

THE FORMATIONAL AND FUNCTIONAL MECHANISMS OF CHINTREPRENEURSHIP

THE MECHANISM OF CHINA-WAY OF ENTREPRENEURSHIP: COLLECTIVISM VS. INDIVIDUALISM

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Abstract

An extensive and in-depth review of literature leads to a series of unsettled conceptual questions: Is entrepreneurship the cause or the consequence of economic development? Why does an economic downturn provide opportunities for entrepreneurship? How is the mechanism of entrepreneurship differentiated between developed and emerging economies? By examining the path-dependent rise of Chintrepreneurship (China-way of Entrepreneurship), this paper argues that, neither Schumpeterianism nor Keynesianism alone is able to rationalize the tripartite model (Entrepreneurship, Industrial Upgrade and Economic Growth) in today's increasingly globalized and diversified business environment. Instead, the combination of the two camps may help to rationalize that, government is the most efficient and effective agent in adjusting the political-economical environment, cultivating the mechanism of entrepreneurship, and boosting an economic leapfrog, like the one happened in China. This paper is motivated to rationalize the mechanism of government intervention oriented entrepreneurship, which can be fostered, as a more valid and competitive mechanism now than ever, to stimulate and incentivize the capability of innovation and economic catch-up for developing economies. By defining a series of critical conditions and criteria, this paper proposes a BRIDGE model to rationalize how the theoretical framework of government intervention oriented Chintrepreneurship can serve to offset or overcome the weakness of existing literature, and to solve the dilemmatic puzzle: which one of individualism and collectivism is more contributive to the formational and functional mechanisms of entrepreneurship? The trade-offs and related issues of government intervention such as the impact of dual-track policy system on regional

and wealth disparities in China are discussed. Two case studies are presented and suggestions are made.

Keywords: Chintrepreneurship, Government Intervention, Dual-Track Policy System, Regional Disparity, Autocracy, Cronyism, Collectivism vs. Individualism, Mechanism of Entrepreneurship, Innovation, Private Ownership Right, BRIDGE Model

INTRODUCTION

Conventional framework of economics (ex.: laissez-faire with invisible hand) stipulates that, entrepreneurs are those individuals, willing to take risks to invest in new technologies and innovations, in the hope of creating market demand and generating business values. Often the case is that, an industrial revolution may be triggered, giving birth to new industries to massively promote the newly innovated products and services. For example, the emergence of information technology gives birth to internet, e-business and m-commerce industries, changing the entire way of life ever.

Following this line of logic, entrepreneurship has been branched out of management science and diverged into a discipline with a bunch of questions remained to be explored, including but not limited to: what theoretical progresses have been advanced from Schumpeterian framework of long waves? What is the theoretical nature of entrepreneurship in today's globalized economy? How can a new wave of entrepreneurship be cultivated to catalyze the economic competence of developing countries in today's global economic downturn? Why more and more disastrous news has been reported by Wall Street (the financial empire) in today's economy than in the past? Why one after another former entrepreneurial star has metamorphosed into crooks in today's economy? Why is it more difficult in today's economy to build a loyal consumer clientele and supply chain, than in the past?

Answers to these questions may help to ameliorate limitations, weaknesses and misconceptions of the extant literature, and to systematically theorize the deviations of the formational and functional mechanism of entrepreneurship between developed- and developing-countries. Therefore, this paper aims theoretically, to enrich and deepen the understandings of entrepreneurship in today's rapidly intensified and globalized business environment, and practically, to recover public confidence and trust to entrepreneurship as a solution for the presently depressed global economy.

Is Entrepreneurship the Cause or the Consequence to Economic Growth?

The term “entrepreneur” is referred to anyone who is able to identify frequently unrecognized opportunities, to create a new start-up business, to offer innovative or technological ways to transform those opportunities into new products/services and market values. To this end, the defining characteristic of entrepreneurship is genetically traceable to the academic pedigree of Schumpeterianism that, innovations and technologies constitutes the perennial gale of creative and destructive forces, to destroy or annihilate the old ones, while to create and replace them by new ones, and to propel the incessant and intrinsic process of industrial and economic mutations, even during the periods of economic downturns (Schumpeter, 2008[1942]). The essence of Schumpeterian creative destruction theory emphasizes the dynamic power of innovation, which is also defined as a genetic force of maximizing the value of outputs (productivities) from the inputs (resources), and hence, guiding industrial and economic evolution (Drucker, 1985). Aligned with this line of thought, entrepreneurship is described as a channel, for working class to become Burgeoning Bourgeoisie (The Economist, 2009b), and entrepreneurs is worshiped as business heroes (The Economist, 2009a), especially in propelling an economic renaissance during financial crisis and economic downturns (Posted by The Economist, Special Report: Entrepreneurship, on 12th March 2009).

Up to date, GEM (Global Entrepreneurship Monitor), initiated in 1998 by Babson College, is perhaps one of the mostly cited comprehensive initiatives in collecting annual data, comparing and analyzing the impacts of entrepreneurship on national economic performance across national boarder (OECD, 2002). Using a longitudinal data (1988-1999), GEM estimated a nation’s entrepreneurial activity by the share of individuals among the nation’s entire labor force, who either involved in starting a new venture, or managed a business in less than 42 months. The results showed a significant linear relationship between a nation’s entrepreneurial activity and its economic growth (Kantis, et al., 2002). Similar findings have been reported by using different variables. For instance, based on a sample of 14 manufacturing industries selected from 13 European countries, some scholars examined how the share of small firms may affect the output growth of the belonging industries. The results indicated that, an industry with high share of small firms in one country performed better in the subsequent 3-4 years, than the same industry with lower share of small firms in other countries (Carree & Thurik, 1998). Additional findings showed that, the intensity of market competition is linearly associated with the increased number of competitors, the increased share of entrepreneurs within the same industry, and consequently, the increased growth of industrial productivity (Nickell, 1996; Nickell, Daphne & Neil, 1997).

Some scholars claimed that, it is impossible for a country to have a high level of entrepreneurship, but simultaneously, a low level of economic growth (Reynolds et al., 2002). Furthermore, the level of a nation's entrepreneurship often determines its industrial transformation, from large shares of large enterprises to large shares of small- and medium-sized enterprises (Thurik & Wennekers 2001; Frijis et al., 2002). Such a transformation may reflect the combinative result of technological advancement and globally intensified competition, forcing large firms to adopt outsourcing strategies in order to achieve cost-advantages by exploiting the potentials of those ambitious and innovative entrepreneurs or SMEs with flexibilities and propensities to accommodate those technological and managerial talents (Audretsch & Thurik, 2001; Carree & Thurik, 2002).

In addition to the above ontological approaches, an institutional perspective has been established and applied to examine the relationship between entrepreneurship and economic development, stipulating that, the process of entrepreneurship is leveraged or adjusted through the process of institutional evolution. Without a well-established institutional system, entrepreneurship cannot even get a kickoff (Boettke & Coyne, 2003). Although, the mainstream of literature contends that, entrepreneurship is linearly associated with economic growth, however, how such a causal mechanism can be cultivated, developed and managed seems to be an unanswered question, discounting the generalizability of previous findings. A tacit consent that entrepreneurship leads to economic growth in the absence of institutional system seems to be conceptually misleading. Furthermore, the role of government intervention must be added in order to objectively evaluate the linear flow from institutional setting, through the development of entrepreneurship, and to economic growth (Zhao & Zhang, 2016; 2017).

Critiques argue that, in the discussion of entrepreneurship, previous literature may have overly stressed individual role, while neglected the power of collective wisdom and synergy. Quoted from Professor Qian that: "..... the China-way of entrepreneurship is a government oriented approach, effective in lowering the threshold for the mass-entrance, rather than a few entrepreneurs, so that the market can be disturbed more faster than" (An informal interview held on July 2nd, 2013, with Professor Qian, who is a professor of macro-economy at China RenMin University). Traditionally, entrepreneurship is essentially privileged to those ambitious individuals, aspired to destruct the old ways of doing business and replace them by innovative ones. Therefore, entrepreneurs must be knowledge and technology oriented in order to differentiate them from opportunists (Nwaobi, 2012). Nevertheless, individualism vs. collectivism in the formational and functional mechanism of entrepreneurship remains to be explored. Facing these unsettled issues, this paper argues that, the weakness of the extant knowledge on

entrepreneurship must be acknowledged and discussed. Overly depending on the experience of developed economies to explain the situation of developing countries seems to be a prejudiced roadmap (Zhao & Zhang, 2016; 2017). Lacking a robust methodological design for data collection and measurement from those developing countries makes previous research findings weak in terms of validity, reliability and generalizability (Torres, et al., 2012). Note that, the measurement of economic growth goes far beyond the numeric magnitude of increased/decreased outputs (i.e. income per capita, productivity, or monetary quote). Without systematically quantifying the impacts of entrepreneurship on the economic dimensions (i.e. poverty alleviation, employment rate, public health, quality of household life, and social well being), within a specifically defined timeframe, political, social, economical and cultural system, the validity, reliability and generalizability of the theoretical constructs on the causality of entrepreneurship and economic growth may be ruthlessly discounted (Zhao & Zhang, 2016; 2017).

The Delayed Delivery of Innovation and Early Bird Strategy – A Dilemmatic Trade-off

The Ewing Marion Kauffman Foundation, arguably the world's leading think-tank, defined that, 'replicative innovation' and 'innovative innovation' should be viewed as the two transitional phases of entrepreneurship (Excerpted from a Special Report: Entrepreneurship from The Economist posted on 12th March, 2009, and titled as Global Heroes, accessible at <http://www.economist.com/node/13216025>). Replicative innovation pervades mostly in developing economies as their catch-up strategy, due to their lack of technological capability. In contrast, Innovative innovation prevails mostly in developed economies, obliging to pursue a competitive or early bird strategy (Research and Ideas, The two faces of Entrepreneurship, part one: The article was posted on the 19th of July of 2006, accessible at: <http://research.wpcarey.asu.edu/economics/the-two-faces-of-entrepreneurship-part-one-replicative-entrepreneurs-serve-growing-population/>). William Baumol, a leading economist, focused on the dilemmatic relationship between innovation and entrepreneurship, and argued that, the optimal timing, speed and frequency of innovations are vital factors in the process of entrepreneurial decisions, and that, the longer the delivery of R&Ds, the more improvement or newness, and hence, the more achievable market value. However, a delayed delivery of innovation also gives competitors an opportunity to enhance their products/services. Therefore, a trade-off decision over the market opportunities is always a dilemma encountered by entrepreneurs (Baumol, 1993). To Baumol, entrepreneurship is a deviation from established business patterns and practices, partly determined by the capability of innovation supply, partly determined by the market incentives rewarded from the contribution of innovations, and

ultimately, determined by the specific settings of political, social and cultural norms in a specific society (Baumol, 2015).

A recently proposed peculiarity framework argues that, the varied forms of creating newness (new products and services, or new ways of doing things) determines the formational and functional mechanism of entrepreneurship, which is vitally determined by the peculiarly structured political-social, institutional and cultural settings within a specific timeframe (Zhao, 2016; 2017). In China for example, although a spectacular growth of economy, entrepreneurship is loosely associated with proprietary innovations. Instead, it is largely a result of rapidly massed imitative entrepreneurship, abetted and nurtured by its historically inherited autocratic, bureaucratic and cronyism-oriented political-economic system (Zhao, 2016). Given their limited technological and financial capabilities, creative or radical innovations are barely feasible in those developing economies. Instead, imitative innovation is their widely pursued way of entrepreneurship (Schmitz, 1989). According to GEM 2002 report, based on a survey of 37 countries representing about 62 per cent of the world population, 460 million adults around the world were engaged in activities of imitation or replication rather than breakthrough innovations (<http://www.gemconsortium.org/country-profile/99>). Two-thirds of the surveyed entrepreneurs were opportunity-oriented, while the rest are survival-oriented, trying to start businesses because they had no other job opportunities (EMPRETEC, 2004). By imitation/replication, entrepreneurs of developing countries can absorb, accumulate and even establish their own knowledge through the curve of learning-by-doing at minimum cost (Schmitz, 1989; Zhao, 2014; Zhao & Zhang, 2016). This may help explain why, although China was not appraised as a competitive country of innovation by a range of GEM dimensions (such as fear of failures, entrepreneurial intentions and efficiency-driven and so forth), nevertheless, it was ranked as one of the most competitive countries with better entrepreneurial performances than the average of those being surveyed (Global Entrepreneurship Monitor Reports, at: <http://www.gemconsortium.org/>; <http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Pages/home.aspx>; and https://entrepreneurship.bschool.cuhk.edu.hk/gem_hk/).

Why Does an Economic Downturn Provide Opportunities of Entrepreneurship?

A new economic pattern always evolves from its declining predecessor (Schumpeter, 2008[1942]). Economic downturns may act as a cold shower, awakening companies to strive to innovate smarter ways of doing business, forcing capitals and labors to be liberated from those dying sectors, or replaced by a new generation of entrepreneurs and innovators. The most commonly observed phenomena during the economic downturns may be described as a combination of the reduced cost of business operations and the increased mobility of talents

and skilled labors being released from those also-rans. To this end, an economic downturn is thought of a right timing for entrepreneurs to survive and thrive. Many high-tech companies (Microsoft, Hewlett-Packard, Geophysical Service (now Texas Instruments) and Genentech), as well as most (if not all) of those Chinese companies, were born and nourished during economic recessions. Opinion polls of 2008 Endeavor's survey (carried out in eight emerging markets) suggested that, majority of the surveyed entrepreneurs were confidently expecting a business growth of 31%, and increase rate of workforce of 12% in the year. Over 50% of the surveyed entrepreneurs believed that they would be able to hire more and better talents, and 39% of them became more optimistic to their respective competitive strengths (Excerpted from a Special Report: Entrepreneurship from The Economist, posted on 12th March, 2009, and titled as Global Heroes, accessible at <http://www.economist.com/node/13216025>).

Note that, the increasingly globalized and intensified IT-dominated business environment has served as a catalyzing platform to expedite the turnover cycle of innovative ways of doing businesses. The law of the 'fittest of survival' is to make those good ones better in an incremental rhythm. For instance, in the mid of last century, the ranking of the Fortune 500 was so stable that, once constituted, it was kept for 20 years until the next round of selection, which is now scheduled to take place in every four years. From economics point of view, economic downturns may provide supportive advantages for the development of IT-oriented entrepreneurship. On the one hand, the relentless nature of IT-competition deprives the privileges of those incumbents. It is argued that, the beginning point of an entrepreneurial process stimulates a path-breaking point, where the transaction cost of business operations within a stereotyped market system exceeds the cost of doing the same business in a newly emerged and diversified market system (Coase, 1937). On the other hand, IT-innovations may trigger a shift of economic pattern from manufacturing-oriented to service-oriented. Such a transformation may lower the entry barrier for new comers, given the fact that, service firms are relatively smaller, flexible in operations, and easy to start off.

Study Objectives

This paper is motivated to rationalize the mechanism of government intervention oriented entrepreneurship, which can be fostered, as a more valid and competitive mechanism now than ever, to stimulate and incentivize the capability of innovation and economic catch-up for developing economies. Methodologically, literature review, interviews with researchers, business executives, policy-makers and government consultants, are used to analyze, compare and discern the similarity and dissimilarity between Chintrepreneurship and traditionally conceptualized entrepreneurship. The primary goal of this paper is to logically theorize that,

without understanding such a mechanism as an efficient and effective way to boost the transformational path of global economy, from a polarized (centralized and monopolized) by a few industries of developed countries, to a depolarized (decentralized and diversified) and IT-dominated global environment, revitalizing the vibrancy of entrepreneurship from economic downturns would be in vain or too difficult to realize. The subset goals of this paper is to rationalize that, without acknowledging the differentiated formational and functional mechanisms of entrepreneurship in forging a nation's economic capability and competitiveness, is a theoretical drawback of existing literature, misleading the cognitive development. Without understanding the deviated impacts of collectivism versus individualism on the mechanism entrepreneurship respectively, it would be too difficult to understand the diversity of entrepreneurship. Without taking into account the role of government intervention, the cognitive development on the mechanism of entrepreneurship is trapped in a dead-end.

A REVIEW OF THEORETICAL DEVELOPMENT OF ENTREPRENEURSHIP

To date, there are five approaches contributing to the theoretical development of entrepreneurship. The first is the Growth theory, focusing on elements that can be used to examine and evaluate the causal relationship between entrepreneurship and economic growth. The second is the Agglomeration theory, emphasizing the aggregated roles of knowledge, technology and innovation in promoting the development of entrepreneurship, meanwhile, promoting knowledge management to deal with an increasingly exacerbated challenges for proprietors to prevent knowledge leakage or spillovers, imitators and/or copycats from eroding and discounting the early birds' advantages. The third is the Globalization theory, emphasizing the roles of increasingly globalized and diversified entrepreneurial patterns due to the intensified competition of value chains and supply chains, from traditionally labor and material oriented production competition, to presently information-technology oriented innovation competition across national borders (Zhang & Stough, 2013). The fourth is the theory of peculiarity, specifying the nature of time-and-space to the mechanism of entrepreneurship, which is intrinsically limited to a nation's political-social, institutional and cultural settings across time (Zhao, 2016). The last is the government intervention theory, stipulating that in those politically-controlled economies like China, government functions as the planter to cultivate entrepreneurship (Zhao, 2017).

Epistemologically, these five theoretical stances seem traceable to the origin of historically inherited two camps, namely: Schumpeterianism and Keynesianism, equivalently representing the two antithetical camps between the democracy and the free market oriented entrepreneurship (Washington Consensus) and the autocracy and the government intervention

oriented entrepreneurship (Beijing Consensus). Which one of the two camps is more constructive is a question for history to tell (Zhao, 2016; 2017). According to Schumpeterianism, autocracy and bureaucratization are the killers, obstructing the development of entrepreneurship, which is accordingly defined as the prop of a strong economy, driven by entrepreneurs' creative and destructive innovations (Schumpeter, 1942). In contrast, Keynesianism favors the role of big government in creating an orderly prosperity (Keynes, 1920). What makes Schumpeterianism essentially differentiated from Keynesianism is their respective attitude to the developmental mechanism of entrepreneurship. Sociologically, it is argued that, adapting, habituating and complying with the power of government of either type, democratic or autocratic, is an inherited gene throughout human history – therefore, risking the turmoil to chase creative destruction and market competition is equivalent to the waste of resources (Keynes, 1920). As he prophesied that, when it comes to a financial crisis and a subsequent recession/depression, the entire business world would scream and struggle for government support – this is why government intervention is thought to be an effective treatment or cure during an economic downturn (Keynes, 1920).

Schumpeterian Agent Theory of Creative and Destructive Force and Tripartite Model

The functional role of entrepreneurs in business operations may be summarized as coordinating, innovating, risk taking, decision making, capital supplying and resource allocating (Barreto, 1989; Friijs et al., 2002; Jääskeläinen 2000). Some scholars emphasized entrepreneurs' capabilities of perceiving and capturing emerging opportunities, or, generating, disseminating and implementing new business concepts/ideas to organize and re-organize institutional resources, to cope with uncertainties, and to create profit (Carree & Thurik, 2002; Dejardin, 2000; OECD, 1998; Wennekers & Thurik, 1999). Other scholars endeavored to study entrepreneurs' consistent behavioral characteristics, rather than one-time activities (Pirich, 2001). These scholastic contributions may be traced and rooted into Schumpeterian framework of agent theory, stipulating that, entrepreneurs function as the driving force in compelling the development of tripartite relationship among innovation, entrepreneurship, and economic growth (Schumpeter, 1934). When historical dimension is added, economic development is defined as a long wave of unevenly distributed innovations initiated stochastically via agents' efforts (Schumpeter, 1942).

According to the agent theory, everyone can be an agent, as far as he/she is able to create a combinative force of new innovations, new products/services, and/or new management models. Such a combinative force should be not only creative but also destructive to make the existing ones obsolete or replaced (Schumpeter, 1934; 1942). To this end, it is the creative and

destructive force of agents that constitute Schumpeterian tripartite model, namely, the path-dependent process of cyclical waves from innovations of entrepreneurs, through industrial upgrade, to the dynamic growth of economy. Enlightened by Schumpeterian tripartite model, this paper proposes a three-staged model to outline the developmental mechanism of entrepreneurship (See Figure 1):

Figure 1: A Three-Staged Model for the Sustainable Mechanism of Entrepreneurship

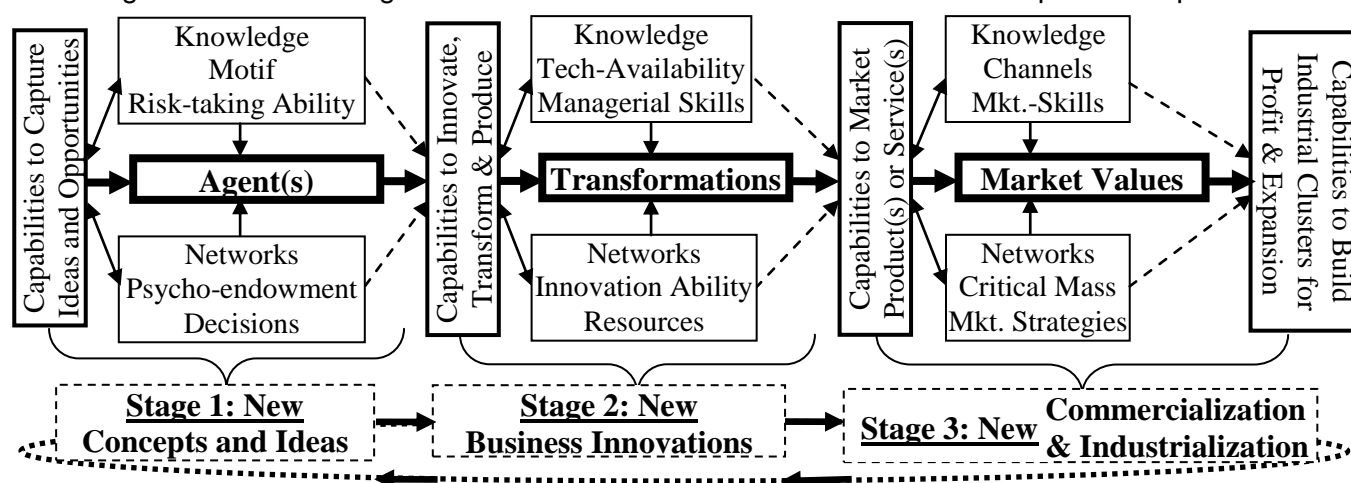


Figure 1 indicates that, any entrepreneurial process is always traceable to an individual ambition and capability of innovation. Therefore, entrepreneurs' knowledge scope, network resource availability or proximity, and psychologically endowed risk-taking propensity are necessary conditions to ensure the three-staged process of entrepreneurship, from agents (entrepreneurs) searching/creating novel ideas/concepts (Stage 1), through transforming ideas/concepts into innovative business operations (Stage 2), to commercializing and industrializing the innovative products/services, by establishing newness and critical mass to disrupt the existing market (Stage 3). The loop of three-stages is the core prop of sustainable development of entrepreneurship.

Keynesian Government Intervention and the Tripartite Model

Comparing with Schumpeterianism, Keynesianism contends that, the function of government intervention is indispensable from the formational mechanism of entrepreneurship. In 2002, the U.S. Congress, in response to Enron scandal, launched the Sarbanes-Oxley legislation with a spearhead pointing at corporate governance, making entrepreneurship more difficult than ever. Such a government reaction is in sharp contrast when compared with China government's let-go attitude in the face of financial scandals and various unethical and criminal business activities (Markets in China are barely fazed by scandal, unless the state is involved, posted at

The Economist on August 20th, 2011 at: <http://www.economist.com/node/21526407>. A list of China Stock Scandals, posted at Euromoney, accessible at: <http://www.euromoney.com/china-stock-scandals.html>. Google search with a string of 'financial scandals in China' pops out 30,200,000 results in 0.44 seconds). Over 40% of China's online sales provide counterfeit or fake products of those globally renowned brands, deceiving and depriving both IPR and consumers' right. Among millions of online vendors, Alibaba is the most notorious host of e-commerce platform in China (Source: <http://www.zerohedge.com/news/2015-11-03/over-40-chinese-goods-sold-online-are-counterfeit>. Google search with a string of 'online counterfeit or fake products in China' pops out 1,280,000 results in 0.25 seconds). These examples explain that, the confinement of government intervention to the developmental mechanism of entrepreneurship does exist, and that, the respective political power distribution and redistribution determine the respective ways of pursuing business opportunities, organizational patterns, and business creed (Marris & Somerset, 1971; Zhao, 2014; 2016; 2017). For example, the historically inherited autocratic political system determines the fundamentally differentiated economic and entrepreneurial mechanisms between China and Western societies. The success of the past 40-years' economic growth may serve to support Keynesianism, and legitimize the effectiveness of government intervention in boosting the development of entrepreneurship (Zhao & Zhang, 2016; 2017).

One example to elaborate the effectiveness of government intervention is the transition of ownership. By launching a series of policies, part of SOEs have been privatized and transformed from previously government sole ownership to a board of collective owners but with appointed or designated party-members as top leaders (red-hat entrepreneurs). The red-hat enterprises can opt to register as POEs, and behave like chameleons, sheltered under SOEs' umbrella, but guaranteed not to be crowded out from private sectors. This is the peculiarity of China-way of industrial reformation, which allows SOEs to receive state budget as their primary source of venture capitals. Such an exclusive privilege is absolutely not available and accessible to those non-red-hat entrepreneurs (Zhao, 2016; 2017).

Another example to explain the role of government intervention is the progressively promulgated and implemented strategic policies, guiding China economic reformation, through industrial consolidation, privatization, diversification and globalization, resulting in some emerging but fast growing industries such as telecommunication and finance, significantly contributed to the growth of China GDP and economic transition. To support innovation, government has sponsored the 'Innofund' (a public venture investment program), dedicated to finance the high-tech innovation and entrepreneurship. Although much to be improved, however, Innofund has stimulated and incentivized the development of entrepreneurship, and

meanwhile, prevented the chances of speculative behaviors, such as rent seeking, as well as coercive monopoly of incumbents (Zhang & Stough, 2013). In a sense, the government of China is the bundling nexus, connecting the nation's innovation, entrepreneurship with its industrial transformation and economic growth (Zhao & Zhang, 2016; 2017).

An Urgent Need to Upgrade the Framework of Entrepreneurship for Emerging Economies

Although Schumpeterianism and Keynesianism seemingly able to explain the formational and functional mechanism of entrepreneurship from their respective perspective, however, each of them, when examined independently, exposes its respective limitations in rationalizing the tripartite relationship from innovation/entrepreneurship, through industrialization, to economic growth. Additionally, it is suggested that, when an economic system enters the phase of industrialization and capitalization, then, its capabilities of innovations and entrepreneurship may be accumulated and aggregated to the level that will inevitably trigger and propel a qualitative change of a nation's economy (Peretto, 1999). Given that the two theoretical frameworks are crystallized from developed economies in Western societies, this paper argues that, they must be adjusted or upgraded, in order for the tripartite framework to be able to appropriately and objectively explain the rapidly emerged economic phenomena (Schmitz, 1989).

Historically, entrepreneurship has been discussed more as a subject of psychology and sociology, focusing on cultural and social conditions associated with entrepreneurs' personal traits (ex.: propensity of risk-taking), than as a subject of management (Zhao, 2016). Correspondingly, a systematic framework capable of explaining the formational and functional mechanisms of entrepreneurship in promoting economic development is still weak, if not absent (Baumol, 1968). Pragmatically, how to stimulate a nationwide impetus of R&Ds and entrepreneurship across regional and cultural disparities, how to minimize the marginal cost of transforming resources into market values, and ultimately, how to convert government intervention (policy and regulation) as a resource, and integrate it into the process of entrepreneurship – they are the emerging but challenging questions that will help contemporary scholars to shake off the shackles of traditional framework, so that the dynamically globalized and diversified economic pattern become fathomable and/or predicable (Zhao & Zhang, 2016; 2017).

Furthermore, from the perspectives of resource-based view and dynamic capability approach, the consolidated network resource (ex.: political, social, institutional and cultural settings) may be more vitally decisive than the traditionally emphasized personal traits for entrepreneurship. This is especially true in those emerging economies like China, wherein,

autocratic bureaucracy and cronyism oriented capitalism dominate its economic system (Zhao & Zhang, 2017). Accordingly, how to integrate these generic but non-market type of resources, and convert them into value-adding and competitive advantages for the development of entrepreneurship, becomes a critical research question (Yiu & Lau, 2008). After all, innovation and entrepreneurship are crystallized from human wisdom, catalyzing the transformational speed of resource inputs to value outputs, by breaking the idled or sluggish processes, while replacing or upgrading them by innovative ones over and over again across time and space.

Ironically, it was claimed that, when the macroeconomics garnered the most attention, entrepreneurship seems to become a forgotten pond of backwater (Galbraith, 1967). Such a misconception was overthrown when Joseph Schumpeter launched his theory of creative and destructive force of innovation, stipulating that, the key to business competitiveness is no longer the scale of mass production and the price of product, instead, it is the combination of new ideas and resources, enabling innovators and entrepreneurs to generate new technologies as creative forces to destruct old ways of doing business, replace them by new ones, and consequently, revitalize a new round of economic growth (Schumpeter, 1934; 1942). To this end, the glory of Schumpeterian framework deserves to be once again revitalized or revamped, to open up a whole new avenue to explore the causal mechanism of innovation, entrepreneurship and economic growth in both developed and developing economies (Abzug et al., 2000; Birch, 1979; Haltiwanger et al., 2011; McCraw, 2010; Medoff & Birch, 1994; Phelps, 2013; Wong et al., 2005).

It must be noted that, in the face of the explosively emerged information technology along with the rapidly globalized business environment during the past three decades, the attitude of some developing countries' government toward the concepts of POR and entrepreneurship are still hesitating or panic, if not against, mainly because of potential risks that might jeopardize their entrenched political-social interests (Cooper, 2010; Ogilvie, 2011; Rodrik & Rosenzweig, 2010).

CRITICAL CONDITIONS FOR THE DEVELOPMENTAL MECHANISM OF ENTREPRENEURSHIP

Entrepreneurship does not happen in a vacuum. Instead, it happens within a specifically defined time-and-space of a specifically structured political, social, cultural and economical environment. Therefore, discussions of entrepreneurship must be confined correspondingly.

The Resource- and Infrastructure-based Perspective on the Mechanism of Entrepreneurship

Entrepreneurship is defined as a process of pursuing opportunities beyond the control of available resources (Stevenson, 1983). This definition is described as the ‘best answer’ by the INC Magazine (An article by Eric Schurenberg, the Editor-in-Chief of the INC Magazine. The article was published on the 9th of January of 2009, accessible at: <http://www.inc.com/eric-schurenberg/the-best-definition-of-entrepreneurship.html>), stipulating that, the magnitude of resource availability determines whether an entrepreneurial process can proceed (Stevenson, 2000; Stevenson & Gumpert, 1985). To Stevenson, political environment and administrative settings are critical resources that can either foster or destroy the developmental mechanism of entrepreneurship (Stevenson, 1983).

To cultivate and sustain the momentum of entrepreneurship, both environmental conditions (exogenous) and entrepreneurs’ capabilities (endogenous) must be established (Barreto, 1989). As a complement, it is argued that, the institutional capabilities of regulating, normalizing and standardizing R&Ds and Innovations, the managerial capabilities of organizing and controlling necessary resources, and the technological capabilities of manufacturing, commercializing or converting resources into market values (salable products/services) – they are the three resource-based infrastructural conditions, either facilitating or constraining the developmental mechanism of entrepreneurship (Van de Ven, 1993).

In line of this thought, entrepreneurship is a socially, institutionally and collectively engaged process of doing new business, or doing business in new ways, rather than focusing exclusively on the individualism, namely, the individual characteristics, attributes and inclination of risk-taking behaviors (Zhao & Zhang, 2016; 2017). To a certain extent, a nation’s capability of entrepreneurship determines the pace of its industrial revolution and evolution. While, technological capability represents its intrinsic power to knock down the existing market and industrial boundaries (See Table 1):

Table 1: Endogenous and Exogenous Conditions for the Development of Entrepreneurship

Endogenous	From the perspective of personal traits, the origin of any innovation or entrepreneurial activity can be traced to a single person. According to McClelland’s findings, individuals are the agents of entrepreneurship, they are motivated with clear proclivity to make things happen, generally tinged with the following ten personal entrepreneurial competencies (PECs), namely, opportunity-driven, risk-taking, efficiency and quality demanding, persistent, commitment to contract, information vigilant, goal-oriented, systematic planning and monitoring, persuasive and networking, and independence and self-confidence (McClelland 1961; 1965). Therefore, the key is to identify and select individuals with potentials, provide trainings to upgrade their skills/abilities, and advance their entrepreneurial performance and competence (EMPRETEC, 2004; EDECU, 2002).
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Table 1: Endogenous and Exogenous Conditions for the Development of Entrepreneurship

Exogenous	<p>The success of entrepreneurship is largely determined by a specifically structured political, institutional, social, economical and cultural system (Baumol, 1990; Van de Ven, 1993). Government interventions (i.e. policies and regulations) possess the critical impact on the development of entrepreneurship. This is especially true in those developing countries like China, wherein, autocracy, rather than democracy, dominates the economic environment (Zhao, 2016; 2017). In contrast, a democratic and market oriented environment may enable entrepreneurs to interpret market signals of demand and price, and respond accordingly (OECD, 1998). Therefore, the role of government intervention may be summarized as::</p> <ul style="list-style-type: none"> • Government can guide social, institutional and legal systems to establish a bankruptcy system, make them not hostile to bankrupted entrepreneurs, and allow those unsuccessful enterprises to restructure or close down, so that, the resources liberated from them can be allocated to other promising business ventures. For instance, in some European countries, bankruptcy is perceived as a personal failure bearing a social stigma. Bankrupted entrepreneurs are forced to settle all their debts, severely discouraging or preventing them from using their experiences to start a new firm. In contrast, US bankruptcy system is commonly deemed as a reasonable outcome of a 'good try', or a stepping stone for starting a new business, allowing resource redistribution from the failed to those promising and competitive ones (OECD, 1998). Such a government sheltered bankruptcy system can not only encourage the tempted entrepreneurship, but also foster the viable causes of employee ownership and organizational entrepreneurship (OECD, 2002). • Government is the key to unlock the latent resources and potentials, and support a nation's entrepreneurship social prosperity. By providing and safeguarding an equal right of opportunity and resource, disadvantaged groups (ex.: women entrepreneurs) are also encouraged and stimulated to participate (Reynolds, et al., 2000).
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Table 1 explains that, given the unavoidable, irreplaceable and decisive role of government in forming the endogenous and exogenous conditions, namely, the threshold of entry and exit of entrepreneurship, improving the quality of government intervention to stimulate and incentivize the development of entrepreneurship seems to be the top challenge especially for those developing and transitioning economies (Zhao & Zhang, 2016; 2017). Despite the deviations of social, economic and cultural impacts from region to region, country to country, the absolute power of government to disrupt and adjust the formation and function of both endogenous and exogenous conditions remains the same regardless of developed- and developing economies. Note that, overly emphasizing the endogenous conditions (individual traits) may trigger a flurry of debates, misleading the cognitive development. Exogenous conditions such as political systems and cultural disparities may exert severe impacts on the development of entrepreneurial traits (Müller & Abisya, 2001). In addition to the indelible contribution of government intervention to the formation and function of Chintrapreneurship in China (Zhao, 2016; 2017), EMRETEC, a Spanish acronym for entrepreneurs and technology, a global program firstly launched and implemented in Argentina by United Nations Conference on Trade and Development (UNCTAD) in 1988, and then introduced to other developing countries, is

another example to showcase the impact of exogenous condition on the development of entrepreneurship.

It is reported that, EMPRETEC is a one-stop-shop ETW (Entrepreneurship Training Workshop) program, to motivate and inspire those potentially talented individuals to enhance their PECs (personal entrepreneurial competencies). Candidates, after a careful selection process, are required to undergo a two-week close-door workshop, accepting in-house advices and trainings, including but not limited to change management, marketing, quality control, productivity improvement, accounting practices, financial management and negotiating skills – all is aimed to enhance candidates' entrepreneurial skills, abilities and competencies. Tested results show that, more than 85% of those trainees after completing the program and returning to their respective home countries have demonstrated a noticeable change in terms of their business attitude, entrepreneurial commitment and performance (EMPRETEC, 2004). An impact analysis of a 10-year period of EMPRETEC program in Brazil indicates that, a remarkable improvement of environmental condition for entrepreneurship has been detected and linearly associated with the implementation of EMPRETEC program. The total number of the nation's entrepreneurs has been doubled with improved business performances, labor productivity has been enhanced, and employment rate has been increased (EDECUC, 2002), indicating that, exogenous support (both government and non-government) is critical and decisive. Until 2004, the EMPRETEC program via its localized business centers, has trained and assisted more than 80,000 entrepreneurs from 27 developing countries, generated enviable results to the promotion of regional momentum and impetus of entrepreneurship.

Similarity and Dissimilarity of Entrepreneurship between Developed and Developing Economies

Entrepreneurship is conventionally prohibited or dismissive in many developing countries, due to their autocratic political system and their limited capabilities of technology, restricting the survival of entrepreneurship and forming a sharp contrast between developed and developing economies. However, globalization has reshaped the traditional economic structure, leading to the newly emerged generation of entrepreneurs, one after another, massively erected from those underdeveloped economies (i.e.: Asian Dragons, African Lions, and golden BRICS). These rising stars have demonstrated their tenacity and dynamism, and proved themselves as a disruptive force to the polarized and stagnated economic environment (Zhao, 2016; 2017). To what extent, the similarity and dissimilarity of the formational and functional mechanism of entrepreneurship can be differentiated between developed and developing economies is an imperative challenge to objectively reflect the increasingly globalized and diversified phenomena

of entrepreneurship. This paper proposes that, analyzing and rationalizing the role and impact of government intervention may best serve to fulfill this theoretical need. What is the rationale of policy-necessity in the development of entrepreneurship? Assuming the policy-necessity possesses the theoretical validation, then, how can a policy be designed and institutionalized to stimulate a sustainable mechanism of entrepreneurship? Answers to these questions may help explain some already observed, but not yet rationalized deviations of the developmental mechanism of entrepreneurship between developed and developing economies (See Table 2).

Table 2: Similarity and Dissimilarity of Entrepreneurship between Developed and Developing Economies

Similarities	Taking risks, capturing opportunities, organizing resources, and converting them into competitive advantages and profit-making processes within a specifically defined timeframe and a specifically defined political, economical, social and cultural environment, together, they constitute the similarities in the developmental mechanism of entrepreneurship, across time and space (Zhao, 2014; 2016; 2017).
Dissimilarities	<p>Government intervention (policy and regulation), rather than market competition, is the driving force to propel the development of entrepreneurship in developing countries, especially in a politically autocratic country like China (Zhao & Zhang, 2017). Given the autocratic nature of government in developing countries:</p> <ul style="list-style-type: none"> • complying with and taking advantage of government policies seem to be critical and decisive to the mechanism of entrepreneurship (i.e. capture opportunities, lobby investors, and incentivize market consumptions), however, • when policy-makers were not well-informed or not equipped with required knowledge, it is likely to have policies improperly designed and executed, leading to misdirection of entrepreneurship.

Table 2 indicates an important message, either implicitly or explicitly, that, the dynamic nature of time-and-space oriented entrepreneurship, which varies from time to time, location to location, and society to society, is the missing point in the existing literature. Government intervention, aside from other factors, is the key to distinguish the mechanism of entrepreneurship between developing- and developed- economies. It is contended that, government intervention, if properly designed, executed and institutionalized, can act as a value-adding factor to incentivize the momentum of innovation and entrepreneurship, and meanwhile, prevent those malfunctioned entrepreneurial behaviors such as rent-seeking, copycatting or imitations (Zhao, 2016; 2017).

It is suggested that, although empirical validation is needed, the correlation between government interventions (policies and institutions) and entrepreneurship is widely witnessed. According to the ranking results of World Bank's Doing Business index measured by the ease of doing business, China and Brazil are the two developing countries having achieved a rapid

progress respectively, in promoting the development of entrepreneurship through government interventions (<http://www.doingbusiness.org/rankings> accessed on November 12th, 2016).

Although China government has greatly endeavored to facilitate the ease of doing business by promoting entrepreneurial policies in many respects, such as lifting the restrictions in some industries, lowering the entry threshold of new business, investing in infrastructures, transforming and privatizing SOEs, and financing indigenous innovations. Nevertheless, the contribution of POEs to the growth of national GDP is too tiny to compare with those SOEs – primarily because that, the benefits of government intervention can only be captured and embraced by those pseudo- or quasi- entrepreneurs, or pure opportunists, who are associated directly or indirectly with the cronyism-oriented bureaucratic government system (Zhao & Zhang, 2016; 2017). In contrast, the contribution of entrepreneurship reaches 40% of United States economy. Given these research findings, it is argued that, the linear relationship from entrepreneurship, through industrialization to economic growth in those developing countries like China, cannot be measured and evaluated, if without adding government intervention as an adjustor. Otherwise, the generalizability, reliability as well as of the validity of measurements would be biased (Zhao, 2017).

Upgrading the Definitions of Entrepreneurs, Entrepreneurship/Intrapreneurship

Literature abounds with definitions of entrepreneurs, entrepreneurship/intrapreneurship, however, these concepts seem fragmented, lacking a universally benchmarked criteria system, so that researchers and practitioners can communicate on a systematically defined theoretical platform.

Three Critical Criteria to Evaluate the Process of Entrepreneurship

Although a measuring system was established by OECD (1998) to monitor and evaluate the relative shares of entrepreneurial contribution to a nation's economic growth, however, the methodology of data collection seems lack of validity and reliability. For instance, the number of entrepreneurs was represented by the net entry of new firms, but their business performances remained unmeasured. To fill this need, two groups of scholars delved into the construction of performance criteria to evaluate the contribution of entrepreneurship to economic development. The first group emphasized the role of individual qualifications (traits and capabilities) in promoting the change of micro-environment (Carree & Thurik, 2002). The second group endeavored to examine the impact of macro-environment on the development of entrepreneurship (Global Entrepreneurship Monitor (GEM) Reports, at: <http://www.gemconsortium.org/>; [Licensed under Creative Common](http://www.babson.edu/Academics/centers/blank-center/global-</p>
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research/gem/Pages/home.aspx; and https://entrepreneurship.bschool.cuhk.edu.hk/gem_hk).

The two groups are mutually complementary in forming a measuring system composed of three critical criteria, namely, newness, social capitals (network resources), and critical mass (See Table 3):

Table 3: Three Critical Criteria to Examine and Evaluate the Development of Entrepreneurship

Criteria 1: Newness of Technology and Innovation

According to Zhao (2014), 'New-to-the-world' innovation barely exists, since knowledge can only evolve in a consecutive order. Break-through technology is a rhetoric word. Instead, 'New-to-the-existing ones' is a realistic term to define the concept of innovation. The degree of proximity and connectivity between the new technology and the existing ones determines the degree of newness. A radical innovation (breakthrough innovation) may be distanced from the existing technologies. An incremental innovation is likely derived from those closely related existing technologies. Either one can act as a sufficient and necessary cause of entrepreneurship (Zhao, 2014).

Criteria 2: Availability or Accessibility of Social Capitals or Network Resources

The availability and accessibility of social capitals or network resources determine entrepreneurs' capability of obtaining the financial, technological and managerial supports (OECD 2002), and hence, the feasibility of transforming ideas and resources into business process and market values. Taking advantage of government policies and regulations is an efficient and effective way to create ideas and opportunities to start a new business or a new project (Zhao, 2016; 2017).

Criteria 3: Critical Mass, Industrialization, Commercialization

Establishing a critical mass for an innovated product/service is not only the pre-condition for the development of industrial clusters with competitive advantages, but also the pre-condition for the transformation from an idea to a profit-making process. Without establishing a critical mass, industrialization and commercialization would be practically impossible.

Table 3 underlines the three critical conditions for the development of entrepreneurship. Entrepreneurs must be able to seize opportunities, to create newness, to establish a critical mass, and to transform resources into economic values. Social network resources serve as the main channel of entrepreneurship. Large organizations' R&Ds and innovations are likely to become the sources of SMEs' entrepreneurial opportunities, through spin-offs, technological and knowledge spillovers, outsourcings, as well as supply chain operations (Reynolds et al., 2002).

Definition of Entrepreneurs

Who are entrepreneurs? What qualifies an individual person to be an Entrepreneur? According to Schumpeter (1975), entrepreneurs, the bedrocks of modern economic breakthroughs, are those capitalistically motivated individuals, capable of innovating and converting knowledge and

technology into market competition and profit creation. From value-yielding perspective, it is argued that, entrepreneurs are those innovators, capable of purposefully deploying, redeploying and transforming resources inputs (ex: labor, material, finance and technology), from a low-yield level, to a high-yield level, through an industrial and trading process (Hisrich & Peters, 2002).

From the individual traits perspective, entrepreneurs are anecdotally deemed as solution-providers, doers of making impossible possible, or, risk-takers and profit-creators out of the uncertainties. From the organizational perspective, entrepreneurs are depicted as change agents, capable of creating new business opportunities, organizing and allocating resources, fostering innovations and enhancing business competitiveness. From academia perspective, entrepreneurs are respected as brokers of the most cutting edge knowledge. Notwithstanding these theoretical efforts, the most embarrassing challenge encountered by researchers and practitioners is to define the minimum characteristics and traits that can be used to measure and qualify the type of people as entrepreneurs (See Table 4):

Table 4: Commonly Defined Characteristics and Traits of Entrepreneurs

Perspectives	Characteristics and Traits of Entrepreneurs
Individuals' Dispositions	Risk takers and rule-breakers
	Pursuers or creators of novel ideas and opportunities that others may fail to recognize or may even view as problems or threats
Individuals' Technological Capabilities	Innovators, able to innovate and transform knowledge and technology into business process of profit making
Individuals' Managerial Capabilities	Able to create/convert ideas and resources into business operations
	Able to organize and develop social networks
	Able to disrupt and break into an existing market
	Able to create new jobs, new markets, or new market segments

Note: The source of this table is borrowed and modified from Zhao (2014; 2016; 2017)

Table 4 demonstrates a short list of congruently acknowledged characteristics and traits distilled from existing literature. An entrepreneur must be able to bridge the gap between knowledge producers and industrial users, and to convert and commercialize scientific and technological advancement into industrial and value-creating process. Using a cross sectional data sampled from two European countries (Sweden and Ireland) respectively, covering gender, age, previous entrepreneurial background and experience, professional specialty and personal attitude to entrepreneurship, the results empirically showed a significant relationship between academic institutions and business entities, but not significant between academic entrepreneurship and creation of new firms or organizational spinoffs (Klofsten & Jones-Evans, 2000). This result is in a sharp contrast with the case of China, where in, academic entrepreneurship has resulted in

tens of thousands of POEs divested from SOEs, universities, research institutes and government agencies (Zhao, 2017).

Definition of Entrepreneurship/Intrapreneurship

It is obvious that, Schumpeterian concept of entrepreneurship still dominates the mainstream of existing literature. Both entrepreneurship and intrapreneurship are referred as the perennial gale of creative force, driving technological advancement, global competition, and economic growth (Schumpeter, 1934; 1942). Intrapreneurship represents an organization's capability and propensity of R&Ds and innovations (OECD, 1998; Porter, 1990) – an internal force dedicated to overcome the genetically inherited organizational inertias. Comparatively, entrepreneurship is defined as a process of taking risks, capturing opportunities of innovations (Egai, 2008), and transforming the novel ideas and resources into business ventures and market values, and ultimately, enhancing or stimulating the potentials of economic growth (UNIDO, 1999).

To complement these theoretical endeavors, entrepreneurship is defined as a process of constantly upgrading the already established business routines, cultivating and enforcing organizational ingenuity of doing new business or doing business in new ways. It is an orderly processed activity flow from searching or creating new business ideas/opportunities, to organizing/allocating resources and transforming them into business operations and market values (Zhao, 2013; 2014; 2016; 2017). Notwithstanding the existing theoretical mosaic, it must be emphasized that, an entrepreneurial process is comprised of interacting, interdependent and multi-facet business activities, rather than any stochastic or casual actions. The dynamically evolving nature of entrepreneurship is still epistemologically underdeveloped. The crux of entrepreneurial mechanism ought to be systematically theorized, in order to fit into and keep pace with the rhythm of increasingly globalized and diversified environment.

Defining the Relationship between Innovation and Entrepreneurship

Newness is the defining characteristic of entrepreneurship, aiming to create new business or new ways of doing business, to improve business processes and enhance the productivity and efficiency, both quantitatively and qualitatively through innovation. Therefore, entrepreneurship by essence is a process of innovation, radical or incremental, creative or imitative – representing the revolutionary forces of changing or adding something new to the existing ones. To this end, newness is the least requirement, intolerable for any compromises, in defining and measuring a process of entrepreneurship. Therefore, innovation is a mandatory characteristic in defining the concept of entrepreneurship.

Establishing a Measurement System to Examine and Evaluate the Performance of Entrepreneurs

Innovation cannot occur from occasional odds. Instead, it can be only initiated or derived from the process of transforming innovative ideas and technologies into the development of new venture business or the improvement of the existing ones (Hisrich & Peters, 2002). Put simply, innovation is the fundamental measurement of entrepreneurship. Without inculcating the concept of innovation, entrepreneurship is solely an empty word. It must be noted that, if, choosing the best idea to pursue innovation is difficult, then, implementing that same idea to start off a new venture business is more difficult. Although, focusing on consumers' needs is a necessary starting point, however, avoiding a cut throat competition may be the rule of thumb for any entrepreneurs to kick off. Given the decisive role of innovation, establishing a measurement system to examine personal qualifications (traits and characteristics) and capabilities of searching and capturing the feasible innovation ideas/concepts, organizing and allocating resources, and transforming them into market values, are the key factors to determine whether an individual can be qualified as an entrepreneur (See Table 5):

Table 5: Dimensions to Measure the Capability and Performance of Entrepreneurship

Levels	Measurements of an Entrepreneur's Qualifications: Characteristics and Traits
Personal Level	<ul style="list-style-type: none"> ● Information-vigilance, risk-taking and just-do-it in the face of uncertainty and resource scarcity; ● Passionate, initiative, aggressive and burn with desire, easygoing and flexible to change; ● Energetic, diligent, confident, determined and persistent; ● Visionary, independent, and self-disciplined.
Professional Level	<ul style="list-style-type: none"> ● Leadership and persuasiveness: able to build and lead a team, and convince followers; ● Innovation-oriented: able to act as change agents and initiate innovations; ● Network-oriented: able to communicate, coach and organize, vertically and horizontally; ● Competition-oriented: able to perceive and catch subtle signals of business ideas and opportunities, and react immediately and actively; ● Strategy-oriented: able to preemptively exit, at a minimum cost, at the right timing.
National Level	<p>The annual longitudinal demographic data (1996-2013) published online by Kauffman Index of Entrepreneurial Activity (Accessible at http://www.kauffman.org/multimedia/infographics/2013/kiea-interactive), shows that, in addition to race, gender and education background:</p> <ul style="list-style-type: none"> ● The proportion of adult population engaged in the creation of new businesses, and the proportion of the new firms that have survived from their respective start-up phase, are two critical dimensions to measure a nation's performance and competitiveness of entrepreneurship against the odds stemmed from political, social, cultural, bureaucratic and financial constraints. ● As observed that, when entrepreneurs of developing countries migrate to a developed country, wherein, the strong economic and industrial infrastructures and the positive social and cultural attitudes give them a head-start. Those successful Indian and Chinese innovators in Silicon Valley can be used as good examples to explain that, exogenous

Table 5: Dimensions to Measure the Capability and Performance of Entrepreneurship

	factors may have more weight in the development of entrepreneurship than those endogenous ones do.
Capabilities	Measurements of an Entrepreneur's Capabilities & Performances
R&Ds & Innovations	<ul style="list-style-type: none"> • Ability to initiate R&Ds and innovations; • Ability to transform innovations into salable products or services
Responsiveness to Market Feedbacks	<ul style="list-style-type: none"> • Ability to respond to market feedbacks in a timely manner; • Ability to analyze and identify deficiency or inefficiency from existing operations, and treat them as innovation opportunities for improvement, both technologically and managerially.
Leverage Government Interventions	<ul style="list-style-type: none"> • Ability to understand and take advantage of government interventions (policies & regulations); • Ability to make use of government interventions and convert them as business resources to stimulate the momentum of entrepreneurship and enhance competitive advantages.

Table 5 indicates that, whether an individual can be qualified as an entrepreneur is determined and measured by whether his/her personal and professional characteristics, traits and capabilities are contributive to the development of business competitiveness. The feasibility of ideas, the availability/accessibility of resources, in conjunction with the technological and managerial skills and experiences – together, they determine an entrepreneur's qualification and capability that can be used as a baseline criteria to estimate and predict his/her likelihood of controlling risks and uncertainties, or, his/her chances of successful process of innovation and entrepreneurship. Note that, given the politically autocratic rather than democratic system in those developing countries like China, the capability of taking advantages of government interventions is the ultimate determinant, particularly in determining the affirmative relationship between ideas feasibility and resource availability or accessibility (Zhao & Zhang, 2016; 2017).

DISTINGUISHING CHINTREPRENEURSHIP FROM THE TRADITIONAL CONCEPT OF ENTREPRENEURSHIP

Despite that entrepreneurship have widely garnered recognition as the driving force propelling industrialization and economic development in developed economies, nevertheless, they have not earned their deserved-respect in those developing countries (Baumol et al., 2009; Bruton et al., 2010; Cumming & Suret, 2011; Du et al., 2013; Kaldor, 1966; Leff, 1979; Ireland et al., 2003; Lu et al., 2013; Perkins et al., 2013; Rodrik & Rosenzweig, 2010; Zahra et al., 2006). There exists a need to establish a theoretical framework to systematically rationalize the mechanism of how Chintrepreneurship has influenced China industrial development and economic growth (Zhao, 2016; 2017). The most controversial point is: whether Chintrepreneurship can be qualified and applied as a business model for both developed and developing economies

(Ahlstrom, 2010; Audretsch et al., 2006; Butler et al., 2004), in terms of job creation (Phelps, 2013), poverty alleviation (Bruton et al., 2013), and social welfare as a whole.

Scholars posited that, to what degree entrepreneurship can contribute to economic development in developing countries is a fundamental question to be answered (Wong et al., 2005). To understand the mechanism of Chintrepreneurship in China, the role of government intervention in incentivizing and facilitating ownership transformation, stimulating and enforcing industrial consolidation and privatization, while still maintaining the autocratic communist system, has been one of the dilemmatic wonders puzzling the contemporary practitioners and researchers (Li, 2006; Zhao & Zhang, 2016; 2017). Correspondingly, how entrepreneurs in China have managed to survive in such a political environment has been widely researched topic (Chen et al., 2012; Kazanjian et al., 2002; Peng, 2006; Yang & Li, 2008). To solve these pending puzzles, the rest of this paper focuses on the issues including, the dearth of private ownership right (POR), the government intervention (i.e.: Dual-Track System), regional and wealth disparities, and other related barriers that might be obstructive to the sustainability of Chintrepreneurship.

Collectivism vs. Individualism: A Dilemma Sabotaging the Concept of Entrepreneurship

Why and how, the rapidly emerged Chintrepreneurship can be incubated and nurtured in a politically autocratic, cronyism-oriented and collectivism-based system (China), should be treated as a theoretical question, fundamentally sabotaging or at least shaking the foundation of traditionally conceptualized framework that, only a politically democratic system can thrive the individualism based entrepreneurship (Zhao, 2017). To this end, the collectivism-based Chintrepreneurship deserves to be incorporated into the neo-classic economic theory, in order to provide a new paradigm for those contemporary Western scholars and politicians to shake-off their status quo of skepticism in the face of emerging model of China-way of entrepreneurship. The constant growth of China GDP even in the downturn of global economy proves itself that, Chintrepreneurship is successful in terms of speed, scale and scope (Keane, 2007; Kynge, 2000), indicating that, in today's rapidly globalized and diversified environment, the government-led or the collectivism-based entrepreneurship may be more appropriate than the traditionally individualism-based entrepreneurship. Given that the wholeness is greater than the sum of pieces, it is plausible to rationalize why those globally competitive FDIs failed to compete with the government-supported indigenous enterprises in China (Zhao, 2016; 2017).

It is suggested empirically that, the contribution of entrepreneurship to economic growth tend to be country-specific (Zhang & Stough, 2013). The impact of political and cultural systems on the mechanism of entrepreneurship must be carefully weighted and examined, in order to

understand the emerging phenomena of entrepreneurship geminated from those developing economies like China – historically infused with the autocratic and cronyism oriented Confucianism (君君臣臣,父父子子), namely, let the king be the king, the courtier be the courtier, and let the father be the father, the son be the son (Zhao, 2016; 2017). In such an officialdom/superiors-will-dominated society, obedience is the core of political-social-cultural structure, obstructing free-thinking, transparent-communication and market-oriented entrepreneurship (Hall, 1981; Hofstede, 1994).

Note that, when Americans think of entrepreneurs, they think of individuals like Bill Gates, Steve Jobs, Larry Page and Sergey Brin, technical geniuses who created huge business empires based upon their beliefs and practices of science, technology and innovation. In contrast, when people in China think of entrepreneurs, they think of people who have the courage to abandon the 'Golden Bowl' and start a small business to survive, rather than technological creativity and innovation. The reigning issue challenging entrepreneurs in China is how to take advantage of government policy to make profit. 'Who you know determines what you can do', may best rationalize the mechanism of entrepreneurship (Zhao, 2016). Understanding such a cronyism oriented political system may help solve the dilemmatic puzzle between collectivism and individualism in the formational and functional mechanism of entrepreneurship (Zhao & Zhang, 2016; 2017).

From the Dearth of Private Ownership Right to the Development of Chintrepreneurship in China

Despite the overseas Chinese Diasporas are well-known for their entrepreneurial spirit around the Pacific Rim. However, entrepreneurship was virtually impossible in China for nearly 80 years of the 20th century (Ahlstrom et al., 2004; Balazs, 1964; Landes, 1998; Pan, 1990). For half of the century, China was undergoing a period of warfare. From 1950s to 1970s, the country underwent a series of political, ideological and cultural turmoil and upheavals, such as land reforms, economic collectivization or nationalization and Cultural Revolution. Private Ownership Right (POR) and entrepreneurship became tabooed vocabularies, chastised and prohibited under the communist government system (Cooper, 2010; Harding, 1987; Nasar, 2012; Naughton, 1995; Rawski, 1989; Zhao, 2016; 2017). Even the intellectual property right (IPR) such as individuals' inventions was also defined as state owned property, confiscated from the original inventors, and offered them nominal reward as symbolic compensation without bargain (Balazs, 1964; Finley, 1965). Such a dearth of POR can be traced back to Confucianism, a hierarchical system, determining the inheritable privilege of properties assigned by the royal family to its government officials according to their respective rankings in the feudalistic past

(Balazs, 1964; Ho, 1962), and by the mono-party control of communist government in the modern history. This is the root cause of China politically, socially, culturally and economically bureaucracy-cronyism oriented system, hindering indigenous proprietary innovations and entrepreneurship (Rosenberg & Birdzell, 1986).

Since the founding of Communist China in 1949, the country has adopted the former Soviet political-economic system. Entrepreneurship was completely prohibited, enterprises were forced to seek government approval prior to virtually everything they do (Rawski, 1989; Reynolds, 1982), managers forced to obtain government authorization, prior to every decision they make (Liu & Wang, 1984). In a sense, entrepreneurship was completely wiped out from China political radar. However in 1978, when Deng Xiaoping took over the leadership and launched economic reforms, the country has been constantly experiencing the development of Chintrepreneurship and economic transformation, from a government planned economy, to a nascent but more like a hybrid market economy, from one of the poorest countries, to the 2nd largest world economy (Harding, 1987; Huang, 2008; Yueh, 2013).

In 2012, the registered SMEs exceeded approximately six million (Chen, 2006), and contributed to over 50% of China GDP growth in addition to social welfare and poverty alleviation improvement (Huang, 2008; The Economist, 2009a; 2009b; The Economist, 2011). Therefore, understanding the footprint of Chintrepreneurship might provide experiences and directions, practically meaningful for other developing countries to pursue their catch-ups (Chen et al., 2012), and theoretically instructional for researchers to rationalize the respective impacts of the collectivism-based Beijing Consensus versus the individualism-based Washington Consensus on the formational and functional mechanism of entrepreneurship (Zhao, 2016; 2017).

From Government Intervention (Dual-Track System) to Regional and Wealth Disparities

The geographically diversified social, cultural, ethnical and economic patterns may explain the original motif and purpose of government dual-track policy system, which was initiated by Deng Xiaoping to rapidly let a few people and regions to get rich first (Zhao & Zhang, 2016). Dramatically, such a geographically discriminatory policy system has effectively caused a sharply contrasted economic imbalance between those selected regions (coastal cities such as Shenzhen, Shanghai, Xiamen, Dalian and those specifically zoned science and industrial parks, etc.), and authorized them with a series of exclusively privileged policies and treatments to move faster than the rest parts of China (Zhao & Zhang, 2016). Empirical evidences also confirmed that, government dual-track policy system is the root-cause of both regional and wealth disparities, resulting from the differentiated development of innovation, entrepreneurship,

industrial development, job creations, financial capital, human capital (knowledge and technology), input/output per capita, consuming market (population-led purchasing power), and infrastructural amenities (Zhang & Stough, 2013).

Understanding the negative impact of government dual-track system on the formation of regional and wealth disparities, does not mean that its positive effect can be ignored. As a matter of fact, those firstly-initiated economic zones have indeed played their expected role in leading the nation's economic development. To this end, given the autocratic and cronyism-oriented nature of China government system, it is the political rather than the economic impact on the formation of an overall peculiarity of Chintrepreneurship. To some extent, without government dual-track policy, the rapid development of Chintrepreneurship would not be possible (Zhao & Zhang, 2016). Some scholars claimed that entrepreneurs in private sectors must be more nimble to government policies, than those in SOEs in order to avoid or reduce political and institutional risks, and to capture entrepreneurial opportunities (Bruton & Ahlstrom, 2003). In a sense, an ideological dilemma that, how such regional and wealth disparities have been fermented in a historically and still contemporarily self-declared socialist system, has become an emerging but seemingly embarrassing phenomenon sabotaging the traditionally democracy- and free-market dominated framework of entrepreneurship (Zhao, 2016; 2017). Therefore, a dialectic view is critical to objectively study and evaluate the role of government intervention in forming the peculiarity of Chintrepreneurship (See Table 6).

Table 6: Government Intervention, Entrepreneurship and Regional Disparity in China

Characteristics of Economic Disparities	
Rural versus Urban	<p>When the open policy was ideologically disputed among those senior party leaders over the issue of private ownership, and given the low income, poor education, inefficient productivity, and size of rural population (55-75% of China demography), the simple-minded rural people was selected as the sample or trial group to harness political divergence, avoid potential risk harmful to social stability, meanwhile initiate economic reform and Chintrepreneurship. By the mid-1990s, rural entrepreneurs accounted for 30-50 percent of China's private sectors, some of them have metamorphosed as globally reputed manufacturers such as Sanyang, the heavy industry equipment manufacturer, Wanxiang, an automobile component manufacturer, and Geely, the company that just acquired Volvo, just to name a few (National Bureau of Statistics of China, http://www.stats.gov.cn/english/). However, it is found that:</p> <ul style="list-style-type: none"> • Purely relying on the price jack-up of agricultural products does not help to stimulate rural economy. Instead, transforming the low value-adding agricultural activities into the higher value-adding activities through industrialization would be an effective way to enhance rural productivity. • The bottom social stratum of rural people makes them a demographic group of nothing to lose, and hence, the faithful and loyal group to the mono-party autocratic communist leadership, the easiest group to be brainwashed, and the desperate group for any opportunities that may lead them to a better life. This is what makes the rural people the first generation of entrepreneurs

Table 6: Government Intervention, Entrepreneurship and Regional Disparity in China

	<p>in the early stage of China reforms, and still believed as the key force for China economic transition ahead. To a certain extent, if without rural people engagement, Chintrepreneurship would not come this far (An interview with a senior economist and consultant for the central government, the interview was conducted on November, 11th, 2015.). The domestic consuming demand for agricultural products is far beyond China financial affordability for such a huge scale of imports. Therefore, agricultural industrialization to increase productivity through technological innovation seems to be the only option for China to continue its entrepreneurship, for today and for future.</p>
Political versus Economical	<p>Acknowledging the two types of entrepreneurship associated with their respective mechanism is critical. Type-I refers to Schumpeterian creative and destructive innovation oriented entrepreneurship, complying with the early-bird business strategy, requiring a vibrant market and competition system to nurture and fertile new business concepts/ideas and innovations. In contrast, Type-II is Keynesian government-led entrepreneurship, oft described as a catch-up strategy, and therefore, more realistic and feasible than the Type-I for emerging economies:</p> <ul style="list-style-type: none"> The mechanism of Type-II entrepreneurship is determined politically rather than economically. Assuming the inevitable transition from autocratic to democratic is true, then, Type-II and Type-I may be interpreted as two phases of entrepreneurship complying with political evolution. The speed of this transition is determined by the speed of political and social democratization. For example, China is Type-II based entrepreneurship, which would not happen or survive, if without the let-go permission from its autocratic government (Zhao & Zhang, 2016; 2017). Despite the achievement so far, whether China is able to transform from its government-oriented Type-II to market competition oriented Type-I, under the existing political system, is an imperative question. Answers to this question may help determine whether the Type-II can be used as a feasible and profitable model for other developing economies to follow.
Regional versus National	<p>In developing countries, the mechanism of entrepreneurship varies as a result of regionally differentiated government interventions (Malecki, 1993; Zhao, 2016; 2017):</p> <ul style="list-style-type: none"> It is argued that, innovation is constituted by the Schumpeterian rubric of creative and destructive force, driving the dynamism of capitalism, and determining the geographically differentiated formational patterns and mechanisms of entrepreneurship (Scott, 2006; Zhao, 2016; 2017). Empirical evidence also confirmed that, although lagged effect, regional disparity is inevitably and linearly associated with regional level of entrepreneurship, increased number of new start-up firms, and increased magnitude of job creation (Baptista, Escária & Madruga, 2008).

Table 6 indicates that, on the one hand, the path-dependent roadmap from government intervention to regional disparity is inevitable. On the other hand, entrepreneurship is far from a spontaneous or sporadic and self-relied activity. Instead, it is strictly disciplined and confined to a spatial-cum of political-social, institutional, cultural and economic conditions, susceptible to various kinds of breakdowns and disruptions (Zhao & Zhang, 2016; 2017). It is argued that, given the autocratic nature of China political system, if without a political reform, whether China is able to transition from Type-II to Type-I entrepreneurship, from a catch-up economy to a knowledge-driven economy, in order to incubate some of its own Bill Gates and Steve Jobs, and to jump-start another economic leapfrog, seems to be an interesting question for future research

(Zhao & Zhang, 2017). As commented by Charles Zhang, the founder and CEO of China's second largest internet portal, Sohu.com (A short essay posted by Zhang, Chaoyang (Charles Zhang) on Wechat, on 07/28/2015): *".....Without political reformation, there will be no fair market competition, no quality, no excellence, no employment opportunities, no stability, and no real rise of China.....Only by realizing maximum fairness, can those talented individuals and creative organizations emerge. The government should stop protecting and supporting unfair competition."*

Barriers Hindering the Sustainable Development of Chintrepreneurship

Although the linear relation of entrepreneurship and economic capability and competitiveness dominates the mainstream of literature, however, empirical evidences showed that such a positively associated relationship is not significant in developing countries (Hector & Rocha, 2004), and that the trajectory from entrepreneurship to industrial clusters and economic growth, is leveraged by regional technological capability of innovation, which serves as a platform to facilitate industrial transformation and corporate productivity (Feldman & Yoon, 2012). For example, by comparing the diverged path of entrepreneurship between Silicon Valley, CA and Route 128, MA, the two global hubs of technological innovation in the IT-industries, some scholars found that, the sharply contrasted outcome between the two locations since the 1960s, may be attributed to their respectively differentiated path of industrial cultures, inter-firm relations and organizational capability of innovation (Kenney & Burg, 1999).

In comparison, although the rapidly emerged industrial clusters (i.e.: science-technology parks) have played remarkable role in promoting the development of entrepreneurship in China (Zhao & Zhang, 2016), however, scholars argued that, the differentiated formational patterns and mechanisms of entrepreneurship between the developing and the developed economies, especially with regard to the role of technological capability of innovation, has not received a deserved attention (Leff, 1978). Such a negligence is identified and claimed as the cause of conceptual elusiveness in the previous literature of entrepreneurship (Baumol, 2015), hindering the theoretical construction for the increasingly emerged entrepreneurial phenomena in those developing economies, in which, entrepreneurship is more needed than in those developed economies (Leff, 1978). In the face of these theoretically dubious and unsolved caveats, and given the technological constraints and political barriers, it is necessary to identify and understand the challenges and barriers that hinder the development of technological capability and discount the quality of entrepreneurship particularly in those developing economies like China (See Table 7):

Table 7: Three Challenges Constraining the Development of Technological Capabilities in China

Characteristics	
Financial Capital Constraint	The lack of government trust is the most critical challenge depriving the eligibility of POEs/SMEs from obtaining the government-controlled financial resources such as bank loans and credit authorization (Cassar, 2004; Cong, 2009; Cooper et al., 1994; Florin, 2005; The Economist, 2011), and hindering them from achieving competitive capabilities and advantages (Newman et al., 2012).
Human Capital Constraint	The lack of a dedicated educational and professional training program leads to the lack of talents of R&Ds and technological innovation. Consequently, replicative or imitative innovations become the only feasible option in China (Schmitz, 1989; Zhao, 2013; 2014; 2016; 2017).
Political and Institutional Constraint	<p>The lack of a democratically-based political, institutional and legal system hinders or constrains the development of a creative mechanism to encourage and incentivize technological capability:</p> <ul style="list-style-type: none"> • Government interventions (policies and regulations) hinder the ease of doing business and prevent the fair competition for entrepreneurial opportunities (Baumol, 1990; Chen et al., 2012; Coase & Wang, 2012). For instance, it takes entrepreneurs on average, to go through 13 procedures and 33 days to complete a single business registration, which only requires 5 procedures and 12 days in those OECD countries (World Bank, 2012). • Government interventions (policies and regulations) are likely to cause the regional and wealth disparities (Ahlstrom et al., 2008; Cumming et al., 2009; Huang, 2010). For example, the dual-track policy is defined as a geographically discriminatory treatment between coastal regions and inland China (Zhao, 2016; 2017).

Table 7 demonstrates the three constraints, challenging the mechanism of entrepreneurship in China. From political perspective, individual or organizational beliefs, goals and actions are restrained by a specific institutional setting (Scott, 2014). Therefore, the substantially deviated institutional system between China and Western societies (i.e. USA and European countries), must be taken into account in order to explain the variability of their respective mechanism of entrepreneurship (Ahlstrom et al., 2007). Note that, the government of China has also learnt and accumulated experiences, and endeavored to improve its institutional landscape and incentivize the development of entrepreneurship (Bruton et al., 2010). Since 1999, the government of China has launched a series of financial incentive packages, lifted its restrictions of private and informal finance and investment institutions, stimulated an unprecedented financial market expansion and diversification, and resulted in a rapid development of private venture capitals and investment firms. By 2010, there were 720 officially registered venture capital enterprises, operating 30 million RMB fund size on average of (Shen, 2011). Additionally, the government also launched the Inno-Fund program, to stimulate and incentivize a nationwide innovation and entrepreneurship (Allen et al., 2005; Newman et al., 2012).

From the resource-based perspective, entrepreneurs in China have learnt and managed to navigate and take advantage of its government intervention system (Young et al., 2008). In a sense, what makes entrepreneurs in China differentiated from those Western entrepreneurs is that, the top priority of China entrepreneurs is to network or connect with government system. In

contrast, Western entrepreneurs generally focus on technological advancement and market expansion. However, it is unfortunate that, such a contrasted differentiation is either ignored or refuted by most of the contemporary scholars at present time (Ahlstrom & Ding, 2014; Littunen, 2000; Sarasvathy, 2008; Shane & Nicolaou, 2013; Tan, 2001; Van Praag & Cramer, 2001; Wright et al., 2008; Xavier et al., 2013; Yang & Zhang, 2012; Zhao & Zhang, 2016; 2017). For this reason, the peculiarity of Chintrepreneurship deserves an in-depth research (See Table 8):

Table 8: Personal Characteristics and Professional Attributes of Entrepreneurs in China

Age Group	It is estimated that, the average age of entrepreneurs in China is in their early 30. About 44% entrepreneurs are at the age of 25–34, 57% around 18-34 and less than 25% in the range of 45-64, indicating a diversified pattern with no significant difference of age (Xavier et al., 2013).
Education Level	Entrepreneurs in China are generally well-educated. Nearly 32 percent hold bachelor degree, about 27 percent are community college or equivalent level, 9 percent are secondary school or below, and 4.4 percent are the holders of master's degree or above (Yang & Zhang, 2012).
Migration	Regional disparity leads to mass migration of talents and labors, from inland to coastal regions for jobs and higher wages, shaping the most phenomenal demographic characteristics of entrepreneurs. Overseas returnees with foreign knowledge and skills constitute another demographic characteristic of China entrepreneurs (Wright et al., 2008).
Technical Skill	Over 80% of entrepreneurs have prior work experiences. Entrepreneurs in POEs tend to be more innovative, proactive and productive, than those managers in SOEs (Tan, 2001; Zhao & Zhang, 2016).
Political Networking Skill	Given the autocratic and cronyism-oriented political system, those successful entrepreneurs in China are generally incubated and supported by, or at least associated with government system, one way or another. Otherwise, no entrepreneurs would even survive (Zhao & Zhang, 2016).
Problem-Solving Skill	Entrepreneurs in China possess stronger social networking aptitude but less technological skills in problem solving than that of entrepreneurs elsewhere (Sarasvathy, 2008; Van Praag & Cramer, 2001).
Risk-Taking Propensity	Entrepreneurs in China are more risk-taking-oriented than that of entrepreneurs elsewhere (Littunen, 2000; Shane & Nicolaou, 2013). This is so because they have nothing to lose (Zhao, 2016).

Table 8 illustrates the peculiarities (characteristics/attributes) of entrepreneurs in China. Given that, entrepreneurship does not exist in a vacuum, and that, any entrepreneurial behaviors and activities can be traced to an individual person, therefore, it is reasonable to hypothesize that, entrepreneurs must possess the capabilities (endogenous), sufficient enough not only to develop and strengthen their entrepreneurial momentum, but also to overcome the adversity of external conditions (exogenous). The combination of these characteristics/attributes constitutes the peculiarity or the precondition to determine whether an individual can be qualified as an agent of entrepreneurship in China (See Table 7 and 8). This is why that, some scholars contend that, despite the dogged effort of previous studies, the poverty of knowledge on the peculiar mechanism of Chintrepreneurship still remains as an academic challenge (Bruton et al.,

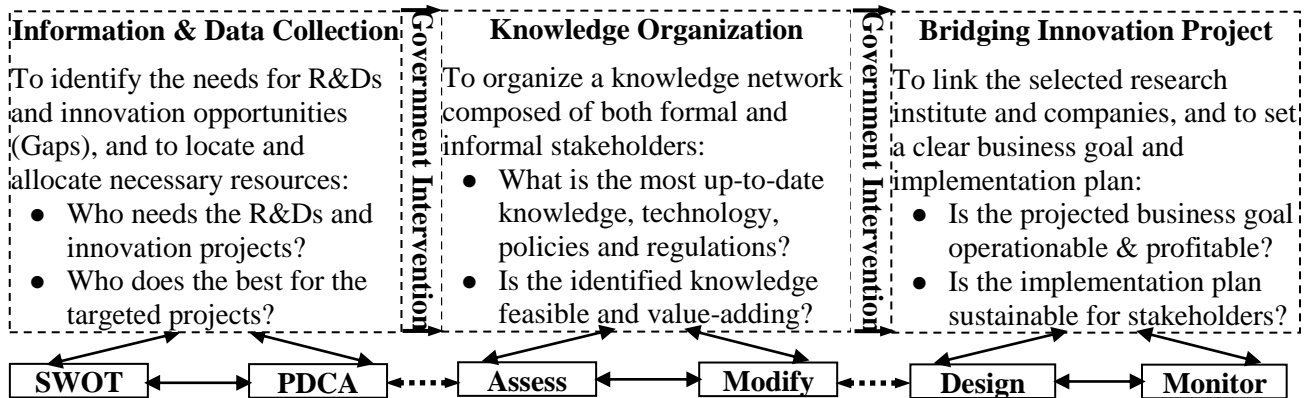
2001; 2008; Haley et al., 2009; Hitt et al., 2004; Young et al., 2004; Zhao, 2016; 2017), hindering the cognitive development on: why and how, such a politically democratic and economically capitalistic and free market competition oriented entrepreneurship, has flourished in China, which is a historically inherited autocratic and cronyism oriented society? To this end, the significance of establishing a theoretical framework to explain and rationalize the peculiarity of Chintrepreneurship is far-reaching, especially for the knowledge development on the increasingly globalized and diversified trend and pattern of entrepreneurship (Lerner, 2009; Poldner, 2012; Yang & Li, 2008; Zhao & Zhang, 2016; 2017).

BRIDGE Model: An Adjusted Model of Entrepreneurship for Emerging Economies

Many developing countries suffer from the lack or weak capability of transforming knowledge, from knowledge developers (academia) to knowledge users (industry). This is perhaps the most challenging issue, hindering the mechanism of entrepreneurship. Two noticeable reasons may explain this long-existing weakest link. The first is the lack of an effective government institutional system to guide and enforce the collaboration between research institutions and business entities. The second is the lack of technological capabilities to support the in-house R&Ds and innovations. The direct consequence of the two weaknesses is the brain drain, namely, the migration of talented researchers and entrepreneurs, or, the key force of knowledge transformation. In response, a BRIDGE (Bridging Research, Industry, Development, Growth and Entrepreneurship) was designed and proposed as an entrepreneurial model, jointly initiated by African, Caribbean and Pacific Group of States (ACP) and European Union (EU). The BRIDGE Model aims to help developing countries to establish an effective and collaborated government intervention system to bridge the gap between research institutions and the consortia of companies, and to improve the efficient allocation, distribution and utilization of available and accessible resources across national border.

To make the BRIDGE Model robust, this paper argues that, government intervention must be treated as an indispensable and irreplaceable precondition to overcome the traditionally lagged process of value-transformation from knowledge (R&Ds and innovations) to market values (salable products and/or services), to enforce the dialogue and partnership between knowledge producers and industrial users, and hence, to enhance the capability of entrepreneurship (See Figure 2). Figure 2 serves as a flow chart of a three-phased BRIDGE Model for the development of entrepreneurship. Government engagement determines the flow from collecting data and information and analyzing the resource availability and accessibility (Phase 1), through searching feasible and applicable cutting-edge knowledge (Phase 2), to designing and implementing an actionable and value-adding project plan (Phase 3).

Figure 1: BRIDGE Model for Developing Countries to Pursue Entrepreneurship



Case Study 1: What makes Wenzhou the Dragon-Head of Entrepreneurship in China?

Wenzhou, a mid-sized city in Zhejiang province, is well-known as an entrepreneurial hub for the development of POEs in China. The great success of Wenzhou in incubating entrepreneurship during the past four decades may be summarized as the result of three reasons. Firstly, the government of Wenzhou is relatively less bureaucratic but more open-minded, more market-oriented and more supportive to the development of small business than the government of other cities in China. Secondly, entrepreneurs in Wenzhou are more market-oriented and more teamwork-oriented to exploit group advantages such as financial and marketing resources, than the entrepreneurs of other cities, wherein, they are more opportunistic oriented and more interested in Guanxi or personal networking with government systems. Thirdly, entrepreneurs in Wenzhou are mostly benefited from local Diasporas, who serve as the sources of financial investment and the outlets of import and export trade, and function as the BRIDGE, linking Wenzhou with both domestic and international markets. Put differently, it is the government intervention that enables Wenzhou to be the dragon head of entrepreneurship, contributing to the development of entrepreneurship in China.

Case Study 2: What makes Taiwan an Entrepreneurial Pioneer?

Ideologically, Taiwanese and people in mainland share an identical root of Chinese ethnical culture, which has been overwhelmingly dominated by Confucianism, stipulating that, the absolute authoritative and autocratic role of government should be unquestionable, untouchable and unshakable (Zhao & Zhang, 2016). Such a cultural heritage has been infused in, inherited from, and carried on in the evolution of China society, impeding its development of democracy. On the contrary, Taiwan, after experiencing the 50-years' Japanese colonization and more than

a half century American cultural influence, has transitioned into a semi-democratic and capitalistic system, nurturing the development of entrepreneurship. From economic perspective, similar to (if not identical) the situation in mainland China that, properly taking advantage of government policy system is one of the best practices of those private enterprises in Taiwan. From business operation and strategic perspectives, it is reported that, SMEs in Taiwan have managed to swiftly adapt to and comply with policy-changes, and played a pivotal role in stimulating the development of manufacturing and high-tech industries, and meanwhile, facilitating the cost saving and latecomer strategies, leading to the rapidly advanced proprietary capability of innovation, constantly absorbed and accumulated from external technological and intellectual resources (Liu, 1998). To this end, government intervention is substantially the ultimate controller or adjustor in optimizing the interactions of political, social and economical settings, contributing to the overall economic development of both Taiwan, and even the pacific region.

CONCLUSIONS AND RECOMMENDATIONS

Despite the dogged effort and great contribution of previous studies, an extensive literature review reveals their weakness, in measuring and evaluating the performance of the rapidly emerged mechanism of Chintrepreneurship, presenting an academic challenge for present and future researchers. Instead of being a spontaneous or sporadic and self-sufficient business activity, entrepreneurship is a path-dependent and susceptible to the diversified spatial-cum of political-social, institutional, cultural and economic conditions. Such a dynamic nature must be taken into account, both theoretically and practically, when discussing whether the government-oriented Chintrepreneurship can be smoothly transformed into a market-oriented and knowledge-driven entrepreneurship, and used as a catch-up model for other developing economies. This paper argues that, if properly designed, executed and institutionalized, government intervention can function as a critical controller/adjustor, influencing the tripartite relation of entrepreneurship, industrialization and economic growth. Having government intervention integrated into the measurement of entrepreneurship may not only help to explain the ideological and theoretical dilemma of why and how the traditionally defined democratic, capitalistic and free-market dominated entrepreneurship has thrived from the self-declared communist and socialist China, but also help to rationalize the critical need to establish a dialectic view to objectively study the role of government intervention in forming the peculiarity of Chintrepreneurship.

Given the autocratic nature of China political system, government intervention is indisputably the root cause of the geographically and economically divided haves and have-nots (regional disparity and wealth disparity). On the one hand, such a divide itself emerged and coexisted in the self-declared communist China sabotages and chastises the ideological foundation of communism. On the other hand, the success of Chintrepreneurship and its contribution to economic growth, achieved through the leadership of China communist government, suffices to prove that, regardless of political -isms or ideological doctrines of any kind, only those able to create and advance human welfare deserve to be selected in the course of human history. Following this line of reasoning, entrepreneurs in private sectors must be more nimble to government policies than those in SOEs, in order to minimize political and institutional risks, while maximize the benefit of entrepreneurship. To this end, what measurements should be established to evaluate and qualify an individual as an agent of entrepreneurship, and used to distinguish the collectivism-based Chintrepreneurship in China from the individualism-based entrepreneurship in Western societies, may be the theoretical priority for present and future researchers, in order to re-establish a holistic mechanism of entrepreneurship that is applicable to the dynamically globalized and diversified business environment.

Until 2013, the fifth generation of China leadership headed by Xi Jinping embarked a political reform centered by the movement of anti-corruption and anti-cronyism, stirring up an intensive debate within the communist ruling system. The opposition side (conservatism) argued that, it is superfluous, harmful and risky, jeopardizing the vested interests of communist party and the national priority of political stability. Notwithstanding, it is reasonable to expect that, the ongoing political reform may serve to recover the economic sluggish and the mired financial distress both domestically and internationally, and meanwhile, provide feasible solutions for the government-led Chintrepreneurship to overcome the encountered barriers and continue to stimulate China economy to grow. Following this logic, this paper proposes that, to prevent contemporary scholars and practitioners from continuously misidentifying and misinterpreting the emerging economic and business phenomena, especially from those developing economies, whether the government-led Chintrepreneurship should be confined to the traditionally inherited theoretical boxes of Schumpeterianism and Keynesianism, whether it is applicable as a catch-up model, and whether the observed problematic side-effects (ex.: regional and wealth disparities) can be weighted as a worthy tradeoff – all is determined by, whether government intervention can be systematically integrated into an entrepreneurial model, namely, the BRIDGE model to enrich the theoretical framework of entrepreneurship.

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