhou). His company was set up in Apr 2006, with the registered capital of Rmb 4.35 million, hiring around 100 staffs specializing in the heat technologies industry. His heat technologies start-up specialized in air conditioning and heat pump technologies’ research and application in China, with a technological cooperation with a Spanish group. He had an in-depth thinking about the social insurance. To him, social insurance costs were only a fraction of the wage – not too much, but not too little too:

\[
\text{If we do not do social insurance, then the decrease of costs is not too much, else we can still manage the premiums to make a profit. We support the social insurance law, but we will not “have no work to do but find work to do”}. \\
\text{- Vice General Manager, Heat technologies start-up}
\]

The social insurance costs were therefore not considered as too much a big deal by the heat technologies entrepreneur, which accounted for only 10% of his overall criteria of non-compliance decision.

These cost-related rational concerns, nonetheless, were still the most frequently referred important criteria of non-compliance decision by most of the non-compliance start-ups in common. In fact, any entrepreneurs, regardless of the industries they were operating in, had to consider social insurance costs, wage costs, or total costs as their criteria, as they were related to the net profits of their start-ups. This thus repeated the findings in the literature.

The probability and the punishment of conviction have been missed out so far, but it was a rational concern of these non-compliance entrepreneurs as well. The trading entrepreneur, for example, mentioned that the social insurance scheme still remained at
the promotion stage, but not the execution stage in most regions of China, so his three factories, two hardware factories in Dongguan and one electroplating factory in Huizhou had a low conviction probability and a low penalty level in their regions. The lack of enforcement was also taken advantage of by some other cottage factories in Dongguan that did not do social insurance at all. This evidenced the low legal pressure experienced by the trading entrepreneur. Thus, the execution of the social insurance scheme was a low concern (10% - 20%) for him. Low risk of non-compliance for social insurance was repeated as a low concern (10%) for the plastic industry entrepreneur too.

In contrast, the property management entrepreneur met a legal issue for his non-compliance. He argued that, he wanted to contribute to social insurance, as he did not want to be sued 10 years later suddenly. He disclosed one of his prior bad experiences from a hospital in Zhongshan to us. His start-up had almost completed the contract with the hospital, and it was about to retreat, when a hospital contract staff sued his start-up for its non-compliance of social insurance. This hospital staff was sneaky – when he was being hired, he did not want to sue the start-up, as he was afraid of being fired; but once he knew that the start-up was withdrawing, he wanted to sue the start-up in order to maximize his earnings from the start-up. In the end, the start-up had to negotiate with this hospital staff in order to settle down this labour conflict outside the legal court. In fact, the property management entrepreneur had a number of labour conflicts due to minimum wage and social insurance, which had drawn his attention away from his usual businesses. In his point of view, the legal costs of non-compliance had increased to a level higher than the costs of compliance, while the social insurance eg, work injury and medical insurances could also lower the possible costs of insurance claims in future. In the compliance case, if his staffs had an accident, his start-up did not need to cover their expenses itself, but it could claim these expenses from insurance agencies. He nonetheless had not given a weight to his conviction concern in non-compliance decision, likely because of his two measures of lowering his legal risks.

The property management entrepreneur used two management approaches to lower his legal risks of his non-compliance of social insurance. His first approach was to lower his legal risks associated with his employees – paying the saved employee’s part of social insurance premiums back to them. The payback amount was around Rmb 100 –

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9 Cottage factories are the ones which copied business ideas to make net profits, extended to mean low end factories with low value-added products or services in this context.
200, about 10% of the minimum staff wage Rmb 1300 in Guangzhou. Even the employee’s part was paid back, his start-up could still be benefited from not paying the employer’s part of premiums to the Government, which was about 20.45% of staff wage. For protection, the start-up signed an agreement with its staffs stating this payback arrangement. Similar agreements could be seen in other companies too. The heat technologies entrepreneur told us that his start-up had a legal counsellor to help drafting this legal agreement. If his staff agreed not registering social insurance, they would sign an agreement with standard terms and conditions, stating that the saved premium of Rmb 300 had been received by them. He argued that this should have avoided labour conflicts with his staffs. The jewellery entrepreneur also had a staff actively requesting not registering social insurance. He thus signed an agreement with his staff for such a payback arrangement (though this practice was changed later). However, this payback approach was doubted by the serial entrepreneur as to whether it could really lower the legal risk of non-compliance. He had reservations that, even after the saved premiums had been paid back to the staffs as part of their wage, the staffs could both take the payback premiums, and could still sue his start-up for non-compliance. This worst scenario was also worried by the property management entrepreneur. He recognized that similar kinds of non-compliance agreement might be useless when his start-up was being sued on the legal court. Though, these agreements aimed to frighten some conservative staffs for not suing the start-up, which would hence lower the legal risk of being sued by his staffs. On the contrary, his second approach was to lower the legal risk of being sued by the Government. This was an unseen method in current literature – he bought social insurance in some other lower-tier cities. This approach could lower his social insurance costs, while it made his start-up seemed following strictly the social insurance law as well. He saw that, even if his start-up was based in Guangzhou, he could buy the social insurance in Qingyuan, Zhongshan or some neighbouring cities in Guangdong. In Guangzhou, his social insurance premiums were about Rmb 520 per his staff, but the mandated full amount of premium was only around Rmb 200 in these lower-tier cities. Furthermore, the saved difference of premiums could be paid back to the staff too, as argued by him. Even in a rare case that people criticized his start-up for a business location mismatch, nonetheless, his start-up could register its operation in both these lower-tier cities and Guangzhou, so fulfilling the social insurance law. Thus, through these two management approaches to social insurance, the legal risks of his non-compliance were lowered, decreasing his likelihood of compliance.
The admin costs of the whole social insurance scheme were deemed high by non-compliance entrepreneurs as well. The trading entrepreneur, as we have mentioned before, did not have much trust to the social insurance law. He supported employment injury insurance, but not basic endowment insurance. He deemed that the employment injury insurance had remained at a low level such that it was affordable to him to cover his staffs. In contrast, the basic endowment insurance took a large proportion of wage from him and his staffs, but its respective collection and payment were not transparent. There could be a possibility that his staffs could not claim back insurance premiums on retirement. To him, the lack of clarity of law shattered his trust towards the law per se. He claimed that his staffs were reserved about the Government too, so that his staffs did not trust the law and would not demand for their social insurance provision. Thus, he deemed the law as remaining at the promotion stage but not the execution stage. And it was just too forward to talk about social insurance in the society, he thought. Note that, his concerns on the completeness, comprehensiveness and execution of social insurance scheme contributed to about 10% - 20% of his non-compliance decision. Both the realty agency entrepreneur and the pharmaceutical entrepreneur agreed that not all social insurances were needed for the society too. To them, medical insurance, rather than basic endowment insurance, was necessary, as his staffs could use medical insurance to purchase their medical and pharmaceutical products. Though, as the pharmaceutical entrepreneur run his start-up in medical industry and he was a close partner with the realty agency entrepreneur, strong doubts were expressed about their conflicts of interest here. These points on the effectiveness of social insurance law were repeated by the property management entrepreneur as well. He deemed that some social insurances were helpful eg, work injury insurance and medical insurance, because these two could lower the insurance risk of his start-ups. In case of work injury or medical problems, his staff’s relevant expenses could be covered by insurance claims, instead of his start-up. His confidence towards the usefulness of social policies accounted to 10% of his non-compliance decision.

### 4.2.2 Compliance

The compliance of entrepreneurs would be discussed in the rational model of this section. Table 13 showed a list of entrepreneurs that complied with social insurance law. We found that these entrepreneurs had both rational criteria and other non-rational criteria for their compliance decision.
Table 13: Compliance Entrepreneurs

<table>
<thead>
<tr>
<th>Title</th>
<th>Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Electronic technology</td>
</tr>
<tr>
<td>Managing Director</td>
<td>Jewellery</td>
</tr>
<tr>
<td>General Manager</td>
<td>Information tech</td>
</tr>
<tr>
<td>General Manager</td>
<td>Marketing &amp; research consultants</td>
</tr>
<tr>
<td>General Manager</td>
<td>Management consulting</td>
</tr>
<tr>
<td>General Manager</td>
<td>Advertising</td>
</tr>
</tbody>
</table>

One complying entrepreneur ie, Korean entrepreneur was in the cash burn stage when considering social insurance compliance. This was thus a supporting case to the heterogeneities with respect to the attributes of compliance decision among entrepreneurs (Gartner, 1985). He had registered two companies – an older one in Wuxi Jiangsu and a newer one in Zhongshan Guangdong. The new company was set up in June 2010, with the registered capital of US$ 4.5 million, hiring around 120 staffs specializing in the electronic technology industry. These two companies designed and manufactured precision die and electrical equipment for fin die, motor core die and other related spare parts in China.

At the time of fieldwork, the electronic technology start-up had not struck a break-even for the net profits. Then, the costs and cost-related concerns would have been expected to be a dominating concern for the start-up. There could be two potential cost concerns for compliance. On the one hand, unlike the smaller start-ups of serial entrepreneur, since it was hiring around 120 staffs, its admin costs were small relative to its total costs, so its admin costs were not a high concern for compliance. On the other hand, although its admin costs were small relative to its total costs, its social insurance costs were large relative to the total costs, given a large number of staffs working in the start-up. The high social insurance costs, in addition to net losses, these costs and cost-related concerns would have forced the Korean entrepreneur to non-compliance.

The Korean entrepreneur nonetheless concerned about the concept of face for his social insurance compliance. The concept of face was his dominating criteria, accounting for 60% of his whole concern of compliance decision. He viewed the face concept very important. His face emphasis was confirmed when his partner, the General Manager of his start-up stated:
The Korean entrepreneur’s face emphasis is a bit too much. This is like “beating to swell one’s face to act as if a fat man”\footnote{To beat to swell one’s face to act as if a fat man is an idiom in Chinese, which means to be all hat and no cattle in English.}

- Partner, Electronic technology start-up

His face emphasis could be further revealed from his daily life when working with the partner. The partner remembered two examples. When his start-up was set up, the partner had two cars – the Audi car of Audi AG, and the Passat car of Volkswagen. On one occasion, he saw that the partner drove the Passat car to the office. Although his start-up had little money at that time, he offered the Crown car of Toyota as a gift to the partner. Later, because the partner did not want to owe too much favour to him, he suggested using his own money to buy the Crown car instead. He replied to the partner, “This is the face issue.” He considered the Passat car as a lower rank car that did not suit the status of the partner during the meetings with his customers. In addition, he tried his best to make his start-up have a face in business too. Personal face and start-up face were both relevant. At the material level, he insisted that the dressing of his staffs should be good-looking (ie, with uniform), his office should have a beautiful reception with interior design, and his office automobiles should be in a higher rank as well. At the management level, he insisted to place his staffs before his financial concerns in order to maintain firm reputation. When his start-up had a shortage of cash, his must-do thing was to settle staff wage and social insurance completely first, before settling the debts of his suppliers (although his partner wondered that this action would still harm firm reputation nevertheless).

The face emphasis worked together with other non-rational criteria in explaining the compliance decision of the Korean entrepreneur indeed. On the one hand, he felt that, because he was doing business in China, he had to follow the laws in China. Thus, even his start-up had net losses, his start-up would normally follow the social insurance law in China ie, compliance with social insurance. In fact, he did not only follow the Chinese laws, but also the Chinese values as well. In particular, in South Korea, people used not to cross the road in red light, but it was normal to see people crossing the road when red light was on in China. He said that, after living in China for a long time, he had started to cross the road ignoring traffic lights too. This action was for him, “to
enter the township and follow the custom”. Adopting the customs and behaviour of Chinese when in China was his 20% concern to his compliance decision. On the other hand, social policies were well accepted in Korean culture as well, such that he just implemented what he had implemented in South Korea in China. The Korean culture was his 20% concern to his compliance decision as well. The above two non-rational criteria could mix with the face concept in explaining his compliance decision. Particularly, he considered non-compliance as violating the customs and behaviour of Chinese, which could make him lose his face in front of Chinese; while, in view of the Korean culture, non-compliance could make him lose his face in front of Korean too. To the partner of his start-up, the Korean entrepreneur’s face concept was not calculative, but normative in nature however.

On the other hand, in other complying entrepreneurs, recruitment and retention was the most frequently referred rational concern that had a positive impact to their compliance decision of social insurance. We begin with the jewellery entrepreneur first, as his case was a helpful example to elucidate our evidence. Other compliance start-ups will then be described. We will also describe the recruitment and retention concern of both the non-compliance and compliance start-ups in this section.

The jewellery entrepreneur was born in Guangzhou and he based his jewellery start-up in both Hong Kong and Panyu Guangzhou. His Hong Kong start-up was responsible for S&M, while it “outsourced” its inbound or outbound logistics and operations to his jewellery factory in Guangzhou. He had to hire around 60 staffs (half was local staffs and half from outside the city) in 2011, when he decided to retire. Also, he had just sold his jewellery start-up to his partner, before he met with us.

In the 2000s, when there was no established social insurance law, the jewellery entrepreneur was a pioneer on staff benefits within his industry. His start-up had implemented a long term service award for his staffs before the new social insurance law. He recalled that such a service award had the purpose of retaining his staffs. This implementation was based on his initiative of “we have this, but not the others”, as similar service awards had not been implemented in other start-ups in the jewellery industry, thus it became a unique advantage of his start-up. However, this long term

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11 To enter the township and follow the custom is an idiom in Chinese, which means when in Rome, do as the Romans do in English.
service award had ended when the new social insurance law was enacted. Due to the fact that this service award was rather similar to the social insurance, it was rendered less useful, thus the service award was faded out during the migration to the social insurance instead. The integration of these two schemes took a long period of time before his staffs accepted the new social insurance scheme. Although the migration was successful, it was argued that the original purpose of these two schemes had been evaded. In particular, to him, the social insurance scheme no longer served as his unique advantage to retain his staffs, as the scheme was mandated upon passing of the law, such that all companies in his industry needed to follow. Thus, his concern to retain staffs was less valid for his compliance decision now. In the 2011, when the law was enacted, he realized that the nature of service award was different from social insurance. His initiative was reversed to “we have this, as same as others”, in order to retain his staffs now. Thus, while his purpose of attracting his staffs was less valid, his concern was changed to providing staff protection for his staffs. Once he had a technical staff coming from Guangzhou. This technical staff was a strong supporter of social insurance – “I will leave this start-up if it has not done social insurance and I am willing to receive smaller wage in order to contribute to social insurance.”, the technical staff said. This technical employee was not a single example to the jewellery entrepreneur, especially when vast old aged staffs had similar social insurance needs in his start-up too:

*The old aged staffs do not want to change job and want to be stable on retirement, thus social insurance is the last hope to them for retirement.*

- Managing Director, Jewellery start-up

The staff recruitment and retention concern therefore accounted to 50% of the whole consideration of his compliance decision in the jewellery start-up.

This recruitment and retention was a concern for both non-compliance and compliance start-ups. However, this did not invalidate our hypothesis when their concerns were further examined. In particular, there could be a segmentation of workforce (Nyland et al., 2011) within non-compliance start-ups. Thus, we need to further investigate the respective segments of workforce in the start-up, in order to know the influence of staff concern on compliance decision.
The heat technologies entrepreneur, for example, segmented his workforce according to the hukou of staffs (registered permanent residence), the technological level of jobs, and their contribution to the start-up. Part of his workforce did not, while part of them complied with social insurance. Hukou was the first stated criteria by him. Local staffs, which had a local hukou in Guangzhou, often had a stronger sense of rights protection (cf, Chung (2013)). In contrast, staffs from other provinces, which had little cognition awareness, did not demand for social insurance, while there were also difficulties in transferring premiums across. The technological level of jobs was also important (see Section 4.4). Lower-end workers (eg, assembling) were unlike high-tech engineers or back office staffs in terms of their social insurance compliance. Their contributions to the start-up made up his consideration too – in particular, backbone staffs in his back office (eg, sales and marketing) would receive social insurance from his start-up. This segmentation of workforce dominated his consideration, with the hukou of staffs 30%, and their contributions to the start-up 40%, which amounted to 70% of his non-compliance decision. Such a segmentation of workforce was indeed a concern of recruitment and retention, however only specific to particular segments of the workforce, instead of the whole workforce often assumed in the literature. Similar kind of segmentation was seen in other non-compliance entrepreneurs too. The trading entrepreneur, for instance, used the length of the service of staffs as his segmentation criteria, in addition to their marriage status and whether or not those staffs were team leaders. The social insurance was used as a HR management tool in retaining the targeted segments of workforce, which summed to 10% -20% of his consideration. Yet, this usage as a HR management tool might not be a common practice across start-ups. The serial entrepreneur whom we have mentioned was such a contrasting case. In spite that he agreed job performance and the length of the service of staffs were two segmentation factors, he thought that social insurance was less useful than wage to serve his purpose of recruitment and retention nonetheless. The plastic industry entrepreneurs, on the contrary, implemented an on-demand compliance rule. He told us that most of his staffs did not do social insurance – however, if his staffs made a written request, then he would do social insurance for them, but there were not vast written requests coming out in his start-up. That said, he also worried about his on-demand compliance rule would lower his abilities to find suitable staffs for his start-up, due to his inabilities to provide a standard social welfare to suitable staffs, which contributed to 20% of his concern for on-demand compliance nonetheless.
On the other hand, the segmentation of workforce had not been implemented in the compliance start-ups. The sampled compliance start-ups often had a small number of staffs so the whole workforce was considered for compliance decision. The marketing & research consultant entrepreneur, for example, had done all the five mandated social insurances for his whole workforce. However, he was not feeling recruitment and retention as a big concern, because not social insurance compliance, but wage increase was more attractive to his staff instead. To him, social insurance (also optional business insurance) blended with the wage to form a single consideration. That said, he viewed social insurance as the protection to his staff as well, which contributed to 40%-50% of his compliance decision. These points of the marketing & research consultant entrepreneur were repeated by the management consulting entrepreneur. The management consulting entrepreneur deemed social insurance as part of the wage of his staffs, and, as the protection of his staffs as well. His purpose of staff protection was to take care of the psychologies of his staffs, and to make them feel secured when working for his start-up, which was a 33% factor of concern for him.

This argument of staff protection was reiterated in our discussion with the information tech entrepreneur once more. He regarded social insurance as a security or protection to his staffs. He remembered that, in the beginning, start-ups and companies were able to choose whether or not to do social insurance (~1999). Even when he was a staff working for another company that time, he did not do social insurance for himself. Over 80% of companies did not do social insurance at that time. Later, social insurance became a mandated law in 2010 however. Though social insurance scheme was intended to protect the retirement of his staffs, he had a deep reservation towards its future protection. Since the consumer price index ("CPI") in China had been increasing in a high rate, the insurance contributions would be discounted in the future. Then it would be a challenge that these deflated insurance benefits would be insufficient for retirement. In addition, as the social insurance programme was not 100% trustable, he had concerns about the reliability of the programme as well. The unreliability issue would render the whole scheme unnecessary for his start-up, not even mentioning that the amount of insurance contributions was substantial to them too. This point on staff protection was almost 30%-40% of his concern for compliance decision.

Then, what were the common considerations of complying with social insurance across the start-ups? In the non-compliance start-ups, some segments of workforce had more
privileges than other segments of workforce. Hukou, the technological level of jobs, the contributions to the start-up, the length of service, marriage status, whether or not the staffs were team leaders, job performance, and whether or not the staffs made written requests of social insurance, were different segmentation criteria of compliance. Hukou, marriage status, and whether or not the staffs made written requests were in fact related to the cognition or the needs of staffs. Such the cognition or the needs of staffs came from the staffs, which was seldom considered by the entrepreneurs, as compared with their own needs for themselves eg, the technological level of jobs, the contributions to the start-up, the length of service, whether or not the staffs were team leaders, and job performance. When we looked through the list of segmentation criteria, we could see that these criteria were defined in such a way that distinguished out valuable staffs from invaluable staffs in their start-ups. High-tech staffs, high contribution staffs, long service staffs, team leaders, and high performance staffs are all valuable staffs who could help their businesses, whose recruitment and retention were the need of start-ups. Thus the needs of staffs were prevailed by the need of start-ups. Hukou, for example, was weighted as 30% of concerns by the heat technologies entrepreneur, less than his 40% concern about the contribution to the start-up. On the other hand, in the compliance start-ups, it seemed that not recruitment, but retention was more of a concern. Social insurance did not help much in their staff recruitment, but the scheme provided the protection or security to their staffs, or took care of the psychologies of their staffs, particularly for the retention of their staffs. Such a motivation on the retention of staffs could be connected to ideological and reputational criteria as well – either these entrepreneurs could consider that the protection of retirement in the future was an ethical ideology, or; the provision of social insurance to their staffs could increase their ethical reputation.

Overall, the recruitment and retention consideration was common for complying with social insurance across the start-ups. Other long term strategic concerns eg, rival’s costs, consumer sales, political supervision, or the probability of being re-audited, however, had neither been mentioned as the criteria of compliance decision by these compliance entrepreneurs.

4.2.3 Fieldwork Findings
In this section, we will first discuss and explain the extent to which three rational or material criteria (social insurance costs, the probability and the punishment of
conviction, and recruitment and retention) had an impact to compliance decision, using the interview findings in 13 entrepreneurs, followed by our evaluation of the questionnaire findings of 144 entrepreneurs as a triangulation. Finally, we will accept or reject rational or material hypotheses based on our interview findings complemented by questionnaire findings of this fieldwork study.

Table 14 summarized the structure of comparisons and the variables for the rational or material criteria. The column entrepreneurs showed the 13 entrepreneurs, with the three rational criteria (social insurance costs, the probability and the punishment of conviction, and recruitment and retention), and the variable V16 (SocialInsuranceCosts) (Total social insurance costs of total wage costs) in the middle columns. The last column was the entrepreneurs’ reported compliance of social insurance in the meetings.
<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Social Insurance Costs and Cost-related Criteria</th>
<th>The Probability and the Punishment of Conviction</th>
<th>Recruitment and Retention</th>
<th>V16 (Social Insurance Costs)</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>Costs (10%)</td>
<td>The monitoring of the Government (5%)</td>
<td>Hukou (30%)</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The contributions to the start-up (40%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>Cost control (60%)</td>
<td>-</td>
<td>The reputation in recruitment (10%)</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td></td>
<td>The Government deprived of contributions (30%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading</td>
<td>The complete and comprehensive execution of the social insurance scheme (&lt;10% - 20%)</td>
<td>The complete and comprehensive execution of the social insurance scheme (&lt;10% - 20%)</td>
<td>Management tool (the length of service, staff's expectation, and retention) (10% - 20%)</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>The admin costs (the troublesome administration and non-trustable staffs) (50%)</td>
<td>The probability of conviction and the level of punishment (a little but low)</td>
<td>Recruitment and retention (little concern)</td>
<td>&lt;=4%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Industry</td>
<td>Factor</td>
<td>Impact</td>
<td>Compliance Level</td>
<td>Note</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------</td>
<td>------------------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>Net profits (100%)</td>
<td>-</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td>Realty agency</td>
<td>Cost control (60%)</td>
<td>-</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Government deprival of contributions (30%)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>Firm burden (70%)</td>
<td>The risk of non-compliance (10%)</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suitable staff (20%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property management</td>
<td>Low customer price (10%)</td>
<td>-</td>
<td>15% - 24%</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High costs expense of staffs (10%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic technology</td>
<td>-</td>
<td>-</td>
<td>5% - 14%</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Jewellery</td>
<td>Costs (small)</td>
<td>Risk (small)</td>
<td>25% - 34%</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Information tech</td>
<td>Operating costs (5% - 10%)</td>
<td>-</td>
<td>&lt;=4%</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Marketing &amp; research</td>
<td>Costs (15% - 25%)</td>
<td>Enforcement (weak)</td>
<td>5% - 14%</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>consultants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management consulting</td>
<td>-</td>
<td>-</td>
<td>35% - 44%</td>
<td>Compliance</td>
<td></td>
</tr>
</tbody>
</table>
4.2.3.1 Cost Control

In this section, we will use both the interview findings of 13 entrepreneurs and the questionnaire findings of 144 entrepreneurs as a triangulation, to accept or reject the Hypothesis 1 – whether high level of cost control consideration has a negative impact to the level of social insurance compliance (see Section 3.3.2). We will understand the impact of social insurance costs and cost-related criteria eg, wage costs and total costs too. At last, based on our interview findings complemented by questionnaire findings of this fieldwork study, we will summarize the major findings concerning social insurance costs and cost-related criteria in this comparative section.

Interview Findings

To read better, the structure of comparisons and the variables for social insurance costs and cost-related criteria were repeated in Table 15 for readers.

Table 15: The Comparison of Social Insurance Costs and Cost-related Criteria of the Selected Entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Social Insurance Costs and Cost-related Criteria</th>
<th>V16 (SocialInsuranceCosts)</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>10%</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>90%</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Trading</td>
<td>80% - 100%</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>80%</td>
<td>&lt;=4%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>100%</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Realty agency</td>
<td>90%</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>70%</td>
<td>5% - 14%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Property management</td>
<td>20%</td>
<td>15% - 24%</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Electronic technology</td>
<td>-</td>
<td>5% - 14%</td>
<td>Compliance</td>
</tr>
<tr>
<td>Jewellery</td>
<td>Small</td>
<td>25% - 34%</td>
<td>Compliance</td>
</tr>
<tr>
<td>Information tech</td>
<td>5% - 10%</td>
<td>&lt;=4%</td>
<td>Compliance</td>
</tr>
<tr>
<td>Marketing &amp; research consultants</td>
<td>15% - 25%</td>
<td>5% - 14%</td>
<td>Compliance</td>
</tr>
<tr>
<td>Management consulting</td>
<td>-</td>
<td>35% - 44%</td>
<td>Compliance</td>
</tr>
</tbody>
</table>
When we made the comparisons, we would analyse social insurance costs and cost-related criteria as vary over the compliance decision in business. The first perspective (method of agreement) consisted in analysing whether or not there was a common level of support of social insurance costs and cost-related criteria for compliance decision in non-compliance entrepreneurs. The second viewpoint (method of difference) involved whether a common level of neglect existed in compliance entrepreneurs. Beyond these two comparisons, it was also possible to assess the varied impacts of the level of support of cost criteria on the compliance decision of business (method of concomitant variations). However, measuring this varied impact was not an easy task. It required us to identify the effects of costs criteria by controlling for the effects of confounding factors (eg, sex, age, and education) that might also affect compliance decision. In view of these difficulties, we would try to capture the effects of costs criteria by the bivariate measures of associations of the variable SocialInsuranceCosts and the compliance decision.

Common social insurance costs and cost-related criteria had prompted many entrepreneurs not to comply with social insurance (see the table). The pharmaceutical entrepreneur, trading entrepreneur, serial entrepreneur, restaurant owner, realty agency entrepreneur, and plastic industry entrepreneur had social insurance costs and cost-related criteria over 50% of their consideration to compliance decision. Some entrepreneurs eg, heat technologies entrepreneur and property management entrepreneur showed a lower degree of cost concern in their compliance decision, but it was obvious that social insurance costs and cost-related criteria were in common among these non-compliance entrepreneurs.

There was a major difference in the level of concern on cost-related criteria between the non-compliance and compliance entrepreneurs eg, the Korean entrepreneur, and management consulting entrepreneur, even though some, such as information tech entrepreneur and marketing & research consultant entrepreneur, were still having little concern on cost criteria in compliance decision. Low level of cost concern (≤ 50%) was obviously related to compliance entrepreneurs. We thus found the difference in the level of cost concern between non-compliance and compliance entrepreneurs.

Then, we would discuss the varied impacts of cost-related criteria on the compliance decision of business by referring to both the level of cost concern and the
SocialInsuranceCosts. The SocialInsuranceCosts was the percentage of their start-up’s social insurance costs in wage costs. The varied level of concern on cost criteria seemed to correlate with the compliance decision, even though there were less obvious differences in the SocialInsuranceCosts between non-compliance and compliance entrepreneurs.

The table showed the difference between the SocialInsuranceCosts and the reported compliance of social insurance. This difference might be explained by the timeline of fieldwork. On 1 July 2011, the social insurance law came into force. The fieldwork dates began on March, 2012, the interview ended on 8 June, 2012 and the questionnaire ended on February 28, 2013. In other words, the immediate last financial year before the fieldwork was around 2011. While the exact dates of financial year depended on the business, the SocialInsuranceCosts was likely to span across the effective date of the law ie, 1 July 2011, but the reported compliance was at the date of fieldwork. This timeline therefore resulted in the difference between the SocialInsuranceCosts and the reported compliance of social insurance in the table.

**Questionnaire Findings**

When we analysed the varied impacts of cost-related criteria in the 13 entrepreneurs, we should note that comparing these criteria was not an easy task, as controlling for the effects of confounding factors was difficult, and 13 entrepreneurs were a small sample. Therefore, we evaluated the varied impacts of cost-related criteria in statistical terms as a triangulation.

Table 16 showed the partial rank correlation results of the rational criterion V16 (SocialInsuranceCosts) and the V22_1 (Awareness), V22_2 (Judgment/Intent), V23Fac (Decision), and V24Fac (Implementation) in compliance stages, controlling for the demographic variables V3_237 (Age), V2 (Sex), V5 (Education), V1DumNorth (LocationNorth), V1DumNortheast (LocationNortheast), V1DumEast (LocationEast), V1DumSouthCentral (LocationSouthCentral), V1DumSouthwest (LocationSouthwest), V1DumNorthwest (LocationNorthwest) and V9Time (AgeStartup), as an example as follows. The V24Fac was produced by factor analysis as an implementation factor (see Section 4.6). The demographic variables were controlled in the partial rank correlations. This table format did not display degrees of freedom and significance level in matrix format, which was suppressed for simplification and standardization. The complete
partial rank correlation results of the rational criteria and other variables in compliance stages were presented in Exhibit 7.

**Table 16: Correlation Matrix (Social Insurance Costs versus Compliance Stages Controlling for Demographic Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_</th>
<th>V22_</th>
<th>V23F</th>
<th>V24F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SocialInsuranceCosts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>-.069</td>
<td>.142</td>
<td>.186</td>
<td>-.062</td>
</tr>
</tbody>
</table>


The acceptances or rejections of rational hypotheses of relevant associations were asterisked in the row correlation of the independent variables in the table. One asterisk (*) meant that the social insurance costs and the compliance stages associated with each other and the association was 95% statistically significant. Two asterisks (**) meant that the association was 99% statistically significant. No asterisk indicated there was not a significant association between the two variables. The associations with over 95% confidence level ie, with asterisk(s), were accepted for the rational hypotheses.

On the one hand, correlation matrix of SocialInsuranceCosts and Awareness showed that there was not a significant association between the variables SocialInsuranceCosts and Awareness. The Spearman's rho correlation coefficient (p) (partial) was -0.069, p (obtained) value was 0.470 and sample size N (weighted) was 109. In spite that p as -0.069 indicated a negative and weak monotonic relationship between the variables, p (obtained) value of 0.470 was larger than p (critical) value of 0.05, for the N as 109, therefore there was not a significant association between the variables SocialInsuranceCosts and Awareness.

On the other hand, correlation matrix also did not show the significant associations between the variables SocialInsuranceCosts and three compliance stages, Judgment/Intent, Decision and Implementation. The Spearman's rho correlation coefficients (p) (partial) were 0.142, 0.186 and -0.015, p (obtained) values were 0.137, 0.051 and 0.880 and sample sizes N (weighted) were 109, 109 and 109 respectively. p (obtained) values of 0.137, 0.051 and 0.880 were larger than p (critical) value of 0.05.
There was also not a 95% significant association between the variables SocialInsuranceCosts and Judgment(Intent), Decision and Implementation in the compliance stages.

Two other cost-related criteria variables, V15 (WageCosts) and V12 (Costs) with the compliance stages were also checked with associations, as shown in Table 17. The WageCosts and Implementation had a significant, negative and weak association between each other, but there was not a significant association between the variable Costs and compliance stages.

Table 17: Correlation Matrix (Cost-related Criteria versus Compliance Stages Controlling for Demographic Variables)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23F</th>
<th>V24F</th>
</tr>
</thead>
<tbody>
<tr>
<td>WageCosts</td>
<td>Correlation</td>
<td>.145</td>
<td>.072</td>
<td>.028</td>
</tr>
<tr>
<td>Costs</td>
<td>Correlation</td>
<td>.017</td>
<td>.081</td>
<td>.088</td>
</tr>
</tbody>
</table>


* p <= .05. ** p <= .01.

These common insignificant results were consistent with the arguments described in the Section 3.3.2. The rational principle of cost control was followed up for business firms and start-ups, while social insurance costs, labour costs and profits, however, were not appropriate constructs to predict contribution obligations, because of a causality issue. Taking cost control as the cause and compliance decision as the effect, the two will have a negative relationship; else the cause and effect reversed, the two will have positive relationship instead. These two theoretical predictions on cost control and compliance decision are both valid arguments, therefore leading to insignificant relationships in the results.

In our interview, the entrepreneurs mentioned the cost-related criteria as being critical in social insurance compliance; while the correlations of cost-related attributes ie, social insurance costs, wage costs and total costs and compliance stages were not found significant, the correlations of cost-related weights ie, V26_1 (WeightProfits) and compliance stages were found significant in the questionnaire. The cost-related weight,
WeightProfits, however, had an unexpected impact to the compliance stages, as shown in the correlation matrix (see Table 18).

Table 18: Correlation Matrix (Cost-related Weight versus Compliance Stages Controlling for Demographic Variables)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22</th>
<th>V22_2</th>
<th>V23F</th>
<th>V24F</th>
</tr>
</thead>
<tbody>
<tr>
<td>WeightProfits</td>
<td>Correlation</td>
<td>.135</td>
<td>-.094</td>
<td>.372**</td>
</tr>
</tbody>
</table>


High level of the variable WeightProfits had 95% significant and weak to moderate impacts to high level of Decision. This positive significant correlation between cost-related weight and compliance stages could be due to the following:

On the one hand, the interview used trade-off method and asking method, whereas the questionnaire used asking method to measure cost-related weights, thus we would expect that the cost-related weights could differ in behaviour between the interview and the questionnaire (Zarghami & Szidarovszky, 2011) (see Section 4.6). In the interview, the cost-related weight (trade-off weights) had negative impacts to compliance decision, which was different from the WeightProfits (asked weights) in the questionnaire. Based on our difference in the measuring methods of cost-related weights, it was important to note that our positive impacts of the asked WeightProfits to compliance stages could be changed when using the trade-off WeightProfits in the questionnaire, which can thus be a future direction.

On the other hand, assuming the positive impacts were correct between WeightProfits and compliance stages, that was, the entrepreneurs who considered corporate profits as important in social insurance compliance, would make a social insurance compliance decision. This result could be due to two possible explanations. An explanation was the enforcement of social insurance. In spite that these entrepreneurs considered corporate profits as important, they were compelled to engage with social insurance behaviour. A high level of social insurance costs in turn made them think the cost control of these cost-related criteria for corporate profits as more important. Another vindication was that there could be confusion about the interpretation of profit-related weight that
resulted in its incoherent impacts to compliance stages. An understanding of high profit-related weight was that, the maximization of profits was considered important to entrepreneurs, thus not supporting social insurance. Another elucidation was that, corporate profits were deemed important, due to the fact that it made social insurance possible, thus supporting social insurance. In the interview, the former interpretation was clearly presented by the entrepreneurs, whereas the latter interpretation seemed to be shown from the profit-related weight findings in the questionnaire instead, which will call for future research.

To conclude, this comparative section had three major findings concerning social insurance costs, cost-related criteria and weights. First, cost-related criteria could be a commonly important consideration for non-compliance entrepreneurs. Second, this cost concern was less likely to be involved in compliance entrepreneurs. Third, compliance decision seemed to be influenced by the varied level of cost concerns and the SocialInsuranceCosts in the interview, while negative association was found between the cost-related criteria and compliance stages in the questionnaire. The cost-related weight was also elucidated as the importance of cost control in order to make social insurance possible, thus supporting social insurance. These findings would thus partially accept our Hypothesis 1 (high level of cost control consideration has a negative impact to the level of social insurance compliance) in this section.

4.2.3.2 The Probability and the Punishment of Conviction

The probability and the punishment of conviction were considered a short term rational criterion that would have a negative impact to the level of social insurance compliance (see Section 3.3.2) as well.

Table 19: The Comparison of the Probability and the Punishment of Conviction of the Selected Entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>The Probability and the Punishment of Conviction</th>
<th>V1DumCentralCities (LocationCentralCities)</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>5%</td>
<td>Central cities</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>-</td>
<td>Central cities</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Trading</td>
<td>&lt;10% - 20%</td>
<td>Central cities</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>A little but low</td>
<td>Central cities</td>
<td>Non-compliance</td>
</tr>
</tbody>
</table>
Lower probability and punishment of conviction concerns had brought many entrepreneurs not to comply with social insurance, as shown in Table 19. These non-compliance entrepreneurs had an obviously and commonly low conviction concern (0% - 20%) in non-compliance decision. There seemed to be a minor difference in the level of conviction concern from that among the compliance entrepreneurs, albeit a major difference indeed existed in a deeper analysis. In particular, the conviction concern was often paraphrased as the concern of legal rules and regulations among the compliance entrepreneurs. The jewellery entrepreneur, for example, referred to the normal following of the legal rules as 20% of his compliance decision. The information tech entrepreneur, marketing & research consultant entrepreneur, and management consulting entrepreneur accounted this legal concern for 50%, 50%, 30% - 40% and 33% respectively of their compliance decisions. Higher level of legal concern (20% - 50%) was indeed obviously related to compliance entrepreneurs. The difference between non-compliance and compliance entrepreneurs in the LocationCentralCities was also difficult to determine, because most these start-ups were located in central cities. The varied level of concerns on conviction and law, thus, still seemed to correlate to the compliance decision.

Table 20: Correlation Matrix (The Probability and the Punishment of Conviction versus Compliance Stages Controlling for Demographic Variables)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23F</th>
<th>V24F</th>
</tr>
</thead>
<tbody>
<tr>
<td>LocationCentralCities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>InstitutionSOE</td>
<td>.235*</td>
<td>-.005</td>
<td>.161</td>
<td>.242*</td>
</tr>
<tr>
<td>IndustriesGovernment</td>
<td>.153</td>
<td>.021</td>
<td>.043</td>
<td>.074</td>
</tr>
</tbody>
</table>

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*p <= .05. **p <= .01.

Correlation matrix showed a significant, positive and weak association between the dummy variable V1DumCentralCities (LocationCentralCities) and two compliance stages, V22_1 (Awareness) and V24Fac (Implementation), as shown in Table 20. There was not a significant association between V13DumSOE (InstitutionSOE) and compliance stages; whereas, since no entrepreneur was classified into non-private organizations, neither significant association between V14DumGovernment (IndustriesGovernment) and compliance stages was found. The association of the locations in central cities with compliance stages was read as: the entrepreneurs outside the central cities (which had a low level of the probability and the punishment of conviction concern) less recognized the current Government social insurance provisions as an issue, but more likely to set up social insurance infrastructure as an implementation. This negative significant correlation between the central cities and implementation could be because of the enforcement of a minimum standard in central cities, which made them deem the current level was adequate, thus not willing to set up the social insurance infrastructure as an implementation further.

These comparisons and associations, in other words, thus partially accepted the Hypothesis 2 (low level of the probability and the punishment of conviction concern has a negative impact to the level of social insurance compliance).

4.2.3.3 Recruitment and Retention

In contrast, recruitment and retention were considered as a long term rational criterion that would have a positive impact to the level of social insurance compliance (see Section 3.3.3).

Table 21: The Comparison of Recruitment and Retention of the Selected Entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Recruitment and Retention</th>
<th>V10 (NoEmployees)</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>70%</td>
<td>100 or more employees</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>10%</td>
<td>Less than 10 employees</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Trading</td>
<td>10% - 20%</td>
<td>100 or more employees</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information</td>
<td>Little concern</td>
<td>Less than 10 employees</td>
<td>Non-compliance</td>
</tr>
</tbody>
</table>
Lower recruitment and retention concerns had also encouraged many entrepreneurs not to comply with social insurance, as shown in Table 21. These non-compliance entrepreneurs had an obviously and commonly low recruitment and retention concern (0% - 20%) in non-compliance decision, except the heat technologies entrepreneur. However, his higher recruitment and retention concern (70%) was only specific to the valuable segments of his workforce, instead of his whole workforce. In other words, his higher concern had encouraged the valuable segments of his workforce to comply with social insurance. There was also an obvious similarity of the high level of recruitment and retention concern (30% - 50%) among the compliance entrepreneurs. Thus, even if there were difficulties to find out a difference in the NoEmployees between non-compliance and compliance entrepreneurs, the varied level of recruitment and retention concerns seemed to correlate to the compliance decision.

Table 22: Correlation Matrix (Recruitment and Retention versus Compliance Stages Controlling for Demographic Variables)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23F</th>
<th>V24F</th>
</tr>
</thead>
<tbody>
<tr>
<td>NoEmployees Correlation</td>
<td>-.020</td>
<td>.028</td>
<td>-.106</td>
<td>-.114</td>
</tr>
<tr>
<td>NoNewEmployees Correlation</td>
<td>-.057</td>
<td>-.100</td>
<td>-.187*</td>
<td>.028</td>
</tr>
</tbody>
</table>

* p <= .05. ** p <= .01.

On the one hand, the current level of recruitment and retention was operationalized by the variables V10 (NoEmployees) and V17 (NoNewEmployees). Correlation matrix did
not show a significant association between NoEmployees and compliance stages, but a 95% significant, negative and weak association between NoNewEmployees and V23Fac (Decision) was shown in Table 22. The entrepreneurs who needed to employ a high number of new employees each year were less likely to make a social insurance decision.

One possible explanation for the negative correlation between the level of recruitment and retention and decision was about the complex admin compliance procedures of social insurance eg, the serial entrepreneur (see Section 3.3.2 and 4.2.1). High level of recruitment and retention increased the admin costs of compliance, which encouraged evasion. The high admin costs of social insurance law, for example, were particularly mentioned by the serial entrepreneur to result in his non-compliance of social insurance. Second, a high employee turnover often meant that these employees had lower technological skills that could be substituted. Cost strategies were also often implemented in these start-ups, in which recruitment and retention was not critical eg, the plastic industry entrepreneur. These two reasons thus combined to encourage evasion. Third, the level of recruitment and retention could be dependent on the social insurance compliance too. Those start-ups not offering social insurance could make their employees to abandon their venture, which could thus increase the level of turnover of employees.

On the other hand, the concern of recruitment and retention was operationalized by the variable V26_4 (WeightLong), which was considered as a long term rational weight that was attached with the importance of long term rational criteria by the entrepreneurs. The association of WeightLong and the compliance stages were executed as follows.

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23Fac</th>
<th>V24Fac</th>
</tr>
</thead>
<tbody>
<tr>
<td>WeightLong</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.256**</td>
<td>.180</td>
<td>.215*</td>
<td>.116</td>
</tr>
</tbody>
</table>

The long term rational weight, WeightLong, had an expected impact to the compliance stages, as shown in the correlation matrix (see Table 23). High level of the variable WeightLong had 95% significant and weak impacts to high levels of Awareness and Decision. The statistical findings of long term rational weight therefore showed the significant correlations between long term rational weight and compliance stages.

The incoherent statistical results from NoEmployees and NoNewEmployees, and WeightLong could be interpreted as follows. In particular, the NoEmployees and NoNewEmployees operationalized the level of recruitment and retention, while the WeightLong operationalized the concern of long term rational criteria instead. Since the association between the level of recruitment and retention and compliance decision could be affected by residual influences and cause-effect issues, the level of criterion was less a direct operationalization method than the concern of criterion, thus the association between the concern of long term rational criteria and compliance decision was taken as a more compelling argument instead.

This comparative section had two major findings concerning recruitment and retention concerns. On the one hand, compliance decision seemed to be impacted by the varied level of recruitment and retention concerns in the interview. On the other hand, a negative association was found between the concern of long term rational criteria and compliance stages in the questionnaire as well. These interview and questionnaire results thus accepted the Hypothesis 3 (high level of recruitment and retention has a positive impact to the level of social insurance compliance).

4.3 Ideological and Reputational Criteria

4.3.1 Ethical Ideologies

This section will continue to the interview findings about the ideological criteria of those entrepreneurs that were not complying with social insurance and those complying entrepreneurs. Then we will discuss and explain the extent to which these ideological criteria had impacts to compliance decision, using the interview findings of 13 entrepreneurs. This will be followed by our evaluation of the questionnaire findings of 144 entrepreneurs as a triangulation. Ultimately, based on our interview findings complemented by questionnaire findings of this fieldwork study, we will summarize the major findings concerning ideological criteria in this comparative section.
Interview Findings

On the one hand, some non-compliance entrepreneurs did not think compliance decision as an ethical decision. Therefore, these entrepreneurs did not consider ethical ideologies as an important criterion when considering their non-compliance decision. This lack of recognition could be revealed by a rare discussion on ethical ideologies from these entrepreneurs. Even when being asked explicitly, ethical ideologies did not account to a large extent for their whole consideration though. The realty agency entrepreneur and the pharmaceutical entrepreneur, for instance, both stated that ethical ideologies were a minor consideration in deciding whether or not to comply with the social insurance law. This point was agreed by the restaurant owner, who argued that ethical ideologies were not important to her in fact. The plastic industry entrepreneur also had the same opinion that ethical ideologies were of little concern for him, while his start-up should focus more on its survival rather than ethical ideologies. While their ethical ideologies will be returned later, all three of them attached no weight to their ethical ideologies in their non-compliance decision at all.

Not all the non-compliance entrepreneurs viewed ethical ideologies as negligible, but two of them attached some weights to ethical ideologies for their non-compliance decision. The heat technologies entrepreneur, in particular, underscored the ethical ideologies of bosses as an important criterion in deciding their social insurance compliance, although this criterion was often overwhelmed by their concern on costs, as he mentioned. He nevertheless attached 15% weight to ethical ideologies compared with 10% weight to costs. His higher weights of ethical ideologies relative to costs seemed peculiar, given his non-compliance decision. This could be related to a difference between ideological content and weights, which will be further discussed. In addition, the property management entrepreneur viewed social responsibilities as significant too. First, he claimed that his start-up also wanted to do social insurance, as it could protect his staffs, cater the old, and make the society stable, which was a societal development of China. Though, he drew a contrast to its social consensus then. He asserted that the current state of law was transitional. There was a large grey area so that most companies, including some SOEs, did not do social insurance. Thus, the whole atmosphere needed to mature to a state that most companies in various industries would do social insurance. The lack of social consensus deterred his start-up from social insurance. Third, he referred to a point related to social fairness and national competitiveness as well. What he thought was, because the society was under a transition, in which start-ups were not
making money, hence the level of insurance premiums needed to increase slowly, or else vast start-ups would not survive long. The Government should be fair in taking care about survival first, before protecting welfare. He extended this argument to the national competitiveness of China as well – China should not become Europe, which did not have sufficient money to provide welfare, to avoid a financial crisis in the future. These three points, social responsibilities, social consensus and social fairness/national competitiveness, were 30% - 35%, 30% - 35% and 10% of the concerns respectively, which together totalled 70% - 80% of his non-compliance decision.

On the other hand, in spite that some compliance entrepreneurs did not state explicitly ethical ideologies as an important criterion for their compliance decision, these entrepreneurs referred to the support of law instead (cf, Ayres and Braithwaite (1992)). The jewellery entrepreneur, for instance, did not mention ethical ideologies in explaining his compliance decision. He considered that companies were calculative for business profits, rather than normative for social responsibilities. But, he considered social insurance as the Government’s behaviour, so he abided to the law. Thus, in spite of the low reliability of the programme, the core reason of compliance for him was that, the social insurance was the legal rule of the country. The marketing & research consultant entrepreneur was similar too. He neither felt ethical ideologies being a big consideration to him, although he also argued that social insurance was something that should be done indeed. His main reason for legal compliance was that he was forced to follow the Government rules legally. This legal regulation accounted to 30% - 40% of his whole concern. A similar point of view was shown in the management consulting entrepreneur as well, who deemed his firm’s following of the Government regulations was a 33% concern. The information tech entrepreneur also deserves our discussion. To him, both ethical ideologies (5% - 10%) and Government regulations (50%) were his concerns for his compliance decision. When asked about whether ethical ideologies were his decision attribute, he stated that the ideologies must have an impact to compliance decision:

*The personalities of bosses do matter, or else the bosses will save the social insurance costs through the innovation of different [non-]compliance strategies. The ethical ideologies of course have an impact to social insurance compliance.*

- General Manager, Information tech start-up
Unethical bosses might save the social insurance costs through different non-compliance strategies: 1) submitting incorrect labour contracts of their staffs, and; 2) increasing Rmb 500 wage to their workers in place of insurance compliance. While, ethical bosses would just follow local legal rules, as they deemed insurance premiums as a cost that could not be saved. Likewise, he viewed that social insurance was the same thing as wage. His staffs might only view Rmb 1500 as their full wage, whereas he viewed Rmb 1500 plus 20.45% insurance premiums as their full wage instead. To him, he would save the time of not formulating non-compliance strategies to focus on business strategies instead:

*I will not waste time to think of methods to save the insurance costs. I will save the time to focus on the how to manage the business instead.*

- General Manager, Information tech start-up

Though he was reserved about the reliability of social insurance programme, not having 100% trust on the programme, he stated that this was the Government rule, hence his compliance decision in his start-up.

The Korean entrepreneur was an interesting case of ethical ideologies in compliance start-ups as well. He would abide to the well accepted ethical ideologies of Koreans – not crossing the road when red light was on, entering the township and following the custom, supporting social policies, and etc. Such the abiding seemed not to be calculative, but normative. His abiding action did not seem to result from social forces in China too. Thus, transferring the implementation of social insurance policies from Korea to China was the result of his ethical ideologies, which summed to his 40% concern to compliance decision.

The interview and questionnaire findings will then be further investigated for the acceptance or rejection of ideological hypotheses. The comparison results of ideological criteria in the interview were shown in the Table 24, whereas the partial rank correlation results of ideological criteria versus compliance stages in the questionnaire were illustrated in the Table 25. The complete partial rank correlation results of ideological criteria and compliance stages were presented in Exhibit 7.
<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Ideological Criteria</th>
<th>V21_4 (IntegrityProper)</th>
<th>Social Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>Ethical values (15%)</td>
<td>8</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>-</td>
<td>2</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Trading</td>
<td>Ethical ideologies (minimal)</td>
<td>9</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information Technology and Trading</td>
<td>Moral: on morals the firm should provide social insurance to the staff (20%)</td>
<td>5</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>-</td>
<td>5</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Realty agency</td>
<td>-</td>
<td>10</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>-</td>
<td>9</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Property management</td>
<td>Social responsibilities (30% - 35%)</td>
<td>6</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Electronic technology</td>
<td>Normal following of the rules (20%)</td>
<td>8</td>
<td>Compliance</td>
</tr>
<tr>
<td>Jewellery</td>
<td>The Government's behaviour (50%)</td>
<td>8</td>
<td>Compliance</td>
</tr>
<tr>
<td>Information tech</td>
<td>The Government regulations (50%)</td>
<td>6</td>
<td>Compliance</td>
</tr>
<tr>
<td>Marketing &amp; research consultants</td>
<td>Legal regulations (30% - 40%)</td>
<td>5</td>
<td>Compliance</td>
</tr>
<tr>
<td>Management consulting</td>
<td>Government regulations (33%)</td>
<td>2</td>
<td>Compliance</td>
</tr>
</tbody>
</table>

Lower ideological criteria had provoked the heat technologies entrepreneur, pharmaceutical entrepreneur, trading entrepreneur, serial entrepreneur, restaurant owner, realty agency entrepreneur, and plastic industry entrepreneur not to comply with social insurance. These non-compliance entrepreneurs had an obviously and commonly low ideological concern (0% - 20%) in non-compliance decision, except the property management entrepreneur. His higher concern (70% - 80%), however, could be further
explained. While he viewed the social responsibilities (30% - 35%) of social insurance as noteworthy, this ideological criterion was acted against by other two ideological criteria – the opinions about the lack of social consensus (30% - 35%) and social fairness/national competitiveness (10%) (cf, Tyler (2006)) in his non-compliance decision. In other words, although his ideological concern was higher, his ideological contents could be divergent, whose net result was his non-compliance decision. The lower level of ideological criteria in non-compliance entrepreneur was, nonetheless, obviously different from the higher level of ideological concern (30% - 60%) eg, law-abiding ideals and cultural ideals among the compliance entrepreneurs. The varied level of ideological concern therefore seemed to correlate to the compliance decision.

**Questionnaire Findings**

The time of interview was too short in exploring various ethical ideologies eg, familism, integrity, work ethics, and anti-individualism of entrepreneurs, these details were probed by the use of questionnaire as a complement instead.

**Table 25: Correlation Matrix (Ideological Criteria versus Compliance Stages Controlling for Demographic Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23F ac</th>
<th>V24F ac</th>
</tr>
</thead>
<tbody>
<tr>
<td>FamilismImportant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>-.051</td>
<td>-.065</td>
<td>.259**</td>
<td>.073</td>
</tr>
<tr>
<td>FamilismGoals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>-.021</td>
<td>.054</td>
<td>-.060</td>
<td>.127</td>
</tr>
<tr>
<td>FamilismEmphasis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>-.028</td>
<td>.026</td>
<td>-.103</td>
<td>-.034</td>
</tr>
<tr>
<td>FamilismNeglect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.207*</td>
<td>.147</td>
<td>.135</td>
<td>.171</td>
</tr>
<tr>
<td>IntegrityProper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.267**</td>
<td>.119</td>
<td>-.027</td>
<td>-.035</td>
</tr>
<tr>
<td>WorkHumiliating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.002</td>
<td>-.093</td>
<td>.265**</td>
<td>.144</td>
</tr>
<tr>
<td>WorkLazy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.050</td>
<td>-.074</td>
<td>.344**</td>
<td>.298**</td>
</tr>
<tr>
<td>WorkDuty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.123</td>
<td>.054</td>
<td>.088</td>
<td>.047</td>
</tr>
<tr>
<td>WorkIndolent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.225*</td>
<td>.126</td>
<td>.293**</td>
<td>.110</td>
</tr>
<tr>
<td>AntiIndividualismSelfish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.236*</td>
<td>.213*</td>
<td>.187*</td>
<td>.222*</td>
</tr>
<tr>
<td>AntiIndividualismDepend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.233*</td>
<td>.104</td>
<td>.175</td>
<td>.147</td>
</tr>
</tbody>
</table>

* p <= .05. ** p <= .01.
The familism value was operationalized by variables V19_1 (FamilismImportant), V19_5 (FamilismGoals), V19_6 (FamilismEmphasis), and V20_4 (FamilismNeglect). The FamilismImportant, FamilismEmphasis and FamilismNeglect were more connected to the group dominance value of familism, which were expected to have a positive impact to social insurance compliance; whereas FamilismGoals in the hierarchical values of familism was anticipated to negatively influence social insurance compliance instead. These two value components of familism therefore were expected to have divergent effects to compliance decision-making of social insurance.

These two expectations were shown partially accepted. The FamilismImportant and FamilismNeglect, but not FamilismEmphasis, had an expected significant, positive impact to compliance stages V22_1 (Awareness) and V23Fac (Decision) in social insurance. In other words, the entrepreneurs who agreed that family was important to their lives, or rejected others’ negligence of family in their lives, were aware of existing social insurance provisions, and made social insurance decision. In contrast, the FamilismGoals did not have a significant impact to compliance stages. In other words, the positive impact of group dominance value prevailed over the hierarchical value of familism to social insurance on the whole. The familism values thus had a positive impact to the level of social insurance compliance. The Hypothesis 4 (high level of familism has a negative impact to the level of social insurance compliance), as a result, was not accepted in our statistical results.

The integrity value was operationalized by variable V21_4 (IntegrityProper). The IntegrityProper had significant effect to the compliance stage V22_1 (Awareness) in social insurance. Those entrepreneurs who considered important to always behave properly, to avoid doing anything people would say was wrong would recognize social insurance as adequate. The Hypothesis 5 (high level of integrity has a positive impact to the level of social insurance compliance), as a result, was accepted in our statistical results.

The work ethics variables V19_2 (WorkHumiliating), V19_3 (WorkLazy) and V20_2 (WorkIndolent), except V19_4 (WorkDuty), had significant impacts to V22_1 (Awareness), V23Fac (Decision) and V24Fac (Implementation) too. The entrepreneurs who agreed with work ethics recognized social insurance as adequate, made a social insurance decision, and implemented their insurance infrastructure. The Hypothesis 6
(high level of work ethics has a negative impact to the level of social insurance compliance) was thus not accepted in our statistical results. The work ethics seemed to have a positive impact to the level of social insurance compliance.

The anti-individualism variables V20_1 (AntiIndividualismSelfishness) and V20_3 (AntiIndividualismDependence) had significant, positive and weak impacts to V22_1 (Awareness), V22_2 (Judgment/Intent), V23Fac (Decision) and V24Fac (Implementation) instead. The entrepreneurs who rejected selfishness or dependence recognized social insurance as adequate, established social insurance intent, made social insurance decision, and implemented social insurance infrastructure. The Hypothesis 7 (high level of anti-individualism has a positive impact to the level of social insurance compliance) was therefore accepted in our statistical results. Thus, high level of anti-individualism had a significant, positive and weak impact to the stages of social insurance compliance.

The ideological weight was also operationalized by a variable V26_2 (WeightIdeologies), as shown in the Table 26. The WeightIdeologies, however, did not have a significant correlation with the compliance stages. The importance placed on corporate ideologies did not seem to make more support to the social insurance compliance.

**Table 26: Correlation Matrix (Ideological Weight versus Compliance Stages Controlling for Demographic Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23Fac</th>
<th>V24Fac</th>
</tr>
</thead>
<tbody>
<tr>
<td>WeightIdeologies</td>
<td>.094</td>
<td>-.023</td>
<td>.169</td>
<td>.116</td>
</tr>
</tbody>
</table>


On the one hand, this finding thus replicated the differing behaviour between trade-off weights and asked weights. Based on the difference in measuring the ideological weight, it was important to note that our insignificant impacts of the asked WeightIdeologies to compliance stages might be different for the use of trade-off WeightIdeologies in the questionnaire. On the other hand, the ideological contents were important in explaining
the impact to social insurance compliance. The property management entrepreneur, for example, deemed that the lack of social consensus and the lack of social fairness/national competitiveness in social insurance resulted in his non-compliance decision, despite of a high ideological concern. The compliance entrepreneurs considered this ideological content as law-abiding ideals instead. The differed ethical ideologies eg, familism, integrity, work ethics, and anti-individualism had differed impact to social insurance compliance as well. Understanding the differences in ideological contents was thus important in analysing their impacts to social insurance compliance outcomes in this section.

Lastly, this comparative section had three major findings concerning the ethical ideologies. First, ethical ideologies were a less common consideration for non-compliance entrepreneurs, whereas such an ideological concern was more likely to be involved in compliance entrepreneurs. The compliance decision was thus influenced by the varied level of ideological concern in the interview. Second, all the ethical ideologies ie, familism, integrity, work ethics, and anti-individualism had positive, significant impacts to compliance stages, while some impacts eg, the hierarchical value of familism and work ethics differed from the expected direction of impact. Third, the ideological weight (the importance placed on corporate ideologies) did not seem to make more support to the social insurance compliance in the questionnaire.

4.3.2 Ethical Reputation
This section will carry on to portraying the interview findings about the reputational criteria of those entrepreneurs that were not complying with social insurance and those complying entrepreneurs. After that, we will talk about and give details on the extent to which these reputational criteria had impacts to compliance decision, using the interview findings of 13 entrepreneurs, followed by our evaluation of the questionnaire findings of 144 entrepreneurs as a triangulation. After all, based on our interview findings complemented by questionnaire findings of this fieldwork study, we will sum up the major findings concerning reputational criteria in this comparative section.

Interview Findings
On the one hand, non-compliance start-ups did not view ethical reputation as important in explaining their non-compliance decision. The heat technologies entrepreneur, for instance, did not think the ethical reputation of his start-up mattered in his non-
compliance decision. He neither deemed the mutual trust and reciprocities between him and his lower-end staffs critical:

_The workers do not want to work in the start-up? No problem. The workers can work elsewhere then. Wherever is not doing social insurance. Where can they move? Most of the factories are not doing the social insurance too._

- Vice General Manager, Heat technologies start-up

Only except his backbone staffs in the back office, which had a high contribution to his start-up, were a different story to him.

The restaurant owner, like the heat technologies entrepreneur, neither deemed ethical reputation important in her non-compliance decision. The trading entrepreneur also agreed that ethical reputation was of little importance to him in social insurance. He understood that potential staffs would look at the size and the reputation of start-ups for an expectation of social insurance from him. For large and reputed companies, there were more standardization and more responsibilities to staffs, so a higher expectation on social insurance was expected, which was not the case in his start-up nevertheless. Thus, social insurance was not expected by his staffs. In turn, the ethical reputation formed little importance in non-compliance decision. He knew that his ethical reputation would neither be damaged by his non-compliance decision, because it would be too far from a consensus on social insurance in the society. The reason of attaching low importance to ethical reputation was further explicated by the plastic industry entrepreneur. To the plastic industry entrepreneur, though his ethical reputation could be of some importance (shown from his concerned about his anonymity), he contended that his ethical reputation to his staffs was different from that to his customers. His less essential staff reputation was damaged instead of his more crucial customer reputation. The damage of his staff reputation by his non-compliance lowered his chance to find suitable staff, but the lower tech level of jobs in his start-up and the higher supply of staffs to his start-up made the damage less vital to him. Although his customer reputation was more critical, such the reputation could not be increased by the means of social insurance, but by his product, service, quality, word-of-mouth, and the business activities facing to his customers, so he attached low importance to ethical reputation in his non-compliance decision. The serial entrepreneur also joined this cohort of non-compliance
entrepreneurs that deemed ethical reputation as little concern to non-compliance decision. The non-compliance of social insurance in Shenzhen was considered in no way to affect Hong Kong. Moreover, he neither deemed his ethical reputation could increase the mutual trust and reciprocities of his mainlander staffs. His argument was ascertained by vast examples eg, a betrayal of staffs only for a meal or an iPad, which was referred in our meeting. In sum, the serial entrepreneur did not think ethical reputation key for his non-compliance decision.

Some cases of non-compliance start-ups, however, attached little weights to ethical reputation for non-compliance decision. The property management entrepreneur, for example, valued his ethical reputation slightly in his non-compliance decision. His start-up was within the top three largest property management start-ups in Guangzhou. This reputed position in his industry increased his concern of maintaining his reputation. He accordingly referred his branding as 10% of his whole consideration of decision. On the other hand, though he did not explicitly commented about his own reputation, we found out a relevant article about him on the internet. An ex-staff of his start-up left an article titled “black-heart enterprise, black-heart boss” on an online community. This article appeared on the search results when we searched for his start-up’s name in a search engine. This ex-staff described how his start-up, who had been established for a decade, concealed, omitted and falsified its actual number of workers, in order not to follow related labour laws including social insurance law. This article also showed how his start-up was submersed into a deep mud of labour conflicts. Thus, the reputation of his start-up should be worsening indeed. Such a worsening of reputation seemed to deteriorate his labour relations, which should therefore be the reason why his ethical reputation was valued slightly in his non-compliance decision. This linkage between ethical reputation and staff was recapped by both the realty agency entrepreneur and the pharmaceutical entrepreneur. Both of them considered their ethical reputation in hiring staffs as about 10% of their non-compliance decision.

On the other hand, ethical reputation was considered more important in compliance start-ups, but we found both calculative and normative natures of ethical reputation in the empirical findings.

The calculative nature of ethical reputation was connected to recruitment and retention of these compliance start-ups. When asked about the importance of ethical reputation in
compliance decision, the jewellery entrepreneur connected it to his staffs. He explained that, his long term service award, his former scheme of social insurance, was based on his initiative to increase his reputation, to retain his staffs to work for his start-up. Even when his initiative was reversed to “we have this, as same as others” to retain his staffs now, still, it was his idea to avoid bad reputation to the staffs of his start-up. In this case, he owned a calculative view of ethical reputation, as connected to staff concern, which accounted to 50% of his compliance decision. While the marketing & research consultant entrepreneur was an exception, ethical reputation was felt as a bigger deal to the compliance decisions of the management consulting entrepreneur and the information tech entrepreneur. The management consulting entrepreneur deemed the ethical reputation of his start-up as an attraction to his staffs, which was 33% of his compliance decision. Also, the information tech entrepreneur linked the recruitment and retention of staffs to the reputation as well. Most of his staffs, mainly university graduates in the information tech discipline, asked for social insurance. If a start-up did social insurance, then its staffs deemed it more formal, which was helpful to the recruitment and retention of a start-up. The customer reputation was however not brought up by him, because customers would not consider whether or not his start-up did social insurance before doing business with his start-up. Though the ethical reputation was weighed little, its connected staff concern was 30% - 40% of his compliance decision. These two entrepreneurs thus both held a calculative view of ethical reputation that was attached to the staff concern during their consideration for compliance decision.

In contrast, the Korean entrepreneur had a normative view of ethical reputation (see Section 4.2.2). His main concern was about the concept of face, accounting for 60% of the whole concern of compliance decision to him. He viewed this face concept as very important, even more important than life. This face emphasis could be shown in his daily lives as well eg, his comments on his partner’s car, the dressing of staffs, office design, office automobiles, and etc. Such a face concept did not seem calculative but normative in nature, as regarded by his partner. He was commented as being really a junzi by his partner:
The Korean entrepreneur is really a junzi.\textsuperscript{12} This is my overall comment to him.

- Partner, Electronic technology start-up

The interview and questionnaire findings will then be further investigated for the reputational hypotheses. The comparison results of reputational criteria in the interview were shown in Table 27, whereas the partial rank correlation results of reputational criteria versus compliance stages in the questionnaire were illustrated in Table 28. The complete partial rank correlation results of reputational criteria and compliance stages were presented in Exhibit 7.

Table 27: The Comparison of Reputational Criteria of the Selected Entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Reputational Criteria</th>
<th>V21_5 (ReputationReputation)</th>
<th>Social Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>-</td>
<td>9</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>-</td>
<td>7</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Trading</td>
<td>Ethical reputation (minimal)</td>
<td>6</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>Reputation (little concern)</td>
<td>6</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>-</td>
<td>8</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Realty agency</td>
<td>-</td>
<td>7</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>-</td>
<td>8</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Property management</td>
<td>Market share and brand (10%)</td>
<td>8</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Electronic technology</td>
<td>Face (60%)</td>
<td>9</td>
<td>Compliance</td>
</tr>
<tr>
<td>Jewellery</td>
<td>-</td>
<td>8</td>
<td>Compliance</td>
</tr>
<tr>
<td>Information tech</td>
<td>Reputation (not much considered but the connected staff concern was 30%-40%)</td>
<td>8</td>
<td>Compliance</td>
</tr>
<tr>
<td>Marketing &amp; research consultants</td>
<td>-</td>
<td>9</td>
<td>Compliance</td>
</tr>
<tr>
<td>Management consulting</td>
<td>Reputation (33%)</td>
<td>8</td>
<td>Compliance</td>
</tr>
</tbody>
</table>

\textsuperscript{12} Junzi is a term in Chinese, which means gentleman in English.
Lower reputational criteria had provoked the heat technologies entrepreneur, pharmaceutical entrepreneur, trading entrepreneur, serial entrepreneur, restaurant owner, realty agency entrepreneur, plastic industry entrepreneur, and property management entrepreneur not to comply with social insurance. These non-compliance entrepreneurs had an obviously and commonly low reputational concern (0% - 10%) in their non-compliance decision.

There was an obvious difference between their lower level of reputational concern from the higher level of reputational concern (0% - 60%) among compliance entrepreneurs. The Korean entrepreneur, for instance, even placed 60% of his concern on the concept of face in his compliance decision. Some connected the concerns of reputation and recruitment and retention together eg, the jewellery entrepreneur (50%) and information tech entrepreneur (30%-40%), except the marketing & research consultant entrepreneur (0%).

While few compliance entrepreneurs overtly weighed the reputational criteria, they did have a tacit one in their compliance decision. The information tech entrepreneur, for example, did not think public shaming as too significant. If a start-up did not do social insurance, then there must have a reason for it. The social insurance premiums were deemed a significant cost to start-ups. This cost reason forced these start-ups to dismiss the public shaming. That said, his start-up did not want to be seen on the newspaper as well:

*Our start-up does not want to be seen on the newspaper [as non-compliance] as well.*

- General Manager, Information tech start-up

The marketing & research consultant entrepreneur furthered this newspaper point with a metaphor:

*This whole thing is like stealing – if the stealer is arrested, the police should prison him, but the police should not take him to parade through the streets.*

- General Manager, Marketing & research consultant start-up
The public shaming was deemed placing a high pressure to start-ups, which was however too serious as a penalty. He argued that, simply enforcing the law would be sufficient to increase compliance, so the Government should not announce the names of those start-ups to the public.

The varied level of reputational concern between non-compliance and compliance entrepreneurs therefore seemed to correlate to their compliance decision, albeit less obvious differences in ReputationReputation between non-compliance and compliance entrepreneurs.

**Questionnaire Findings**

The time of interview was too short in exploring various ethical reputational concerns eg, emphases on reputation, trust, and reciprocities, relationships or guanxi of entrepreneurs, these details were probed by the use of questionnaire as a complement instead.

**Table 28: Correlation Matrix (Reputational Criteria versus Compliance Stages Controlling for Demographic Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23F ac</th>
<th>V24F ac</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReputationReputation</td>
<td>.152</td>
<td>.145</td>
<td>.013</td>
<td>.033</td>
</tr>
<tr>
<td>ReputationTrust</td>
<td>.029</td>
<td>.082</td>
<td>.183</td>
<td>.159</td>
</tr>
<tr>
<td>ReputationReciprocities</td>
<td>.093</td>
<td>.105</td>
<td>.163</td>
<td>.194*</td>
</tr>
</tbody>
</table>


The ethical reputational concerns were operationalized by variables V21_5 (ReputationReputation), V21_3 (ReputationTrust), and V21_2 (ReputationReciprocities). The ReputationReciprocities, but neither ReputationReputation nor ReputationTrust, had a significant impact to the compliance stage V24Fac (Implementation) in social insurance. Those entrepreneurs who considered important to always behave properly, to avoid doing anything people would say was wrong would recognize social insurance as adequate. Those entrepreneurs who
regarded reciprocities, relationships and guanxi with the people as important, would increase their engagement of implementation in social insurance. As a result, the Hypothesis 8 (high level of emphasis on reputation has a positive impact to the level of social insurance compliance) and the Hypothesis 9 (high levels of emphases on reciprocities, relationships and guanxi have a positive impact to the level of social insurance compliance) were accepted in our statistical results.

The reputational weight was also operationalized by a variable V26_3 (WeightReputation), as shown in the Table 29. The WeightReputation had a significant, positive and weak correlation with the V22_1 (Awareness) in compliance stages. The entrepreneurs who placed a heavy weight on reputation would recognize current social insurance provisions as adequate.

Table 29: Correlation Matrix (Reputational Weight versus Compliance Stages Controlling for Demographic Variables)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23Fac</th>
<th>V24Fac</th>
</tr>
</thead>
<tbody>
<tr>
<td>WeightReputation</td>
<td>.229*</td>
<td>.122</td>
<td>.155</td>
<td>-.026</td>
</tr>
</tbody>
</table>


In conclusion, this comparative section had three major findings concerning the ethical reputational criteria. First, ethical reputation was a less common consideration for non-compliance entrepreneurs, whereas such the reputational concern (in terms of their reputation to staff) was more likely involved by compliance entrepreneurs. The compliance decision thus seemed to be impacted by the varied level of reputational concerns of these interviewed entrepreneurs. Second, the ethical reputational concern eg, emphasis on reciprocities, relationships or guanxi had positive, significant impacts to compliance stages, despite some impacts eg, emphases on reputation and trust were not significant. Third, a higher level of reputational weight (the importance placed on corporate reputation) seemed to correlate with a higher awareness of social insurance from the questionnaire entrepreneurs.
4.4 Technological Impact

This section will then describe the relevant technological impacts (eg, technological related spirit, technological disciplines or backgrounds, and technological knowledge) revealed to influence the compliance decision of the start-ups.

Interview Findings

On the one hand, the technological entrepreneurs brought technological impacts together with compliance decision making. The information tech entrepreneur, for instance, considered that technological or engineering bosses had similar personality, which differed systematically from business bosses. What these personalities were had not been specified explicitly however. These personality differences were nonetheless regarded as the outcome of the disciplines or backgrounds of entrepreneurs, resulting in the differences in social insurance compliance:

*The technological or engineering bosses have similar personality as different from business bosses, therefore we do not think about this kind of things (non-compliance), saving our time to think about other things (doing business) instead.*

- General Manager, Information tech start-up

On the other hand, technological knowledge was also considered as an enabler of compliance decision. The heat technologies entrepreneur was an example that highlighted this argument. He considered that the lower-tech start-ups were often non-compliant with social insurance, whereas start-ups having high technological level were associated with the compliance of social insurance provisions. This contrast could be indicated by his two start-ups – heat technologies and electronic technology start-ups. His heat technologies start-up manufactured the heat pump of air conditioning, which was deemed a lower technological product than the precision die and electrical equipment designed and manufactured in his electronic technology start-up. Since he was responsible for the management of both heat technologies and electronic technology start-ups, thus similar management styles should have been applied to both start-ups, only in a rare conflict with the Korean entrepreneur. Yet, the heat technologies start-up focused more on rational or material criteria (the staff contribution to his start-up, the hukou of staffs, social insurance costs, and the Government monitoring accounted to 85% of decision criteria of his non-compliance decision), whilst the
electronic technology start-up emphasized more in ideological and reputational criteria (the concept of face, the adoption of customs and behaviours and the Korean culture), despite of its net losses. Comparing these two start-ups, the technological level thus seemed either to moderate the weight of decision criteria, or to form an independent impact factor of compliance decision. The technological level of jobs was also a judging criterion in the heat technologies start-up. Lower-end workers (eg, assembling) did not have social insurance compliance, as different from higher-tech engineers. The different levels of technological contributions to his start-up amounted to 40% of his decision concerns. This point on the technological level of jobs was mentioned by the jewellery entrepreneur as well. He deemed that lower-tech cottage factories did not do social insurance, in contrast to higher-tech leading manufacturing factories eg, Hayco (Wong & Wong, 2005).

The interview and questionnaire findings will then be further investigated for the acceptance of technological hypotheses. The comparison results of technological impact from the interview were shown in Table 30, whereas the partial rank correlation results of technological impact versus compliance stages were shown in Table 31. The complete partial rank correlation results of technological impact and compliance stages were presented in Exhibit 7.

Table 30: The Comparison of Technological Impact of the Selected Entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Technological Level</th>
<th>V14 (Industries)</th>
<th>Social Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>Medium</td>
<td>Manufacturing</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>Low</td>
<td>Health Care, Sports &amp; Social Welfare</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Trading</td>
<td>Low</td>
<td>Manufacturing</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information</td>
<td>Medium</td>
<td>Wholesale and Retail Trades &amp; Catering Services Transport, Storage, Postal &amp; Telecommunication Services</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>technology and Trading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>Low</td>
<td>Wholesale and Retail Trades &amp; Catering Services</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Realty agency</td>
<td>Low</td>
<td>Real Estate</td>
<td>Non-compliance</td>
</tr>
</tbody>
</table>
Lower technological level had prompted the heat technologies entrepreneur, pharmaceutical entrepreneur, trading entrepreneur, serial entrepreneur, restaurant owner, realty agency entrepreneur, plastic industry entrepreneur, and property management entrepreneur not to comply with social insurance. There was an obvious and common lower technological level (low to medium). The pharmaceutical entrepreneur had a lower technological level, because he did not research and develop the pharmaceuticals, but only bought and sold them in the pharmaceutical chain; whereas the serial entrepreneur was classified to medium technological level, because of his information tech start-up among his three start-ups. The lower technological level (low to medium) among non-compliance entrepreneurs was obviously different from the higher technological level (medium to high) among compliance entrepreneurs. In the Korean entrepreneur’s start-up, the precision mould technologies were of higher technological level, which needed on-site engineers for precision die and electrical equipment design and manufacturing; while, even though the technological contents were not high in the marketing & research consultants, and management consulting start-ups, their required educational level was medium to high for their industries. The varied technological level therefore seemed to correlate to the compliance decision.

**Questionnaire Findings**

**Table 31: Correlation Matrix (Technological Impact versus Compliance Stages Controlling for Demographic Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_</th>
<th>V22_</th>
<th>V23F</th>
<th>V24F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Correlation</td>
<td>.119</td>
<td>.118</td>
<td>.341**</td>
<td>.133</td>
</tr>
</tbody>
</table>

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The technological related spirit, technological disciplines or backgrounds, and the technological knowledge were operationalized by variables V21_1 (TechnologicalSpirit), V6DumEngineering (DisciplineEngineering), and V14DumTelecommunication (IndustriesTelecommunication).

The TechnologicalSpirit was shown in the table to have a significant, positive and weak impact to V23Fac (Decision) in the compliance stages. A high level of emphasis on the technological related spirit had a positive impact to the decision in compliance stages. The entrepreneurs who considered important to think up new ideas and be creative or to do things their own ways, would thus engage in the decision behaviour in social insurance. The Hypothesis 11 (high level of technological related spirit has a positive impact to the level of social insurance compliance) was therefore accepted in our statistical results.

The two other technological-related variables, DisciplineEngineering and IndustriesTelecommunication, however, had no significant impact to the compliance stages. The lack of significant correlations could be due to that these dummy variables might not well represent those technological constructs. The technological subjects, for instance, could fall into science faculties if not integrated to engineering faculties, whereas there could be other less technological subjects eg, engineering management falling under engineering departments. The technological knowledge might also be not well represented from the measure of industries. The high technological start-ups could be classified to manufacturing industry eg, the Korean start-up or to scientific research and polytechnic services industries; while there could be other non-technological start-ups eg, physical transport companies categorized under the transport, storage, postal & telecommunications services industries too. Thus, the potential impacts of these two
technological constructs to compliance stages needed further confirmation from future research.

To finish, this comparative section had two major findings concerning technological impact. On the one hand, the technological related spirit (the emphasis on innovation) had positive, significant impacts to compliance stages in the questionnaire. On the other hand, technological level was lower for non-compliance whereas this level was more likely to be higher in compliance entrepreneurs according to the interview, even though the relevant technological construct ie, IndustriesTelecommunication had no significant impacts to the compliance stages in the questionnaire. The less-satisfying representation for technological level by industries could be the reason for unnoticed significant correlations between the industries and compliance stages.

4.5 Compliance Stages
This section will describe the various compliance stages of the start-up in social insurance. Rest (1986) argued that each stage in the process was distinct, such that the former did not imply the latter. It was further argued that, while each stage increased the likelihood of its later stage, the former stage was “neither a necessary nor sufficient condition for later success” (Solymossy & Masters, 2002). In other words, some stages can be not correlated. We will also describe the descriptive statistics of the compliance stages in social insurance as a supplement in the end of this section.

Interview Findings
On the one hand, some entrepreneurs did not recognize compliance decision as a moral decision, although we were not sure whether it was indeed a reason or an excuse of non-compliance in social insurance (Nyland et al., 2011). On the other hand, there were often no clear distinction of awareness, judgment/intent, decision and implementation of compliance stages by the entrepreneurs. The terms of various compliance stages were used interchangeably during the meetings.

The awareness and judgment/intent were considered as a reason of the decision of social insurance from the entrepreneurs, in spite of the blurred boundaries between them. The trading entrepreneur, for example, recognized that social insurance scheme still remained at promotion level, such that the execution was just too far for discussion then. The completeness, comprehensiveness and execution of social insurance policies thus
accounted to 10% to 20% of his non-compliance decision. The property management entrepreneur mentioned extensively about how he thought about social insurance as well. He deemed that social insurance could protect the staffs, cater the old, and make the society stable, which was one of the societal developments. He nonetheless pointed out that it was a grey area under the current transition of the society, when even some SOEs did not do social insurance. He also indicated that insurance premiums were a higher need of welfare benefits which should be increased gradually, or else the Government would not have sufficient money to provide such benefits, which made it a time bomb to be explored in the future. The social responsibilities, social consensus, and national competitiveness were 30% - 35%, 30% - 35% and 10% of his concerns in non-compliance decision respectively. In contrast, the marketing & research consultant entrepreneur remarked about the question of transparencies of social insurance, which was a 30% to 40% concern for him. The information tech entrepreneur was also reserved about social insurance. Given the increase of the CPI index, the insurance premiums might not be sufficient to protect retirement, which would render social insurance unnecessary. Only if there was 100% trust on social insurance, together with the deflation issue tackled, then the program would be reliable enough for it to worth doing. This reliability concern contributed to 30% to 40% of his compliance decision.

The interview and questionnaire findings will then be further investigated for the association of compliance stages, as shown in Table 32 and Table 33. The complete partial rank correlation results of compliance stages and compliance stages were presented in Exhibit 8.

**Table 32: The Comparison of Compliance Stages of the Selected Entrepreneurs**

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Awareness/Judgment/ Intent</th>
<th>V23Fac (Decision)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>-</td>
<td>Have done</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>The Government deprivation of contributions (30%)</td>
<td>Not done</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Trading</td>
<td>The complete and comprehensive execution of the social insurance scheme (&lt;10% - 20%)</td>
<td>Have done</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>-</td>
<td>Not done</td>
<td>Non-compliance</td>
</tr>
<tr>
<td>Industry</td>
<td>Decision</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>Have done</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td>Realty agency</td>
<td>Have done</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>Not done</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td>Property management</td>
<td>Have done</td>
<td>Non-compliance</td>
<td></td>
</tr>
<tr>
<td>Electronic technology</td>
<td>Have done</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Jewellery</td>
<td>Have done</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Information tech</td>
<td>Have done</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Marketing &amp; research</td>
<td>Have done</td>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>consultants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management consulting</td>
<td>Have done</td>
<td>Compliance</td>
<td></td>
</tr>
</tbody>
</table>

Poor awareness and judgment/intent on social insurance law had been reflected by the pharmaceutical entrepreneur, trading entrepreneur, realty agency entrepreneur, and property management entrepreneur for their non-compliance of social insurance. Their poor awareness and judgment/intent on social insurance were around <10% -30% in their non-compliance decision. This could be either a reason or an excuse associated with non-compliance (Nyland et al., 2011). However, no reflection of awareness or judgment/intent was seen among the compliance entrepreneurs. This absence of reflection of awareness or judgment/intent could be viewed as a low level of poor awareness and judgment/intent, thus the varied level of poor awareness and judgment/intent seemed to correlate to the compliance decision of these entrepreneurs.

Then, we would discuss the seemed incoherence between Decision and actual compliance. The Decision was their reported decision of social insurance behaviour, with five provisions (basic endowment, unemployment, medical, employment injury, and maternity insurances) integrated into one single decision. We found that though some entrepreneurs claimed that they have complied with social insurance, they were found indeed not having done all according to our analysis. The heat technologies entrepreneur, for example, had segmented his workforce in his start-up. This partial compliance could lead to an understanding of compliance to him, even though it was analysed as non-compliance by us instead. Such the segmentation of workforce seemed
to cause a misunderstanding to the trading entrepreneur too. In addition, while the realty agency entrepreneur had at least one staff registering social insurance, so he claimed that he was running a non-black-and-white out-of-paper rule of the local Government, but he had only partial compliance indeed. In the property management entrepreneur’s case, since he had two start-ups – his old firm had been sued for non-compliance whereas his new firm had better compliance, he seemed to take his partial compliance in new firm as reported decision. These details therefore explained the difference between Decision and actual compliance.

**Questionnaire Findings**

**Table 33: Correlation Matrix (Compliance Stages versus Compliance Stages Controlling for Demographic Variables)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23Fac</th>
<th>V24Fac</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>1.000</td>
<td>.546**</td>
<td>.193*</td>
<td>-.148</td>
</tr>
<tr>
<td>Judgment/Intent</td>
<td>.546**</td>
<td>1.000</td>
<td>-.059</td>
<td>.081</td>
</tr>
<tr>
<td>Decision</td>
<td>.193*</td>
<td>-.059</td>
<td>1.000</td>
<td>.053</td>
</tr>
<tr>
<td>Implementation</td>
<td>-.106</td>
<td>.148</td>
<td>.157</td>
<td>1.000</td>
</tr>
</tbody>
</table>


* p <= .05. ** p <= .01.

The awareness, judgment/intent, decision, and implementation in compliance stages were operationalized by variables V22_1 (Awareness), V22_2 (Judgment/Intent), V23Fac (Decision), and V24Fac (Implementation) respectively.

The Awareness focused, it had a significant, positive and medium impact to the Judgment/Intent, but a weak one to Decision, and no significant impact to Implementation. The Judgment/Intent did not have a significant impact to Decision or Implementation, neither did Decision to Implementation. The entrepreneurs who recognized current Government social insurance provisions as adequate, would established social insurance provision intent, and would make social insurance decisions. In other words, the awareness had a significant impact to its direct stage – judgment/intent, but less significant to its indirect stages ie, decision and implementation, likely due to the increasing number of mediating variables along the compliance stages. The statistical results of compliance stages were thus consistent with
Rest (1986) and Solymossy and Masters (2002), which partially accepted the hypotheses of the correlations between compliance stages in the context of social insurance.

Descriptive Statistics
The entrepreneur’s values as distributed across awareness, judgment/intent, decision and implementation in the compliance stages were also showed in the sample statistics of our data in Table 34.

Table 34: Compliance Stages (Means and Std. Deviation)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>5.11</td>
<td>2.384</td>
</tr>
<tr>
<td>Judgment/Intent</td>
<td>5.49</td>
<td>2.267</td>
</tr>
<tr>
<td>Decision</td>
<td>1.61</td>
<td>0.490</td>
</tr>
<tr>
<td>Implementation</td>
<td>.0000005*</td>
<td>.93448749</td>
</tr>
</tbody>
</table>

*. Zero-centred mean for Implementation.

Our data found most respondents were neutral (5.11) in recognizing current Government social insurance provisions as adequate. This neutral stand was found in their judgment/intent towards social insurance provisions too (5.49). More respondents made social insurance decisions (1.61) and increased employers’ insurance premium level as an implementation (6.30), though these numbers were not overwhelming. These sample parameters were then compared to the average compliance rates from 2001-2004 in Shanghai from Nyland et al. (2012). Our reported average compliance rates ie, 61.00% are different from the actual average compliance rates in 2001 (29.10%), 2002 (23.25%) and 2004 (28.19%) in Shanghai, but similar to that in 2003 (64.54%) in Shanghai, at the time when there was an increased pressure from senior managers of Shanghai Bureau of Labour and Social Security to enforce compliance. Our higher average compliance rates could be accounted for, to some extent, by the claiming of partial compliance as compliance by entrepreneurs. Consequently, since a new social insurance law had been issued in 2010 and had come into force in 2011, our higher average compliance rates therefore suggested an increased enforcement effort from 2012 to 2013 in China too.
To end with, this comparative section had four major findings concerning compliance stages. First, the entrepreneurs did not often have a clear distinction of the awareness, judgment/intent, decision and implementation in the compliance stages. There were blurred boundaries between these compliance stages. Second, poor awareness and judgment/intent were a common consideration for non-compliance entrepreneurs, whereas this poor awareness or judgment/intent was not involved in compliance entrepreneurs. The compliance decision thus seemed to be impacted by the varied level of poor awareness and judgment/intent in the interview. Third, such the referral of poor awareness as either a reason or excuse of non-compliance explained the positive, significant impact between Awareness and Decision in the compliance stages. Fourth, our higher average compliance rates could be explained by an increased enforcement effort from 2012 to 2013 in China.

4.6 Research Model

The above individual rational or material, ideological and reputational models were supported by empirical evidences in explaining entrepreneur’s compliance with social insurance regulations. While these three models of compliance had been separately described, these models will be integrated in this section. The integrated model will be discussed in two parts: criteria weights and multiple regressions. In the interview findings, we will investigate these criteria through trade-off weights and asked weights of these criteria. This will be complemented by the asked weights of criteria from the questionnaire findings as a triangulation. The regression coefficients of multiple regressions will be followed by to understand the decision making of social insurance.

The research results showed that entrepreneurs consider five decision factors – cost control, the probability and the punishment of conviction, recruitment and retention, ethical ideologies, and ethical reputation – to make a social insurance decision in China.

These five decision factors, depending on their underlying drivers, could be coded and classified into four main decision criteria – short term rational or material criteria, long term criteria, ideological, and reputational criteria. Cost control, and the probability and the punishment of conviction, for example, had short term material interest (wage costs or total costs, and fines from Government) as the main driver of entrepreneur’s non-compliance. About the recruitment and retention concern, while this concern seemed less monetary, it was means to ends such as long term profits to entrepreneurs, so it was
described as long term criteria. In contrast, ethical ideologies and ethical reputation proposed non-material drivers i.e. ideological and reputational criteria respectively for the entrepreneur’s compliance decision in China instead.

This section used the measures of criteria weights and compliance decision as main variables (see Section 4.1). Criteria weights were the attached weight of the importance of the four main groups of decision criteria (rational or material (short term), rational or material (long term), ideological, and reputational criteria) for a decision. Their use relied on two techniques i.e, trade-off method or asking for direct importance judgments (Zarghami & Szidarovszky, 2011). These weights gave us an idea about how the four criteria compared with each other with respect to the impact to social insurance compliance. Compliance decision was represented through the reported decision of social insurance behaviour. The social insurance decisions in five provisions (basic endowment, unemployment, medical, employment injury, and maternity insurances) were then summed up into one decision. My logic was that, any non-compliance in the five reported decisions would make a non-compliance decision in the recoded variable, as all five compliance decisions were needed for compliance in social insurance law.

4.6.1 Interview Findings

In the interview findings, multiple criteria were investigated through the weights of criteria in the decision making of social insurance. Two direct methods were used to measure the weights: trade-off method or asking for direct importance judgments (Zarghami & Szidarovszky, 2011). Trade-off weights were elicited through verbal conversation, whereas asked weights were written in the self-completion questionnaire.

On the one hand, the weights of multiple criteria through trade-off method for 13 entrepreneurs were shown in Table 35. These weights were attached to the criteria proposed by the entrepreneurs. Due to that these criteria could be classified into four main groups of decision criteria i.e, rational or material criteria (short term), rational or material criteria (long term), ideological criteria, and reputational criteria, the respective weights could then be totalled, resulting in the four criteria weights in the table.

Table 35: Trade-off Weights (Interview Findings)

<table>
<thead>
<tr>
<th>Non-compliance</th>
<th>Rational (Short Term)</th>
<th>Rational (Long Term)</th>
<th>Ideological</th>
<th>Reputational</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Category</th>
<th>Rational (Short Term)</th>
<th>Rational (Long Term)</th>
<th>Ideological</th>
<th>Reputational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic technology</td>
<td>0%</td>
<td>0%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Jewellery</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td>Information tech</td>
<td>5%-10%</td>
<td>30%-40%</td>
<td>55%-60%</td>
<td>0%</td>
</tr>
<tr>
<td>Marketing &amp; research consultants</td>
<td>15%-25%</td>
<td>40%-50%</td>
<td>30%-40%</td>
<td>0%</td>
</tr>
<tr>
<td>Management consulting</td>
<td>0%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Mean</td>
<td>6%</td>
<td>33%</td>
<td>43%</td>
<td>19%</td>
</tr>
</tbody>
</table>

The table of trade-off weights demonstrated that rational criteria (short term) seemed to be the main driver of non-compliance in social insurance. Social insurance costs or cost-related criteria, i.e., short term rational criteria had the mean weight of 71% which dominated the long term rational criteria of 16%. These non-compliance entrepreneurs were also more motivated by short term rational criteria than two other non-rational criteria, ideological of 14% and reputational of 1% in compliance stages. In the compliance start-ups, on the whole, rational criteria (short term) had the mean weight of 6%, less than the 33% mean weight of long term ones, but their sum was still less weighted than the sum of ideological and reputational criteria in the compliance stages. Though there were a few mentions on cost and staff concerns by these compliance entrepreneurs, we found that they were more motivated by ideological and reputational criteria in compliance stages instead. All of them had referred to different ideological criteria (ethical ideologies, rule following, national culture, or rule of law) in their
compliance stages. In addition, if we took the connection between staff and reputational concerns into account, all of them indeed referred to either calculative or normative nature of ethical reputation as their criteria in compliance stages.

The non-compliance and compliance entrepreneurs totalled, rational criteria (short term and long term) had the respective mean weights of 46% and 22%, heavier than the ideological of 25% and the reputational of 8%. As a result, these trade-off weight results indicated short and long term rational criteria as the main driver of entrepreneur’s compliance.

On the other hand, the weights of compliance stages through asking method for 13 entrepreneurs were shown in Table 36.

Table 36: Asked Weights (Interview Findings)

<table>
<thead>
<tr>
<th>Non-compliance</th>
<th>V26_1 (WeightProfits)</th>
<th>V26_4 (WeightLong)</th>
<th>V26_2 (WeightIdeologies)</th>
<th>V26_3 (WeightReputation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Trading</td>
<td>9</td>
<td>6</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>10</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Realty agency</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>10</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Property management</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Mean</td>
<td>8.25</td>
<td>7.875</td>
<td>7</td>
<td>6.75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compliance</th>
<th>V26_1 (WeightProfits)</th>
<th>V26_4 (WeightLong)</th>
<th>V26_2 (WeightIdeologies)</th>
<th>V26_3 (WeightReputation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic technology</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Jewellery</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Information tech</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Marketing &amp; research consultants</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Management consulting</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Mean</td>
<td>6.67</td>
<td>8.5</td>
<td>6.67</td>
<td>6.83</td>
</tr>
</tbody>
</table>
The asking method enquired the entrepreneurs about what they would consider to decide whether they take various forms of compliance action, comparing among corporate profits (V26_1 (WeightProfit)), long term strategies and success (V26_4 (WeightLong)), corporate ideologies (V26_2 (WeightIdeologies)), and corporate reputation (V26_1 (WeightReputation)) for the importance in their compliance decision.

The asking weight table illustrated that rational model (short term) (WeightProfit) seemed to be the main driver of non-compliance in social insurance. Therefore, the trade-off weights and asked weights were consistent with each other. The mean WeightProfit (8.25 on a 10-point scale), together with WeightLong (7.875), stood out from the mean weights on WeightIdeologies (7) and WeightReputation (6.75) for these non-compliance entrepreneurs. In the compliance start-ups, despite the mean WeightProfit (6.67) fell to a level less than or equal to that of WeightIdeologies (6.67) and WeightReputation (6.83), the highest value was still placed to the long term rational criteria ie, WeightLong (8.5).

The non-compliance and compliance entrepreneurs totalled, WeightProfit and WeightLong had the mean weights of 7.57 and 8.14 respectively, heavier than WeightIdeologies of 6.86 and WeightReputation of 6.79. Accordingly, both trade-off method and asking method seemed to point out rational model as a major direction in explaining entrepreneur’s compliance in social insurance consistently.

### 4.6.2 Questionnaire Findings

The asked weights of criteria were not only extracted from 13 entrepreneurs, but also obtained from 130 filtered entrepreneurs in the questionnaire findings. The asked weights of these 144 entrepreneurs were integrated together, as shown in Table 37. This table therefore showed the direct importance judgments of multiple criteria from these 144 entrepreneurs.
Table 37: Asked Weights (Questionnaire Findings)

<table>
<thead>
<tr>
<th>Group</th>
<th>WeightProfits</th>
<th>WeightLong</th>
<th>WeightIdeologies</th>
<th>WeightReputation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance</td>
<td>7.96</td>
<td>7.98</td>
<td>7.35</td>
<td>7.73</td>
</tr>
<tr>
<td>Compliance</td>
<td>8.70</td>
<td>7.82</td>
<td>7.25</td>
<td>7.56</td>
</tr>
<tr>
<td>Total</td>
<td>8.40</td>
<td>7.88</td>
<td>7.29</td>
<td>7.63</td>
</tr>
</tbody>
</table>

The asked weights showed that rational criteria (WeightProfits and WeightLong) had the highest weight in non-compliance entrepreneurs according to the questionnaire findings. WeightProfits and WeightLong had the weights of 7.96 and 7.98 on a 10-point scale respectively. While, WeightIdeologies had the weight of 7.35, less than the 7.73 weight of WeightReputation. The rational criteria thus seemed to be the main driver for non-compliance entrepreneurs. On the whole, compared with non-compliance entrepreneurs, rational criteria (short term) had an even higher weight among compliance entrepreneurs, whereas rational criteria (long term) had a lower weight instead. The lower weights happened in the ideological and reputational criteria too. In compliance entrepreneurs, WeightProfits had the weight of 8.70 on the scale. This was higher than the weights of 7.82, 7.25, and 7.56 in WeightLong, WeightIdeologies, and WeightReputation respectively. The rational criteria thus seemed to take a higher role in the compliance entrepreneurs. The two groups aggregated, rational criteria (short term and long term) had the higher weights of 8.40 and 7.88, while those of ideological and reputational were 7.29 and 7.63 respectively, as found in these asked weights. These weight differences between decision criteria were reflected as real in the population too, according to a paired samples t test matrix (not shown here).

4.6.3 Supplement

As an addition, we will look at the figures showing the strength of relationships between criteria weights and compliance behaviour by the help of multiple regressions in questionnaire findings as well. The outline of these multiple regressions will be described as follows. We will begin by describing the data handling of criteria variables to produce criteria factors. Next, we will also connect these data handling processes to stages factors. Finally, we will link together our criteria factors and stages factors through multiple logistic and linear regression models.

First, the data handling to manipulate, recode and compute independent variables (criteria) and dependent variables (stages) was developed in order to reduce the
dimensions at stake, which helped control the number of regression models. The small number of criteria weights was manageable, so the weights were directly used, in which four criteria factors resulted (see Table 38).

Table 38: Criteria Factor and Item

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factor</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational Weight</td>
<td>Rational Weight (Short Term)</td>
<td>V26_1 (WeightProfits)</td>
</tr>
<tr>
<td>(Short Term)</td>
<td>(WeightProfits)</td>
<td></td>
</tr>
<tr>
<td>Rational Weight</td>
<td>Rational Weight (Long Term)</td>
<td>V26_4 (WeightLong)</td>
</tr>
<tr>
<td>(Long Term)</td>
<td>(Weight-Long)</td>
<td></td>
</tr>
<tr>
<td>Ideological Weight</td>
<td>Ideological Weight (WeightIdeologies)</td>
<td>V26_2 (WeightIdeologies)</td>
</tr>
<tr>
<td>Reputational Weight</td>
<td>Reputational Weight (WeightReputation)</td>
<td>V26_3 (WeightReputation)</td>
</tr>
</tbody>
</table>

Second, the large number of stages variables was reduced with computational logic or factor analysis using SPSS 21.0, to produce 4 stages factors and 5 implementation factors with items.

One stage variable or factor – V22_1 (Awareness), V22_2 (Judgment/Intent), V23Fac (Decision), and V24Fac (Implementation) – was operationalized for each stage respectively. The operationalization of the former three stages has been described in Section 4.1, thus no further special treatment was needed for them. The latter implementation stage equalled to the factor of improved implementation, a factor reduced from the factor analysis of 19 implementation actions.

The number of 19 implementation action variables was not small; hence these 19 items were subjected to factor analysis using SPSS 21.0. The default analysis setting of factor analysis for SPSS was to use Pearson's r correlation coefficient. To use Spearman's rho instead, a correlation matrix for Spearman correlations was generated with a matrix subcommand, which could be used in place of raw data to obtain factor analysis. In addition, principal axis factoring, varimax, and regression method were used for factor extraction, rotation, and computing factor scores respectively. Accordingly, this approach was adopted to obtain the factors of implementation action construct.
The implementation action factors had the Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.806, a high value close to 1.0, which indicated high proportion of variance in the variables could be caused by underlying factors. The Bartlett’s test of sphericity showed approx. Chi-Square as 2232.593, df as 171 and p (obtained) value of 0.000, a small value less than p (critical) value of 0.05, which indicated that the variables were related and therefore suitable for factor analysis (Dziuban & Shirkey, 1974). The results of the factor analysis revealed that there were 5 factors. These 5 factors explained 82.435% of the variance in implementation action. These factors were multidimensional so they were rotated. The rotated factor matrices helped determine items that the factor represented. The items that were highly correlated (> 0.500) were indicated, but less correlated items were not specified. The factor 2, for instance, was highly correlated (>= 0.500) with V25_16 (ImplementationAddBusinessRegistration), V25_17 (ImplementationAddSchedule), V25_18 (ImplementationPerformance), and V25_19 (ImplementationImproveLevel), but less correlated with other items of implementation actions. These four items loaded on the factor at a level around 0.8, well above 0.4 that was accepted to be meaningful (Ford, MacCallum, & Tait, 1986). The factor score of factor 2 therefore mainly represented the improved implementation actions.

These processes produced 4 stages factors and 5 implementation factors with items in Table 39 and Table 40, whose factor score coefficients were shown in Exhibit 9.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.806, a high value close to 1.0, which indicated high proportion of variance in the variables could be caused by underlying factors. The Bartlett’s test of sphericity showed approx. Chi-Square as 2232.593, df as 171 and p (obtained) value of 0.000, a small value less than p (critical) value of 0.05, which indicated that the variables were related and therefore suitable for factor analysis (Dziuban & Shirkey, 1974). The results of the factor analysis revealed that there were 5 factors. These 5 factors explained 82.435% of the variance in implementation action. These factors were multidimensional so they were rotated. The rotated factor matrices helped determine items that the factor represented. The items that were highly correlated (> 0.500) were indicated, but less correlated items were not specified. The factor 2, for instance, was highly correlated (>= 0.500) with V25_16 (ImplementationAddBusinessRegistration), V25_17 (ImplementationAddSchedule), V25_18 (ImplementationPerformance), and V25_19 (ImplementationImproveLevel), but less correlated with other items of implementation actions. These four items loaded on the factor at a level around 0.8, well above 0.4 that was accepted to be meaningful (Ford, MacCallum, & Tait, 1986). The factor score of factor 2 therefore mainly represented the improved implementation actions.

These processes produced 4 stages factors and 5 implementation factors with items in Table 39 and Table 40, whose factor score coefficients were shown in Exhibit 9.

Table 39: Stages Factor and Item

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factor</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>Awareness (Awareness)</td>
<td>V22_1 (Awareness)</td>
</tr>
<tr>
<td>Judgment/Intent</td>
<td>Judgment/Intent (Judgment/Intent)</td>
<td>V22_2 (Judgment/Intent)</td>
</tr>
<tr>
<td>Decision</td>
<td>Decision (Decision)</td>
<td>V23Fac (Decision)</td>
</tr>
<tr>
<td>Implementation</td>
<td>Implementation (Implementation)</td>
<td>V24Fac (Implementation) = V25Fac2 (Improved Implementation)</td>
</tr>
</tbody>
</table>

Table 40: Implementation Factor and Item

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factor</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Action</td>
<td>No or Some Registration (V25Fac1)</td>
<td>V25_1 (ImplementationNoRegistration) V25_2 (ImplementationSomeRegistration) V25_3 (ImplementationPartCertificate)</td>
</tr>
</tbody>
</table>
These five implementation factors were also in coherent with the four broad groups: not handling social insurance registration, circumventing or escaping, minimum standard, and improved implementation of social insurance to a large extent, endorsing the validity of these five implementation factors. The match between empirical and theoretical constructs also confided us that these action constructs were meaningful for regression analysis.

Third, the criteria factors and stages factors were selected as independent variables and dependent variables for multiple logistic and linear regression models in the following forms (see Equation 3 and Equation 4). These regression models were then tested with Hosmer and Lemeshow test (logistic regression) or F-test (linear regression) for significance, with df, Chi-square-value or F-value, and p-value recorded. The produced Y intercept $\beta_0$, and coefficient $\beta_i$ were tested with Wald-test (logistic regression) or t-test (linear regression). Only the significant regression coefficients were compared here for the relative effects of criteria factors in predicting stages factors in our practice.

**Equation 3**

$$ Logit = \log(\text{Odds}(Y_i)) = \log(\pi_i / (1 - \pi_i)) = \beta_0 + \beta_1 X_{1i} + \ldots + \beta_k X_{ki} + \epsilon_i, i = 1, \ldots, n. $$
Fourth, in the independent variables, the 10 control variables were entered to a regression model first (see Table 41). Age, sex and education were common demographic variables to be entered in the regression model, including hukou or location, as aggregated to the greater administrative area, and the age of start-up as well. The variable selection method was entering the variables in a block in a single step, but not stepwise entering variables depending on their F value (linear regression). The 4 criteria factors, and the stage factors that were prior to focus stage, were respectively entered in the regression model. All variables were entered in the full regression model last. In the dependent variables, the stages and action factors, depending on their measurement level, needed to use different regression models. The compliance decision, our focused factor, was a nominal variable, which thus used logistic regression models instead of linear regression models.

Last, the regression model results were summarized in the Table 41 as follows. The rows indicated control, criteria, and stages factors. These variables were used to predict the compliance decision. The columns indicated multiple logistic regression models with the maximum likelihood estimation method. The respective standardized coefficients were shown at the intersection of rows and columns in the table. The complete multiple regressions results were presented in the Exhibit 10.

### Table 41: Multiple Logistic Regression Coefficients on Compliance Decision

<table>
<thead>
<tr>
<th>Variables</th>
<th>Control</th>
<th>Control and Criteria</th>
<th>Control and Stages</th>
<th>Full</th>
<th>Full w/o dummies</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>22.016</td>
<td>15.038</td>
<td>20.002</td>
<td>670.722</td>
<td>-12.839</td>
</tr>
<tr>
<td>Age</td>
<td>.061+</td>
<td>.099*</td>
<td>.058+</td>
<td>.090*</td>
<td>.059+</td>
</tr>
<tr>
<td>Sex</td>
<td>1.660**</td>
<td>2.229**</td>
<td>1.859**</td>
<td>2.277**</td>
<td>2.292**</td>
</tr>
<tr>
<td>Education</td>
<td>1.525**</td>
<td>1.639**</td>
<td>1.573**</td>
<td>1.650**</td>
<td>1.352**</td>
</tr>
<tr>
<td>LocationNorth</td>
<td>-32.523</td>
<td>-31.539</td>
<td>-31.856</td>
<td>-687.803</td>
<td>-</td>
</tr>
<tr>
<td>LocationNortheast</td>
<td>5.091</td>
<td>6.516</td>
<td>7.535</td>
<td>-648.424</td>
<td>-</td>
</tr>
<tr>
<td>LocationEast</td>
<td>-33.126</td>
<td>-32.274</td>
<td>-32.425</td>
<td>-688.392</td>
<td>-</td>
</tr>
<tr>
<td>LocationSouthCentral</td>
<td>-33.152</td>
<td>-32.531</td>
<td>-32.548</td>
<td>-688.582</td>
<td>-</td>
</tr>
</tbody>
</table>
In the full model without dummy variables, the model table showed that Hosmer and Lemeshow Chi-square test statistics was 17.353, -2 log l (likelihood-ratio test statistics) was 132.983, Cox & Snell R Square was 0.257, Nagelkerke R Square was 0.349, overall percentage correct of the prediction was 78.5%. Chi-square (obtained) value of 17.353 was larger than Chi-square (critical) value with df = 8 at 95% confidence level of 15.507. p (obtained) value of 0.027 was smaller than the p (critical) value of 0.05. This multiple logistic regression model thus adequately fit the data for the association in the population. Nagelkerke R Square (obtained) value of 0.349 meant that 34.9% of the total variation in Decision could be explained by control (without dummy), criteria and stages variables combined (Nagelkerke, 1991). The overall percentage correct of 78.5% meant that 78.5% of the overall prediction was correct.

The regression coefficients $\beta_{\text{WeightProfits}} = 0.338$. $\beta_{\text{WeightProfits}}$ had Wald (obtained) value = 6.809, p (obtained) value = 0.009, and $\exp(\beta_{\text{WeightProfits}}) = 1.403$. p (obtained) value of 0.009 was less than the p (critical) value of 0.05. The variable WeightProfits had a significant partial effect on the probability of Decision = 1 in the population. This accepted partial effect was asterisked in the table. $\exp(\beta_{\text{WeightProfits}})$ value as 1.403 meant that for entrepreneurs weighted one unit more on corporate profits, while holding all other independent variables constant (at whatever values), the odds of compliance...
decision were multiplied by 1.403 in the population (increased by 40.3%). The entrepreneurs that considered rational criteria (short term) as important (ie, rational weight (short term) as heavy) made social insurance decision. On the other hand, in the full model, though the regression coefficient $\beta_{\text{Awareness}} = 0.238$ showed 90% significant partial effect between Awareness and Decision in the population, the $\beta_{\text{Awareness}}$ did not show significant partial effect in the full model without dummy variables. Neither the $\beta_{\text{WeightIdeologies}}$, $\beta_{\text{WeightReputation}}$, $\beta_{\text{WeightLong}}$, nor $\beta_{\text{Judgment/Intent}}$ showed significant partial effect in the population in the last model.

The positive impacts between rational weight (short term) and compliance decision could be because of either the enforcement of social insurance, or the interpretation of rational weight. About the explanation because of the enforcement of social insurance, in spite that these entrepreneurs considered corporate profits as important, they were compelled to engage with social insurance behaviour. A high level of social insurance costs in turn made them think the cost control of these cost-related criteria for corporate profits as more important. For the other vindication, there could be confusion about the interpretation of profit-related weight that resulted in its incoherent impacts to compliance decision. An understanding of high profit-related weight was that, the maximization of profits was considered important to entrepreneurs, thus not supporting social insurance. Another elucidation was that, corporate profits were deemed important, due to the fact that it made social insurance possible, thus supporting social insurance. In the interview, the former interpretation was clearly presented by the entrepreneurs, whereas the latter interpretation seemed to be shown from the profit-related weight findings in the questionnaire instead. These two explanations described will call for future research. Nonetheless, the significant impacts between rational weight (short term) and compliance decision did show the importance of rational criteria (short term) in considering compliance decision.

Excluding the control variables, the $|\beta_{\text{WeightProfits}}|$ had the highest value in coefficients so WeightProfits had the greatest partial effect on Decision, in contrast to other criteria factors. As a result, the consideration of corporate profits as important was the strongest predictor of the entrepreneur’s decision of social insurance provisions in this regression model. This consideration of corporation profits, nonetheless, would be a weaker predictor than the considerations of corporation ideologies or reputations to the entrepreneur’s implementation of social insurance provisions (see Section 5.1.5 and
Exhibit 10). The entrepreneurs that deemed corporate ideologies as important, in particular, implemented an improved level of social insurance infrastructure.

4.6.4 Reports
Rational or material weight (short term and long term) had a significant prediction to compliance decision. The interview findings and questionnaire findings showed the standing out of rational weights in compliance decision. In the interview findings, the trade-off method results indicated rational weights as the main driver of entrepreneur’s compliance. The trade-off method and asking method were also consistent in their illustration of rational weights. In the questionnaire findings, the non-compliance and compliance groups aggregated, the asked rational weights (short term and long term) are high as well. On top, the regression results indicated that the rational (short term and long term) weights were strong to predict behaviour in compliance (long term rational weight was 90% significant to implementation (see Section 5.1.5)). The two parts: interview findings and questionnaire findings were therefore coherent to present rational model as the main driver in the integrated model of entrepreneur’s compliance in social insurance.

Ideological and reputational weights seemed to have some impacts to compliance decision, according to the interview findings and questionnaire findings. Although their impacts were not discovered in the regression model of compliance decision, it was argued that significant, positive and moderate impact was found between ideological and reputational weights and compliance implementation (see Section 5.1.5 and Exhibit 10). The entrepreneurs that deemed ideological criteria as important, in particular, implemented an improved level of social insurance infrastructure.

In addition, the interview findings and questionnaire findings indicated that rational (short term and long term) weights were stronger than ideological and reputational weights in predicting compliance decision in social insurance as well.

As a final point, the attributes and weights referred to MAUT in explaining compliance in social insurance. We had limited our discussion to a descriptive aim, not a normative aim. In other words, we focused on describing the existing attributes and weights of entrepreneurs, instead of proposing these attributes and weights as the ‘best’ compliance
decision to entrepreneurs. While such a normative aim was possible, it was not within the scope of this thesis.
Chapter 5 Discussion

5.1 Social Insurance Decision Making of Entrepreneurs

This section will discuss how the research questions (see Chapter 1.3 and below) at individual level have been answered from the findings as follows.

- How do entrepreneurs actually make a social insurance decision?
- How are cash or financial considerations compared with ethics with respect to the impact on social insurance decisions?
- How does ethical tolerance implicate social insurance decisions?
- How are the implications of technology rippled to social insurance decisions?
- How can social insurance implementation be impacted as a result of ethics in the SME?
- Is social insurance decision making linked to entrepreneurial performance and success?

First, entrepreneurs consider rational or material (short term and long term), ideological and reputational criteria to make a social insurance decision (see Section 5.1.1). Second, cash or financials seem to stand out but not to dominate ethics with respect to the impact on social insurance decisions (see Section 5.1.2). Third, ethical tolerance implicates social insurance decisions (see Section 5.1.3). Fourth, some implications of technology are rippled to social insurance decisions (see Section 5.1.4). Fifth, social insurance implementation can be impacted as a result of ethics in the SME (see Section 5.1.5). Sixth, social insurance decisions seem to be linked to entrepreneurial performance and success (see Section 5.3.2).

The above answers will be discussed one by one in the following sub-sections of this chapter.

5.1.1 Entrepreneurs consider rational or material (short term and long term), ideological and reputational criteria to make a social insurance decision.

Rational or material (short term and long term), ideological and reputational criteria were the three decision criteria developed according to existing literature ie, CMD theory (Kohlberg, 1969) in ethical decision making of entrepreneurs. My research question was whether or not these three criteria were valid in the social insurance
The research results showed that these three criteria were considered to make social insurance decisions. The validity of these literatures on ethical decision making of entrepreneurs was therefore confirmed.

Rational criteria (short term) eg, cost control (wage costs and total costs), and the probability and the punishment of conviction, were considered by the interviewed entrepreneurs, while a significant impact of cost and legal concerns, including rational weight (short term) to compliance stages had also been accepted in the questionnaire, though the positive direction of relationship in the questionnaire will call for future research. In the long term rational criteria, although a negative association was found between the number of new employees and the decision of social insurance, it was argued that the recruitment and retention concern was positively related to the compliance stages both in the interview findings and questionnaire findings. The examination on more rational criteria will help increase the validity of this rational model.

Non-rational criteria (ideological and reputational criteria) were significant to compliance stages as well. On the one hand, ethical ideologies were considered as ideological criteria for compliance stages in the interview, especially familism, integrity, work ethics, and anti-individualism as shown in the questionnaire. On the other hand, reputational criteria also had impact to compliance stages, specifically the emphasis on reciprocities, relationship and guanxi. These two non-rational criteria were thus both considerations for compliance decision.

These three decision criteria, nevertheless, were only a model of decision criteria. In other words, these three criteria had not included, and could not include all relevant criteria considered in the real world. The set of ethical values, for instance, should not exclude other values eg, distributive justice as criteria to influence compliance decision. Non-ethical criteria eg, technological related spirit could also be included in these three criteria. These three criteria were thus not exhaustive in explaining compliance decision.

These three decision criteria, nonetheless, explained compliance decision to some extent. In the interview, the main reasons for business start-ups to make social insurance decision could be classified into these three criteria. In the questionnaire, the
exhaustiveness of these three criteria for explanation was moderate when investigating
the Nagelkerke R Square or adjusted R Square of regression models (see Table 42).

Table 42: Nagelkerke and Adjusted R Square

<table>
<thead>
<tr>
<th>Nagelkerke R Square</th>
<th>Adjusted R Square</th>
<th>Compliance Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>0.108</td>
<td>Awareness</td>
</tr>
<tr>
<td>-</td>
<td>0.447</td>
<td>Judgment/Intent</td>
</tr>
<tr>
<td>0.518</td>
<td>-</td>
<td>Decision</td>
</tr>
<tr>
<td>-</td>
<td>0.420</td>
<td>Implementation</td>
</tr>
<tr>
<td>-</td>
<td>0.151</td>
<td>V25Fac1</td>
</tr>
<tr>
<td>-</td>
<td>0.420</td>
<td>V25Fac2</td>
</tr>
<tr>
<td>-</td>
<td>0.247</td>
<td>V25Fac3</td>
</tr>
<tr>
<td>-</td>
<td>0.118</td>
<td>V25Fac4</td>
</tr>
<tr>
<td>-</td>
<td>0.054</td>
<td>V25Fac5</td>
</tr>
</tbody>
</table>

The R Squares table showed Nagelkerke and adjusted R Squares were from 5% to 50%,
which were the percent of total variation in compliance stages that could be explained
by the criteria weights combined (Field, 2009; Nagelkerke, 1991). These criteria
weights seemed to explain moderate level of total variation in compliance stages, while
higher in compliance decision. These criteria weights, however, had not been exhaustive.
More decision criteria eg, ethical, non-ethical, technological, emotional or political
criteria could be added in explaining compliance stages in social insurance.

5.1.2 Cash or financials seem to stand out but not to dominate ethics with respect
to the impact to social insurance decisions.

The discussion on the domination of impacts to social insurance compliance was
divided in two parts (see Section 4.6): the criteria weights through trade-off method and
asked method in the interview findings, and the criteria weights through asked method
from the questionnaire findings as a triangulation. These weights gave us an idea about
how cash or financials compared with ethics with respect to the impact to social
insurance compliance. The strengths of weights in multiple regression models also
showed the domination of impacts to social insurance compliance.

In the interview findings, the trade-off weights showed the main role of cash or
financials, and long term rational consideration in the non-compliance decision of
entrepreneurs, which was substituted by ideological and reputational criteria as the
drivers of compliance decision of entrepreneurs; while, cash or financials, and long term rational concern were shown to be the higher ones among trade-off weights, when non-compliance and compliance entrepreneurs were aggregated. In the interview findings, the asked weights also showed the main role of cash or financials, and long term rational consideration for non-compliance entrepreneurs. This main role was undermined by ideological and reputational criteria to compliance entrepreneurs. Whereas, cash or financials, and long term ration concern were still the higher ones among asked weights, aggregating non-compliance and compliance entrepreneurs. In contrast, in the questionnaire findings, cash and financial matter, and long term rational items were higher than ideological and reputational affairs in both non-compliance and compliance entrepreneurs in the asked weights, together with the aggregated ones too. In the strengths of weights, cash or financial weight ie, rational weight (short term) had a significant prediction to compliance decision, however, long term rational weight did not had one to compliance decision. When compared with ethics (in terms of ideological and reputational weights), cash or financial weight was a stronger predictor than ideological and reputational weights to the compliance decision still. However, cash or financial weight was a weaker predictor than ideological and reputational weights to the compliance implementation (see Section 5.1.5 and Exhibit 10). The entrepreneurs that deemed ideological criteria as important, in particular, implemented an improved level of social insurance infrastructure. In sum, according to criteria weights, cash or financials were a more important consideration than ethics for the compliance behaviour; nonetheless, the difference between cash or financials, long term rational weight, ideological or reputational criteria were not huge indeed.

The standing out of cash or financial criteria was therefore coherent from these research results. Cash or financial criteria were considered as the most important one to consider when explaining social insurance compliance. However, cash or financial criteria were not seen to have a total dominance in explaining compliance. The roles of ideological or reputational criteria were not ignorable to compliance entrepreneurs, given that their differences were not huge indeed. In other words, entrepreneurs did not trade off ethics for profits completely in their compliance behaviour of social insurance. The research results thus showed a multi-facet of decision criteria in explaining social insurance compliance.
Overall, cash or financials seem to stand out but not to dominate ethics with respect to the impact to social insurance decision.

This discussion on the dominance of impacts could be sometimes criticized as temporal but not perpetual across various contexts. The dominance of impacts could be moderated by outer level drivers (industry, cluster, national (regional) or supranational level drivers), in different time and places, with different contexts. Weak surveillance and enforcement mechanism, for instance, was deemed moderating the dominance of impacts to social insurance compliance (Maitra et al., 2007). These outer level drivers will therefore be further discussed in Section 5.2.

5.1.3 Ethical tolerance implicates social insurance decisions.

Ethical tolerance, in terms of the inverse of emphasis of rule, was found to have a significant, negative and weak impact with compliance decision in compliance stages (see Exhibit 7). The entrepreneurs indicated how much they rejected to others’ behaviour of chaotic and lawless in the questionnaire. Low level of rejection of chaotic and lawless meant high level of ethical tolerance. More ethically-tolerant entrepreneurs expected and accepted ethical uncertainties, would be less hesitated to access opportunities of cost control in the ethically blurred regions of law, thus not making social insurance decisions. The Hypothesis 10 (high level of ethical tolerance has a negative impact to the level of social insurance compliance) was therefore accepted in our statistical results.

On the other hand, ethical tolerance was shown to have some correlations with ethical values. In this case, ethical tolerance had correlations to both ethical values and social insurance decision, which could indicate a moderating role of ethical tolerance on ethical impact to compliance decision. Ethical tolerance was controlled or partial-ed out to study the true effect of ethical values on compliance decision in a partial correlation shown in Table 43.

| Table 43: Correlation Matrix (Ethical Values versus Compliance Stages Controlling for Demographic Variables and Ethical Tolerance) |
|---|---|---|---|
| Variables | V22_ | V22_ | V23F | V24F |
| | 1 | 2 | ac | ac |
| FamilismIm- | Correlation | -.076 | -.141 | .195* | .251** |
| important | | | | |

- 245 -
<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation 1</th>
<th>Correlation 2</th>
<th>Correlation 3</th>
<th>Correlation 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Familism Goals</strong></td>
<td>-.030</td>
<td>.025</td>
<td>-.105</td>
<td>.337**</td>
</tr>
<tr>
<td><strong>Familism Emphasis</strong></td>
<td>-.042</td>
<td>-.017</td>
<td>-.171</td>
<td>.056</td>
</tr>
<tr>
<td><strong>Familism Neglect</strong></td>
<td>.221*</td>
<td>.077</td>
<td>.025</td>
<td>-.137</td>
</tr>
<tr>
<td><strong>Integrity Proper</strong></td>
<td>.264**</td>
<td>.103</td>
<td>-.053</td>
<td>-.155</td>
</tr>
<tr>
<td><strong>Work Humiliating</strong></td>
<td>-.008</td>
<td>-.134</td>
<td>.227*</td>
<td>.102</td>
</tr>
<tr>
<td><strong>Work Lazy</strong></td>
<td>.047</td>
<td>-.087</td>
<td>.336**</td>
<td>.266**</td>
</tr>
<tr>
<td><strong>Work Duty</strong></td>
<td>.118</td>
<td>.031</td>
<td>.057</td>
<td>.065</td>
</tr>
<tr>
<td><strong>Work Indolent</strong></td>
<td>.281**</td>
<td>.026</td>
<td>.214*</td>
<td>.059</td>
</tr>
<tr>
<td><strong>Anti Individualism Selfishness</strong></td>
<td>.270**</td>
<td>.155</td>
<td>.075</td>
<td>.077</td>
</tr>
<tr>
<td><strong>Anti Individualism Dependence</strong></td>
<td>.242*</td>
<td>.038</td>
<td>.091</td>
<td>-.039</td>
</tr>
<tr>
<td><strong>Reputation Reputation</strong></td>
<td>.147</td>
<td>.121</td>
<td>-.026</td>
<td>-.041</td>
</tr>
<tr>
<td><strong>Reputation Trust</strong></td>
<td>.015</td>
<td>.033</td>
<td>.124</td>
<td>.158</td>
</tr>
<tr>
<td><strong>Reputation Reciprocities</strong></td>
<td>.084</td>
<td>.054</td>
<td>.097</td>
<td>.317**</td>
</tr>
<tr>
<td><strong>Weight Ideologies</strong></td>
<td>.084</td>
<td>-.089</td>
<td>.100</td>
<td>-.072</td>
</tr>
<tr>
<td><strong>Weight Reputation</strong></td>
<td>.227*</td>
<td>.082</td>
<td>.100</td>
<td>-.153</td>
</tr>
</tbody>
</table>

* p <= .05. ** p <= .01.

The partial correlation table showed that, with ethical tolerance controlled, ethical ideologies (familism, integrity, work ethics, and anti-individualism), and ethical reputation (emphasis on reciprocities, relationships and guanxi, and reputational weight) had similar impacts to compliance stages. The moderating role of ethical tolerance was thus not supported, because the true effect of ethical values on social insurance decision existed from these findings.

5.1.4 Some implications of technology are rippled to social insurance decisions.

The findings showed that 1) high level of the emphasis on innovation (thinking up of new ideas and being creative; doing things one’s own way), a technological related spirit, had positive impacts to the decision in the compliance stages; 2) engineering disciplines or backgrounds did not seem to have a significant implication, and; 3) the transport, storage, postal & telecommunication services industries, neither seemed to be an enabler of compliance stages (see Exhibit 7). The Hypothesis 11 (high level of
technological related spirit has a positive impact to the level of social insurance compliance) was therefore accepted in our statistical results. Though, these latter two dummy variables might not well represent the technological constructs; thus, their underlying technological arguments needed for further statistical results.

On the other hand, these technological impacts had correlations with ideological and reputational criteria as well. The case that technological impact had influences to both ethical values and social insurance decision could indicate a moderating role of technological impact to compliance decision. Similarly, the technological impact was thus controlled or partial-ed out to study the true effect of ethical values on compliance decision in a partial correlation, as shown in Table 44.

Table 44: Correlations Matrix (Ethical Values versus Compliance Stages Controlling for Demographic Variables and Technological Impact)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V22_1</th>
<th>V22_2</th>
<th>V23F_ac</th>
<th>V24F_ac</th>
</tr>
</thead>
<tbody>
<tr>
<td>FamilismImportant</td>
<td>Correlation</td>
<td>-.102</td>
<td>-.125</td>
<td>.201*</td>
</tr>
<tr>
<td>FamilismGoals</td>
<td>Correlation</td>
<td>-.032</td>
<td>.029</td>
<td>-.037</td>
</tr>
<tr>
<td>FamilismEmphasis</td>
<td>Correlation</td>
<td>-.048</td>
<td>.005</td>
<td>-.135</td>
</tr>
<tr>
<td>FamilismNeglect</td>
<td>Correlation</td>
<td>.178</td>
<td>.089</td>
<td>.075</td>
</tr>
<tr>
<td>IntegrityProper</td>
<td>Correlation</td>
<td>.253**</td>
<td>.101</td>
<td>-.139</td>
</tr>
<tr>
<td>WorkHumiliating</td>
<td>Correlation</td>
<td>-.058</td>
<td>-.182</td>
<td>.147</td>
</tr>
<tr>
<td>WorkLazy</td>
<td>Correlation</td>
<td>.111</td>
<td>-.131</td>
<td>.285**</td>
</tr>
<tr>
<td>WorkDuty</td>
<td>Correlation</td>
<td>.107</td>
<td>.013</td>
<td>.083</td>
</tr>
<tr>
<td>WorkIndolent</td>
<td>Correlation</td>
<td>.186</td>
<td>.087</td>
<td>.168</td>
</tr>
<tr>
<td>AntiIndividualismSelfishness</td>
<td>Correlation</td>
<td>.199*</td>
<td>.170</td>
<td>-.014</td>
</tr>
<tr>
<td>AntiIndividualismDependence</td>
<td>Correlation</td>
<td>.203*</td>
<td>.063</td>
<td>.073</td>
</tr>
<tr>
<td>ReputationRepresentation</td>
<td>Correlation</td>
<td>.135</td>
<td>.124</td>
<td>-.049</td>
</tr>
<tr>
<td>ReputationTrust</td>
<td>Correlation</td>
<td>-.074</td>
<td>-.004</td>
<td>-.064</td>
</tr>
<tr>
<td>ReputationReciprocities</td>
<td>Correlation</td>
<td>.013</td>
<td>.017</td>
<td>-.092</td>
</tr>
<tr>
<td>WeightIdeologies</td>
<td>Correlation</td>
<td>.066</td>
<td>-.073</td>
<td>.120</td>
</tr>
<tr>
<td>WeightReputation</td>
<td>Correlation</td>
<td>.203*</td>
<td>.079</td>
<td>.054</td>
</tr>
</tbody>
</table>
The partial correlation table showed that, with three technological impacts controlled, similar correlations to compliance stages were seen still. Ideological impacts (familism, integrity, work ethics, and anti-individualism) to awareness, decision, and implementation remained; while reputational impacts (emphasis on reciprocities, relationships and guanxi, and reputational weight) to implementation were basically the same too. Thus, the moderating role of technological impact to ethical values was not backed, since the true effect of ethical values on social insurance decision existed from these findings.

5.1.5 Social insurance implementation can be impacted as a result of ethics in the SME.

The compliance implementation was for us to explore the development of social insurance infrastructure at a detailed level. The demand for such implementation details was handled through four broad groups of 19 implementation actions in social insurance.

The four broad groups of 19 implementation actions were: 1) not handling social insurance registration; 2) circumvent or escape (issue a partially correct certificate of employment relationship; issue a partially correct certificate of employment wage; pay social insurance premiums late or in partial amount; supplement gifts to employees; give gifts to Government; accept imposed fine as normal cost, and; use the unclear area of provisions); 3) minimum standard (recruit rural residents; recruit part-time employees and other persons in flexible employment, the staff governed analogically by the Civil Servant Law, foreign migrant workers or foreigners, who have low insurance contribution level; provide different insurance contribution levels to different segmentation of workforce; reduce employee total wage; reduce employee recruitment, and; reduce employee total bonus), and; 4) improved implementation (provide additional business social insurance registration; workers can select different insurance schedules; workers’ performance determines the insurance level, and; comprehensively improve insurance contribution level). Not handling social insurance registration and circumventing or escaping groups were deemed as non-compliance implementation action groups, while minimum standard and improved implementation groups were considered as compliance implementation action groups. The minimum standard group,
though legal, was less ethical than the improved implementation group of social insurance.

The interview and questionnaire findings will be further investigated for these implementation actions. The interview results of ethical values (ideological and reputational criteria) have been presented in Section 4.3.1 and 4.3.2, whereas the complete partial rank correlation results of ethical values (ideological and reputational criteria) and compliance implementation has been presented in Exhibit 7.

**Interview Findings**

Section 4.3.1 discussed that lower ideological criteria had provoked some entrepreneurs not to comply with social insurance. These non-compliance entrepreneurs had a commonly low ideological concern (0% - 20%) in non-compliance decision. There was a difference between the lower level of ideological concern in non-compliance entrepreneurs, and the higher ideological concern (30% - 60%) eg, law-abiding values and cultural values among compliance entrepreneurs. Then, there was a varied level of ideological concern between non-compliance and compliance entrepreneurs. Similarly, lower reputational concern in non-compliance entrepreneurs was also discussed in Section 4.3.2. These non-compliance entrepreneurs had a commonly low reputational concern (0% - 10%) in non-compliance decision, which had a difference from the higher reputational concern (0% - 60%) among compliance entrepreneurs. Thus, there was a varied level of reputational concern between non-compliance and compliance entrepreneurs too. The varied levels of ideological and reputational concerns therefore seemed to correlate with compliance implementation, which was varied in its level between non-compliance and compliance entrepreneurs.

Particularly, non-compliance implementation actions eg, not handling social insurance registration, paying social insurance premiums in partial amount, supplementing gifts to employees, and using the unclear area of provisions had been commonly reflected by non-compliance entrepreneurs. Supplementing gifts to employees had been especially ordinary. The heat technologies entrepreneur, for example, supplemented a cash premium of Rmb 300 to his staff, if his staff did not want to register social insurance. These gifts could also be in a non-cash form, such as annual dinner, red pockets in spring festival, or moon cakes in mid-autumn festival, like the remedy of non-compliance by the restaurant owner to acquire the trust of her staff. This
supplementation of gifts to employees was also a management method of social insurance for the property management entrepreneur. His supplemented amount was Rmb 100 – 200, which was about 10% of minimum staff wage (~Rmb 1300) in Guangzhou. He revealed how the unclear area of provisions could be used too - buying social insurance in other lower-end cities. This method could lower his social insurance costs, while making his start-up seemed following social insurance law as well. Even in the rare case that people might criticize his start-up for a mismatch in business location, nonetheless, his start-up could then register his business in both the lower end cities and Guangzhou, thus fulfilling social insurance law.

Providing different insurance contribution levels to different segmentation of workforce could also be revealed by these entrepreneurs. The heat technologies entrepreneur, for example, segmented his workforce according to the hukou of staffs (registered permanent residence), the technological level of jobs, and their contribution to his start-up. Part of his workforce did not have social insurance, while part of them complied with social insurance. Such kind of segmentation was seen in the case of trading entrepreneur as well, who used the length of service of his staffs as a segmentation criterion, in addition to marriage status, and whether or not his staffs were team leaders. The serial entrepreneur agreed with using the job performance and the length of service of staffs as segmentation factors too. While, an on-demand compliance rule, which divided the staffs into ones that had a cognition of social insurance, from ones who did not, was also told by the plastic industry entrepreneur. These entrepreneurs, thus, used the segmentation of workforce as a non-compliance implementation action, in order to circumvent or escape a partial amount of social insurance premiums. This segmentation action was similar but different from the segmentation response in Nyland et al. (2011).

Nyland et al. (2011) indicated the utilization of different models of insurance covering different segments of workers by some employers. These models were still mandated minimum standards for segments of workforce respectively, only with some segments of workforce receiving mandated benefits that were greater. In other words, the segmentation of workforce of those employers was used more as an employee management tool, instead of a non-compliance implementation action by our entrepreneurs.

Among compliance entrepreneurs, a low indication of these non-compliance implementation actions was seen. The jewellery entrepreneur once had a staff actively
requesting receiving his social insurance premiums in a cash form rather than registering social insurance. This temporal action was abandoned and changed to complying with social insurance later. Our sampled compliance start-ups such as marketing & research consultant, and management consulting start-ups considered their whole workforce as a homogenous unit for compliance decision. This low manifestation of non-compliance actions could be viewed as a sign of compliance – although, we could not find some improved implementation (providing additional business social insurance registration; providing different insurance schedules for workers to select; determining the insurance level by workers’ performance, and; comprehensively improving insurance contribution level) of social insurance from the response of these compliance entrepreneurs. However, in the interview findings, varied level of ideological and reputational criteria seemed to correlate to compliance implementation actions.

**Questionnaire Findings**

The partial correlation matrix between compliance criteria and implementation actions controlled for the demographic variables was summarized in Exhibit 7. This showed a significant, negative impact between integrity, work ethics, innovation, and reputational weight, and non-registration implementation action. The entrepreneurs who disagreed integrity as important or disagreed work as a duty towards society, who described innovation as unimportant, or who considered corporate reputation as unimportant to take implementation actions, would be more likely not handling social insurance registration. The interview and questionnaire results were thus in coherent with each other.

In the circumvent or escape group, the business people who agreed family was important, but not as their main goals or not having more emphases, who rejected family negligence, who agreed not humiliating to receive money without work, who disagreed work as a duty or did not reject indolence, who did not reject selfishness, and who did not consider corporate ideologies or reputation as important, would more likely circumvent or escape social insurance. Supplementing gifts to employees was also interesting. The business persons who agreed family was important, but not having more emphases, and who opposed work as a duty, would more likely supplement gift to employees.
Then, the enterprisers who agreed with familism and work ethics (except work as a duty and indolence rejection), who did not reject selfishness, who emphasized on trust, and reciprocities, relationships and guanxi, and who considered ideologies or reputation as unimportant, would more likely do a minimum standard of social insurance.

Last, in the improved implementation group, the owner of start-ups who rejected family negligence, who agreed that no work turned people lazy, but not that work was a duty, who rejected indolence, selfishness, and dependence, and who emphasized reciprocities, relationships and guanxi, would more likely provide an improved implementation of social insurance in their start-ups.

To end with, this comparative section had two major findings concerning compliance implementation. On the one hand, in the interview findings, ideological and reputational concerns were less common considerations for non-compliance entrepreneurs, whereas these two concerns were more involved by compliance entrepreneurs. Non-compliance entrepreneurs reflected the use of non-compliance actions eg, supplementing gifts to employees, and segmentation of workforce, which were lowly revealed from the responses of compliance entrepreneurs. The compliance implementation thus seemed to be impacted by the varied level of ideological and reputational concerns in the interview. On the other hand, in the questionnaire findings, lower ideological and reputational weights had a significant, positive impact to non-registration implementation. Less important consideration of corporate ideologies or reputation also resulted in some circumvent or escape actions eg, partial compliance, and some minimum standard actions such as reducing employee’s total wage or total bonus. This weight on ideological and reputation, however, did not lead to the provision of improved implementation of the infrastructure of social insurance. The interview and questionnaire results therefore coherently indicated that ethical values, in terms of ideological and reputational criteria, could impact social insurance infrastructure implementation in the SME as well.

5.2 Outer Level Drivers
The above research model discussion has focused on the individual level drivers of social insurance compliance; however, outer levels drivers must not be forgotten in explaining social insurance compliance in different contexts. Individual level drivers such as rational or material criteria (short term and long term), ideological criteria and
reputational criteria, in fact, can be considered as mediators of outer level drivers (e.g., industry, cluster, national (regional) or supranational level drivers). This section will provide a coherent account of outer forces influencing compliance decision in social insurance, based heavily on Nyland et al. (2009), Nyland et al. (2011), and Nyland et al. (2012).

Nyland et al. (2009) and Nyland et al. (2011) utilized the qualitative evidence from eight case studies conducted in Shanghai, detailing how employers respond to attempts by the Government to manage social insurance behaviour. They integrated various theoretical concepts of compliance and regulatory behaviour in conceptualizing regulatory compliance or non-compliance as a dynamic process involving multiple factors and actors. This model of regulatory compliance was shown in Figure 25 (Nyland et al., 2011). The multiple factors and actors in this dynamic process in the model of regulatory compliance will be discussed, which can be integrated into our research model as follows.

Figure 25: Model of Regulatory Compliance (Nyland et al., 2011)

First, Nyland et al. (2011) argued that the composition of social insurance policy itself could be the origination of the problems with regulatory compliance. Poorly-written or clarity-lacking policies could lead to non-compliance. The importance of this completeness, comprehensiveness and execution of social insurance was also contended in our admin costs discussion. On the whole, because of a difference of levels of analyses, they focused more on the Government level rather than the employer level in our focus (Nyland et al., 2011). Although the composition of social insurance law was controlled by the Government, it was argued that the law composition could only
influence as a factor through employers themselves to social insurance compliance, which could also be seen in both their model and our model.

Second, the Government capacity (the ability to implement the law universally) was also dealt with in the Nyland et al. (2011)’s model. The Government must have human capital, fiscal strength, and reach/responsiveness in order to implement social insurance law successfully. They argued that diminished Government capacity was linked to a lack of enforcement, which led to a greater likelihood of non-compliance. Their model also made a case that Shanghai regulators attempted to use public shaming to affect employer’s moral and ethical fortitude, or public response/social action, in order to increase compliance, despite its little impact on their compliance behaviour as a shaming strategy. These impacts were similar between them and us. Our model, in particular, maintained the Government capacity as the execution of social insurance. The lack of enforcement was represented as a low level of the probability and the punishment of conviction, which differed across regions in our model. The use of public shaming was in line with our model as well – which could be specified as an effect to ethical ideologies or ethical reputation. Therefore, our model was open to the integration of Government capacity as a national level driver that influenced the compliance.

Third, their elucidation of three different levels: enforcement, moral and ethical fortitude, and public response/social action that were used for the organizational assessment of regulations, were similar to three decision criteria in our model. The contrast between them and us was on the rational level. Their enforcement level only focused on the assessment of the enforcement of the policy, which had been reproduced as the probability and the punishment of conviction in our model. But it was only one short term rational criterion among other rational criteria, such as costs-related concern, or recruitment and retention concern (Goodall & Warner, 1997; Maciejovsky et al., 2012; Warner et al., 1999). On the contrary, in their latter two levels, though their model also tied moral and ethical fortitude level with public response/social action level together, our model utilizes a rational explanation for the latter two criteria of ethical ideologies and ethical reputation instead, in order to maintain internal consistencies with our MAUT model (Alm & Torgler, 2011). Their highlight on brand image was also similar to the criterion of reputation in our reputational model.
Fourth, despite these three different levels were listed, their model did not describe in detail their influencing mechanisms, which were explained in depth correspondingly in our rational, ideological and reputational models. We utilized rational and psychological decision making theories and models (Alm & Torgler, 2011; Etzioni, 2010; Fuller et al., 2007; Gigerenzer & Todd, 1999; Lindenberg, 2001a, b; Scholz, 1985) for a more complete theoretical account of compliance and regulatory behaviour.

Fifth, as similar as Greer and Downey (1982), their support of both the calculative and normative behavioural patterns of compliance behaviour was kept in our model as well. While our utilized assumption was primarily calculative; however, those normative behaviour could be included. Organizational norm and culture could be represented through normative decision attributes or weights in our model. Thus at least, there was a way for these normative criteria to be integrated into our model, in spite that treating these normative criteria as quantitative attributes or weights might not be completely compatible with normative theories. Both calculative and normative behavioural patterns, thus, should be generally integratable in explaining compliance decision.

Sixth, in both their model and our model, when an organization weighed the potential benefits for possible gains, these gains were not necessarily financial alone eg, political gains. Such a non-restrictive concept of gains was similar between them and us. While their model referred power as an example of gains, the definition of gains could be even more open in our model - the concepts of material goods, power, or honour could all be regarded as various dimensions of gains. Since we used the concept of utility, such a concept could represent whatever entrepreneurs wanted to achieve in our MAUT model (Baron, 2000). These different gains could then be blended together, and weighed for the potential benefits using the concept of utility in our MAUT model.

Seventh, there was also a note in their model about contextual influences on the entire process of regulatory compliance. They argued that economic, societal and political forces could influence any one of the steps in their process. These contextual forces were demonstrated as a background process, without linking to any one of the steps in their process, as shown in the Figure 25. On the whole, we agreed with these contextual influences, but we wanted to integrate them properly. Since our model took an entrepreneurial angle, so these contextual influences needed to mediate through an entrepreneur in order to influence compliance decisions, otherwise no actual influences
could be accounted. These contextual influences could either influence three decision criteria, or moral intensity, could be one of these criteria, or could be an additional criterion weighed to the total utility in compliance decision. In such a way, these contextual influences could be integrated into our model. Economic force, for example, could increase the competitions in the industry, so it could be thought of as a force controlling the level of costs, endangering the survival of start-ups, which thus increased the need for non-compliance. Then, the changing societal values could influence through ethical ideologies or ethical reputation to induce or discourage compliance. The remaining political force, like political advancement that created the rule of law, could increase the probability and the punishment of conviction, hence more favourable for compliance. These contextual influences could thus be integrated through the three decision criteria into our model.

Eighth, while Nyland et al. (2011)’s model stopped at compliance decision, not discussing compliance implementation at all, our concern was also extended to the implementation as the compliance behaviour in our model. Our model represented compliance implementation via the four broad groups of 19 implementation actions: not handling social insurance registration, circumventing or escaping, minimum standard, and improved implementation of social insurance. Our findings demonstrated that the factors and actors for compliance implementation could be even more complex too.

Ninth, their research only abstracted eight case studies conducted in Shanghai, which gave us an overall idea about the factors and actors of the process, but not both qualitative and quantitative data as a triangulation from our research instead. The use of the triangulated data from these two researches helped us improve the explanation of social insurance compliance.

These nine arguments had tried to compare Nyland et al. (2011)’s model of regulatory compliance with our research model of social insurance, revealing the factors and actors that can be integrated into our research model. These arguments showed some outer level drivers eg, the Government capacity, public shaming, and economic, social and political contextual influences that could influence through rational or material, ideological, and reputational models on compliance decision. The Government capacity was related to the institutional development ie, the development of the legal system and intermediary organizations in the external governance environment (Gao & Kling,
Nyland et al. (2012) extended the discussion about the shaming and employer social insurance compliance behaviour, by investigating whether or not the inclusion of reintegrative shaming in the repertoire of mechanisms the Government utilised to enforce employer compliance, was likely to prove effective. Their main argument was as follows. Given that some studies had determined shaming as an effective social control mechanism in developing countries (Ahmed & Braithwaite, 2005; Braithwaite, 2006), they hypothesized that, as the sensitivity to shaming (the industry reliance on direct consumers for sales) increased, social insurance compliance rates would increase. So their model utilized this sensitivity to shaming as industry dummies. The industries were divided into relying ones and less-relying ones. Three analyses were then run on these industry dummies with three findings: 1) less-relying industries (ie, less sensitive to shaming) were less compliant than relying industries (ie, more sensitive to shaming); 2) compared with the strongest relying industry, other industries as a unit of measure had mixed results of compliance, and; 3) over time those industries that relied heavily on a direct link to the consumer became less compliant. Thus, the results seemed to support the shaming hypotheses when using the reliance industry group as a dummy, despite that mixed results appeared when using specific industry type as a unit of measure.

First, Nyland et al. (2012)’s model presented a discussion on reintegrative shaming as a theoretical model for shaming, although it did not detail too much about how public shaming as an outer level driver influenced compliance. Second, their model argued that shaming affected via the reputation to consumers to compliance. While it missed out the potential of shaming to shape ideologies in compliance, the reputational criteria were not only limited to consumers, but also extended to employers, suppliers, and other stakeholders too. Third, their model’s utilization of the sensitivity to shaming as industry dummies was less direct than the emphasis on reputation in our model. This less direct operationalization of the sensitivity to shaming therefore undermined their data analysis and results. In essence, their results showed that some industries were less...
compliant. These less compliant industries, however, were not necessarily those relying industries, as shown in their second finding. Even if some relying industries were less compliant, it did not mean that consumer reliance itself was a factor of compliance, partly because the arbitrary classification of relying industries could be improper, and partly because those relying industries could have some other common factors eg, low industry competition that drove compliance. Also, the reliance on direct consumers for sales was not necessarily related to the sensitivity to shaming indeed. Such a relation assumed that consumers must prefer branding. However, given heavy consumer reliance, if consumers favoured a low price instead, then employers would be more price-sensitive, rather than more shaming-sensitive. Last, comparing the model of regulatory compliance (Nyland et al., 2011) and the shaming model (Nyland et al., 2012), public shaming was a Government capacity tool to control the fortitude and response/action, but the sensitivity to shaming was the fortitude and response/action that affected compliance. Thus, they were in fact two different links in the model. The latter link could not validate the former link. In other words, while the sensitivity to shaming of employers could affect compliance, this did not confirm whether or not public shaming was effective in shaming the employers. Thus, Nyland et al. (2012)’s results only indirectly support public shaming as an outer level driver of compliance.

Therefore, these doubts undermined their results as a convincing data drawn to support their argument of public shaming. Nyland et al. (2012)’s argument – though the reintegrative shaming had the potential to become an important social insurance enforcement mechanism, optimism that this will occur in the near future was not justified – was therefore not yet justified. In other words, public shaming could still be a possible outer level driver to be integrated to our model.

5.3 Critical Success Factors
This thesis aims to investigate the social insurance decision making of entrepreneurs to examine whether or not ethics is a critical success factor of entrepreneurship. This section therefore imitated Tomczyk et al. (2013) to elaborate a mediation model (see Figure 26). In the subsection 5.3.1, we will have a short review on the social insurance decision results (see Section 5.1), as a validation for the ethical-value-social-insurance path (“IV-M path”). We will discuss the two other mediation paths ie, the relationships between social insurance and start-up success (“M-DV path”) in the sub-section 5.3.2, and between ethical values and start-up success (“IV-DV path”) in the sub-section 5.3.3,
in our mediation model on ethics and entrepreneurship (see sub-section 5.4). We will also engage ourselves into the greater academic debate about the mediation model on ethics and entrepreneurship eg, Tomczyk et al. (2013) in Section 6.1.

**Figure 26: Mediation Model**

5.3.1 **Ethical Values and Social Insurance**

This sub-section will have a short review on the social insurance decision results (see Section 5.1), as a validation for the ethical-value-social-insurance path ie, IV-M path in our mediation model on ethics and entrepreneurship.

First, cash or financials seemed to stand out but not to dominate ethics with respect to the impact to social insurance decisions (see Section 5.1.2). The cash or financial weight and long term rational weight were higher than ideological and reputational weights to compliance decision, when non-compliance and compliance entrepreneurs were aggregated (trade-off and asked weights); whereas rational weight (short term) was a stronger prediction than ideological and reputational weights to the compliance decision still (the strengths of weights). In sum, according to criteria weights, cash or financials were a more important consideration than ethics for the compliance behaviour; nonetheless, the difference between cash or financials, long term rational weight, ideological or reputational criteria were not huge indeed. In other words, the entrepreneurs did not trade off ethics for profits in social insurance decisions. This research result underpinned the belief that ethics was a critical success factor of entrepreneurship.

Second, ethical tolerance implicated social insurance decisions (see Section 5.1.3). More ethically-tolerant entrepreneurs expected and accepted ethical uncertainties, would be less hesitated to access opportunities of cost control in the ethically blurred regions of law, thus not making social insurance decisions. Ethical tolerance controlled
or partial-ed out, the true effect of ethical values on social insurance decision nonetheless existed from the findings.

Third, some implications of technology rippled to social insurance decisions (see Section 5.1.4). High level of the emphasis on innovation (thinking up of new ideas and being creative; doing things one’s own way), a technological related spirit, had positive impacts to the compliance decision. Three technological impacts controlled or partial out, the true effects of ethical values on social insurance decision nonetheless existed from the findings.

Fourth, social insurance implementation could be impacted as a result of ethics in the SME (see Section 5.1.5). Social insurance implementation was a step forward from simpler to more complex social insurance behaviour. In non-compliance implementation actions, varied level of ethical values (in terms of ideological and reputational concerns) correlated with non-registration action, and some circumventing or escaping actions, while these two concerns were also considered for implementing a minimum standard of social insurance, despite that neither two concerns led to a provision of an improved implementation of social insurance infrastructure. Our findings indicated that ethical values, in terms of ideological and reputational criteria, could impact social insurance implementation in the SME, which will have a more lasting consequence to start-ups.

Overall, ethics seemed to have some grounds ie, not being traded off, true effects (controlled or partial out for ethical tolerance and technological impacts), and having impacts to compliance implementation actions in social insurance. Ethics seemed to therefore influence social insurance decisions. This therefore led us to examine the other paths ie, M-DV path and IV-DV path on the performance and success of new ventures.

5.3.2 Social Insurance and Start-up Success

The sub-section 5.3.2 will examine the social-insurance-start-up-success connection ie, M-DV path, whereas the ethical-value-start-up-success link ie, IV-DV path in our mediation model will be inspected in sub-section 5.3.3.

Table 45 summarized the structure of comparisons and the variables for social insurance practices and start-up success. The column entrepreneurs showed the 13 entrepreneurs,
with the entrepreneurial reported compliance of social insurance, growth plan, and the performance and success variables V18 (Increase%) and V9Time (AgeStartup) as survival time in the last column.
Table 45: The Comparison of Social Insurance and Start-up Success of the Selected Entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Compliance</th>
<th>Growth Plan</th>
<th>V18 (Increase%)</th>
<th>V9 Time (Age Startup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>Non-compliance</td>
<td>The heat technologies entrepreneur’s business agenda was 1) the survival of start-up; 2) sales, and; 3) performance management, which was more connected to the management of the start-up. The start-up manufactured “gap” heat pump products that were too big to small start-ups, but too small for big companies. This business plan made the start-up unable to grow too much. The heat technologies entrepreneur had a concern on the high growth as well, because the high growth could attract attacks from big companies in the industries.</td>
<td>35% - 44%</td>
<td>7 years</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>Non-compliance</td>
<td>The pharmaceutical entrepreneur had an original plan to open some branches in 5 years but the plan was stalled because of economic conditions.</td>
<td>&lt;=4%</td>
<td>9 years</td>
</tr>
<tr>
<td>Trading</td>
<td>Non-compliance</td>
<td>The trading entrepreneur did not have a detailed business plan. He focused on the survival of start-up. The start-up would then move one step by one step forward eg, small technological enhancements and word-of-mouth to develop the business, without a detailed business objective.</td>
<td>15% - 24%</td>
<td>33 years</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>Non-compliance</td>
<td>-</td>
<td>95% - 99%</td>
<td>2 years</td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>Non-compliance</td>
<td>The restaurant owner’s business agenda was 1) staff relationship and management eg, staff loans or theft; 2) customer relationship eg, new menus and sales, and; 3) food qualities. The start-up had not made profits before close down thus no expansion plan was existed.</td>
<td>&lt;=4%</td>
<td>12 years</td>
</tr>
<tr>
<td>Realty agency</td>
<td>Non-compliance</td>
<td>The realty agency entrepreneur had an original plan to open some branches in 5 years but the plan was stalled because of economic conditions.</td>
<td>&lt;=4%</td>
<td>10 years</td>
</tr>
<tr>
<td>Industry</td>
<td>Compliance</td>
<td>Details</td>
<td>Percent Range</td>
<td>Years</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-------</td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>Non-compliance</td>
<td>The plastic industry entrepreneur’s business agenda was 1) customer satisfaction eg. time and qualities of delivery; 2) costs; 3) human resource management such as recruitment and retention, and; 4) technological innovation. The technological innovation that could have high added value was in consideration, to 1) the core technologies; 2) time and qualities, and; 3) the automation of machines. The start-up had a plan to open a new factory in the next year end with new logistics design that would increase productivity and efficiency, which would locate the headquarter too.</td>
<td>5% - 14%</td>
<td>21</td>
</tr>
<tr>
<td>Property management</td>
<td>Non-compliance</td>
<td>The property management entrepreneur’s business agenda was 1) internal management systems, and; 2) business operations eg, business process, human resources, and strategies. The start-up would throw some Rmb 100,000 to management consulting for the business. The start-up aimed to form an oligopoly with top few competitors to set the price such that the price would not be too low that dried out the profits. It had a business plan to expand its revenue to Rmb 200M – 300M in a few years’ time. The start-up was planning to step into new business too eg, the pre-kindergarten education, old age nursing, or the tomb consolidation (though this would be outsourced to others because of bad image). The entrepreneur had an exit plan as well – if the start-up could not continue, it would be passed to the staff or competitors, or sold out.</td>
<td>25% - 34%</td>
<td>13</td>
</tr>
<tr>
<td>Electronic technology</td>
<td>Compliance</td>
<td>The Korean entrepreneur’s business agenda was the survival of branch of the start-up in Zhongshan. He brought his two sons to do the business too. The two sons would learn to do business following their father. This schedule was most likely to equip them with business knowledge to inherit the family business.</td>
<td>&gt;= 100%</td>
<td>2</td>
</tr>
<tr>
<td>Jewellery</td>
<td>Compliance</td>
<td>The jewellery entrepreneur’s business agenda was 1) sales contracts, and; 2) &lt;=4%</td>
<td>&lt;=4%</td>
<td></td>
</tr>
</tbody>
</table>
cash flow. He was a family man rather than a working man. He wanted to be sufficient for livings but did not want to grow too much, which could affect his own lifestyle. He did not have an expansion plan before he sold the start-up to his partner. The partner invested millions of Rmb in new machines in the start-up then.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Compliance</th>
<th>Business Agenda</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information tech</td>
<td>Compliance</td>
<td>The information tech entrepreneur’s business agenda was 1) financial situations (revenue and costs); 2) operation (customer response, customer compliant, successful cases, and business development), and; 3) staff training (technologies, positioning, one post serving multiple functions). The entrepreneur had opened a branch in Sichuan in 2007, but its effect and its market were questionable that was not satisfied, thus the branch was taken back then. Unless there was a mainly targeted product, the start-up would not consider opening a branch then. The start-up needed to flexible in changing the industry too. He had not worked on the firewall, but because of his friend from Beijing, he changed to sell the firewall then. There was thus no strategic plan for the start-up then.</td>
<td>&lt;=4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Marketing &amp; research consultants</td>
<td>Compliance</td>
<td>The marketing &amp; research consultant entrepreneur’s business agenda was 1) customer channels; 2) the reduction of costs; 3) the improvement of staff qualities (both internal and practical), and 4) the retention of staff. The start-up demanded for survival more than being big. One big project could be a bad thing to the start-up which could play the start-up around. The start-up thus would not expand too much in near future. In addition, the research firm had a common investment size; however big hence had a limit indeed.</td>
<td>15% - 24%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Management consulting</td>
<td>Compliance</td>
<td>The management consulting entrepreneur’s business agenda was 1) customer;</td>
<td>25% - 34%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2) qualities, and 3) profits. The start-up aimed for making profits and healthy growth, thus it did not have a high-growth plan.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 years</td>
</tr>
</tbody>
</table>
Common pattern between compliance behaviour and performance and success was less obvious in the non-compliance entrepreneurs. Non-compliance entrepreneurs eg, heat technologies entrepreneur, trading entrepreneur, and restaurant owner had survival as the business agenda of their start-ups. They also had a business plan for healthy growth rather than big expansion. The heat technologies entrepreneur, for instance, had the business goal of manufacturing “gap” heat pump products, whose business size will not grow too much, such that his start-up will not be attracted by industry giants. This less aggressive business goal was similar to the one in Bhide, Sahlman, Stancill, and Rock (1999). The trading entrepreneur will move step by step forward to develop his business too. Some expansion plans of opening branches were nevertheless seen in the pharmaceutical and realty agency entrepreneurs, but their plans were stalled because of bad economic conditions. Some entrepreneurs eg, plastic industry entrepreneur and property management entrepreneur even had a higher growth plan. The plastic industry entrepreneur will open a new factory to increase productivity and efficiency, which will also locate the new headquarter. The property management entrepreneur had a few more business plans. He will throw some Rmb 100,000 to management consulting for his business. Additionally, he aimed to form a partnership with few top competitors such that their set price will not be too low that dried out their profits. In addition, he aimed to expand his start-up’s revenue to Rmb 200M – 300M in a few years’ time. Also, he was planning to step into new businesses eg, pre-kindergarten education, old age nursing, or tomb consolidation as well (although tomb-consolidation will be subcontracted to others to keep a better image). Most of these non-compliance entrepreneurs (except the plastic industry entrepreneur and the property management entrepreneur) therefore had business plans aiming for a lower level of growth percentage in common.

There was a minor difference in the business plans between non-compliance and compliance entrepreneurs. These compliance entrepreneurs did not often have survival as the business agenda of their start-ups. While the Korean entrepreneur talked about survival, he concerned about the newly established Zhongshan branch instead of the Wuxi headquarter. Most of these entrepreneurs eg, the jewellery entrepreneur, information tech entrepreneur, marketing & research consulting entrepreneur, and management consulting entrepreneur concerned on revenues and costs for their net profits. The majority of them did not have a detailed growth plan, but they did want to develop their business. The Korean entrepreneur, for example, opened a new branch in
Zhongshan, whereas planning for his two sons to inherit his family business. The jewellery entrepreneur’s partner, after taking over his start-up, invested millions of Rmb in new machines in the start-up. The information tech entrepreneur had business development as his growth agenda too. Though his last trial of growth was not satisfactory, he was searching for a new mainly-targeted product, before opening a new branch. The management consulting entrepreneur also aimed for a healthy growth, albeit he did not have a detailed high-growth plan. Medium level of growth is thus intended in the growth plans of compliance entrepreneurs. We therefore found slight differences in the business plans between non-compliance and compliance entrepreneurs.

The varied level of compliance behaviour thus weakly correlated to the growth agenda in the growth plan. There were also small differences in the Increase%, and AgeStartup between non-compliance and compliance entrepreneurs. The varied level of compliance behaviour therefore weakly correlated to the survival time.

When we analysed the varied impacts of compliance behaviour of 13 entrepreneurs, we should note that comparing these performance and success variables was not an easy task, as controlling for the effects of confounding factors was difficult. The confounding effects on performance and success could be many, because of vast managerial factors that could influence performance and success, so it was not easy to reveal a clear pattern. Therefore, we also evaluated the varied impacts of compliance behaviour using implementation actions in statistical terms.

The associations between social insurance compliance behaviour, and performance and success variables were investigated in Table 46. We considered V18 (Increase%), as the performance of entrepreneurship, while V9Time (AgeStartup) as survival time could be proxy of the success of entrepreneurship. The complete partial rank correlation results of social insurance compliance behaviour and performance and success were shown in Exhibit 11.

### Table 46: Correlation Matrix (Social Insurance Behaviour versus Performance and Success Controlling for Demographic Variables)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V18</th>
<th>V9TIme</th>
<th>V9TIme (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V9TIme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V9TIme (r)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The circumventing or escaping implementation action ie, ImplementationGiftEmployee, and minimum standard implementation actions eg, ImplementationRecruitRural, ImplementationSegment, and ImplementationReduceRecruitment had 95% significant, negative correlations with growth percentage. The entrepreneurs who supplemented gifts to employees, recruited rural residents, provided different insurance contribution levels to different segmentation of workforce, and reduced employee recruitment would have a low level of growth percentage. These implementation actions either

<table>
<thead>
<tr>
<th>Implementation</th>
<th>Correlation</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NoRegistration</td>
<td>.025</td>
<td>.028</td>
<td>.171+</td>
<td></td>
</tr>
<tr>
<td>SomeRegistration</td>
<td>.001</td>
<td>.110</td>
<td>.019</td>
<td></td>
</tr>
<tr>
<td>GiftEmployee</td>
<td>-.207*</td>
<td>.023</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fine</td>
<td>-.065</td>
<td>-.120</td>
<td>-.189*</td>
<td></td>
</tr>
<tr>
<td>RecruitRural</td>
<td>.310**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segment</td>
<td>-.226*</td>
<td>-.113</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ReduceWage</td>
<td>-.085</td>
<td>-.125</td>
<td>-.259**</td>
<td></td>
</tr>
<tr>
<td>ReduceRecruitment</td>
<td>-.197*</td>
<td>.044</td>
<td>-.070</td>
<td></td>
</tr>
<tr>
<td>AddBusinessRegistration</td>
<td>.158+</td>
<td>.033</td>
<td>.124</td>
<td></td>
</tr>
<tr>
<td>ImproveLevel</td>
<td>.152</td>
<td>-.029</td>
<td>-.036</td>
<td></td>
</tr>
</tbody>
</table>

V18 Increase%. V9Time AgeStartup.
+ p <= .1. * p <= .05. ** p <= .01.\(^{13}\)

\(^{13}\) This partial correlation matrix controlled for age, sex, education, location, and age of start-up for the leftest column, while controlling for age, sex, education, and location for the righter two columns, because of a focus on the age of start-up in the righter two columns; while, this partial correlative matrix used Spearman’s rho for the middle column and Pearson’s r for the rightmost column, due to the scale nature of the age of start-up in the righter two columns.
circumvented or escaped, or provided the minimum standard of social insurance, thus the employees did not contribute actively to the start-ups, lowering the growth rate.

No specific implementation action showed a monotonic relationship with the age of start-up, nonetheless, some circumventing or escaping, and minimum standard implementation actions ie, accepting imposed fine as normal cost, providing different insurance contribution levels to different segmentation of workforce, and reducing employee total wage would have significant, negative parametric impacts to the age of start-up as the survival time of the start-ups. The monotonic relationships were less appropriate than the parametric relationships due to the scale nature on the age of start-up. These implementation actions therefore seemed to have a significant impact to the survival time of the start-ups.

To conclude, this comparative section had two major findings concerning social insurance practices and start-up performance and success. On the one hand, in the interview, the varied level of social insurance compliance weakly correlated to the growth agenda in the growth plan. There were also small differences in the Increase%, and AgeStartup between non-compliance and compliance entrepreneurs. The varied level of social insurance compliance therefore weakly correlated to the survival time. On the other hand, the varied level of some circumventing and escaping, and minimum standard implementation actions ie, accepting imposed fine as normal cost, providing different insurance contribution levels to different segmentation of workforce, and reducing employee recruitment negatively correlated to the performance and success of the start-ups in the questionnaire as well.

Social insurance practices therefore seem to be linked to entrepreneurial performance and success.

5.3.3 Ethical Values and Start-up Success
The association between ethical values and start-up performance and success was shown in Table 47 and Table 48, while the complete partial rank correlation results were presented in Exhibit 12.
Table 47: The Comparison of Ethical Values and Start-up Success of the Selected Entrepreneurs

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Ideological Criteria &amp; Reputational Criteria in Social Insurance</th>
<th>Is Ethical Values a Critical Factor to Start-up Success?</th>
<th>V18 (Increase %)</th>
<th>V9Time (AgeStartup)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat technologies</td>
<td>Ethical values (15%)</td>
<td>The heat technologies entrepreneurs considered morality as important to the start-up. He described two cases. The former case was related to the sales. The sales people were normally accepted to earn the commissions of the start-up. This practice was often not much concerned by the entrepreneur. However, there was a case in which a sale person had an illegal rebate. The sales person took 6% rebate from a contract in a secret way. The customer, when discovered this, demanded the sales person to leave, else would not do business with the start-up. The latter case was connected to procurement. The procuring staff had to deal with raw materials for the start-up. The misdealing eg, hiding 1% of materials with the suppliers was over Rmb 500K, which was a big loss to the start-up.</td>
<td>35% - 44%</td>
<td>7 years</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>-</td>
<td>-</td>
<td>&lt;=4%</td>
<td>9 years</td>
</tr>
<tr>
<td>Trading</td>
<td>Ethical ideologies (minimal) Ethical reputation (minimal)</td>
<td>-</td>
<td>15% - 24%</td>
<td>33 years</td>
</tr>
<tr>
<td>Textile, Information technology and Trading</td>
<td>Moral: on morals the firm should provide social insurance to the</td>
<td>-</td>
<td>95% - 99%</td>
<td>2 years</td>
</tr>
<tr>
<td>Industry</td>
<td>Key Success Factors</td>
<td>Description</td>
<td>Duration</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Gourmet restaurant</td>
<td>Staff (20%) Reputation (little concern)</td>
<td>The restaurant owner concerned both the ethical values of staff and entrepreneur. The staffs must be in high qualities, not stealing money from cashier whereas the staff’s trust needed to be acquired by the entrepreneur.</td>
<td>&lt;=4%</td>
<td></td>
</tr>
<tr>
<td>Realty agency</td>
<td>-</td>
<td>-</td>
<td>&lt;=4%</td>
<td></td>
</tr>
<tr>
<td>Plastic Industry</td>
<td>-</td>
<td>-</td>
<td>5% - 14%</td>
<td></td>
</tr>
<tr>
<td>Property management</td>
<td>Social responsibilities (30% - 35%) Social consensus (30% - 35%) Social fairness/National competitiveness (10%) Market share and brand (10%)</td>
<td>The property management entrepreneur referred three relevant success factors: 1) hard working; 2) character and integrity. The entrepreneur must meet the promise with customers and staffs, and; 3) the people’s relationship.</td>
<td>25% - 34%</td>
<td></td>
</tr>
<tr>
<td>Electronic technology</td>
<td>Normal following of the rules (20%) Korean culture (20%) Face (60%)</td>
<td>-</td>
<td>&gt;= 100%</td>
<td></td>
</tr>
<tr>
<td>Jewellery</td>
<td>The Government’s behaviour (50%)</td>
<td>The jewellery entrepreneur mentioned the importance of helping oneself, “God helps those who help themselves”, as his motto in business.</td>
<td>&lt;=4%</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Percentage and Consideration</td>
<td>Comment</td>
<td>Years</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Information tech</td>
<td>The Government regulations (50%) Ethical values (5% - 10%) Reputation (not much considered but the connected staff concern was 30%-40%)</td>
<td>The information tech entrepreneur indicated morality as a factor to start-up success. Being asked about what morality meant, he answered that it was a general behaviour eg. keeping the promise.</td>
<td>&lt;=4% 14 years</td>
<td></td>
</tr>
<tr>
<td>Marketing &amp; research consultants</td>
<td>Legal regulations (30% - 40%)</td>
<td>The marketing &amp; research consultant entrepreneur concerned that hard working was an important factor to start-up success. An entrepreneur must have the heart to work and must be patient too. This factor was important because it was the only factor the entrepreneur could control among other factors.</td>
<td>15% - 24% 18 years</td>
<td></td>
</tr>
<tr>
<td>Management consulting</td>
<td>Government regulations (33%) Reputation (33%)</td>
<td>The management consulting entrepreneur talked about the trust of the staff as the factor to the start-up success. The trust of staff helped the cohesion of the staff and the entrepreneur to work for the start-up together.</td>
<td>25% - 34% 6 years</td>
<td></td>
</tr>
</tbody>
</table>
Common pattern between ethical values and performance and success was less clear in less well-performing (growth <= 4%) entrepreneurs or shorter life (<= 5 years) start-ups. Lower-growth entrepreneurs eg, the pharmaceutical entrepreneur, and realty agency entrepreneur, or younger start-ups eg, the serial entrepreneur, and Korean entrepreneur did not consider ethical values as a critical factor to start-up success. Some lower-growth entrepreneurs eg, the restaurant owner, jewellery entrepreneur, and information tech entrepreneur nonetheless concerned slightly ethical values in start-up success. These lower-growth entrepreneurs and younger start-ups thus did not think ethical values as a strong impact factor to start-up success in common.

There were some differences in considering ethical values for start-up success between lower-growth or shorter life start-ups, and higher-growth (>= 30%) or longer life (>10 years) start-ups. Higher growth entrepreneurs eg, the property management entrepreneur, management consulting entrepreneur, and heat technologies entrepreneur had mentioned ethical values for start-up success. The serial entrepreneur and Korean entrepreneur concerned ethical values in social insurance too, in spite of not contributing them for start-up success explicitly. Older start-ups eg, the restaurant owner, property management entrepreneur, information tech entrepreneur, marketing & research consulting entrepreneur, and jewellery entrepreneur referred ethical values for start-up success as well, with the exception of the realty agency entrepreneur, plastic industry entrepreneur, and trading entrepreneur. Ethical values were thus considered as a critical factor of start-up success by some high-growth entrepreneurs and older start-ups, despite that the differences between lower- and higher-growth entrepreneurs, and between shorter and longer life start-ups were not too big.

The varied level of ethical values therefore weakly correlated to the consideration of ethical values as a critical factor to the performance and success of start-up.

Table 48: Correlation Matrix (Ethical Values versus Performance and Success Controlling for Demographic Variables)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V18</th>
<th>V9Time (ρ)</th>
<th>V9Ti me (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FamilismImportant</td>
<td></td>
<td>-0.091</td>
<td>0.125</td>
</tr>
<tr>
<td>FamilismGoals</td>
<td></td>
<td>0.146</td>
<td>0.146</td>
</tr>
<tr>
<td>FamilismEm-</td>
<td></td>
<td>0.197*</td>
<td>0.071</td>
</tr>
</tbody>
</table>
V18 Increase%. V9Time AgeStartup.
+ p <= .1. * p <= .05. ** p <= .01.\textsuperscript{14}

The ethical ideologies of familism, the main foundation in Confucianism, significantly correlated with the Increase%, rather than survival time. The entrepreneurs who emphasized family life would have higher growth percentage. Then, the business people who agreed with not working as lazy, working as a duty, and who rejected indolence, would have either higher growth, or longer survival time. The owners of start-ups who rejected selfishness and dependence would have longer survival time afterward. In contrast, the ideological weight had no significant association with performance and success variables.

The ethical reputation of emphases on reputation, trust, and reciprocities significantly correlated with the Increase% and survival time too. The capitalists who emphasized

\textsuperscript{14} This partial correlation matrix controlled for age, sex, education, location, and age of start-up for the leftest column, while controlling for age, sex, education, and location for the righter two columns, because of a focus on the age of start-up in the righter two columns; while, this partial correlative matrix used Spearman’s rho for the middle column and Pearson’s r for the rightmost column, due to a scale nature on the age of start-up in the righter two columns.
reputation, trust, and reciprocities, would had a higher growth and longer survival time for their start-ups. On the contrary, the reputational weight had no significant correlation with performance and success variables.

The research results showed that work ethics, anti-individualism, and emphases on trust and reciprocities correlated with the survival time of start-ups. This ethical-value-survival-time correlation could have two deductions. On the one hand, ethical values could be considered as a cause, and survival time could be deemed as an effect: because these entrepreneurs agreed with work ethics, anti-individualism, and emphases on trust and reciprocities, they based on these criteria to make social insurance decisions; therefore their start-ups could last for a long time. On the other hand, the age of establishment and ethical values might be regarded as a cause and an effect respectively. Younger start-ups might not emphasize these ethical values, but vice versa was found in the older start-ups. Ethical values were not known as important before will be realized as important later. These two deductions nonetheless led to the same argument: ethical values will be related to survival time.

The associations of ethical values versus survival time could be complemented with the survival analysis of survival time indeed (Klein & Goel, 1992). Survival analysis was a statistical method used to assess the time to an event eg, the exits of start-ups. Standard survival analysis techniques were tried to be performed however with a problem and limitation. Only few entrepreneurs (eg, the jewellery entrepreneur and restaurant owner) were known to have closed the start-up, while other entrepreneurs were fighting for the survivals of start-ups at the moment of writing. The lack of the exits of start-ups therefore undermined the usefulness of survival analysis. The survival analysis will therefore left for future research.

To conclude, this comparative section had three major findings concerning ethical values and start-up success. First, in the interview, the varied level of ethical values therefore weakly correlated to the consideration of ethical values as a critical factor to the performance and success of start-up. Second, in the questionnaire, ethical values (familism, work ethics, and emphasis on reputation) positively associated with Increase%. Third, the ethical values of work ethics, anti-individualism, and emphases on trust and reciprocities had positive impact to AgeStartup as survival time in the questionnaire as well.
5.4 Mediation Model

The three associations ie, ethical values and social insurance (IV-M path), social insurance and start-up success controlling for ethical values (M-DV’ path), and ethical values and start-up success (IV-DV path) will be further explored to propose the detailed mediation models for the CSF belief. The detailed mediation models will be specific on the used measures for ethical values, social insurance practices, and start-up success. The association of M-DV’ path will be required instead of the association of M-DV path to test the mediation, although the association of M-DV path will also be shown.

These detailed measures are examined by the provided conditions of analytic procedures appropriate for the use of mediator (Baron & Kenny, 1986): 1) variations in the levels of ethical values significantly account for variations in social insurance practices; 2) social insurance practices significantly explain start-up success, and; 3) there is a significant relation between ethical values and start-up success, which is weakened or vanished when the above two mediation paths controlled. The social insurance practices will function as a mediator of ethics and entrepreneurship, only when these three conditions are followed.

On the one hand, the tests of the linkages of the mediation model is provided by three regression equations (Baron & Kenny, 1986). First, the ethical value affects the social insurance practice in the equation regression the social insurance practice on the ethical value (IV-M path); second, the ethical value is shown to affect the start-up success in the equation regression the start-up success on the ethical value (IV-DV path), and; third, the social insurance practice affects the start-up success, in the equation regression the start-up success on both the ethical value and social insurance practice (M-DV’ path). Fourth, the net direction of the two mediated indirect associations (IV-M path and M-DV’ path) was then compared to the direction of direct associations of ethical values and start-up success ie, IV-DV path, disregarding those disagreed mediated indirect associations in terms of directions. These three regression equations control for age, education, location, and age of start-up (age of start-up is not entered for equations with the dependent variable as start-up success) as the list of covariate variables and weight for the level of education, and region of legal entities as the importance weights.
On the other hand, a Sobel-Goodman significant mediation test for the indirect effect of the ethical value on the start-up success via the social insurance practice is provided and performed (Goodman, 1960; Sobel, 1982). The ratio of the indirect and direct effects of the ethical value on the start-up success is also shown.

Table 49 showed the Sobel-Goodman model results of the ethical value V20_2 (WorkIndolent) and the start-up success V9Time (AgeStartup), mediating through the social insurance practice V25_13 (ImplementationReduceWage), controlling for the age, education, and location (age of start-up is not entered for equations with the dependent variable as start-up success), as an example as follows. The rows indicated control, ethical value, and/or social insurance practice variables. These variables were used to predict the social insurance practice or start-up success. The columns indicated multiple linear regression models. The respective standardized coefficients were shown at the intersection of rows and columns in the table.

<table>
<thead>
<tr>
<th>Variables</th>
<th>IV-M</th>
<th>M-DV'</th>
<th>IV-DV</th>
<th>M-DV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Age</td>
<td>-.023</td>
<td>.761**</td>
<td>.764**</td>
<td>.767**</td>
</tr>
<tr>
<td>Sex</td>
<td>.013</td>
<td>-.082</td>
<td>-.084</td>
<td>-.079</td>
</tr>
<tr>
<td>Education</td>
<td>-.062</td>
<td>-.111+</td>
<td>-.103</td>
<td>-.125+</td>
</tr>
<tr>
<td>LocationNorth</td>
<td>.830+</td>
<td>.550*</td>
<td>.446</td>
<td>.626*</td>
</tr>
<tr>
<td>LocationNortheast</td>
<td>.455+</td>
<td>.239</td>
<td>.182</td>
<td>.297+</td>
</tr>
<tr>
<td>LocationEast</td>
<td>1.017</td>
<td>.669+</td>
<td>.541</td>
<td>.786*</td>
</tr>
<tr>
<td>LocationSouthCentral</td>
<td>.863</td>
<td>.519</td>
<td>.410</td>
<td>.619+</td>
</tr>
<tr>
<td>LocationSouthwest</td>
<td>.917*</td>
<td>.512+</td>
<td>.397</td>
<td>.597*</td>
</tr>
<tr>
<td>LocationNorthwest</td>
<td>.276</td>
<td>.347*</td>
<td>.313*</td>
<td>.379**</td>
</tr>
<tr>
<td>AgeStartup</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>WorkIndolent</td>
<td>-.262**</td>
<td>.069</td>
<td>.102+</td>
<td>-</td>
</tr>
<tr>
<td>ImplementationReduceWage</td>
<td>-</td>
<td>-.126*</td>
<td>-</td>
<td>-.143*</td>
</tr>
<tr>
<td>Hosmer and Leme-</td>
<td>2.19</td>
<td>21.59</td>
<td>22.57</td>
<td>23.55</td>
</tr>
<tr>
<td>show Chi-square or F</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.023*</td>
<td>0.000**</td>
<td>0.000**</td>
<td>0.000**</td>
</tr>
</tbody>
</table>

Sobel 1.723+
Goodman test 1.659+
GoodmanII test 1.795+
+ p <= .1. * p <= .05. ** p <= .01.15

On the one hand, first, in the regression equation of IV-M path, the model table showed that the WorkIndolent affected the ImplementationReduceWage; second, the WorkIndolent was shown to affect the AgeStartup in the IV-DV regression equation, and; third, the ImplementationReduceWage affected the AgeStartup in the M-DV’ regression equation. Fourth, the net direction of the IV-M path and M-DV’ path agreed with the direction of IV-DV path. The effect of the WorkIndolent on the AgeStartup (.069) in the M-DV’ path was less than that (.102) in the IV-DV path. In the M-DV path, the ImplementationReduceWage affected the AgeStartup as well.

On the other hand, in the Sobel-Goodman mediation model, the model table showed that Sobel test statistics was 1.723, Goodman-1 (Aroian) test statistics was 1.659, and Goodman-2 test statistics was 1.795, with p (obtained) values of 0.085, 0.097, and 0.073 respectively, which were smaller than the p (critical) value of 0.1. This mediation model thus adequately fit the data for the association in the population. The proportion of total effect that was mediated was 32.274% ie, 0.32274 and the ratio of indirect to direct effect was 0.477. Therefore, partial mediation held between WorkIndolent and AgeStartup, through ImplementationReduceWage.

Table 50 and Table 51 presented the mediation associations between ethics and entrepreneurship. The left column in the table showed ethical ideologies or ethical reputation. In the left +/- column, it illustrated the direction of impact of ethical ideologies or ethical reputation to the mediators of implementation actions or implementation factors in the middle column, which then either positively or negatively (shown in the right +/- column) influenced the performance or success of entrepreneurship in the right column. The presented mediation associations satisfied the tests of the linkages of the mediation model by the three regression equations, significant at 0.10. However, some mediation associations had a Sobel-Goodman significant mediation test results not significant at two-tail 0.10, but significant at one-tail 0.10 instead.

15 This Sobel-Goodman mediation model table controlled for age, sex, education, and location, because of a focus on the age of start-up as the dependent variable.
Table 50: Mediation Model (Implementation Actions)

<table>
<thead>
<tr>
<th>Ethical Ideologies/Reputation</th>
<th>+/-</th>
<th>Implementation Actions</th>
<th>+/-</th>
<th>Performance/Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>WorkDuty</td>
<td>-</td>
<td>ImplementationRecruitRural</td>
<td>-</td>
<td>Increase%</td>
</tr>
<tr>
<td>WorkIndolent</td>
<td>-</td>
<td>ImplementationReduceWage</td>
<td>-</td>
<td>AgeStartup</td>
</tr>
</tbody>
</table>

Figure 27: Mediation Model (Implementation Actions)

Table 51: Mediation Model (Implementation Factors)

<table>
<thead>
<tr>
<th>Ethical Ideologies/Reputation</th>
<th>+/-</th>
<th>Implementation Actions</th>
<th>+/-</th>
<th>Performance/Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>WorkDuty</td>
<td>-</td>
<td>Minimum Standard (V25Fac 4)</td>
<td>-</td>
<td>Increase%</td>
</tr>
<tr>
<td>WorkIndolent</td>
<td>-</td>
<td>Circumvent or Escape and Cost Control (V25Fac 3)</td>
<td>-</td>
<td>AgeStartup</td>
</tr>
<tr>
<td>ReputationTrust</td>
<td>-</td>
<td>Supplement Gifts to Employees (V25Fac 5)</td>
<td>-</td>
<td>AgeStartup</td>
</tr>
<tr>
<td>ReputationReciprocities</td>
<td>-</td>
<td>Supplement Gifts to Employees (V25Fac 5)</td>
<td>-</td>
<td>AgeStartup</td>
</tr>
</tbody>
</table>
This mediation model offered some key considerations for the CSF belief:

The first consideration related to the coherent positive effects of work ethics on start-up performance. WorkDuty was connected to the value of work ethics. This work ethics value negatively influenced ImplementationRecruitRural, which would then negatively affect Increase%. In plain words, the entrepreneurs who agreed that work was a duty toward society, would not try to recruit rural residents to reduce insurance contribution level, which would then have a higher level of growth percentage in the start-ups. Specific implementation details (recruiting rural residents for low insurance contribution level) thus mediated the special effects of work ethics to growth percentage in start-up.

The second point of interest for the mediation model was the discovery of the coherent impacts of work ethics on start-up success. The entrepreneurial rejection of indolence and wallow luxuries and pleasures would not reduce employee’s total wage for low insurance premiums. Not doing this minimum compliance implementation action helped increase the survival time of start-up. We hope in future studies to explore this mediation model.

The third detail was that the work ethics and emphases on trust, and reciprocities, relationships and guanxi, through implementation factors, were essential to start-up
performance and success. The entrepreneurs who agreed that work was a duty toward
society, would not do those human resource management implementations that
minimized the standard of compliance, which would then have a higher level of growth
percentage in the start-ups. While, not doing circumventing or escaping and cost
controlling implementation actions helped increase the survival time of start-up. The
considerations using single implementation action were thus as similar as the
considerations using implementation factor in the mediation model. Conversely,
because the mediations of the implementation action and the implementation factor of
supplementing gifts to employees were not similar, we were conservative to conjecture
about the mediation effects of not supplementing gifts to employees for non-compliance.

On the other hand, ethical values had the main mediation on the performance and
success of the new business through implementation actions. We thus found the
consequences of social insurance implementation, which were the development and
formation of organizational social insurance for future social insurance behaviours
(Fiorelli & Tracey, 2007), which had longer term benefits to new businesses.
Apparently, ethical values did not mainly influence the performance and success of new
firms through positive mediation. Conversely, this mediation was negative. Ethical
values did not directly lead to those implementation actions that improved long-term
performance and success, but they prevented those implementation actions that declined
or discontinued the start-ups. In other words, ethical values were a necessary but not a
sufficient condition of start-up success.

Also, though the extent of immediacy between ethical values and start-up performance
was less than the extent of immediacy between ethical values and start-up success,
ethical values were found to have less mediation to start-up performance than to start-up
success. Thus the ethical values influenced less on shorter term growth percentage, but
more on longer term survival time which represented start-up success. To what extent
ethical values will affect shorter term performance and longer term survival will be an
area for potential further research.

Overall, ethics, in terms of ethical values, seemed to have some grounds, through social
insurance practices, to be a critical performance and success factor of entrepreneurship.
Although this section has explored mediation models by studying a group of
entrepreneurs in both interview and questionnaire approaches, we acknowledged that
we should seek to further test the mediation models to improve our future research in this area.

Chapter 6 Conclusion

6.1 Significance of Research

This section will take stock of research gaps, research results, and the significance of research. We will structure the section according to main research results on social insurance decision making of entrepreneurs, and the CSF belief. In each sub-section, we will begin with a brief summary of what was known about the topic prior to this research. It will then followed by a recap of what the research has established. Finally we will recap the key contributions of this thesis and will link this research to Tomczyk et al. (2013).

This investigation of ethical decision making model and critical success factor belief is summarized in Table 52.

Table 52: Significance of Research

<table>
<thead>
<tr>
<th>Research Gap</th>
<th>Research Answer</th>
<th>Significance of Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash or financials are only integrated to a small extent in the existing models</td>
<td>Cash or financials seem to stand out but not to dominate ethics with respect to the impact on social insurance decisions.</td>
<td>Cash or financials trade-offs with ethics do not invalidate the CSF belief</td>
</tr>
<tr>
<td>Ethical tolerance is not integrated</td>
<td>Ethical tolerance implicates social insurance decisions.</td>
<td>Ethical tolerance’s confounding effect does not invalidate CSF belief</td>
</tr>
<tr>
<td>Technological impact is not integrated</td>
<td>Some implications of technology are rippled to social insurance decisions.</td>
<td>Technological impact’s confounding effect does not invalidate CSF belief</td>
</tr>
<tr>
<td>Not to continue to research on the details of social insurance implementation</td>
<td>Social insurance implementation can be impacted as a result of ethics in the SME.</td>
<td>Ethical impact to the social insurance implementation strengthens CSF belief</td>
</tr>
<tr>
<td>No relationship between social insurance decision and entrepreneurial performance and success</td>
<td>Social insurance decisions seem to be linked to entrepreneurial performance and success.</td>
<td>The link between social insurance decision and entrepreneurial performance and success strengthens CSF belief</td>
</tr>
</tbody>
</table>
6.1.1 Cash or financials versus ethics

First, our research model fills the research gap that a small extent of the integration of cash or financials has been seen in the existing ethical decision making models. Cash or financials are considered important, albeit not dominating decision criteria to entrepreneurs. New ventures often experience limited financial resources. The concern on cash or financials is an important element to be emphasized in our model, making it more developed and realistic for entrepreneurial world.

The fact that cash or financials is important to the ethical decision making of entrepreneurs is not rocket science. Using cash or financial as a decision criterion is common across most, if not all entrepreneurs. However, cash or financials systematically lacks presence in existing models. Treviño (1986), Jones (1991), McDevitt et al. (2007), Barsky (2008), Strong and Meyer (1992), and Vyakarnam et al. (1997) have not emphasized financial concern, not even in entrepreneurial models eg, Solymossy and Masters (2002) and Longenecker et al. (2006). We determine that past development of models is based on a restricted focus on a single human want for ethics. The continual of this direction can result in descriptive models that will approach to normative models in the future. The integration of cash or financials is a small step that tries to pull the research and development of models back to an original direction ie, to explain how entrepreneurs actually make ethical decision.

Cash or financials seem to stand out but not to dominate ethics with respect to the impact on social insurance decisions. In the comparative section, cost-related criteria could be a common consideration for non-compliance entrepreneurs, whereas this cost concern was less likely to be involved in compliance entrepreneurs. Compliance decision seemed to be influenced by the varied level of cost concerns and the SocialInsuranceCosts in the interview, while negative association was found between the cost-related criteria and compliance stages in the questionnaire. The cost-related weight was also elucidated as the importance of cost control in order to make social insurance possible, thus supporting social insurance.

Rational or material weight (short term and long term) had a significant prediction to compliance decision. The interview findings and questionnaire findings showed the standing out of rational weights in compliance decision. In the trade-off weights, cash or financial concern were shown to be the highest one, with non-compliance and
compliance entrepreneurs aggregated. The asked rational weights were also high as well. On top, the regression results indicated that the rational (short term and long term) weights were strong to predict behaviour in compliance. In addition, the interview findings and questionnaire findings indicated that rational (short term and long term) weights were stronger than ideological and reputational weights in predicting compliance decision in social insurance as well.

In sum, according to criteria weights, cash or financials were a more important consideration than ethics for the compliance behaviour; nonetheless, the difference between cash or financials, long term rational weight, ideological or reputational criteria were not huge indeed. In other words, entrepreneurs did not trade off ethics for profits completely in their compliance decision of social insurance. The research results thus showed a multi-facet of decision criteria in explaining social insurance compliance.

Overall, the standing out but not dominance of cash or financials therefore does not invalidate the CSF belief.

6.1.2 Ethical tolerance
Second, our research model describes ethics as a dilemma with confusions and inconsistencies, in which the extent of expecting and accepting these ethical uncertainties is a factor to impact the ethical decision stages. When untapped opportunities are identified and exploited by entrepreneurs, there are a lot of ethically grey areas. Those entrepreneurs who expect and accept ethical uncertainties can take the risk to exploit these ethically grey areas. In other words, their tolerance of ethical uncertainties is a factor that influences the ethical decision making stages.

This ethical tolerance is implicitly connected to the risk taking act of entrepreneurs, which is the central character of entrepreneurship. The tolerance factor was found to have a significant, negative and weak impact with compliance decision in compliance stages. More ethically-tolerant entrepreneurs expected and accepted ethical uncertainties, would be less hesitated to access opportunities of cost control in the ethically blurred regions of law, thus not making social insurance decisions. Except the similar factor of entrepreneurial act (the creative and rule-blending nature of entrepreneurs) (Longenecker et al., 2006), the factor of tolerance was seldom integrated in the current
model. This ethical tolerance therefore customizes current models to the area of entrepreneurship.

The ethical tolerance controlled, ethical values (in terms of ethical ideologies and ethical reputation) had similar impacts to compliance stages. The moderating role of ethical tolerance was thus not supported, because the true effect of ethical values on social insurance decision existed from our findings. Consequently, its confounding effect does not invalidate the CSF belief.

6.1.3 Technological impact

Third, our research model has (information) technological impact being integrated as a factor to impact the ethical decision stages. Technological related spirit, but neither technological disciplines or backgrounds, nor technological knowledge of entrepreneurs, is the enabler of ethical decision. The imagination, creativity, novelty and sensitivity are brought together with moral decision making. These relationships between creativity and ethical ideologies in entrepreneurs are integrated in our research model.

High level of the emphasis on innovation (thinking up of new ideas and being creative; doing things one’s own way) had positive impacts to the decision in the compliance stages. More innovative entrepreneurs thus would maintain ethics in moral decision making. This result is thus coherent with Teal and Carroll (1999), Buchholz and Rosenthal (2005), and Bierly et al. (2009), which suggest that creative entrepreneurs tend to have higher levels of moral decisions, instead of the common belief that creative people tend to be less ethical (Bierly et al., 2009). Because technology and innovation are stressed to have the most influential role in Schumpeterian entrepreneurs (Kirzner, 1999), technological related spirit tailors current models to the field of entrepreneurship. Our entrepreneurial model thus has significant implications in supporting an unification of entrepreneurial spirit and ethics in the new ventures (Buchholz & Rosenthal, 2005).

The technological impact controlled, similar ethical (in terms of ideological and reputational) correlations to compliance stages were seen. Thus, the moderating role of technological impact to ethical values was not backed, since the true effect of ethical values on social insurance decision existed from our findings. Hence, the confounding effect of technological related spirit does not invalidate the CSF belief.
6.1.4 Ethical implementation

Fourth, our research model does not stop at the stage of ethical decision, while to continue the research on the details of ethical implementation in new ventures. Ethical implementation is the last step in ethical stages. This last step of ethical stages signals that a new venture is building an organization. The developed ethical infrastructure in turn influences back the ethical stages. These ethical implementation and infrastructure are thus deemed as a stage in our research model.

On the one hand, in the interview findings, ethical values (in terms of ideological and reputational concerns) were less common considerations for non-compliance entrepreneurs, whereas these two concerns were more involved by compliance entrepreneurs. Non-compliance entrepreneurs reflected the use of non-compliance actions eg, supplementing gifts to employees, and segmentation of workforce, which were lowly revealed from the responses of compliance entrepreneurs. The compliance implementation thus seemed to be impacted by the varied level of ideological and reputational concerns in the interview. On the other hand, in the questionnaire findings, lower ideological and reputational weights had a significant, positive impact to non-registration implementation. Less important consideration of corporate ideologies or reputation also resulted in some circumvent or escape actions eg, partial compliance, and some minimum standard actions such as reducing employee’s total wage or total bonus. This little weight on ideological and reputation, however, did not lead to the provision of improved implementation of the infrastructure of social insurance. The interview and questionnaire results therefore coherently indicated that ethical values, in terms of ideological and reputational criteria, could impact social insurance infrastructure implementation in the SME as well.

This integration of social insurance implementation thus helps distinguish our entrepreneurial model from organizational ones. The consequences of ethical and unethical behaviour are not as good as ethical implementation, which will develop and form organizational ethics for future ethical behaviours (Fiorelli & Tracey, 2007). These long term ethical behaviours will have long term consequences to businesses. The research result that ethical values can influence the social insurance implementation in the SME makes the CSF belief more authoritative.
6.1.5 Social Insurance Decision Making of Entrepreneurs

Our research model makes the following contributions. First, cash flow or financial criteria are now integrated as a rational or material want, following the break-down of the CMD concept. This independent role of cash flow or financials emphasizes its importance in the entrepreneurial context in our model, making it more developed and realistic for entrepreneurial world. Cash flow or financials systematically lacks presence and emphasis in existing models e.g. Treviño (1986), Jones (1991), McDevitt et al. (2007), Barsky (2008), Strong and Meyer (1992), Vyakarnam et al. (1997), Solymossy and Masters (2002), and Longenecker et al. (2006), which are based on a restricted focus on a single human want for ethics. The continual of this direction can result in descriptive models that will approach to normative models in the future. The integration of cash flow or financials is a small step that tries to pull the research and development of models back to an original direction i.e. to explain how entrepreneurs actually make ethical decision. Second, the three components – rational or material, reputational and ideological criteria can be realized to specific criteria, which can acknowledge the importance of context. Existing general models have highly abstract concepts that are not useful in explaining concrete criteria in specific decisions. The ability of realizing the three components to specific criteria can make our component model useful in explaining different contexts. Third, since different specific decision criteria can be attached to or detached from our component model, depending on different specific decisions, this makes our component model flexible and applicable for different specific ethical decisions. Fourth, our component model can also associate existing offered ethical decision models to the specific model in social insurance i.e. Nyland et al. (2009) and Nyland et al. (2011). Hence, our component model provides a direction of how ethical decision making models of entrepreneurs can be applied in the social insurance context.

Then, our component model develops a component view of the ethical decision making of entrepreneurs by using the decision criteria as an analytical component to identify the determinants of a component-based process in ethical decision making of entrepreneurs. The component model provides a basis for developing specific models for specific decisions. By attaching to or detaching different criteria of ethical decision, we can determine which decision criteria demand highest attention. Such a component view can make our component model useful in explaining different contexts, and flexible and applicable for different specific ethical decisions.
These works, however, have not offered a multi-attribute utility theory ("MAUT") (Baron, 2000) view towards social insurance compliance decision. On the one hand, current studies focus more on one or few decision criteria in explaining social insurance decision e.g. the incidence of risk on evasion behaviour (Nyland et al., 2006), the probability of being re-audited (Maitra et al., 2007), or public shaming (Nyland et al., 2012). Various material and non-material logics are seldom integrated together as multiple drivers of compliance decision in existing models (Dao & Ofori, 2010). Some of them e.g. Scott (1998, 2001) and Greer and Downey (1982) join the attempts to develop a framework explaining different motivations of compliance behaviour (regulative, normative, and socio-cognitive pillars); however, these multiple motivations cannot be combined together. On the other hand, the relative importance of these multiple drivers to compliance decision is seldom discussed (Scott, 1998, 2001). Their relative value helps us know the variation of the domination of these multiple drivers. Although some economic models e.g. Sutinen and Kuperan (1999) integrate both social and economic determinants to explain whether individuals comply with regulations, these models focus only on the attributes of decision criteria, but not the weights of decision criteria in social insurance. The attributes of criteria are quantitative measures of performance e.g. the current level of social insurance costs, or the prospective benefits of compliance. These attributes are however measured on different weighting scales i.e. the concern or point of view on importance. Such a view about the weights of criteria has not been found in the existing literature of social insurance. This paper therefore uses MAUT to capture the preferences of multiple criteria for the compliance decision, while offers an integrated decision making model in social insurance.

On the one hand, our research model fills the research gap that a lack of the integration of cost control, and recruitment and retention considerations has been seen in the existing social insurance decision making models (Maitra et al., 2007; Nyland et al., 2012; Nyland et al., 2006; Nyland et al., 2011). Cost and staff considerations are important decision criteria to entrepreneurs (Goodall & Warner, 1997; Maciejovsky et al., 2012; Warner et al., 1999). New ventures often experience limited financial and human resources. The concern on cost and staff is an important element to be emphasized in our model, making it more developed and realistic for entrepreneurial world.
On the other hand, our research model integrates short and long term rational, ideological, and reputational criteria as drivers of compliance decision. While existing models e.g. Dao and Ofori (2010), Scott (1998, 2001), and Greer and Downey (1982) cannot combine multiple motivations together, this paper uses MAUT for their integration. Also, apart from focusing on the attributes of criteria in utilitarian models (Alm & Torgler, 2011; Sutinen & Kuperan, 1999), this paper discusses the relative importance of the multiple drivers focusing on the weights of decision criteria in social insurance. Such a view about the weights of criteria has not been found in the existing literature of social insurance. The research results showed the standing out of rational or material criteria over ideological and reputational criteria, but not the dominance, with respect to the impact on social insurance decisions. Therefore, there is a multi-facet of decision criteria in explaining social insurance compliance.

The four research answers help us understand the ethical decision making of entrepreneurs in the social insurance context (see Figure 29). Entrepreneurs consider short term and long term rational or material (e.g., cost-related criteria, the probability and punishment of conviction, recruitment and retention, and rational weights), ideological (familism, integrity, work ethics, and anti-individualism) and reputational (emphases on reputation, trust, and reciprocities, relationships and guanxi) criteria to make social insurance decisions. Rational (short term) e.g., cash or financial criteria seem to stand out but not to dominate ethics with respect to the impact on social insurance decisions. Ethical tolerance and technological related spirit, implicate social insurance decision, but neither technological backgrounds or disciplines, nor technological knowledge. In addition, ethics can impact social insurance implementation in the SME as well.

This understanding of the social insurance decision making of entrepreneurs is significant for several reasons. First, the three main decision criteria describe how entrepreneurs actually make social insurance decision. This list of decision criteria is helpful either in explaining decision or in guiding decision in social insurance. The steps and determinants, and the weights support both descriptive and normative use. The Government can use this understanding to increase social insurance compliance. Second, the harvested social insurance decision making knowledge is usable for non-ethical entrepreneurial decisions related to employee infrastructure too. Basic decision

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16 This implication to public policies is however not within the scope of this research.
elements such as attributes and weights in MAUT should be relevant, in spite of a difference in some steps and determinants. Last, because the distinction between small and large businesses is being blurred (Quinn, 1997), the social insurance decision making of entrepreneurs and managers provides crucial insights to each other. The implementation actions in social insurance, for instance, can connect small firms and large organizations together. An understanding of social insurance infrastructure developed in a new venture feeds back to influence social insurance behaviour in large companies.
Figure 29: Social Insurance Decision Making of Entrepreneurs
6.1.6 Critical Success Factors

One of the significances of research is to validate the belief of ethics and entrepreneurship in conclusion.

6.1.6.1 Backdrop to the current research

Published research on ethics and entrepreneurship investigates the CSF belief in a way that is embryonic. Opinion programme, but not behaviour research, is often the backdrop to the current research. The CSF belief is often based on the opinion, but not the behaviour of entrepreneurs: the opinion of 128 entrepreneurs conducted in Timmons and Stevenson (1984), own experiences claimed in Chung and Ip (2008), 32 qualitative interviewees suggested in Chow (2003), and his own entrepreneurial and investing experience explored in Chia (2012). The limits of these researches lie on what is actually examined. The examined subject is the factors recognized by entrepreneurs, instead of the factors that are really influencing start-up performance and success. In other words, these researches are more like the opinion programme than the behavioural research.

The opinion programme has some biases resided on entrepreneurs themselves. The most critical one is the ‘survival’ bias (Shukla, 2011). This survival bias is connected to the fact that data are sourced from surviving and successful entrepreneurs and corporations, but not from the whole population of entrepreneurs. Excluding the survival bias, there are still two more validity issues existed in these literatures.

On the one hand, some entrepreneurs might not have the CSF belief themselves. These entrepreneurs might want others to think that, because they are ethical, therefore they are successful, thus increasing their own status. In other words, the CSF belief can be window dressing (Shukla, 2011). The hypocrisy content of such a communication need to be taken into account (Fassin & Buelens, 2011). Selectivity in communication is a factor that influences the gap between communication and performance (Fassin & Buelens, 2011). These entrepreneurs are classifiable to either cynicism, hypocrisy, or opportunism in terms of moral positions (Fassin & Buelens, 2011). These moral positions have either a purely economic or negative (reaction driven) intent and driver, with very limited, or limited but highly targeted efforts in implementation, while having a high communication to demonstrate their ethical credentials. There is thus a sin of omission that propagandas the CSF belief. In contrast, the meaning difference in
semantics ie, problems of terminology, semantics and interpretation also influences the communication-performance gap (Fassin & Buelens, 2011). The ethical terminology is often interpreted in order to rationalize the action of entrepreneurs. Not illegal is often deemed as ethical. Thus, the true meaning of entrepreneurs can be – “not doing we have not done is important to our success”.

On the other hand, most entrepreneurs that are successful do own the CSF belief themselves. These entrepreneurs have a firm belief that they are more ethical than others (Tilley, 2000; Vitell, Dickerson, & Festervand, 2000), and are more ethical than managers (Bucar, 2001). O’Clock and Okleshen (1993) and Tyson (1992) explain that people tend to rate themselves as more ethical than others, similar to their tendency to upwardly bias report their own ethical beliefs among entrepreneurs (Batchelor, Harris, Gibson, & Simpson, 2011). These entrepreneurs can mistreat their own ethical beliefs as a factor to account for their business success. Therefore, the CSF belief can need further facts from the real world.

The two issues of validity therefore undermine opinion programme as an approach to investigate the CSF belief. The problem and limitation of opinion programme however does not exist in behavioural research. Using behavioural research is therefore a new attempt to investigate the CSF belief, which is explored by the mediation model in this research.

6.1.6.2 Summary of Findings
Entrepreneurs differed in their ethical values are likely to differ in their social insurance decision made to their employees. First, entrepreneurs considered ethical values, in terms of ideological and reputational criteria, to make social insurance decisions. Second, ethical impact was not dominated by financial impact, with respect to the impact on social insurance decisions. Third, ethical tolerance implicated social insurance decisions, but the true effects of ethical values on social insurance decision existed. Fourth, some implications of technology rippled to social insurance decisions, but the moderating role of technological impact to ethical values was not backed, since the true effect of ethical values on social insurance decision existed. Fifth, social insurance implementation could be impacted as a result of ethics in the SME. These social insurance implementation actions will have a more lasting consequence. These five findings validated the ethical impact to social insurance decision. The findings that
ethical values had an impact to social insurance decisions helped underpin the CSF belief.

Previous results suggest that start-up performance and success is also weakly explained by social insurance behaviour, with the impacts depended on different implementation details, which can have different effects to start-up performance and success (Murphy et al., 1992). The varied level of social insurance compliance weakly correlated to the growth agenda in the growth plan and the survival time, with some implementation actions eg, accepting imposed fine as normal cost, providing different insurance contribution levels to different segmentation of workforce, and reducing employee total wage negatively correlated to the performance and success of the start-ups as well.

Ethical values, in terms of ideological and reputational criteria, also underlie the start-up performance and success. In the interview, the ethical values were weakly correlated to the consideration of ethical values as a critical factor to the performance and success of start-up, while in the questionnaire, some ethical values (familism, work ethics, and emphasis on reputation) positively associated with Increase%. The ethical values of work ethics, anti-individualism, and emphasis on trust had positive impact to AgeStartup as survival time in the questionnaire as well.

The three paths (ethical values and social insurance, social insurance and start-up success controlling for ethical values, and ethical values and start-up success) were then further explored to propose the detailed mediation models (see Figure 30). The first consideration related to the coherent positive effects of work ethics on start-up performance, through specific implementation details (recruiting rural residents for low insurance contribution level). The second point of interest for the mediation model was the discovery of the coherent impacts of work ethics on start-up success. Not doing the minimum compliance implementation actions ie, reducing employee’s total wage for low insurance premiums helped increase the survival time of start-up. We hope in future studies to explore this mediation model. The third detail was that the work ethics and emphases on trust, and reciprocities, relationships and guanxi, through some less ethical implementation factors, were essential to start-up performance and success.

On the other hand, ethical values had the main mediation on the performance and success of the new business through implementation actions. Apparently, ethical values
did not directly lead to those implementation actions that improved long-term performance and success, but they prevented those implementation actions that declined or discontinued the start-ups. Also, ethical values were a necessary but not a sufficient condition of start-up success. In addition, though the extent of immediacy between ethical values and start-up performance was less than the extent of immediacy between ethical values and start-up success, ethical values were found to have less mediation to start-up performance than to start-up success. Thus the ethical values influenced less on shorter term growth percentage, but more on longer term survival time which represented start-up success.

Figure 30: Critical Success Factors

6.1.6.3 Contributions for research

This section will compare the mediation models between Tomczyk et al. (2013) and this research. Through this comparison, we will be able to identify contributions for research in the academic study of entrepreneurship. Generally speaking, Tomczyk et al. (2013) investigated the number of benefits as the mediation between the values of the entrepreneurs and high growth firms’ performance (see Section 4.6), whereas this thesis presents an exploratory research into the mediation models in China.

The selection of values underlying two mediation models is contrasting. Tomczyk et al. (2013)’s research selects other-caring terminal values (a world at peace, equality, freedom, national security, and family security), and other-caring instrumental values
(forgiving, helpful, loving, and polite). These values are chosen because of their distinctiveness for entrepreneurs (Fagenson, 1993), and their associations with concerns about others’ well-being (Agle, Mitchell, & Sonnenfeld, 1999; Hood, 2003; Johnston, 1995; Rokeach, 1973). However, they did not have a strong case of why these values affect firm performance. They posit that entrepreneurs’ values provide a basis for organizational decisions eg, the distribution of firm resources based on members’ needs or a rule of equality, thus associating with entrepreneurial firm performance (Tomczyk et al., 2013). Nevertheless, their conjecture that values affect performance does not explain why some values (particularly other-caring values) affect performance. Using their lines of thought, any values can be posited to affect firm performance, which should not be true. Rather, we select ethical values in the way as following (see Section 2.4.1). In particular, relevant ethical values should be considered as critical to the success of entrepreneurs, while retaining relevance to the mediation context (ie, social insurance context). In addition, relevant ethical values should come from moral sources in China. In contrast to other-caring values that are infrequently quoted as success factor, ethical values like familism, integrity, work ethics, and anti-individualism are more commonly referred as a factor to affect start-up success, while being relevant to the social insurance context. The selection of values is important, because ethical values can have divergent effects to social insurance and start-up success. Their discovery that other-caring values do not relate to the total number of benefits offered should therefore be restricted to inferring that other-caring values do not relate to firm performance as mediated by compensation practices, rather the inference of the non-existence of the mediation model between other ethical values and start-up success.

Our selection of compensation is generally similar but differs in detailed representation. On the one hand, their interest of compensation practices on a variety of benefits eg, health insurance and vacation, and variable pay such as stock options generally matches our interest. Their argument that compensation is “one of the primary HR practices firms use to elicit and reinforce desired behaviours from employees” (Latham & Wexley, 1981), and is “the least malleable features” (Rousseau & Greller, 1994) of the firm’s employment contract, also has our high agreement. Additionally, their choice of limiting compensation practices to only benefits and perks, in order to allow direct comparison across industries and regions, was recognized. On the other hand, however, their simple addition of the number of benefits and perks for the compensation practice index (Delery & Doty, 1996) seems arbitrary. This additive procedure assumes various
compensation packages to have similar impact on firm performance. This equal weighting assumption is arguable. Various compensation packages that may not be comparable in terms of their nature may be compared in terms of their monetized pay. Differential level of monetized pay will likely have a differential impact on firm performance. Therefore, an additive approach on the number of benefits and perks is less appropriate than adding the monetized pay of benefits and perks. Although measuring the actual extent of compensation is difficult because of some non-monetizable benefits, a closer approximation of the value or extent of benefits is considered to be more revealing (Tomczyk et al., 2013). For this research, we thus limit our consideration to only the main benefit and perk offered by the firms in China i.e., social insurance. A limitation to one compensation practice avoids comparison problems across different practices. Social insurance premiums, in terms of percentage of wage, are also rather standard across industries and regions. Thus, we can code social insurance decision as a dichotomous variable (either 1 for all five social insurances, or adding the five social insurances to an index are possible, as both can reveal their similar connections with ethical values and start-up success), without loss of much revealing power in comparison to monetized pay of social insurance. This dichotomous variable is therefore our selection of compensation.

Furthermore, their research selects a firm’s growth in sales and the number of employees for evaluating firm performance. We also choose a sales growth variable for our definition of start-up performance, but in addition, to remain consistent with our definition of start-up success, we choose the age of start-up as our measurement of survival time as start-up success as well.

These selections of compensation and firm performance are important to ensure the validity of variables for the measurement of concepts of the mediation model. Using other compensation and start-up success variables helps understand whether or not their discovery about the non-existence of relationship should be restricted to the variables themselves, or whether or not their discovery can be generalized to the non-existence of mediation model. These two researches thus complement with each other.

Though their drawn data sets have a better sampling method than our data sets, their data sets are gathered from top performing entrepreneurs in the United States, whereas our data sets are based on typical entrepreneurs in China. Top performing entrepreneurs
with high-growth entrepreneurial ventures may differ from typical entrepreneurs (Tomczyk et al., 2013) or long-life entrepreneurial ventures. Kongo Gumi, Japanese temple builder since the 578, which was the world’s oldest continuously operating business, had only around US$67.6 million revenue in 2004, before its demise in 2006 (Hutcheson, 2007). A different approach may also be seen between those entrepreneurs in United States and Chinese entrepreneurs. Different mediation paths can be shown in different studies. The difference in context can explain the contrasts between our conclusions, obtaining insight on the generalizability of the mediation model.

Their results of the regressions are also contrasting with our results in three ways:

First, their results of the regressions indicate that other-caring terminal values are negatively correlated with the performance of firm, but correlating instrumental values with firm performance has mixed results (positive with sales growth, but insignificant with employee growth). Our results, on the other hand, point out the positive correlations of familism, work ethics and emphasis on reputation on revenue growth (while employee growth was not available in our data sets). These two results aggregated, scholars should note one point: personal or ethical values are not a single element, but are multi-dimensional, with various dimensions having divergent effects to start-up performance and success. We must be precise in stating the particular value in the research, because its effects might not be generalizable to other values.

Second, the correlation between other-caring values and the total number of benefits offered is not supported by their data. The correlation between ethical values (anti-individualism in particular, as similar as other-caring values) and social insurance, conversely, is fairly supported by our data. The relevant ethical values have some grounds to influence social insurance ie, not being traded off, true effects (controlling or partial-in out ethical tolerance and technological impact), and having impacts to compliance implementation actions in social insurance. These differing results, as mentioned before, can be due to the differences in the selection of values, compensation, or the usage of data. Their conclusion of the non-existence of the meditational pathway, thus, should be re-examined further in future papers.

Third, while their model show that the extent of benefits directly and positively influence firm performance, whose direction and effect size remain similar when other-
caring values are included in their analysis, our model, alternatively, demonstrates that some partial and minimum compliance implementation actions negatively correlate to revenue growth as the performance of start-up. The difference in the direction of influence and correlation between two models is because of implementation details, which can have divergent effects to the performance and success variables (Murphy et al., 1992). In spite that we are not sure about the implementation details of their firms, these details are presented by our start-up owners. Some owners supplement gifts to employees, recruit rural residents, provide different insurance contribution levels to different segmentation of workforce, and reduce employee recruitment, in order to reduce social insurance costs. These implementation actions convey a lack of fairness to employees in the firm, which destroys the cultures of effective organizations (Koys, 1997; Ulrich & LaFasto, 1995), despite meeting the minimum standard of social insurance. So these implementation actions have negative correlations with growth percentage. The implementation details are consequently important in understanding the direction of the effect of benefits to firm performance. Contextual difference can also be the reason of the difference in the direction of effect. In the United States, more benefits and variable pay are relatively more accepted as a better compensation. These provided benefits help employees work toward the common goal of firm (Welbourne & Andrews, 1996). Social insurance, in contrast, is under transition in China. The absence of social insurance is not viewed particularly unfair, whereas it is also not particularly attractive, especially when some employees have a lower trust on social insurance. Hence, the positive motivation of social insurance to employees can be limited. As a positive influence is limited, providing social insurance benefits even consumes resources which can slow down the revenue growth of start-ups in China.

Their limitations are improved in our current research as well. Our measuring of personal and ethical values is less restricted. We design our survey to explore more values eg, familism, integrity, work ethics, and anti-individualism, emphases on reputation, trust, and reciprocities, relationships or guanxi to the people in a greater depth (whilst rejecting their seek for the creation of a composite variable, due to the divergent effects of component values in such a variable). In addition, we agree with their proposal to differentiate the stakeholders (family and friends, employees, and customers and clients) at which other-caring behaviour is directed, which is similar to the different range of stakeholders we hope to capture for the emphases on reputation. On top, we answer their call for looking at values that draw on self-interest ie,
individualism in this further study. Despite, those individualist founders did not seem to have long survival time of start-ups. Tomczyk et al. (2013) consider these self-interest values can allow more direct comparison to the agency theory literature in further studies (Jensen & Meckling, 1976).

Through the comparison of the mediation models between Tomczyk et al. (2013) and this research, we has determined that our contribution for research in the academic study of entrepreneurship is to discover that the non-existence of mediation model in their conclusion can be undermined by our argument that other entrepreneurs’ values eg, ethical values can influence the performance and the success of a new venture in other contexts. The benefit practices implemented are also greatly influential to the existence of mediation models.

6.2 Problems and Limitations

This research has some problems and limitations that will be structured in the following: research method, definitions, and research approach. Research methodological part will concern with research design and method used, which will restrict the generalization of our findings. Then, the ambiguous nature of terms will be our second difficulty. The research approach section will also connect to the particular approach we are dealing with the questions in this thesis.

Research Method

First of all, because of the restrictions of time and resources available for the scope of this research, it was not feasible for a more sophisticated analysis of variance patterns and relationships within and between conceptual structures with structural equation modelling (“SEM”) (Cheung & Lau, 2008; Cole & Maxwell, 2003). This research only used factor analyses and multiple regressions to examine empirical surveys. In particular, the factor analyses did not output the goodness of fit indices eg, Chi-square ($\chi^2$), degree of freedom ratio, root mean square error of approximation (“RMSEA”), comparative fit indicator (“CFI”), goodness of fit indicator (“GFI”), Tucker-Lewis indicator (“TLI”), and root mean square residual (“Standardized RMR”) of the factor analyses, nor a path analysis was made to suggest the structural relationships of concepts. These two more sophisticated analyses – confirmatory factor analysis (“CFA”) and path analysis – are the measurement and structural modelling that combines to a full
SEM model. Our research and mediation model are open for the use of a full SEM model. This full SEM model will be one of the areas we will work on for future research.

Second, though non-parametric correlation had come with less assumption on the interrelationships among the variables (Healey, 2008), it was difficult for cross-sectional statistical evidences to provide a causality of implications in social insurance decision. Some correlations could be explained by turning cause and effect around. Owing to this nature of statistical method, the causality relationship was sorted out by the triangulated use of both interview and questionnaire, which could thus provide a more convincing causality argument. The causality argument could also be supplemented by the longitudinal questionnaire planned in the future.

Third, the issue of operationalization method was constrained as a result of limited information access. The exact numbers of some variables eg, number of employees, total incomes/revenues, or social insurance costs, could not be provided willingly in most cases. Ordinal variables were thus used to mask the exact figures (for a higher willingness of response), but retaining the number ranking that could be used for our statistical tests. Some detailed attributes and measures such as net present value could neither be used. High demand for information, difficulties of characterization, or information access of these variables made them infeasible for use in real questionnaires. These operationalized variables might not represent the complete aspects of those reflected concepts too.

Fourth, more convenient sampling was the more feasible sampling method, given the restricted freedom of doing our research project in China. Speech censoring in the region imposed difficulties to random data collection and analysis. The bias of this non-random sampling should be taken account of. On the one hand, not including the entrepreneurs searched from personal relationships, the companies were identified from local business directories and an online research portal. The companies on the directories and the portal were thus the sample frame. However, for instance, whether or not a respondent was the user of this platform, neither explained his ethical decision or entrepreneurial success, nor censored unethical or unsuccessful start-ups. The unrepresentative character of our sample therefore did not violate the two suppositions about the error term as described in Manion (1994). On the other hand, our sample was also subject to weight and post stratification, in order to resemble major demographic
sample parameters to those of population. These demographic variables were further added to correlation and regression models (Manion, 1994). These statistical techniques should remedy the bias of non-random sampling, thus deemed sufficient for inferring relationships between parameters (Manion, 1994).

Fifth, interviews and self-completion questionnaires had their own pros and cons. Interviewing dealt with the concern of validity (the accurate performance of a measure) better than self-completion questionnaire. In the interviewing, the cost control is represented through one’s weight of the importance of cost control from trade-off method; while asking for direct importance judgments is used in the self-completion questionnaire instead. The trade-off method is a better way to elicit criteria weights than asking for direct importance judgments. Such a relative position, however, were reversed in terms of reliability (the consistent performance of a measure). Comparing two methods, internal validity (causality) was higher in interview, whereas external validity (generalizability) was greater in questionnaire (Bryman, 2001). To remedy the biases of a single method, methodological triangulation was therefore used to enhance the reliability and validity of research results (Bryman, 2001), which could increase the generalizability of our research as well.

Sixth, the issue of residual influences could be a challenge. To measure the residual influences to compliances stages, we used R square coefficients, which gauged how much variations of compliance stages were explainable in the regression models (see Section 5.1.1). The R squares were moderate for compliance stages, thus these models had not been exhaustive. More decision criteria eg, ethical, non-ethical, technological, emotional or political criteria could be added in explaining compliance stages in social insurance. These criteria could also be integrated into our model. The threat of residual influence, nonetheless, was common in similar kinds of behavioural research, since heterogeneity was shown with respect to ethical values held by small business owners (Dawson, Breen, & Satyen, 2002). The residual influences to entrepreneurial success could also be a challenge.

Definitions
Seventh, key terms such as ethics and entrepreneurship had been ambiguous in definition, such that what counted as a good representation of these concepts was debatable. Our selection of ethical values and our meaning of entrepreneurial success
could create doubts to the research results. To deal with this definitional issue, a clear rationale about the selection and the meaning had been offered, for a better clarification to our readers.

Research Approach
Eighth, the selection of social insurance as a decision context to approach the CSF belief could also be questioned. The small picture of social insurance decision was used in this research to give a big picture; therefore it could be subjected to a question of representativeness. The selection of social insurance decision, however, was not arbitrary, but systematic according to three criteria: ethical, entrepreneurial, and long-term critical. Social insurance context was both ethical and entrepreneurial. In addition, as employee management was the single most important issue to deal with in building a new venture, in which ethical and legal errors made early on could be extremely costly for a new company down the road (Barringer & Ireland, 2012), thus social insurance was critical in the long term as well. These three criteria will need to be met by alternative decision contexts for them to be selected in future research.

Last but not least, using more convenient data from entrepreneurial firms in China could be criticized for the rigour of methods. In Chinese areas studies articles, however, there was a longer tradition that had been based on qualitative research, particularly in a political environment that was sceptical about enterprises (Manion, 2008). Survey research was still relatively immature. Survey research by economists and sociologists that to varying degrees bore on Chinese politics, was non-representative to a fairly substantial count (Manion, 2010). Relatively even fewer integrated original qualitative and survey research in a single project (Manion, 2008). In our research of social insurance, which to certain degrees bore on Chinese politics, integrating original interviews and questionnaires with convenient data should therefore be a welcomed better-offs than comparable research in Chinese area studies (Manion, 2008).

6.3 Future Directions
Overall, ethical values, in terms of ethical values, have some grounds, through social insurance practices, to be a critical success factor of entrepreneurship. Although this research has explored mediation models by studying a group of entrepreneurs in both interview and questionnaire approaches, we acknowledged that we should seek to
further test the mediation models to improve our research in this area. This section will aim to indicate some future directions on ethics and entrepreneurship.

Common critical success factor belief can be expressed in the following propositional logic (see Equation 5).

**Equation 5**

\[ (\neg e \rightarrow \neg d) \land (\neg d \rightarrow \neg s) , \]

where the term e is ethical values (ethical ideologies and reputation), d is ethical decision (social insurance practices), and s is survival time (start-up performance and success) in entrepreneurship in this equation. The common belief assumes that ethical values positively influence ethical decision that positively influences entrepreneurial success, while ethical values are considered as a necessary but not a sufficient condition to start-up success in the CSF belief as well.

Section 5.4 has explored this area to propose the mediation models for the CSF belief. However, our proposed mediation models did not match completely with the common belief. In the mediation model, ethical values (work ethics) and social insurance practices (trying to reduce employee’s total wage for low insurance premiums) have significant monotonic and negative relationships with each other. In other words, ethical content decided the sign of the e-d relationship, which is not corresponded totally by the positive sign of the e-d relationship in the common belief. Then, this social insurance implementation (reducing employee’s total wage for low insurance premiums) has a negative relationship with the survival time as entrepreneurial success. The sign of the d-s relationship is determined by the contents of implementation and success as well, whose difference cannot be explained by the common belief.

This research on the CSF belief therefore calls for future directions as follows:

First of all, we will have to examine the term e (ethical values) in the CSF belief. What ethical values will we talk about? The relevant ethical values will influence ethical decision that will affect the likelihood of entrepreneurial success. Personal or ethical values are not a single element, but are multi-dimensional, with various dimensions
having divergent effects to start-up performance and success. The proposed mediation models will therefore diverse for various ethical values examined in the CSF belief.

Second, the \( \sim e \rightarrow \sim d \) logic will need to be examined. The insignificant correlation between other-caring values and the total number of benefits offered in Tomczyk et al. (2013)’s data, and the positive correlation between anti-individualism and social insurance in our data, reveal that the relationship between ethical values and social insurance practices can be contingent in the selection of values, compensation, or the usage of data. Other ethical decisions that are ethical, entrepreneurial and long-term critical can satisfy the role of mediator too. There can also be other non-decision mediators eg, innovation between ethical values and entrepreneurial success too. For example, supportive supervision and a caring, consultative working atmosphere emphasized by entrepreneurs are valued by their creative employees (Rice, 2006), so this supportive, non-controlling fashion of supervisory behaviour combines with creativity-relevant characteristics of creative employees to produce more creative work (Oldham & Cummings, 1996). Consequently, these studies suggest that ethical values concern with creativity in the working environment, which can in turn support entrepreneurial success (Bierly et al., 2009).

Third, the \( \sim d \rightarrow \sim s \) logic will need examination. The direct and positive influence of the extent of benefits on firm performance in Tomczyk et al. (2013), is different from the negative relationships of some partial and minimum compliance implementation actions, and revenue growth as the performance of start-up. The difference in the direction of influence and correlation between two models implies that different implementation details can have divergent effects to the performance and success variables (Murphy et al., 1992). The difference in the direction of effect can also suggest contextual difference between different countries.

Fourth, the term s (start-up performance and success) in the CSF belief can be diverse across entrepreneurs as well. The meaning of start-up success must be well defined. Some potential payoffs to ethical organizations eg, better access to capital, decreased vulnerability, improved brand reputation, improved customer loyalty, improved employee commitment, and potential avoidance of fines (Barringer & Ireland, 2012) are regarded as ends sometimes. These ends, nonetheless, can be regarded as means to higher ends such as net profits, total incomes/revenues, growth percentage, and the
survival time of start-ups. There can be other non-economic eg, social and political ends too. The meaning of start-up success should be offered in exploring the mediation models of the CSF belief.

Fifth, the proposition logic can also be affected by different stages of growth in entrepreneurship.

**Figure 31: Stages of Venture Growth (Hunter & Tan, 2004; Timmons, 1994)**

The stages of venture growth are represented in the figure (see Figure 31) (Hunter & Tan, 2004; Timmons, 1994). In research and development (“R&D”) stage (a.k.a. nascent stage), a single aspiring entrepreneur does an investigation and due diligence for his or her business idea (Timmons, 1994). Then the entrepreneur directly and exhaustively drives, energizes entrepreneurial talents to start up a company in the second start-up stage. Third, high growth stage begins with a continually increasing rate of growth or the slope of revenue curve. Next, a company moves to non-survival-driven, but growth-driven maturity stage, before it comes to a stability stage or a decline stage.

In different stages of growth, we have different time, sales, and number of employees, so different success factors. Ethical values can be or not a success factor in some stages of growth in entrepreneurship. *Chow (2003)* suggests that ethics is a subconscious level success factor, spiritual value and fate, which is different at different stages of success of entrepreneurship. In the R&D stage, ethics is less critical, because it is only a single idea. At the start-up stage, ethics is less important than the later stages. These ethical values can become a guiding principle for pursuing an ultimate goal at the ‘ideal stage’ (Chow, 2003), or stability stage in Timmons (1994)’s term – a successful stage that the
company are famous. The impact of ethical values on entrepreneurship at different stages of growth therefore deserves future research.

Last but not least, the research approach in this thesis is transferable to the investigation of other critical success factors as well. Common success factors – eg, risk-loving, profit exploitation, and innovation – can be researched, alongside with success factors examined in Feindt, Jeffcoate, and Chappell (2002) or Van Praag (2003), in addition to the leadership characteristics and styles in Chow (2003) and Wang, Lee-Davies, Kakabadse, and Xie (2011) in the context of Hong Kong and China. The common success factors in non-entrepreneurial management discipline (Collins (2011) or Collins and Porras (2011)) can be interesting future directions as well.
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## Appendices

### 1. Exhibit: Sampling Report (The Profile of Entrepreneur)

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Industries</th>
<th>Capital (10,000)</th>
<th>Entities</th>
<th>Date</th>
<th>Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vice General Manager</td>
<td>Heat technologies</td>
<td>435 Rmb</td>
<td>Limited liability companies (natural person investment or holding)</td>
<td>2006</td>
<td>Panyu</td>
</tr>
<tr>
<td>2</td>
<td>General Manager</td>
<td>Electronic technology</td>
<td>450 US$</td>
<td>Limited liability companies (foreign investment)</td>
<td>2010</td>
<td>Zhongshan</td>
</tr>
<tr>
<td>3</td>
<td>Chain Manager</td>
<td>Pharmaceutical</td>
<td>-</td>
<td>Limited liability companies (corporate owned)</td>
<td>2004</td>
<td>Guangzhou</td>
</tr>
<tr>
<td>4</td>
<td>Managing Director</td>
<td>Jewellery</td>
<td>-</td>
<td>Local companies + private companies</td>
<td>1992</td>
<td>Panyu</td>
</tr>
<tr>
<td>5</td>
<td>General Manager</td>
<td>Lighter</td>
<td>-</td>
<td>-</td>
<td>1998</td>
<td>Wenzhou</td>
</tr>
<tr>
<td>6</td>
<td>The Son of General Manager</td>
<td>Trading</td>
<td>-</td>
<td>Local companies + private companies</td>
<td>1999</td>
<td>Dongguan/Huizhou</td>
</tr>
<tr>
<td>7</td>
<td>General Manager</td>
<td>Textile Information technology</td>
<td>-</td>
<td>Local companies + private companies</td>
<td>2010</td>
<td>Shenzhen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trading</td>
<td>-</td>
<td>Local companies + private companies</td>
<td>2010</td>
<td>Shenzhen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local companies + private companies</td>
<td>2011</td>
<td>Shenzhen</td>
</tr>
<tr>
<td>8</td>
<td>Owner</td>
<td>Gourmet restaurant</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Guangzhou</td>
</tr>
<tr>
<td>9</td>
<td>General Manager</td>
<td>Realty agency</td>
<td>0 Rmb</td>
<td>Limited liability companies division</td>
<td>2003</td>
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<td>Plastic Industry</td>
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<td>1997</td>
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<td>11</td>
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<td>1999</td>
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<tr>
<td>12</td>
<td>General Manager</td>
<td>Marketing &amp; research consultants</td>
<td>50 Rmb</td>
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<td>Property management</td>
<td>503 Rmb</td>
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<td>10 Rmb</td>
<td>Limited liability companies (natural person sole proprietorship)</td>
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## Exhibit: Sampling Report (Demographic Variables)

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### Exhibit: Codebook

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<tr>
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<td>Discipline</td>
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<td>[1, No academic discipline; 2, Architecture; 3, Arts; 4, Business and Economics; 5, Dentistry; 6, Education; 7, Engineering; 8, Law; 9, Medicine; 10, Science; 11, Social Sciences; 12, Any other]</td>
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<td>Dummy for discipline in Arts</td>
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<td>V9Time</td>
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<td>V9Stage</td>
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<td>V9Status</td>
<td>Survival</td>
<td>Survival</td>
<td>[0, Non-survival; 1, Survival]</td>
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<td>Number of employees</td>
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<td>V11</td>
<td>Revenues</td>
<td>Total incomes/revenues</td>
<td>[1, &lt;=4%; 2, 5% - 14%; 3, 15% - 24%; 4, 25% - 34%; 5, 35% - 44%; 6, 45% - 54%; 7, 55% - 64%; 8, 65% - 74%; 9, 75% - 84%; 10, 85% - 94%; 11, 95% - 99%; 12, &gt;= 100%]</td>
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<td>V12</td>
<td>Costs</td>
<td>Total costs of total revenues</td>
<td>[0, Not in institution; 1, institution]</td>
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<td>Institution</td>
<td>Institution of occupation</td>
<td>[1, Government or public institution; 2, Private business or industry; 3, Private non-profit organization; 4, Foreign invested enterprises; 5, Other; 6, Don't know]</td>
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<td>Dummy for institution in SOE</td>
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<td>InstitutionPOE</td>
<td>Dummy for institution in POE</td>
<td>[0, Not in institution; 1, institution]</td>
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<td>V13DumNGO</td>
<td>InstitutionNGO</td>
<td>Dummy for institution in NGO</td>
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<td>Dummy for institution in FIE</td>
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<td>V14</td>
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<td>Industries</td>
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Manufacturing; 4, Production and Supply of Electricity Gas and Water; 5, Construction; 6, Geological Prospecting and Water Conservancy; 7, Transport, Storage, Postal & Telecommunication Services; 8, Wholesale and Retail Trades & Catering Services; 9, Finance and Insurance; 10, Real Estate; 11, Social Services; 12, Health Care, Sports & Social Welfare; 13, Education, Culture and Arts, Radio, Film and Television; 14, Scientific Research and Polytechnic Services; 15, Government Agencies, Party Agencies and Social Organizations; 16, Others

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<th>Dummy for industries in Agriculture</th>
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<td>Dummy for industries in Mining</td>
</tr>
<tr>
<td>V14DumManufacturing</td>
<td>IndustriesManufacturing</td>
<td>Dummy for industries in Manufacturing</td>
</tr>
<tr>
<td>V14DumProduction</td>
<td>IndustriesProduction</td>
<td>Dummy for industries in Production</td>
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<tr>
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<td>[0, Not in industries; 1, industries]</td>
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<td>V14DumReal</td>
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<td>V14DumEducation</td>
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<td>[0, Not in industries; 1, industries]</td>
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<td>V14DumGovernment</td>
<td>Dummy for industries in Government</td>
<td>[0, Not in industries; 1, industries]</td>
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<td>V15 WageCosts</td>
<td>Total wage costs of total costs</td>
<td>[1, &lt;=4%; 2, 5% - 14%; 3, 15% - 24%; 4, 25% - 34%; 5, 35% - 44%; 6, 45% - 54%; 7, 55% - 64%; 8, 65% - 74%; 9, 75% - 84%; 10, 85% - 94%; 11, 95% - 99%; 12, &gt;= 100%]</td>
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<tr>
<td>V16 SocialInsuranceCosts</td>
<td>Total social insurance costs of total wage costs</td>
<td>[1, &lt;=4%; 2, 5% - 14%; 3, 15% - 24%; 4, 25% - 34%; 5, 35% - 44%; 6, 45% - 54%; 7, 55% - 64%; 8, 65% - 74%; 9, 75% - 84%; 10, 85% - 94%; 11, 95% - 99%; 12, &gt;= 100%]</td>
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<td>V17 NoNewEmployees</td>
<td>Number of new employees</td>
<td>[1, Less than 10 employees; 2, 10 to 50 employees; 3, 50 to 100 employees; 4, 100 or more employees]</td>
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<tr>
<td>V18 Increase%</td>
<td>Increase percentage</td>
<td>[1, &lt;=4%; 2, 5% - 14%; 3, 15% - 24%; 4, 25% - 34%; 5, 35% - 44%; 6, 45% - 54%; 7, 55% - 64%; 8, 65% - 74%; 9, 75% - 84%; 10, 85% - 94%; 11, 95% - 99%; 12, &gt;= 100%]</td>
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<td>V19_4</td>
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<td>V19_5</td>
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<td>Code</td>
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<td>V22_2</td>
<td>Judgment/Intent</td>
<td>Judgment/Intent of social insurance provisions</td>
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<td>V23_1</td>
<td>DecisionBasic</td>
<td>Business decision: basic endowment insurance</td>
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<td>DecisionUnemployment</td>
<td>Business decision: unemployment insurance</td>
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<td>Business decision: maternity insurance</td>
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<td>Decision</td>
<td>Decision of social insurance provisions</td>
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<td>V24_1</td>
<td>ImplementationEmployer</td>
<td>Implementation: employers’ insurance premium</td>
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<td>ImplementationIndividual</td>
<td>Implementation: individuals’ insurance premium</td>
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<td>ImplementationReimbursement</td>
<td>Implementation: basic endowment insurance reimbursement</td>
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<td>V25_1</td>
<td>ImplementationNoRegistration</td>
<td>Implementation action: not to handle social insurance registration</td>
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<tr>
<td>V25_2</td>
<td>ImplementationSomeRegistration</td>
<td>Implementation action: handle some but not all employees’ social insurance registration</td>
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<td>V25_4</td>
<td>ImplementationPartWage</td>
<td>Implementation action: issue a partially correct certificate of employment wage</td>
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<td>V25_5</td>
<td>ImplementationPartPay</td>
<td>Implementation action: pay social insurance premiums late or in partial</td>
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<td>V25_6</td>
<td>ImplementationGiftEmployee</td>
<td>Implementation action: supplement gifts to employees</td>
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<td>V25_7</td>
<td>ImplementationGiftGovernment</td>
<td>Implementation action: give gifts to Government</td>
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<td>V25_8</td>
<td>ImplementationFine</td>
<td>Implementation action: accept imposed fine as normal cost</td>
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<td>V25_9</td>
<td>ImplementationUnclearArea</td>
<td>Implementation action: use the unclear area of provisions</td>
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<tr>
<td>V25_10</td>
<td>ImplementationRecruitRural</td>
<td>Implementation action: recruit rural residents</td>
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<tr>
<td>V25_11</td>
<td>ImplementationRecruitPartTime</td>
<td>Implementation action: recruit part-time employees and other persons in flexible employment, the staff governed analogically by the Civil Servant Law, foreign migrant workers or foreigners, who have low insurance contribution level</td>
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<td>V25_12</td>
<td>ImplementationSegment</td>
<td>Implementation action: provide different insurance contribution levels to different segmentation of workforce</td>
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<td>V25_13</td>
<td>ImplementationReduceWage</td>
<td>Implementation action: reduce employee total wage</td>
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<td>ImplementationReduceRecruitment</td>
<td>Implementation action: reduce employee recruitment</td>
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<td>ImplementationReduceBonus</td>
<td>Implementation action: reduce employee total bonus</td>
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<td>V25_16</td>
<td>ImplementationAddBusinessRegistration</td>
<td>Implementation action: provide additional business social insurance registration</td>
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<td>V25_17</td>
<td>ImplementationAddSchedule</td>
<td>Implementation action: workers can select different insurance schedules</td>
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<td>ImplementationPerformance</td>
<td>Implementation action: workers’ performance determines the insurance level</td>
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<td>ImplementationImproveLevel</td>
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### Exhibit: Region

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<th>Provinces/Municipalities/Autonomous regions</th>
<th>Administrative Unit</th>
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<td>Autonomous region</td>
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</table>
5  Exhibit: Original Questionnaire

(English Version)

V1. Hukou (provinces/municipalities/autonomous regions)
   a) Beijing
   b) Tianjin
   c) Hebei Province
   d) Shanxi Province
   e) Neimenggu (Inner Mongolia) Province
   f) Liaoning Province
   g) Jilin Province
   h) Heilongjiang Province
   i) Shanghai
   j) Jiangsu Province
   k) Zhejiang Province
   l) Anhui Province
   m) Fujian Province
   n) Jiangxi Province
   o) Shandong Province
   p) Henan Province
   q) Hubei Province
   r) Hunan Province
   s) Guangdong Province
   t) Guangxi Province
   u) Hainan Province
   v) Chongqing
   w) Sichuan Province
   x) Guizhou Province
   y) Yunnan Province
   z) Xizang (Tibet) Province
   aa) Shaanxi Province
   bb) Gansu Province
   cc) Qinghai Province
   dd) Ningxia Province
   ee) Xinjiang Province
   ff) Hong Kong
   gg) Macau
   hh) Taiwan
   ii) Any other (write in): ________________

V2. Sex
   a) Male
   b) Female

V3. Can you tell me your year of birth, please? ______

V4. What is the number of years have you attended your full time education, either at school or at an institution of higher education? Please exclude apprenticeships: ________

V5. What is the highest educational level that you have attained?
   a) No formal education
   b) Primary school
   c) Secondary school: technical/vocational type
   d) Secondary: university-preparatory type
   e) University-level education, with degree
   f) University-level education, with postgraduate degree
   g) Any other (write in): ________________

V6. What is the academic discipline?
a) No academic discipline  
b) Architecture  
c) Arts  
d) Business and Economics  
e) Dentistry  
f) Education  
g) Engineering  
h) Law  
i) Medicine  
j) Science  
k) Social Sciences  
l) Any other (write in):_______________  

V7. Are you employed now or not?  
a) Full time employee (30 hours a week or more)  
b) Part time employee (less than 30 hours a week)  
c) Self employed  

V8. The name of your start-up  
V9. Can you tell me your start-up’s year of establishment, please? ____  

V10. About how many employees have you employed now?  
a) Less than 10 employees  
b) 10 to 50 employees  
c) 50 to 100 employees  
d) 100 or more employees  

V11. We would like to know what your start-up’s total revenue is last year.  
V12. We would like to know in what percentage your start-up’s total cost is of total revenue last year.  
a) <=4%  
b) 5% - 14%  
c) 15% - 24%  
d) 25% - 34%  
e) 35% - 44%  
f) 45% - 54%  
g) 55% - 64%  
h) 65% - 74%  
i) 75% - 84%  
j) 85% - 94%  
k) 95% - 99%  
l) >= 100%  

V13. Are you working for the government or public institution, for private business or industry, or for a private non-profit organization? Do you work for:  
a) Government or public institution  
b) Private business or industry  
c) Private non-profit organization  
d) Foreign invested enterprises  
e) Other  
f) Don’t know  

V14. Are you working for the industries:  
a) Agriculture, Forestry, Animal Husbandry and Fishery  
b) Mining and Quarrying  
c) Manufacturing  
d) Production and Supply of Electricity Gas and Water  
e) Construction  
f) Geological Prospecting and Water Conservancy  
g) Transport, Storage, Postal & Telecommunication Services  
h) Wholesale and Retail Trades & Catering Services  

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i) Finance and Insurance  
j) Real Estate  
k) Social Services  
l) Health Care, Sports & Social Welfare  
m) Education, Culture and Arts, Radio, Film and Television  
n) Scientific Research and Polytechnic Services  
o) Government Agencies, Party Agencies and Social Organizations  
p) Others  

V15. We would like to know in what percentage your start-up’s wage cost is of total cost last year.  
V16. We would like to know in what percentage your start-up’s social insurance cost is of wage cost last year.  
V17. About how many new employees do you employ each year?  
a) Less than 10 employees  
b) 10 to 50 employees  
c) 50 to 100 employees  
d) 100 or more employees  
V18. About how many percentages does your start-up increase each year?  

V19. Indicate how much you agree with each of the following individual value.  
a) Family is important in your life  
   i) Very disagree  
   ii) Disagree  
   iii) Neither disagree nor agree  
   iv) Agree  
   v) Very agree  
b) It is humiliating to receive money without working for it  
c) People who don’t work become lazy  
d) Work is a duty toward society  
e) One of my main goals in life has been to make my parents proud  
f) More emphasis on family life in our way of life would be a good thing  

V20. Indicate how much you reject to each of the following others’ behaviour.  
a) Individualism  
b) Indolent and wallow in luxuries and pleasures  
c) Dependence  
d) Neglect family in their life  
e) Make gains at others’ expense and sacrifice ethics for profit  
f) Chaotic and lawless  

V21. Now I will briefly describe some people. Would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you?  
a) It is important to this person to think up new ideas and be creative; to do things one’s own way  
b) Reciprocity or relationship with the people nearby is important to this person  
c) Trust is important to this person; to have people trust this person  
d) It is important to this person to always behave properly; to avoid doing anything people would say is wrong  
e) Reputation is important to this person  

V22. Indicate how much you agree with each of the following social situation.  
a) Current Government social insurance provisions are adequate  
b) All in all, would you say you prefer social insurance provisions?  

V23. Indicate whether you administer with each of the following social insurance provision.\(^\text{17}\)  

\(^\text{17}\) Social insurance: As the core of the social security system, social insurance includes basic endowment insurance, medical insurance, employment injury insurance, unemployment insurance and maternity insurance.
a) Basic endowment insurance
b) Unemployment insurance
c) Medical insurance
d) Employment injury insurance
e) Maternity insurance

V24. Indicate whether you agree with each of the following provision implementation.
   a) Increase employers’ insurance premium level
   b) Increase individuals’ insurance premium level
   c) Increase Government subsidies level
   d) Increase basic endowment insurance reimbursement level

V25. I’m going to write out some forms of implementation action that entrepreneur can take to
manage social insurance, and I’d like you to tell me, for each one, whether you would never
under any circumstances do it, whether you might do it or have done any of these things:

   a) Not to handle social insurance registration
      i) Would never do
      ii) Not likely do
      iii) Neither not likely nor likely
      iv) Likely do
      v) Very likely do
      vi) Have done

   b) Circumvent or escape
      i) Handle some but not all employees’ social insurance registration
      ii) Issue a partially correct certificate of employment relationship
      iii) Issue a partially correct certificate of employment wage
      iv) Pay social insurance premiums late or in partial amount
      v) Supplement gifts to employees
      vi) Give gifts to Government
      vii) Accept imposed fine as normal cost
      viii) Use the unclear area of provisions

   c) Minimum standard
      i) Recruit rural residents
      ii) Recruit part-time employees and other persons in flexible employment, the staff governed
          analogically by the Civil Servant Law, foreign migrant workers or foreigners, who have low
          insurance contribution level
      iii) Provide different insurance contribution levels to different segmentation of workforce
      iv) Reduce employee total wage
      v) Reduce employee recruitment
      vi) Reduce employee total bonus

   d) Improved level
      i) Provide additional business social insurance registration eg, annuities
      ii) Workers can select different insurance schedules
      iii) Workers’ performance determines the insurance level
      iv) Comprehensively improve insurance contribution level

V26. What would you consider to decide whether you take these forms of implementation action to
manage social insurance?

   a) Corporate profits
   b) Corporate ideologies
   c) Corporate reputation
   d) Long term strategies and success
   e) Any other (write in):_______________

V27. Any other you think should comment.

V28. In the future, we can provide a follow-up consultancy or research; can I ask are you interested?

V29. Would you please tell me your contact method?
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8 Exhibit: Association (Compliance Stages versus Compliance Stages)

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<td>-.042</td>
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<td>Hosmer and Lemeshow Chi-square or F Sig.</td>
<td>.005**</td>
<td>.000**</td>
<td>.000**</td>
<td>.018*</td>
<td>.137</td>
<td>.082+</td>
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* p <= .05. ** p <= .01.
### Exhibit: Association (Social Insurance versus Start-up Success)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V18</th>
<th>V9Time</th>
<th>V9Time (r)</th>
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</thead>
<tbody>
<tr>
<td>ImplementationNoRegistration</td>
<td>Correlation .025</td>
<td>.028</td>
<td>.171+</td>
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<tr>
<td>ImplementationSomeRegistration</td>
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<td>.019</td>
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<td>ImplementationPartCertificate</td>
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<td>.041</td>
<td>-.094</td>
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<td>ImplementationPartWage</td>
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<td>ImplementationPartPay</td>
<td>Correlation .095</td>
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<td>-.075</td>
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<tr>
<td>ImplementationGiftEmployee</td>
<td>Correlation -.207</td>
<td>.023</td>
<td>.158+</td>
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<tr>
<td>ImplementationGiftGovernment</td>
<td>Correlation .003</td>
<td>.045</td>
<td>-.135</td>
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<tr>
<td>ImplementationFine</td>
<td>Correlation -.065</td>
<td>-.120</td>
<td>-.189*</td>
</tr>
<tr>
<td>ImplementationUnclearArea</td>
<td>Correlation .053</td>
<td>-.094</td>
<td>.180+</td>
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<tr>
<td>ImplementationRecruitRural</td>
<td>Correlation -.310+</td>
<td>.072</td>
<td>.022</td>
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<tr>
<td>ImplementationRecruitPartTime</td>
<td>Correlation -.060</td>
<td>.101</td>
<td>.084</td>
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<tr>
<td>ImplementationSegment</td>
<td>Correlation -.226+</td>
<td>-.113</td>
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<td>ImplementationReduceWage</td>
<td>Correlation -.085</td>
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<td>.251**</td>
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<tr>
<td>ImplementationReduceRecruitment</td>
<td>Correlation -.197+</td>
<td>.044</td>
<td>-.070</td>
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<td>ImplementationReduceBonus</td>
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<td>-.132</td>
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<td>ImplementationAddBusinessReg</td>
<td>Correlation .158+</td>
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<td>ImplementationImproveLevel</td>
<td>Correlation .152</td>
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V18 Increase%. V9Time AgeStartup.

+ p <= .1.  * p <= .05.  ** p <= .01.
### Exhibit: Association (Ethical Values versus Start-up Success)

<table>
<thead>
<tr>
<th>Variables</th>
<th>V18</th>
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<th>V9Time me (r)</th>
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</thead>
<tbody>
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<td>FamilismEmphasis</td>
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<td>WorkDuty</td>
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<td>.176+</td>
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<td>ReputationReciprocities</td>
<td>Correlation</td>
<td>.003</td>
<td>.183+</td>
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<td>WeightIdeologies</td>
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<td>WeightReputation</td>
<td>Correlation</td>
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<td>-.053</td>
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</table>

V18 Increase%. V9Time AgeStartup.

+ p <= .1. * p <= .05. ** p <= .01.
13 Exhibit: Transliteration Table

<table>
<thead>
<tr>
<th>Pinyin spellings</th>
<th>Other systems spellings</th>
<th>Chinese characters</th>
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<td>Chi</td>
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<tr>
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<tr>
<td>Zhong</td>
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