

“CHINTREPRENEURSHIP AS A CATCH-UP MODEL FOR DEVELOPING ECONOMIES”

A TRIPARTITE FRAMEWORK OF GOVERNMENT INTERVENTION, ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT

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Abstract

This paper theoretically explores the formational mechanism of Chintrepreneurship (aka: China-way of Entrepreneurship) from different perspectives, and rationalizes the transformational path of how a politically centralized autocratic system, in conjunction with a socially, economically and culturally cronyism oriented system (China), has been mystically adapted into, and greatly rewarded from the increasingly globalized and capitalized business environment. A tripartite framework is proposed to explain the role of government intervention in facilitating the development of innovation communication platform (ICP), encouraging the participation of NGOs, and incentivizing and incubating the development of Chintrepreneurship, which in turn, functions as an adjustor of supply-demand leveraged economic dynamism. By engaging in the rapidly globalized supply chains (GSCs) and globalized value chains (GVCs), the government-led Chintrepreneurship has proved itself as a more empowered and more competitive way of entrepreneurial practice, than the traditionally worshipped Western-way of entrepreneurship. The results of three case studies also support the conclusion that, government intervention may serve as a value-adding factor to facilitate the development of entrepreneurship and economic leapfrog. Although empirical validation is needed, nevertheless, the tripartite framework may help interpret the cognitive dilemma, namely, the antithetical stances between Washington Convention and Beijing Convention, in terms of their respective mechanisms of entrepreneurship.

Keywords: *Chintrepreneurship, China-way of Entrepreneurship, Government Intervention, Cognitive Dilemma, Value-adding Adjustor, Point-Value Performance, Industrial Upgrade, Global Supply Chains, Global Value Chains*

INTRODUCTION

Since the beginning of 20th century, China had suffered and survived a series of genocide type of destructions, both materially and spiritually, from the Invasion of Eight Nations Coalition, the Age of Warlords, the Independent War against Japanese's Invasion, and lastly, to the Civil War between Nationalism and Communism. Shortly after a half-century war was ended in 1949 and followed by a short period of economical transition (1950-1965), the nation was dragged into an unprecedented political and ideological metamorphosis, namely the Ten-year Cultural Revolution (1966-1976). The crackdown of 'the gang of four' in 1976 and the launch of Deng Xiaoping's open policy for economic reformation in 1978, marked the beginning of political-social and economical transformation, from a pure communism monopolized planned-economy (1950-1976), to a government monopolized and cronyism centered capitalism, which is worded theoretically, as the peculiarity of China socialism and market economy (Zhao, 2017). Accordingly, 1978 has been widely referred as the historical demarcation and the landmark of modern China transformation, from free-will oppression, to mindset liberation; from getting rich is shameful, to getting rich is glorious; from zero tolerance for entrepreneurship, to fanatically pursued imitation as the developmental mechanism of Chintrepreneurship (China-way of entrepreneurship); and ultimately, from one of the poorest nations, to the 2nd largest of the world economies in 2013 (Zhao, 2014; 2016).

The Conceptual Origin and Rationale of Chintrepreneurship

The remarkable success of China rapidly emerging and dynamically transitioning economy has provoked a widespread academic curiosity, panic and debate. Up to date, accusations of imitation and infringement of IPR still dominate the mainstream of literature, like a symphony of 40-year-consistent growth of China GDP, which is composed of three components of 'Made-in-China' manufacturing oriented economy, namely, cheap labor and materials, low price, and huge consuming market. It seems cynical or even ironic that, China economic growth is excluded as an outlier of Schumpeterian causality framework of entrepreneurship and economic growth (Schumpeter, 1934; 1942). A recent research claims that, the concept of entrepreneurship is still an unsettled subject, and that, the existing framework needs to be upgraded in order to rationalize the emerged phenomenon and diversified mechanism of entrepreneurship in the context of increasingly globalized collaboration of supply chains and value chains (Zhang & Stough, 2013). To defend this theoretical argument, the long-prevailing Western framework must be adjusted, so that the contributive role of Chintrepreneurship in stimulating and promoting China economic leapfrog can be rationalize. Meanwhile, the cognitive dilemma, aka: the democracy and free-market oriented mechanism (Washington Convention)

versus the autocracy and government intervention oriented mechanism (Beijing Convention), can be interpreted with more in-depth understandings (Zhao & Zhang, 2017).

From Market Equilibrium Perspective to Discuss the Concept of Chintrepreneurship

Entrepreneurship is defined as a process of capturing the emerging business opportunities, organizing and exploiting business resources, and transforming them into market values (Zhao, 2014). From corporate management perspective, entrepreneurship is widely interpreted as a synergy that cannot be transferred across corporate boundaries, and a key factor of corporate competitive advantage. In today's knowledge- and high-tech intensified global industrial environment, entrepreneurship becomes as a buzzword as opposed to those opportunistic and rent-seeking activities, such as imitations, lower entry barriers and market saturation, frequently eliminated or replaced by the vibrant innovations and entrepreneurial activities (A tale of two types of entrepreneurship in China, 2011,).

The developmental mechanism of entrepreneurship is environmentally determined (Zhao, 2016; 2017). From the perspective of demand-and-supply dynamism, which is depicted as the pattern change of market equilibrium performance, two types of entrepreneurship must be distinguished, namely, the supply-side oriented entrepreneurship versus demand-side oriented entrepreneurship. To this end, under the autocratically inherent political-economic system in China, whether the Chintrepreneurship can be adjusted or tailored to fit into changing nature of market equilibrium is a theoretically and practically meaningful question to help rationalize the peculiarity of China-way of entrepreneurship (See Table 1):

Table 1: From Equilibrium Perspective to Discuss the Two Types of Entrepreneurship in China

Types	Descriptions
Demand-side Oriented Entrepreneurship	<p>Demand-side oriented entrepreneurship is normally incepted by searching and identifying market needs that have yet to be fulfilled. Therefore, consumer needs function as the sources of entrepreneurial opportunities, motivating and driving the design of viable business concepts and plans. Then, the required economic resources are subsequently organized or integrated:</p> <ul style="list-style-type: none"> Majority of high-tech POEs in China are demand-side oriented entrepreneurs, such as: Baidu (NASDAQ:BIDU) a leading Internet company; Dangdang (NYSE:DANG) a e-commerce company; Sina Corporation (NASDAQ: SINA), an on-line media company; Alibaba.com (1688.HK) and so forth. Demand-side oriented entrepreneurs are generally profit-driven by either fair or foul means. The unscrupulous imitations and copycats of foreign products or brand names may best describe their main characteristics during the past thirty years.
Supply-side Oriented Entrepreneurship	<p>Supply-side oriented entrepreneurship normally begins with developing and accumulating economic resources, which are used to evaluate and benchmark the feasibility of identified entrepreneurial opportunities. Most of SOEs are supply-side oriented entrepreneurs, who are supported by government, so that they are capable of taking risky and uncertain opportunities.</p>

Table 1: From Equilibrium Perspective to Discuss the Two Types of Entrepreneurship in China

	<p>China Petroleum & Chemical Corporation (NYSE:SNP); China Mobile Communications (NYSE:CHL); China Life Insurance (NYSE:LFC) are typical examples of this kind:</p> <ul style="list-style-type: none"> • SOEs are funded by state budget, their priority is to comply with government command. • The priority of SOEs' executives is to follow and execute government policies, rather than making their own entrepreneurial decisions. Misjudgment, miscalculation, and perhaps, overestimation of profitability are commonly committed mistakes of this type of entrepreneurs in order to comply with the faulty assumptions of government policies. This is why SOEs are generally not as competitive as POEs (Zhao & Zhang, 2016; 2017), and why the misbehavior of SOEs is the cause of China production overcapacity.
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The Theoretical Base of Chintrepreneurship

Although seemingly old, the pros and cons of contemporary debate over the relationship between entrepreneurship and economic development are still rooted in, or extended from the two traditionally inherited theoretical camps, namely Schumpeterianism versus Keynesianism. Schumpeterianism deems the government and societal bureaucratization as the killing-force hindering the spirit of entrepreneurship, while, innovations and technologies as the creative force, stimulating and facilitating the development of entrepreneurship, through the process of destructing and displacing old businesses by new ones (Schumpeter, 1942). In contrast, Keynesianism insists that, the powers of big government and big corporation, rather than the risks resulting from the turmoil of “creative destruction”, is the preferable and the optimal way to establish an orderly prosperity (An Open Letter to President Roosevelt – by Keynes, John Maynard, 1933). The divergence of the two schools of thought may be demarcated from their respective ideological stances of whether pursuing innovative individualism, or pursuing bureaucratic collectivism (Keynes, 1920). Regardless of which one is more prevailing, the combination of Schumpeterianism and Keynesianism forms a unified force propelling the evolution and diversification of the theoretical development of entrepreneurship, from the Public Choice (Kalecki, 1943; Sweezy, 1946), the Stockholm (Jonung, 1991), the Monetarism (Abel & Bernanke, 2005), the New Classical Economics (Akerlof, 2007), to the government interventions (Zhao, 2016; 2017).

Seemingly, Schumpeterian is more prevalent than Keynesianism in guiding the theoretical development of entrepreneurship (Nwaobi, 2012). Despite the respective ups and downs, the revitalization of these two branches of entrepreneurship is indispensable from the joint efforts of Reagan-Thatcher's regime during the period of 1980s. The evangelistic roles of United Nations, World Bank and European Union in promulgating and promoting the development of entrepreneurship may also help explain the indelible impacts of government interventions on the globalization and industrialization of entrepreneurship. As a result, those world-class business heroes or champions emerged across industries one after another, such

as Bill Gates, Oprah Winfrey, Richard Branson and Warren Buffett, just to name a few. Additionally, the rapidly globalized internet infrastructures and significantly reduced cost of communications, knowledge diffusions and technology spillovers – all has contributed to the creation of entrepreneurial opportunities, anytime and anywhere.

To date, entrepreneurship has far exceeded the conceptual domain of Schumpeterian creative destruction in both scope and scale. Despite that the United States continues to remain as the holy land for entrepreneurship, attracting talents worldwide, learning, working, and then, retuning back to their home countries to preach the gospel of the traditionally inherited free-market oriented entrepreneurship. However, entrepreneurship has been infused and integrated into government agenda and education system in both developed- and developing- economies. The increasing number of those returned youngsters equipped with Western education background, technological competencies and network resources, will, one way or another, raise the bar of entrepreneurial stakes in those developed economies, and simultaneously, open a broader entrepreneurial avenue for those developing economies. Entrepreneurship is no longer the privilege of developed economies. Instead, to some extent, more entrepreneurial opportunities are likely emerged from those developing economies, awaited to be discovered, identified and exploited, than from those developed ones. The successful roadmap of the 40-year incessant economic growth may serve to theoretically rationalize the dynamism of Chintrepreneurship (Zhao, 2016; 2017).

The Peculiarity of Chintrepreneurship – Beyond the Traditional Framework of Entrepreneurship

Given the legacy of monarch political-social and cultural systems, and combined with the communist cronyism, China is described as a pseudo-feudalistic society, highly valuing its historically inherited communal and collective ideology, prioritizing national and collective rather than individuals benefits. Such an ideological system has empowered the government as the embodiment of absolute control of everything, and the SOEs as the dominant force of economic development (Zhao & Zhang, 2017). Typical examples include but not limited to: public universities and schools can hire the best teachers, recruit the higher scored students, and are generally believed to offer better quality of education; public hospitals are staffed with the best doctors and are believed to provide better medical treatment and services. Interestingly, it is claimed that, the degree of connection (guanxi or 关系) with government is a key factor to measure an enterprise competency, and a key factor for investors to make decisions.

Given the peculiar settings of China political-economic environment, it is claimed that, government intervention is the formational mechanism of Chintrepreneurship, driving China to transform from a political-economic system, to a bureaucratically and discriminatively oriented crony-capitalism (Zhao, 2017), in favor of SOEs rather than POEs (Che & Qian, 1998). A typical example is that, entrepreneurs are treated differently due to their respective political-social status. Government leaders or their family members or relatives are classified as the beneficiaries of the chain-of-interests, or the red-hat entrepreneurs, and endowed with privileges not available to others, such as access to insiders' information, zero-interest of bank finance, government authorized free land, and simplified, expedited and hassle-free administrative formalities for special permissions or licenses (Yang, 2007; Zhao, 2017). To this end, the mechanism of government intervention in the development of Chintrepreneurship deserves to be studied.

THEORETICAL FRAMEWORK

Despite the past 40 years' second to none record of consecutive growth stemming from the economic reform and opening policy since 1978, in conjunction with the manufacturing based industrial expansion and agglomeration, in terms of speed, scale and scope, China still struggles at the lower end of both global supply chains (GSCs) and global value chains (GVCs). It is conceptualized that, Chintrepreneurship (China-way of Entrepreneurship) is resulted from government interventions (policies and regulations), the propelling force for the peculiar way of China economic catch-up (Zhao & Zhang, 2017). Whether Chintrepreneurship is able to continuously propel China economic and industrial transition, from the low-end of global supply chains (GSCs) oriented global production networks (GPNs), to the high-end of global value chains (GVCs) oriented global trade networks (GTNs) – relies on whether the mechanism of government intervention can be maintained in a positive track to keep attracting worldwide FDIs, especially those Chinese ethnic merchants and Diasporas, to exert their indelible contributions (financially, technologically and managerially) to the development of entrepreneurship and economic growth, and ultimately, to transform China into a global hub of entrepreneurship across industries (Zhao & Zhang, 2017). Tempted to explore the potentiality and generalizability of Chintrepreneurship, this paper proposes the tripartite framework (the linearity of government intervention, innovation and entrepreneurship, and economic growth), to serve as an economic catch-up model, especially effective for those emerging economies (See Figure 1):

Figure 1: Government Intervention as the Core of Tripartite Framework



RESEARCH OBJECTIVE AND METHODOLOGY

The direct objective of this paper is to rationalize the role of government intervention in stimulating the development of entrepreneurship and economic growth in China. Given that, production overcapacity is one of the causes to influence the dynamism of supply-demand equilibrium, this paper argues that, government intervention may serve as an effective adjustor to control the aggregation processes of productivities and resources, by participating and engaging in the collaborative flow of GSCs and GVCs. Therefore, the indirect objective of this paper is to rationalize that, government intervention can function as a value-adding factor to improve the performances of inherent actors involved in the dynamic balance of supply-demand equilibrium, by leveraging the development of entrepreneurship to create new market outlets through the flow of GSCs and GVCs.

Methodologically, to achieve the projected goal, this paper delves into literature review, analytical comparisons of case-studies, in conjunction with both formal and informal interviews with entrepreneurs and policy-consultants in China. By setting the tripartite framework and integrating it into the context of GSCs and GVCs, this paper aims to explore and complement the previously dominated classical theories in economics and entrepreneurship, in order to rationalize and defend the long-existing yet to be verified theoretical assumption that, financial crises and economic recessions or downturns serve to trigger and incubate the development of entrepreneurship.

GOVERNMENT INTERVENTION AS A NECESSARY ADJUSTOR FOR SUPPLY-DEMAND EQUILIBRIUM

In today's knowledge-driven global business environment, understanding the mechanism of how government intervention can propel economic transition by initiating and stimulating the development of innovation and entrepreneurship, and enhancing enterprises' capabilities and competitiveness – is an emerging but critical subject of business management, especially for those fast growing developing economies like China (Zhao & Zhang, 2016; 2017). Driven by this motivation, this study, using China as an example, endeavors to analyze and explain the role of government intervention as an adjustor, and a value-adding facilitator in the combinative flow of GSCs and GVCs, and to draw a strategic roadmap for developing economies to catch up.

From market equilibrium perspective, production overcapacity stems from the unbalanced equilibrium of supply and demand. The 2008 financial crisis broke the previous equilibrium, leading to an unprecedented worldwide economic predicament. On the 15th of September 2008, Lehman Brothers declared bankruptcy, Dow fell by 504-points on the same day, followed by another significant drop of 777-points on September 29th, the largest drop in

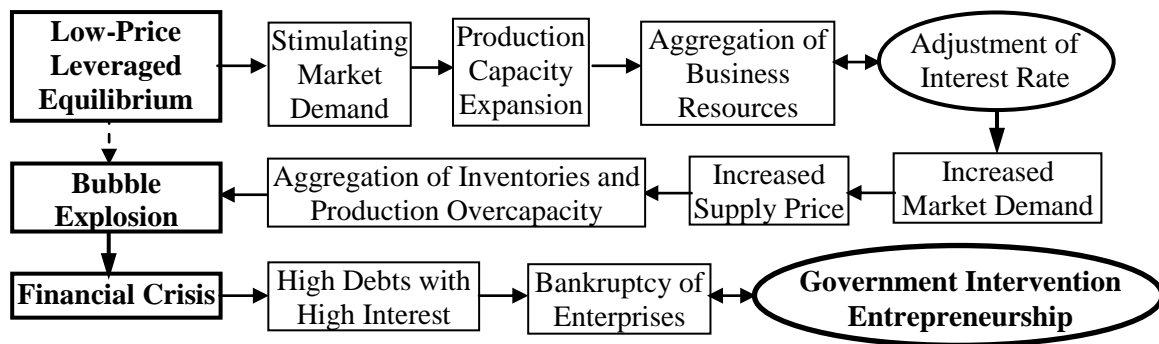
the history of U.S. securities trading. The disastrous impacts of 2008 financial crisis on EU-zone and Japan are like nightmares: a total of 15 millions unemployment in EU-zone; the bankruptcy of Greece currency; and a close to 10% unemployment rate in Japan by the end of 2009. However, comparing the negative impact of 2008 financial crisis on China and other economies, China is perhaps the luckiest, owing largely to the peculiar role of its government intervention, which has effectively guided domestic industrial upgrade via a series of policies and regulations to incentivize and stimulate the development of Chintrepreneurship. Despite a reduced magnitude, the continued China GDP growth evidently proves that, government intervention can serve as an adjustor to help offset or ameliorate the damages resulting from financial crises and economic downturns.

In spite of some negative effects of 2008 financial crisis, such as the inflation of RMB and the increased operating costs of production and import-export trading expenses, in conjunction with the decreased marginal profit of Made-in-China merchandises, however, the tightened monetary policy accompanied with the bill discount or letter of credit for export business, and especially the launch of a series of financial policies such as the adjustments of interest rate and the controls of retailing prices – all has effectively incentivized China domestic consumptions, assured China to maintain a favorable balance of trade, protected China from export deficit and other adverse factors, most importantly, enforced China to transition from a mass-production and supply based economy to a market consumption and demand oriented economy, and consequently, kept China to continue its GDP growth.

Given the absolute control of government in China, on the one hand, the continued economic growth is indispensable from its government intervention and its policy-led entrepreneurship. On the other hand, the lack of knowledge-and-experience based government intervention is also the root cause of strategic misdirection, during and after the 2008 financial crisis. To this end, the undergoing production overcapacity in China may be attributed to the aggregated government policies of aggressive expansions, the overly aggregated raw materials, parts, components, production lines, and the excessively aggregated labors and finished goods. To this end, this paper argues that, a dialectic mindset is required, in order to objectively examine and evaluate the role of government intervention in adjusting the supply-demand equilibrium cycle through the competition of proprietary R&Ds, technologies and innovation oriented entrepreneurship (Huang, 2013).

Stated differently, government intervention should be incorporated into the developmental model of entrepreneurship, in order to efficiently and effectively adjust the trajectory of market equilibrium, directly or indirectly (See Figure 2).

Figure 2: Government Intervention as an Entrepreneurial Model to Adjust Overcapacity



Government Intervention: Stimulating and Catalyzing Innovation and Entrepreneurship

Despite the liner roadmap from innovation and entrepreneurship to economic growth has been witnessed and evidenced both theoretically and empirically, however, when government intervention is added, the tripartite relationship (i.e.: government intervention, innovation/entrepreneurship, economic growth), becomes more genuinely robotic than the traditionally structured two-points framework. It is argued that, the role of government intervention in developed countries is minor comparing with that role of government intervention in developing countries (Thaddeus, 2012; Zhao, 2017). Due to the fact that, developed countries are generally more resourceful in terms of technological availability, innovation capability, and market competitiveness, therefore, entrepreneurship is more motivated in developed countries than in those developing ones (Thaddeus, 2012). In contrast, this paper argues that, government intervention serves as an adjustor and facilitator to offset the disadvantages such as the lack of technological capabilities in those developing economies, and meanwhile, to sustain their momentum of innovation and entrepreneurship.

Government Intervention: A Solution for Production Overcapacity through Industrial Upgrade

Given the autocratic nature of political system in China, government intervention is both the source of the past 40 years' economic growth and the cause of production overcapacity at the present time. Following this line of reasoning, government intervention ought to be the solution for the ongoing production overcapacity in China. Firstly, the government has been promoting and enforcing an industrial structural upgrade through a series of policies and regulations (i.e. innovation incentives, IPRs), to propel the transformation of enterprises business operations, from previously labor-intensive assembling and imitation based business, to the development of proprietary technologies and innovation based business. Secondly, the government has been

endeavoring to dilute its discriminatively categorized three ownership-based industrial groups, namely, the primary and the secondary industries (SOEs) and tertiary industry (POEs), in order for them to better fit with the trend of economic transition. The combination of the two government approaches may serve as a solution, to digest or restructure the aggregated capacities, meanwhile, to allocate and re-allocate the diversified business resources such as materials and skilled labor forces, and to facilitate China economic transition from low to high in the global trade and value chains (Zhao & Zhang, 2017). It is argued that, the reduction of transaction costs through technological advancement is both necessary and sufficient conditions to ensure the consolidation of supply chains and value chains, to promote an innovation oriented industrial upgrade (Sun & Huang, 2010), to enhance a nation's industrial entrepreneurship, and to facilitate its economic transitions (Guo, et al., 2009; Jiang & Liu, 2007; Lu, 2009).

It is argued that, the weakness of technological capability in developing countries like China may help rationalize its rampant imitation relying on the spillovers of knowledge and technology from FDIs during the past 40-years (Kang & Feng, 2011). As a complement, imitation would not have gone this far on both scale and scope in China, if without government permission (Zhao, 2013; 2014; 2016; 2017). To this end, the currently encountered production overcapacity in China must be attributed to the lack of knowledge and experience of government interventions, excessively focusing on the short-term cost competitiveness of imitation oriented supply-side operations, while, ignoring the long-term benefits of the demand-side operations. Therefore, this paper proposes that, improving government intervention is the ultimate solution for China to overcome its overcapacity through an innovation-oriented industrial upgrade (See Table 2).

Table 2: Government Intervention – The Solution for Production Overcapacity in China

Three Reasons	Descriptions
<i>The Role of Government Intervention in Stimulating the Development of Private Sectors</i>	<p>The vibrant impacts of private sectors in China on the nation's social and economic transformation cannot and should not be underestimated. Particularly, the role of government intervention is not only crucial in stimulating the development of private sectors, but also decisive in cultivating their capabilities to capture entrepreneurial opportunities emerged from the rapidly globalized market (Zhao & Zhang, 2016; 2017). Facts speak louder than words. According to 2013 Endeavor's annual report:</p> <ul style="list-style-type: none"> 98% of the total number of firms in the United States is small enterprises, employing about 55% of the entire nation's labor force, accounting for 42% of the nation's wage bill. Over 50% of the United States economic growth can be attributed to the contribution of those

Table 2: Government Intervention – The Solution for Production Overcapacity in China

	<p>newly-emerged industries that barely existed a decade ago. In contrast, the sum of small enterprises is only accounted for 2% of the total number of firms in South African.</p> <ul style="list-style-type: none"> • Most encouragingly, the differentiated impacts of entrepreneurship on economic output between developed and developing economies are largely attributed to the different level of their respective government intervention in promoting the cultural enthusiasm for entrepreneurship. • Therefore, the report concluded that, relationship between entrepreneurship and economic development must be examined and evaluated within a specifically defined business environment, in which, the level of government intervention is a vital factor determining entrepreneurs' economic contribution, regardless of developed and developing economies.
<i>The Role of Government Intervention in Promoting the Development of Entrepreneurial Education</i>	<p>Integrating the subject of entrepreneurship into a nation's tertiary education system as a mandatory course for students across disciplines is one of the most effective government policies in fostering the linkage between research institutions and industries and hence, facilitating a nation's development of entrepreneurship (Aderemi,et al, 2008; Thaddeus, 2012; Zhao, 2016):</p> <ul style="list-style-type: none"> • Having such an educational platform established can not only force students to acquire necessary KSAs of entrepreneurship, and to ensure the immediate linkage and application of research results (ex: novel ideas and innovations) in business operations and industrial development (Aderemi,et al, 2008; Zhao, 2016), but most importantly, to nurture a nation's enthusiasm and ambition for entrepreneurship (Thaddeus, 2012).
<i>The Role of Government Intervention in Developing Entrepreneurial Networks</i>	<p>The role of Government intervention in cultivating the development of entrepreneurship has been spotlighted as a hot topic of those top media outlets (Endeavor Network, The Atlantic, Inc. Magazine, The New York Times, and The Bloomberg TV), arousing a worldwide attention to the contributive impacts of entrepreneurship on job creation, economic growth, and social well-being's enhancement. Such a globally networked entrepreneurial platform would not be possible, if without government engage initiatives and incentives.</p> <ul style="list-style-type: none"> • Endeavor Network is perhaps the most noteworthy global network platform for the development of entrepreneurship. In April 2014, 29 high-impact entrepreneurs were selected from 16 companies of 9 countries in Latin America, to participate in the 53rd International Selection Panel (ISP) in Florianopolis, Brazil. The selection was a rigorous multi-step process of identifying the most potential and high-impact entrepreneurs on economic growth. Once being selected, those finalists are crowned as the Endeavor Entrepreneurs, entitled to share the exclusive Endeavor Network Resources, and offered with a set of specifically customized world-class mentoring and training programs, aiming to make them competitive and impactful business leaders or role models in their respective home countries (Endeavor Hosts 53rd ISP, n.d.) (See Appendix I).

Table 2: Government Intervention – The Solution for Production Overcapacity in China

	<ul style="list-style-type: none"> • The worldwide coverage of information infrastructure (i.e. internet) has irreversibly changed the landscape of entrepreneurial networks. The instantaneous flow of information and communication functions as a modern platform, making innovation no longer the privileged triumph of those developed countries like the United States. Instead, the combination of global IT-infrastructure and innovation-driven competition has already empowered some developing economies like the BRICS, to have leapfrogged their respective industrial expansion GDP growth. Such an IT-oriented network platform makes entrepreneurship more charismatic than ever, and provides more-than-ever momentum for the development of entrepreneurship in those fast growing economies like China (Zhao, 2014; 2016; 2017).
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Government Intervention + Innovation = A Collaborative Model for Industrial Upgrade

Innovation and entrepreneurship are natural twins, mutually enforcing and complementing in advancing business operations. Different forms of innovation may result in differentiated forms of entrepreneurship, and consequently, differentiated performances and outcomes of economic development (OECD 2002; Schumpeter, 2001). For example, innovative entrepreneurship (both radical and incremental) is different from replicative (imitative) entrepreneurship. To this end, this paper argues that, when government is added as an agent, the process of innovation oriented entrepreneurship becomes more efficient and effective. For this reason, the tripartite relationship among Government, Entrepreneurship and Industrial Upgrade should be treated as the core mechanism of economic growth, particularly in those developing countries, in which, the impact of government intervention on the innovation oriented industrial upgrade through the development of entrepreneurship, is one of the emerging economical phenomena attracting an increasing research attention.

From the perspectives of agent theory and resource-based view, government functions as the most powerful and resourceful agent in organizing competitive business resources (ex.: financial and intellectual) in today's IT-dominated and knowledge-driven global business environment, in which, the traditionally pursued industrial comparative advantages (ex: labor intensive and mass production) have been forced to shift toward innovation-based advantages (ex: technology) through the evolutionary process of market competition. According to Schumpeter (2001), the growth rate of capital and output relies heavily on the capabilities and competitive performances of innovation and entrepreneurship, in organizing and transforming resources into the new products or services (Schumpeter, 2001). Without innovation and entrepreneurship, potentials of business resource are likely to be in a state of dormant or indolent (Zhao, 2017). From the perspectives of global supply chains (GSCs) and global value

chains (GVCs), this paper argues that, integrating China economy into the collaborated GSCs and GVCs is an effective approach to adjust and facilitate China industrial upgrade, and to balance the dynamism of market equilibrium. Given that, technology is the core for the development of innovative GSCs and GVCs, this paper proposes a technological collaboration model to propel China industrial upgrade and economic transition, from a low-marginal profit oriented manufacturing-based economy at the lower-end, to a higher-end of GVCs (Figure 3)

Figure 3: A Government Adjusted Industrial Upgrade Model via Technological Collaboration

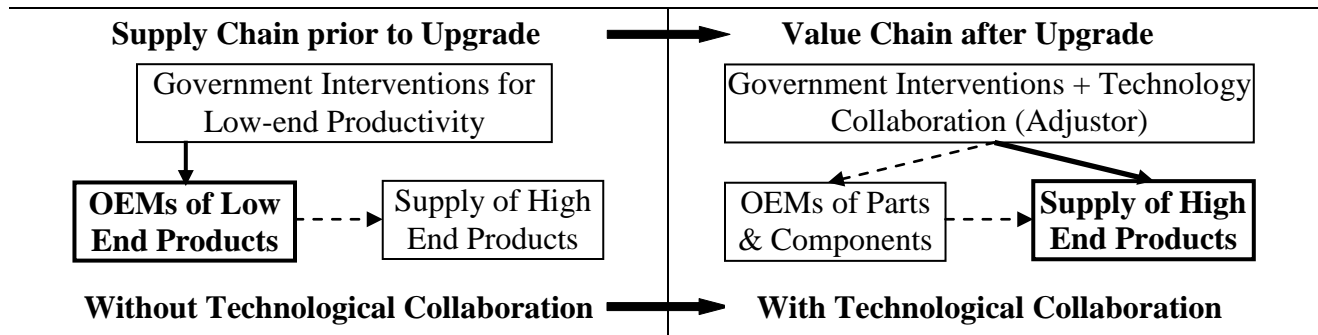


Figure 3 demonstrates that, when government acts as an agent, technological collaboration oriented industrial upgrade model is assumed to have two advantages comparing with the traditionally inherited facility-based upgrade methods. Firstly, from the cost-saving operations management point of view, the traditional methods such as inputting extra investment, shutting down facilities, or merging with others and so forth, are no longer the best practical options for business transition. The second advantage is that, when government is engaged, the collaboration among the involved parties of GSCs and GVCs becomes enforced, therefore, the chance of information lag becomes controllable, the process of absorbing the latest technologies becomes expedited, the possibility of production overcapacity become minimized, and consequently, the upgrade of technological capabilities of indigenous enterprises in those developing countries (like China), wherein, technological advantages and competitiveness are comparatively weak, become less-strengthened and cost-effective. Therefore, fail to leverage the function of government as an agent to exploit the external technologies is equivalent to the waste of resources and opportunities (Zhao & Zhang, 2017). Additionally, the technological collaboration oriented industrial upgrade model may help prevent government policy mistakes (such as antidumping), meanwhile, avoid direct confrontation between indigenous enterprises of developing countries and those global technological pioneers, and minimize the negative effects of production overcapacity, financial crises or market downturns.

GOVERNMENT INTERVENTION AS A VALUE-ADDING FACILITATOR TO THE FLOW OF GVCs

It is suggested that, a GVC-oriented government intervention may help stakeholders understand the urgent need to upgrade the traditionally fragmented supply chain system. A GVC-oriented supply chain system can serve to provide signals as to when and where the weakest link may occur, so that, an innovation process can be triggered to ensure, strengthen and maximize the advantages, competencies and benefits of each party involved in the flow of GVCs (De Meyer & Loh, 2004). As a complement to such logic, and given the fact that, government is the ultimate decision maker especially in those politically autocratic countries like China, therefore, government intervention is recommended as an indispensable value-adding factor to facilitate the upgrade of traditional supply chains (Zhao, 2017).

Following this line of reasoning, this paper hypothesizes that, government intervention is the core of entrepreneurial mechanism, forcing and reinforcing the development of China-way of entrepreneurship (i.e.: Chintrepreneurship). Most importantly, when government intervention is integrated into the GVC-platform, a whole new management paradigm may be established to update the traditional framework of entrepreneurship, by rationalizing many long-existing theoretical issues at stake, especially the cognitive dilemma between government intervention and free-market mechanism of entrepreneurship (See Table 3):

Table 3: Government Intervention – A Value-adding Factor to Facilitate the Flow of GVCs

Aspects	Characteristics of Government-led Innovation and Entrepreneurship in the Flow of GVCs
Government Facilitates Innovation Capabilities	<p>Once a government-engaged GVC-platform is established and institutionalized, a series of advantages become achievable, including but not limited to:</p> <ul style="list-style-type: none"> • A state commitment to venture capital is vital to those capital-intensive high-tech industries. • Government is unquestionably more efficient than any of individual firms, in terms of networking and organizing resources. For instance, government can create an information-oriented and collaborative resource planning system, so that all the parties of GVCs can locate and allocate business resources in an ecological manner.
Government Stimulates the Upgrade of Industrial Environment	<p>Government intervention is the ultimate source to upgrade and institutionalize industrial environment (ex.: the expedited development of industrial clusters in China), to encourage and incentivize innovation and entrepreneurship (Zahra, 1993; Zhao, 2017). Therefore, entrepreneurs must be able to adapt into and take advantage of, rather than resist, the benefits of government interventions (Edelman & Yli-Renko, 2010; Gómez-Haro, et al., 2011). To this end:</p> <ul style="list-style-type: none"> • Entrepreneurship is likely to flourish in a clustered industrial platform, for example, the rate of entrepreneurship is positively related to the density or proximity of organizations and individuals possessing prior experience of entrepreneurship (Nanda & Sørensen, 2010). A

Table 3: Government Intervention – A Value-adding Factor to Facilitate the Flow of GVCs

	<p>third of American venture capital flows into two places, Silican Valley in California and Rt. 128 in Massachusetts. The rest two-thirds mostly flux into New York, Los Angeles, San Diego and Austin. These places are renowned as the pantheon of entrepreneurship.</p> <ul style="list-style-type: none"> • The most successful example of government intervention oriented industrial clusters is the government initiated and funded science-technology and industrial parks in China, indisputably contributed to the incubation of entrepreneurship and economic growth (Zhao, 2014; 2016; 2017).
Cognitive Dilemma on the Formational Mechanism of Entrepreneurship	<p>The free-market economic system (Washington Convention) and the government-intervention economic system (Beijing Convention) are the two theoretical camps, dialectically co-existing and forming the cognitive dilemma in defining the genuine mechanism of entrepreneurship (Zhao, 2017). In addition to this classical debate, there have emerged other controversial issues further widening the cognitive dilemma on the formational mechanism of entrepreneurship, including but not limited to:</p> <ol style="list-style-type: none"> 1. Entrepreneurship is the type of business exclusively for youngsters. Bill Gates, Steve Jobs, Michael Dell, and the founders of Google and Facebook, they created their respective businesses when they were college students. Ben Casnocha, founder of Comcate, an e-government service firm, started his first company at the age 12, and reputed as an entrepreneur by the Inc magazine at the age of 17. Although these astonishingly young business elites, however, there does not exist a cut-off line dividing the young and the old for entrepreneurship. According to the survey result of Kauffman Foundation, of the 652 American-born bosses of IT-companies created in between 1995-2005, the average age was 39 when they started their business, and the number of founders over 50 years old was the double of the number of founders under the age of 25. Harland Sanders started franchising Kentucky Fried Chicken when he was 65. Gary Burrell started the Garmin when he was 52. Herb Kelleher was 40 when he started Southwest Airlines, a business that pioneered no-frills discount Airline business in America, just to name a few. 2. Entrepreneurship is an individual activity only belonging to those heroic individuals or those anti-social geeks, inventing world-changing gizmos alone. However in reality, most of successful entrepreneurial businesses may be attributed to the result of partnership or teamwork among individuals sharing the same business vision. The history of high-tech start-ups reads like a roll-call of business partnerships: Steve Jobs and Steve Wozniak (Apple), Bill Gates and Paul Allen (Microsoft), Sergey Brin and Larry Page (Google), Mark Zuckerberg, Dustin Moskovitz and Chris Hughes (Facebook), and so forth. This is why that, network resource determines the success of entrepreneurship (Zhao, 2016; 2017). 3. Entrepreneurship cannot flourish in big companies. Instead, start-ups are more desperate for innovation than those incumbents, in order to create a new market, or break into the existing market. Facts speak louder. Many big corporations have been playing their leading roles in

Table 3: Government Intervention – A Value-adding Factor to Facilitate the Flow of GVCs

	<p>facilitating industrial innovations. Johnson & Johnson has financed and incubated a large number of entrepreneurs worldwide. GE led by Jack Welch has transformed into a platform for innovation and entrepreneurship. Nokia under the leadership of Jorma Ollila has transformed from a Finnish-based rubber boots firm, to a global cable service and a mobile-phone giant. More recently, an increasing number of big companies choose to contract out their R&Ds to those small but innovative firms, in order to minimize risks and costs, while, maximize profits. P&G outsources half of its annual innovation projects. Microsoft has strategically networked with thousands of innovation vendors around the world.</p>
4.	<p>Entrepreneurship must engage in radical innovations and provide world-changing new products in order to be qualified as a successful entrepreneurship. Given that economic development is an incremental rather than a radical process, and that, service industries has gradually taken the lead, therefore, incremental rather than radical innovation becomes increasingly dominant in the trend of entrepreneurship. Richard Branson has made flying less tedious by providing airline customers with entertainment. Fred Smith has developed a billion-dollar business only by improving and expediting the delivery speed of packages.</p>

Table 3 explains the theoretical construct on the value-adding function of government intervention in the developmental mechanism of entrepreneurship, and meanwhile, rationalizes the long-existing cognitive dilemma on the relationship between government intervention and entrepreneurship through the flow of GVCs. It is implicated that, the role of government intervention is an indispensable part of the formational mechanism of entrepreneurship and economic growth, especially in those politically autocratic economic system like in China (Zhao, 2017). Although empirical validation is needed, nevertheless, such a GVCs-based value-adding perspective may provide a significantly far-reaching theoretical avenue to explore the role of government intervention in promoting the development of entrepreneurship, especially during the period of financial crises, economic recessions or downturns.

Government Intervention: An Adjusted Value-Adding Performance

Model for Entrepreneurship

Establishing and institutionalizing an effective government intervention system (policies and regulations) is decisive for developing economies to enhance their knowledge, technology, know-how experience and other competitive advantages, to grapple with the dynamism of global market competition, and therefore, to ensure the momentum of entrepreneurship and industrial upgrade (Torres, et al., 2012). It is suggested that, establishing a measurement system to evaluate the impact of government intervention on the development of

entrepreneurship can not only to facilitate the social awareness of the in-depth and nuanced mechanism of entrepreneurship and industrial upgrade (Entrepreneurship, capital and capitalism, n.d.) but also to motivate and stimulate the social enthusiasm and desire for entrepreneurship. Such a measurement system should be designed to measure whether a government intervention system is capable of incentivizing the development of high-tech firms, attracting talents, and raising the bar of entrepreneurial threshold, so that those opportunists can be filtered out from the pool of the real entrepreneurs. Accordingly, a government intervention adjusted value-adding performance model is proposed to analyze and evaluate the contribution of each participator throughout the GVCs (Figure 4).

Figure 4: Government Intervention-based Value-adding Performance Model for Entrepreneurship

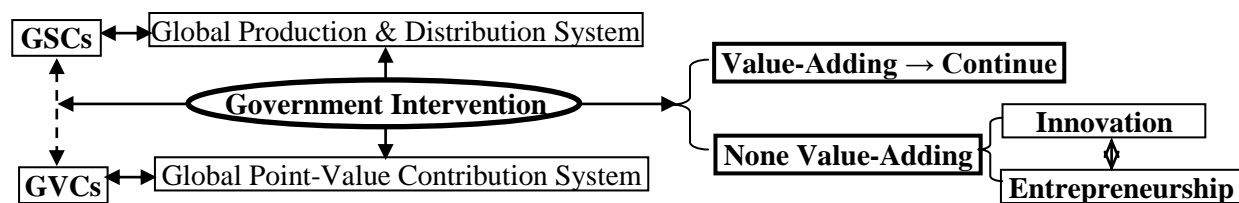


Figure 4 explains and rationalizes that, the government intervention adjusted value-adding performance model may serve as an efficient and effective channel to maximize the synergy of GSCs to GVCs, to enhance the involved firms' capabilities of organizing and consolidating the knowledge-based network resources both internally and externally, to improve the involved firms' performances of R&Ds and innovations oriented entrepreneurship, and ultimately, to contribute to the development of social well-being, rather than to make a few riches richer, and broaden the disparity between the rich and the poor. Notwithstanding these advantages and benefits, the proposed model must be able to withstand a series of empirical validations in future.

The implication of the proposed model is twofold (See Figure 4). From GSCs perspective, globalization has changed the entire operation of traditional supply chain. Finished products are no longer manufactured in a fixed location. Instead, they are the outputs of collaborated partners, geographically fragmented from one location to another, managerially and operationally integrated in an innovation competitive process, from organizing and distributing resources, through manufacturing and assembling processes, to delivering the finished products. From GVCs perspective, both suppliers and demanders (parts, components, manufacturers, assemblers, wholesalers, retailers, and consumers) are treated as point-value contributors, monitored, measured and evaluated according to their respective point-value-performance (ex: capability of either value-adding or non-value-adding). Any non-value-adding

point, once being identified, is defined as an innovation opportunity. Such an opportunity-seeking mechanism, once institutionalized, will facilitate and propel the improvement of entrepreneurial process throughout the flow of GVCs. In contrast to those conventional systems measuring the gross of goods and services across national border, this value-adding performance model examines and evaluates each participator's production capacity, capability, competitiveness, and contributions throughout the flow of GVCs, in terms of value-adding or non-value-adding. especially during the period of financial crises, economic recessions or downturns

CASE STUDIES: GOVERNMENT INTERVENTION AND ENTREPRENEURSHIP IN EMERGING ECONOMIES

Private ownership and entrepreneurship have been historically forbidden in many of those developing countries, either because of their politically royal system (ex.: Nigeria), or because of their politically autocratic communist system (ex.: China). Nevertheless, the breakthroughs of information technology changed the pattern of world economy. Entrepreneurship is no longer the secret recipe or privilege of those developed economies. Instead, it has become a globalized mantra, and instigated the government of many developing countries to engage and stimulate the development of entrepreneurship. It is an interesting but unfortunate fact that, the phenomenal and dramatic role of government in exploiting the ingenuity and potentiality of entrepreneurship, by initiating and enforcing policies and regulations, to enhance social cohesion of entrepreneurship and economic growth of developing economies (for example: the consecutively emerged Asian Tigers, African Lions, BRICS, and especially the successful leapfrog of China economy) during the past 40 years – all should have, but not yet drawn a deserved academic attention, or even being ignored or disputed in the mindset of Western scholars – resulting in the still unsettled cognitive dilemma, namely the free market vs. government intervention oriented entrepreneurial mechanism (Zhao, 2017).

In order to further rationalize the tripartite framework proposed in this paper, and demonstrate the mechanism of how and why government intervention is the most effective approach to utilizing information technology, establishing a robust innovation communication platform (ICP), and integrating or embedding the platform into a nation's economic system, which in turn, serve as a strategic infrastructure to facilitate the diffusion and implementation of innovation policies, to maximize the advantage of knowledge-based and IT-oriented global business environment, to stimulate and expedite the development of entrepreneurship, and to transform it into a catch-up model for emerging economies (De Meyer & Loh, 2004). Given the fact that, government is the social and economical marrow in most of those developing

countries, in which, without government permission, nothing would stand a chance to happen (Zhao, 2014; 2014; 2016; 2017). Additionally, it must be noted that, the potential benefits of ICP-platform goes far beyond a simple online-based resource repository, particularly in enhancing a nation's public enthusiasm and respect to intellectual property, innovation and entrepreneurship. Furthermore, NGOs' engagement must be taken into account as an indispensable ingredient, so that the proposed tripartite framework can become an efficient and effective entrepreneurial model for industrial upgrade and economic transition. Therefore, the combination of government intervention, ICP-platform and NGOs' engagement constitutes an entrepreneurial model for developing countries to catch-up (See Figure 5).

Figure 5: Government Intervention + ICP-Platform + NGOs' Engagement = An Entrepreneurial Model



Case 1: Government Intervention and the Development of Entrepreneurship in Nigeria

Since its independence after the civil war in 1970, Nigerian government has outlawed the British colonized discriminative system, meanwhile, endeavored to motivate indigenous industrial upgrade through a series of policies (Aderemi, et al, 2008). The promulgation of the Nigerian Enterprise Promotion Decree of 1972 (amended in 1987 as an indigenization decree), is the landmark or milestone policy, providing stimulus for the development of privately owned SMEs and venture business, leading to indigenous industrial entrepreneurship the diversification, and ultimately, the economic transition, from the British Colonial and Royally Chartered economy to the independent but still feudalistic Nigerian economy. To inspire and incentivize the nation's spirit and motivation for entrepreneurship, another influential policy, namely, the privatization and commercialization decree, was launched in 1988 (amended in 1989 and 1995 respectively). To ensure and enforce the effectiveness of economic indigenization, a series of microfinance policies was pushed out to allow the Nigerian central bank to provide financial support for the development of venture business. Accordingly, the Small and Medium Enterprise Equity Investment Scheme (SMEEIS) was founded in 2001, offering 10% fund contribution to relieve entrepreneurs from financial burden, effectively enhanced social confidence to entrepreneurship (Aderemi, et al, 2008).

In parallel with government intervention, the role of NGOs in promoting the development of entrepreneurship should not be neglected by any means. The Nigerian Association of Small and Medium Enterprises (NASME), the International Council of Small Business (ICSB), and the Acadia Centre for Small Business and Entrepreneurship (ACSBE) – all has, directly or indirectly, contributed or complemented to Nigerian economic indigenization and reformation. Additionally, it is contended that, if without the joint efforts of both government and NGOs in adopting and taking advantage of the rapidly globalized information technology, by establishing and integrating an ICP-Platform into the full range of Nigerian industries, and if without the effective contribution of the ICP-Platform in promulgating the government initiated 3Rs industrial policy (Reconstruction, Re-development and Reconciliation) – the achievement in entrepreneurship, industrial upgrade and economic transition, would not have been realized as observed in Nigeria (Thaddeus, 2012).

Case 2: Government Intervention and the Development of Entrepreneurship in China

Only after Deng Xiaoping's takeover in 1978, has the private ownership and entrepreneurship become permitted and initiated as a part of economic reformation for the first time in the history of communist China, shaking the foundation of Mao Zedong's politically monopolized planned economy. Such an ideological shift/transition from Mao to Deng has changed the entire social-economical value system in China. Nonetheless, the two regimes are politically the continuous flow of communism only in different forms. Mao pursues a politically centralized and collectivism-based economic system, rather than individualism-oriented market competition system, to build a strong state. In comparison, Deng chooses to pursue a strong state by boosting national economic system without compromising the politically autocratic power of communism. Simply, the absolute control of government leadership has remained unchanged (Zhao, 2017).

Deng's remarks: 'white cat, black cat, catching the rat is a good cat' in conjunction with 'getting rich is glorious', serve as the demarcation between the two regimes, and function as the lighting tower guiding China economic reformation and transformation, from a state of 'do nothing unless told so', to a state of 'do whatever it takes to make money'. Such a transition, on the one hand, has indeed revitalized the development of POEs in China. On the other hand, it has positioned the government of China into a dilemmatic or crossroad situation in terms of harnessing and conciliating the increasingly conflicted ideological collisions between the base-line principles of communism and socialism, and the market oriented capitalism. This is the theoretical origin of Deng Xiaoping' framework, namely, the peculiar way of China socialistic

market economic system, which has served to explain the politically and economically metamorphosed crony-capitalism in China (Zhao & Zhang, 2017).

In addition to policy support, the government of China has been endeavoring to finance both macro- and micro infrastructures, including but not limited to transportation, power, science and industrial parks, inno-fund, and most importantly, the information technology based ICP-Platform – all has indelibly facilitated the development of entrepreneurship and economic growth. It is contended that, the combination of government intervention and seedling approach has incubated tens of millions of entrepreneurs across industries. The seedling approach refers to the government engagement in implementing and executing policies and regulations to promulgate the public education programs of entrepreneurship, to incentivize innovations and R&Ds, to mobilize resources, to simplify and expedite the speed of bureaucratic process business registration, and to foster the linkage between research institutions and industries so that research outcomes can be transformed into business processes efficiently and effectively, at minimum cost and time (Zhao & Zhang, 2016; 2017).

Case 3: Non-Government Intervened Development of Entrepreneurship in India

(The Economist, March 2009)

In December 2008, three weeks after the terrorist attacks in Mumbai, and in the midst of the worst global recession since the 1930s, 1700 bright-eyed Indians gathered in a conference room of a hotel in Bangalore participating in a frenzy of an entrepreneurial networking opportunity. Some of the contemporary world class leading business heroes such as Mr. Azim Premji, who transformed Wipro from a vegetable-oil company into a software giant, and Mr. Nandan Nilekani, one of the founders of Infosys, another software giant, were mobbed among the participants. The conference was so popular and crowded that the organizers had to erect a huge tent to host the overflow. The aspiring entrepreneurs did not just want to strike it rich; they wanted to play their part in forging a new India. The main topic of those distinguished speakers, one after another, concentrated on praising the marrow of entrepreneurship as a powerful force, not only in enhancing economic growth, but also in improving social well being.

In addition to those fanatic individuals, many successful companies were supporters of the conference. Among them, The Indus Entrepreneurs (TiE), founded in Silicon Valley in 1992 by a group of Indian transplants who wanted to promote entrepreneurship through mentoring networking and education, is one of examples illustrating America's pervasive influence abroad. TiE, although continuously anchored in the Valley, has expanded its network with 12000 registered members, and operates in 53 cities of 12 countries respectively. The star speakers during the conference were all educated in the United States, Mr. Raj Jaswa, the president of

TiE's Silicon Valley chapter; Mr. Gururaj Deshpande and Suren Dutia still live and work in Massachusetts and California respectively; Mr. Premji, the founder of Wipro, and one of the most popular gurus of entrepreneurship, received his education at Stanford, and so forth.

Comparative Summary of the Three Case Studies

When leveraged by government intervention, entrepreneurship becomes empowered and energized, and linearly related to the upgrade of existing industries, the formation of new industries, and ultimately, the overall economic competitiveness as a whole. This is especially true in those developing countries (ex: China), wherein, democracy is still not an ideological agenda, private ownership is still politically controversial, and therefore, government intervention may be the best practice to initiate, facilitate and expedite the pace of their development of entrepreneurship and economic development (Aderemi, et al., 2008; Zhao, 2016; 2017). The vigorous summit of BRICK countries may be used as an evidence to explain the powerful role of government intervention in promoting the momentum of global collaboration of entrepreneurship. According to the annual report of Global Competitiveness Indicators issued by the World Economic Forum (WEF), the three countries received significantly different rankings respectively across a ten-year period (See Table 4).

Table 4: Ten-Year Rankings of Economic Competitiveness – China, Nigeria and India

Rankings/Year Countries	2006 Rankings (Total Countries Ranked: 125)			2015 Rankings (Total Countries Ranked: 140)		
	Basic Requirements	Innovation Factors	Overall Ranking	Basic Requirements	Innovation Factors	Overall Ranking
China (Government Intervention)	44	57	54	28	34	28
Nigeria (Government Intervention)	112	69	101	136	114	124
India (Non-Government Intervention)	60	26	43	80	46	55
United States (A Benchmark)	27	4	6	30	4	3

Source 1: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2006-07.pdf

Source 2: <https://widgets.weforum.org/global-competitiveness-report-2015/>

Table 4 demonstrates a sharp contrast between a significant leapfrog of China economic competitiveness, and an insignificant change in India, and even a fall-back of Nigeria, during the same 10-year period (2006-2015). One explanation is that, the government intervention in conjunction with the collectivism economic system (China) is more effectively impactful than the non-government intervention system (India), in promoting entrepreneurship and economic development. As for the backslide of Nigerian competitiveness, a reasonable logic is that, the government of Nigeria has overly emphasized commercial trading, rather than relying on indigenous R&Ds and innovations to develop domestic industrial capabilities, and consequently that majority of Nigerian entrepreneurs are the agents or distributors of imported products, rather than the producers of their own goods or services (Thaddeus, 2012). Another explanation is from the resource-based economic perspective that, China is rich in resources to support its vigorous and fruitful manufacturing oriented economy. In contrast, Nigeria is crisscrossed or backfired by its resource availability, restraining the development of entrepreneurship and economic growth.

CONCLUSIONS AND RECOMMENDATIONS

The successes of Chintrepreneurship and economic leapfrog in China, supports the tripartite framework proposed in this paper that, government intervention, entrepreneurship and economic growth are the three mutually inseparable, intrinsically interdependent, and linearly causal factors in the flow of GVCs. The tripartite framework may serve as a catch-up model for developing economies, due to their limited capabilities of innovation and entrepreneurship. Albeit empirical validation is needed, this paper argues that, government intervention is the decisive key value-adding factor, exerting more impact on the glocal flow of GVCs in those politically centralized social-economic system (mostly the developing countries), than in those politically democratized social-economic system (mostly the developed countries). To this end, whether the development of entrepreneurship is ONLY a free market oriented business activity may attract an increasing research attention in the near future.

From the Tripartite Framework to the Re-interpretation of the Cognitive Dilemma

To explain the emerging business phenomena in the context of increasingly globalized environment, the existing framework of management must be upgraded or adjusted. The results of three case studies (See Table 4) may serve as an added-ingredient to the historically inherited cognitive dilemma, intensifying the debate between Washington Convention and Beijing Convention. Of the two theoretical camps (an autocratic government intervention system versus a democratic and market-competition system), which one is more genuinely supportive

to the developmental mechanism of entrepreneurship, seems to become an imperative research question challenging the contemporary scholars (Zhao, 2017). To this end, a series of empirical verification is needed to validate the tripartite framework proposed in this paper, and to determine whether the combination of the two seemingly antithetical Conventions can be qualified as a catch-up model or a follower's strategy. By setting government intervention as a control variable, researchers may examine and rationalize that, under what circumstances, the variations of entrepreneurial mechanism can be attributed to the function of government intervention, as a value-adding rather than a constraining factor, in stimulating and incentivizing industrial upgrade and economic growth.

In addition to government intervention, implementing a systematically designed entrepreneurial/vocational training program, integrating it into government policies and regulations, and enforcing it as a mandatory course for every college/university student, might be an effective approach to speed up the flow of knowledge and technology, and hence, to upgrade the developmental mechanism of entrepreneurship. Furthermore, it is worth to mention that, the dilemma of knowledge creation, diffusion and spillover versus the potential threat of imitation would continue, if without government intervention in establishing an effective legal and institutional enforcement to safeguard a long-term commitment to a sustainable mechanism of entrepreneurship (Zhao, 2013; 2014; 2016; 2017).

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APPENDIX 1. A Recap of Endeavor's Entrepreneurs Selected from 9 different countries in 2014

Country & # of Selected Companies	Name of Entrepreneurs; Name of Company and URL; Business Profiles
ARGENTINA (2 Companies)	<p><i>Name of Entrepreneur(s):</i> Parker Stanberry</p> <p><i>Name of Company and URL:</i> Oasis Collections (www.oasiscollections.com);</p> <p><i>Business Profile:</i> Oasis Collections is a pioneer innovator of business model providing travelers a curated online platform of high-end, short-term rental properties and other business services across South America. By providing hospitality-oriented experiences including around-the-clock, on-the-ground team, and social perks such as access to Oasis' private member-clubs and exclusive events, Oasis has received international recognitions.</p>
	<p><i>Name of Entrepreneur(s):</i> Mauro Bono</p> <p><i>Name of Company and URL:</i> Savant (www.savant.com.ar);</p> <p><i>Business Profile:</i> is an Argentina based innovative manufacturer, distributor and exporter of pharmaceuticals, by innovating a manufacturing process capable of generating higher margins for pharmacists but more affordable drugs for end consumers.</p>
Brazil (5 Companies)	<p><i>Name of Entrepreneur(s):</i> Cristiano Brega, Guarany Guimarães, Fernando Magero</p> <p><i>Name of Company and URL:</i> Confiance Medical (www.confiancemedical.com.br)</p> <p><i>Business Profile:</i> As a high-impact Brazilian entrepreneur and provider of imported technology (video surgery equipment and technology), Confiance Medical, has successfully transformed the originally expensive video surgery technology into an accessible and affordable medical treatment for mass population.</p>
	<p><i>Name of Entrepreneur(s):</i> Rafael Ribeiro Madke</p> <p><i>Name of Company and URL:</i> Grupo RPH (www.gruporph.com.br)</p> <p><i>Business Profile:</i> Introducing and transforming an imported technology (medical imaging and illuminating technologies) as an entrepreneurial approach for market development in Brazil. By using this technology, Grupo RPH has significantly reduced the costs of medical diagnostic processes of organs' scan for patients.</p>
	<p><i>Name of Entrepreneur(s):</i> Sergio Bertucci and Milena Satyro Bertucci</p> <p><i>Name of Company and URL:</i> Star Think Uniforms (www.staruniforms.com.br)</p> <p><i>Business Profile:</i> Star Think is an innovator of Custom-Designed Technology for professional uniforms. Founded in 2005, Star Think has earned its reputation as a pioneer of proprietary clothing sizing technology.</p>
	<p><i>Name of Entrepreneur(s):</i> Marco Carvalho and Ivan Zorn</p> <p><i>Name of Company and URL:</i> Toys Talk (www.toystalk.com)</p> <p><i>Business Profile:</i> Founded in 2008, headquartered in Belo Horizonte, Brazil and Shantou, China respectively, Toys Talk, a globally recognized manufacturer of high-tech children's toys, has gained its explosive growth from global market sales over the past two years.</p>
	<p><i>Name of Entrepreneur(s):</i> Gabriel Bottós and Rafael Bottós</p> <p><i>Name of Company and URL:</i> Welle (www.wellelaser.com.br)</p> <p><i>Business Profile:</i> Welle, after 6 years' effort in innovating laser-cutting technology, has earned itself a globally recognized industrial leadership position as a manufacturer and provider of reliable, cost-effective, durable, and precise laser cutting, tracing and cleaning, and efficient energy-consuming laser-cutting equipment to consumers, at cheaper price but better quality</p>
CHILE (2 Companies)	<p><i>Name of Entrepreneur(s):</i> Juan Pablo Marín and Francisco Marín</p> <p><i>Name of Company and URL:</i> Eco-Lógica (www.eco-logica.cl)</p> <p><i>Business Profile:</i> As an innovator specialized in reducing, reusing, and recycling industrial waste disposals, Eco-Lógica is now, the second-to-none end-to-end corporate waste management solution provider in the nation for solid waste, hazardous waste, and recycling services, allowing clients to</p>

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	dispose waste safely and efficiently.
	<p><i>Name of Entrepreneur(s):</i> Victor Vargas and Alex Parnas</p> <p><i>Name of Company and URL:</i> Urbano Design (www.urbanodesign.com)</p> <p><i>Business Profile:</i> Urbano Design, as an innovative designer, broke the mold of the mobile accessories industry, and transformed this market trend by adding popular graphic designs and integrating aesthetically appealing function and fashion into the latest tech accessories such as smartphone cases, laptop and tablet sleeves, headphones, and chargers – all these products has successfully reached out major Latin America marketplaces through its fully integrated supply chain outlet.</p>
	<p><i>Name of Entrepreneur(s):</i> Eymard Arguello Mancilla</p> <p><i>Name of Company and URL:</i> Agua Inmaculada (www.aguainmaculada.pe)</p> <p><i>Business Profile:</i> Agua Inmaculada, founded in 2002, is a pioneering CSR innovator in the clean-water technology market. Through an innovative supply chain and new ways of selling its water purification systems to small business owners, Agua Inmaculada made potable and high-quality bottle water available and affordable to the base of pyramid in Mexico.</p>
MEXICO (2 Companies)	<p><i>Name of Entrepreneur(s):</i> Mateo Dornier</p> <p><i>Name of Company and URL:</i> Campo Vivo (www.campovivo.com.mx)</p> <p><i>Business Profile:</i> Campo Vivo is a CSR innovator, specialized in reducing the negative impacts of chemical fertilizers and pesticides sprayed on produces (i.e. fruits and vegetables). Campo Vivo is the largest provider and distributor of high-quality and affordable certified organic produce and processed grocery goods to consumers across Mexico. Campo Vivo currently plans to expand its business into European markets.</p>
COLOMBIA (1 Company)	<p><i>Name of Entrepreneur(s):</i> Pablo Atuesta, Nicolás Borda and Juan Rebolledo</p> <p><i>Name of Company and URL:</i> Groncol (www.groncol.com)</p> <p><i>Business Profile:</i> By innovating the green products such as walls and rooftops made of real plants and vegetation, Groncol is now the pioneer of CSR, and the leading designer, producer and installer in the nation's construction industry. The innovation of vegetated infrastructure products has added millions of dollars in economic value to its clients' buildings, and a measurable environmental impact especially for compensating the CO₂ emissions.</p>
URUGUAY (1 Company)	<p><i>Name of Entrepreneur(s):</i> Carolina Bañales & Agustina Sartori</p> <p><i>Name of Company and URL:</i> AdviseMeTech (www.advisemetech.com)</p> <p><i>Business Profile:</i> AdviseMeTech is a revolutionary innovator and inventor of a web-based shopping software program that allows female consumers to virtually try on cosmetics or makeup products through their own uploaded images. The company's B2B software is embedded in retailers' websites, while its B2C ecommerce platform, GlamST.com, allows women to virtually try on and purchase products online.</p>
MIAMI (1 Company)	<p><i>Name of Entrepreneur(s):</i> Lionel Carrasco and Marcela Henao</p> <p><i>Name of Company and URL:</i> Leapfactor (www.leapfactor.com)</p> <p><i>Business Profile:</i> Leapfactor, founded in 2009, is an innovator of sales management, by providing its B2B mobile app, Salesfactor, as a tool to increase revenues and efficiency, and consequently attracting premier clients across industries. Leapfactor broke the traditional sales' model of pen-and-paper contracts, paper brochures, and antiquated CRM systems, by developing an interactive experience that customers expect in today's digital era.</p>
GREECE (1 Company)	<p><i>Name of Entrepreneur(s):</i> Sotiris Papantonopoulos-Mantopoulos and Manolis Marsellos</p> <p><i>Name of Company and URL:</i> Money-Market (www.money-market.gr)</p> <p><i>Business Profile:</i> Money-Market is an online insurance aggregator, providing easier and affordable options for Greeks to compare and purchase automobile, motorcycle, boat, and home insurance policies. Currently, it plans to expand into health and pension insurance.</p>

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SOUTH AFRICA (1 Company)	<p><i>Name of Entrepreneur(s):</i> Bevan Ducasse</p> <p><i>Name of Company and URL:</i> wiGroup Pty Ltd (www.wigroupinternational.com)</p> <p><i>Business Profile:</i> wiGroup is a pioneer innovator and provider of cloud-based software for the booming of m-Commerce in Retailing Sector in South Africa. By providing Mobile Apps for Mobile Transaction through the wiPlatform compatible to any application at any merchant through a simple integration with a retailer's POS system, wiGroup has expanded its business to over three million transactions worth over US\$200 million since the launch of its platform in 2011 in South Africa's m-commerce sector.</p>
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Note: the name of entrepreneurs is hyperlinked to their respective personal web portal

Source: this table is constructed based upon the information provided at: <http://www.endeavor.org/blog/endeavor-hosts-53rd-isp-29-high-impact-entrepreneurs-from-9-countries-join-the-endeavor-network/#sthash.ZV7WtnKo.dpuf>