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DESCRIPTIVE LITERATURE REVIEW TO CLASSIFY AND ANALYZE GROWTH OF CHINESE FIRMS FROM 1990's UNTIL 2018

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DESCRIPTIVE LITERATURE REVIEW TO CLASSIFY AND ANALYZE GROWTH OF CHINESE FIRMS FROM 1990's UNTIL 2018

Abstract

This paper presents an understanding of the economic situation of the Chinese firms and their growth model, using a descriptive research model with an extensive literature review of factors argued to be generating growth and persistent high-growth in China. The selection of reviewed and embedded papers included several quantitative, as well as qualitative papers for analysis from the 1990s until 2018. Thus, the descriptive literature review was used as the methodology by which researchers present the history of the firm's development and discuss the work of others using scientific arguments and comments. The examination has revealed that numerous factors discussed in this paper affect growth. However, there is no specific structural characteristics or performance of promising persistent-high-growth. Finally, there is a paucity of existing literature focusing on sustainable high-growth dynamics. Studies do not delve into details on this subject; accordingly, it is suggested that the lack of review articles has been hindering the progress of this area, thus, more investigations are requested from future researchers with attention to the use of a plurality of methods.

Keywords

persistent high-growth; China; economic market

1. INTRODUCTION

In half a century, a total transformation of the Chinese economy took place. From the agricultural economy to the global super-power a transformation, that changed China's reality and assisted in becoming an economic market leader unparalleled with any other country. Today, China is the second-largest economy in the world, accounting for 16 percent of USD 86 trillion of global GDP in nominal terms (Ghosh, 2018). The adjustment of the power parity (PPP) numbers when purchasing will show that the Chinese economy has been the largest in the world since 2014. Therefore, the purpose of this paper is to present an understanding of the economic situation of the Chinese firms and their growth model, using a descriptive research model with an extensive literature review of factors argued to be generating growth and persistent high-growth in China.

The paper however covers the persistent high-growth of the Chinese firms by focusing on the demographic, innovative and structural characteristics that designated the performance of these firms, by shedding the light on the state of entrepreneurship and research & development (R&D), entrepreneurship and social networks, knowledge-intensive business services (KIBS), Foreign Direct Investment (FDI), and state-ownership (state-controlled vs. non-state-controlled firms).

Focusing on the labor shortages and increased wages (Lewis Turning Point) and the shrinking demographic dividends (indicating undesirable growth of the working-age population) in 2011, researchers found out that some of the selected papers argued that substantial changes are occurring in China's economic development stage (Cai and Lu, 2016). In an effort to assess how conventional wisdom would change in industrialized countries if micro and small businesses were taken into account in the studies, the study found that micro and small businesses account for a higher proportion of gross job creation and destruction than conventional wisdom recognizes. Besides, the results showed significantly higher dispersion of company potency, a weaker correlation between company potency and company size, and a lower contribution of improvements in company potency to cumulative productivity growth (Li and Rama, 2015).

Other studies, however, indicate that company age substantially destabilizes the influence of reflective practice and reduces the chances of network infrastructures on business success, while the perceptual and voyeuristic learning of returnee entrepreneurs as well as networking technologies has a positive impact as they produce outcomes (Liu et al., 2015). In 2015, after 30 years of impressive and inspiring growth and catch-up, the Chinese economy declined from 10 percent to 6.9 percent in the GDP growth rate. Meanwhile, through "mass entrepreneurship and creativity", the State Council of China attempted to boost sustainable economic growth and employment creation (Moschella et al., 2018). (Moschella et al., 2018). Entrepreneurial efforts to capture substantial business opportunities and achieve sustainable, fast growth by gaining knowledge and skills are definitely a difficult challenge for developed countries (Cimoli et al., 2009).

Besides, it is argued that technological advancement is one of the most significant factors behind the high growth of companies. Interestingly, the dimensions of creativity are unequally calculated. Innovation outputs are also trademarks, trade secrets, market improvement processes or business models, and journals, awards, disclosures of inventions, degrees awarded, sales of new goods, and many others. Outside the commercial space (e.g. culture), innovation can happen as well. Studies have shown that innovation is reasonably well calculated in the form of patents, and many academics have found firms' patents (Wei et al., 2017). The Chinese State Intellectual Property Office (SIPO) has announced that, from 1995 to 2014, the number of patents registered has risen. They indicated that the number of registered patents rose by 2.2 million from 1995 to 2014, with a 19 percent annual growth rate.

Additionally, other studies have been indicating that China surpassed the US in 2011 on a positive note, as the country with the world's highest patent filings (Wei et al., 2017). Chinese patents filing and approvals both indicated a very prompt growth. From 1995 to 2011, patent agencies in developed countries granted numerous Chinese applicants by patents (more than 30 percent per year) (Wei et al., 2017). Furthermore, patents licensed by the "US Patent and Trademark Office" (USPTO) for Chinese Corporate representatives increased from 62 to 7,236 between 1995 and 2014. In the same way, value is determined by the population size of the country and the level of income. In this regard, Chinese companies perform extremely collectively in the number of patents than would be indicated by China's population size and income level. Chinese citations are close to patents for the growth utility model; between 1995 and 2014, 36 percent per year. Globally, not only the quantity of Chinese patents blown up but also Chinese patents quality exhibits robust advancements that are

pretty agreeable and promising relative to international experience. Chinese firms prove real progress and an important ability to innovate (Wei et al., 2017).

The flow of this current study is organized as follows. After introducing the reader to the Chinese economic market, the study presents afterward, the research methodology section. Next, this is followed by the outcome of our literature review and classification. To conclude, some discussions, conclusion and future recommendations are drawn.

1.1 METHODOLOGY

The methodology of this paper is supported by the extend literature. Principally, the descriptive literature review is the method used. A descriptive review is a planned technique of locating, gathering, and appraising a collection of writings on a particular phenomenon in order to discover any interpretable patterns or trends with respect to a phenomenon. The literature reported that this method is referring to discovering of published research linked to a precise area of investigation to the examination in order to have and or draw rational conclusions about the phenomenon. Interestingly, the strength of this type of methods is the possibility to systematically collect from a body of knowledge that offer variety of views (King and He, 2005). The purpose of adopting this method was to carry out a critical, rigorous, and transparent appraisal of previous research, so as to understand factors affecting Chinese firm's growth. We were convinced that it was mandatory to add sources that address subjects in this area. To do so, researchers selected, reviewed, and embedded papers from 1990's until 2018 that include several quantitative, as well as qualitative information to analyze persistent high-growth of Chinese firms.

1.2 DEMOGRAPHY

Researchers elected some studies which demonstrated findings of a meta-analysis indicating high-growth companies tend to be younger, smaller, and pervasive in all sectors, taking into account the essence and characteristics of high-growth episodes (Henrekson and Johansson, 2010). Also, this study has shown that small gazelles can be over-represented in absolute terms, whereas larger gazelles are still significant contributors to the job. As supported by a study done on start-ups and young companies by Haltiwanger et al. (2013), innovation or young age seem to be even more important factors to consider. This suggestion seems to be contradictory to the well-known theory of ecology (the mortality of companies). In other words, it does not confirm Hannan & Freeman's (1984) seventh assumption that organizational death rates decrease with scale.

In addition to the theorem that corporate death rates decrease with age as reproducibility increases approximately exponentially with age in the life cycle of a business for the first years (Freeman et al., 1983). Findings approve the average high impact organization about 25 years old when it affects the economy (Acs et al., 2011). In Moschella et al. (2018) empirical research, authors consider the age and scale of businesses, since the literature on high-growth companies has constantly stressed that small and young companies recognize a lot of entrepreneurial dynamics that achieve bright growth records. On the one hand, studies on firm age have shown that, relative to non-high-growth businesses, high-growth companies appear to be younger. Therefore, findings on the young-firm dummy showed a negative coefficient on age, but a positive coefficient.

Age did not, however, even arise as a surprising characteristic of sustainable high-growth companies as well. On the other hand, the effects of the various criteria and the various meanings of size groups are very constant. The findings show that high-growth companies are typically smaller than non-high-growth companies in size. However, even if authors consider small or small-medium enterprises as the focal size group, the smaller size does not impact the degree of persistence of high-growth output in any way (Moschella et al., 2018). The literature revealed some substantial findings on the average function effect of the contextual climate of companies. In coastal regions, tertiary and vocational education has a substantial positively strong influence on labor productivity rather than on inland regions' labor productivity (Wu et al., 2017). Many scholars have stated that firms operating in coastal areas are more productive than inland (see Cheung and Ping, 2004; Wei et al., 2017; Wu et al., 2017).

For example, in the 1980s and 1990s, in coastal provinces, China's government structured several separate economic zones and growth zones to attract foreign direct investment (Wei et al., 2017).

2. INNOVATIVENESS

Further, researchers specified that a big number of empirical studies have reported the important relation of innovative activities indicators (R&D expenditures, patenting behavior...) at the firm level to high-growth (look at Akçomak and Ter Weel, 2009; Coad et al., 2016; Castaño et al., 2016; Moschella et al., 2018). However, findings of empirical studies done later on have shown the limited impact of innovation on the average company's sales growth rates, while innovative efforts are critical for the growth rates of the fastest-growing companies in the highest quantities of the distribution of company growth rates (Audretsch et al., 2014; Moschella et al., 2018). Firm investment in advanced and innovative infrastructure, especially for technological learning, is also linked to the procurement of innovative embedded infrastructure (Freeman et al., 1982; Yu et al., 2015).

In addition, researchers noted that the study conducted by Wu et al. (2017) empirically explored the function and impact of the National Innovation System (NIS). Demonstrating that they stated in their study (Wu et al., 2017) that China's rural economic growth varies between the coastal and inland areas and is positively affected by the national structure for innovation. Following conventional technology policy findings (Furman and Hayes, 2004; Furman et al., 2002), findings can lead to a presumption of investigating or embracing entrepreneurial action by governments acting as social entrepreneurship. This variation depends on the cost of research and development and labor mobility led by the government. The authors' findings support the link within the NIS context between government-led infrastructure policy and economic development.

A nation's innovation systems can promote rural economic development by linking the knowledge gap between rural and urban areas. In line with that expectation, the shared infrastructure, clustering, and linkages have all presented a productive and significant relationship with rural productivity and income in China. It is argued that rural economic growth is associated with new technology adoption, and the process is encouraged by China's NIS (Wu et al., 2017). Using existing datasets from the "China State Intellectual Property Office" (SIPO), the "United States Patent and Trademark Office" (USPTO), and the "World Intellectual Property Office" (WIPO), of the registered patent, interesting findings were reported, Wu et al. (2017). China's performance in innovative activities, as measured by patent data, has been strong, especially in recent years, but it is possible to learn some lessons from India, and mainly from the Republic of Korea. Besides, it has been argued that rising incomes and growing economies are primary factors behind China's patent performance in a more conciliatory atmosphere.

3. STRUCTURAL CHARACTERISTICS AND PERFORMANCE

4.1 Entrepreneurship and Research & Development (R&D)

Since the 1980s, and specifically from a macroeconomic perspective, entrepreneurial has been increasingly recognized as a vital factor for regional economic development (Andersson and Koster, 2011; Fritsch and Wyrwich, 2016). Among the types of entrepreneurship that traditionally live together in harmony in developing countries (sustenance, catch-up, and frontier entrepreneurial), most Chinese entrepreneurs are of the catch-up kind. These entrepreneurs usually go for replicative operations, copying, and generating inventions produced by others at a competitive cost, so they only make incremental innovations (Naudé and Szirmai, 2013). Interestingly, they contribute significantly to the economy through business development and job creation; they implement science and technology advances, but at a much lower speed than emerging entrepreneurial companies do (Moschella et al., 2018).

In addition, government policies that advance the position of social entrepreneurship will influence economic development. Scholars have empirically analyzed the two major NIS-related instruments powered by the Chinese government to encourage effective entrepreneurial activities (Wu et al., 2017) [1-directing extra funds to R&D investments; 2-promoting workforce flexibility across regions]. Findings have shown that govt-lead R&D spending has a productive correlation, with a robust inland impact, with rural economic growth everywhere. As the inland areas catch up with the coastal regions of China, this is likely to occur. These findings seem to provide a clear image of the primary role of policies and actions of govt-lead technology in

increasing the impact of NIS on economic growth (Wu et al., 2017). China's investment in R&D has reached 2, 05 percent of GDP.

Likewise, researchers found out from several papers that innovative leaders are investing aggressively in research and development at business and national levels. China is argued to be an overachiever from a collective R&D spending lookout (Yan and Berliner, 2016; Wei et al., 2017). The proportion of researchers in the population is also a measure of the commitment towards innovation. In 2014, China's share of researchers reached 1,113 per million people. In China, this R&D investment continues to rise over time (Wu et al., 2017). Some have, however, reported an empirical challenge in determining the degree to which government intervention could encourage companies to invest more in R&D and thus boost their economic and technological performance (Guo et al., 2016, Peng et al., 2018).

4.2 Entrepreneurship and Social Networks

Researchers signify that as found in the empirical analysis of Chen et al. (2018), when it comes to social networks, entrepreneurship significantly promotes regional economic development in China. The results indicate that if entrepreneurial is higher than 0.5745, its effect on economic growth and development will continue to increase (some provinces in China are already at 0.5745 and 0.8343). As previously reported, it also has a significant impact on economic growth and development related to social networks. Similarly, the results show that when social networks are greater than 0.1594 (some provinces of China vary from 2.7859 to 0.2514), the driving effect of social networks on regional economic growth will continue to rise. The investigators compiled data from 31 cities across the country in China over the period between 2007 and 2016 to accomplish the research objectives.

Furthermore, the findings clarified that entrepreneurship in the eastern part of the country and social networking in the core part have the greatest economic growth potential in the local places. On the other hand, it has also been argued that entrepreneurship could impede the growth in the economy of China's central areas researchers therefore suggest the importance of developing flexible working practices for hybrid entrepreneurial environments and the appropriate use of interpersonal networks to improve the efficiency of economic activities, which are expected to strengthen the role of entrepreneurship and social networks in the contextual economic and business climate (Chen et al . , 2018). In particular, entrepreneurship provides technical advancement and strengthens spillovers of information, while social networks hold channels of capital.

Local players have been recommended to pay excellent attention to how entrepreneurs and networking technologies are used to bring sustainable development to China's regional economies (Chen et al., 2018). Studies have shown that entrepreneurship not only represents a greater positive effect on regional economic development, but also represents a primary role in fostering regional economic activities through social networks, taking into account the synergy and harmony between entrepreneurship and social networks in empirical research. Such studies have effectively shown that the introduction of social networks would significantly increase the efficiency of the acquisition of resources and profoundly advance the economic success of different provinces in China (Chen et al., 2018).

Eventually, the effect of social networks on economic growth and development is strengthened by taking into account the degree of government involvement, the performance of government entities and the level of education. Which also suggests that social networks are capable of improving the regional network of interpersonal ties and of improving the efficiency of the production of goods and services and management of human resources.

4.3 Knowledge-Intensive Business Services (KIBS)

Hong Kong is an area where basic industrial research is missing, calling for government intervention (Mok, K. H. (2005; Yam et al., 2011). Usually, the technologically innovative products are advanced by the adjustment of the existing one (Stanko et al., 2015). As for Hong Kong companies, technological innovation and patent registration are also significant drivers of change regarding innovational activities (Yam et al., 2011). There is, however, a crucial need for the effectiveness of the transition, which is highly dependent on the competence of individuals involved (especially key individuals) and the company's business strategy (Teece, 1996).

The efficacy of technology transfer therefore depends on the degree to which patent data will support the company and use its expertise in the improvement process of manufacturing new innovative products (Yam et al., 2011).

Specifically, the implicit transfer of information is another obstacle to the development of information to boost the capabilities of the business (Storper and Harrison, 1991). Croatia's manufacturing industry, for example, has faced multiple problems that hamper its competitiveness, which is crucial for the global market to thrive. First, the problem was linked to insufficiently trained and unskilled workers, especially in the fields of production and management. The factory developed a special learning environment (Innovative Smart Enterprise) in one laboratory as a "Lean Learning Factory" to resolve this situation by incorporating the requisite information into the engineering curriculum. This interesting technique has encouraged industries to use it as part of the transfer of information from universities to companies (Gjeldum et al., 2016).

Interestingly, Yam et al. (2011) suggested an alternative approach that proposes the use of intermediary agencies; as the information-intensive business services (KIBS) that are supposed to serve as a bridge allowing the organization to increase the efficacy of its operations in the transfer of knowledge (Yam et al., 2011). Empirical findings have shown that even though the use of external sources will increase all technical advancement capabilities, this would not be realized unless knowledge-intensive business services are used. There is a beneficial connection among knowledge-intensive business services and external sources, which echoes the fact that when knowledge-intensive business services are appropriately used, external sources would be used to a greater degree.

KIBS was found to be positively related to R&D capability and allocation of resources capabilities in addition to research and development and firm resource allocation capabilities that will be expanded by services provided by consulting firms and universities (i.e. using KIBS). Collaborations with universities (Mok et al., 2005) generally focus on new product creation in Hong Kong, while consulting firms on information transfer and systems make better use of existing resources, such as total quality control practices (Ho et al., 1999) and skills in business resource planning (Umble et al., 2003). KIBS was found, however, to have no direct influence on capabilities. Producers in Hong Kong were alleged to have misunderstood the position of KIBS as they used it to solve problems rather than to experiment with new problem-solving methods.

However, KIBS could serve as an agent for the transfer of information (Yam et al., 2011). Besides, findings confirm that when used, KIBS acts as a source of new information that can increase the ability of organizational R&D and resource allocation. Thus, KIBS bridges creativity in the manufacturing sectors of Hong Kong. Effective transfer of technology allows businesses to cultivate the ability to identify opportunities and look for, change, and adopt the technology. The bridging function of KIBS has been argued to be especially important for SMEs and to change the pattern of peripheral regions (Muller, 1999; Pinto et al., 2015).

4.4 Foreign Direct Investment (FDI)

It should be noted that the key reason for attracting foreign direct investment (FDI) from countries with developing economies is to acquire sophisticated high tech from developed countries so that the potential for domestic innovation can be established. China was the biggest beneficiary of FDI across developing countries in the 1990s, following its "market for technology" strategy (Cheung and Ping, 2004). China has succeeded in attracting the world's high levels of FDI, as well as the rapid development of Chinese areas that have enjoyed the lion's share of inflow of FDI (Long et al., 2015). The findings of an empiric study examining the extent to which the inward FDI to China has affected the creative activities of Chinese companies have shown that the effect of FDI on patent applications is significant statistically and optimistic.

The findings of an empiric analysis exploring the extent to which FDI inward to China has affected the artistic practices of Chinese firms and have shown that the effect of FDI on patent applications is statistically relevant and optimistic (Cheung and Ping, 2004). Significant economic impact of FDI on the number of domestic patent applications and the strongest influence on minor inventions (especially external design patents) have been reported. FDI has a positively significant effect on patent applications, especially in the central and western regions

of China. However, only the concept patent effect is statistically significant in the border provinces.

Furthermore, it was found that FDI was affecting the economic development of the host nation. Contributions from Long et al. (2015) provide insights into a new channel by which FDI can influence the economic growth and development of the recipient country, which has a beneficial effect on the institutional climate. The trend that the western region has the greatest FDI spillover impact is attributed to the concentration of China in the coastline and central regions. For example, the findings revealed a very large FDI coefficient on design patents in the coastline region. Drawing on the vital significance of technology/knowledge spillover location proximity, higher FDI spatial concentration tends to show greater spillover effects (Cheung and Ping, 2004).

The findings clarified, as predicted by the scientists, that scientific and technical staff as well as an investment are the greatest factors in the development of innovation, strongly affecting major innovations rather than minor innovations (Cheung and Ping, 2004). In the same vein, policymakers in developed countries should not restrict their efforts only in the technical domain to positive FDI spillovers but should also concentrate on their possible effects on the institutional climate of the host region (Long et al., 2015).

4.4.1 State-Ownership (state-controlled vs. non-state-controlled firms)

The influence of state-controlled and non-state-controlled development, whether or not they are related, has been investigated in several studies. Non-state-controlled enterprises are argued to become even more probable in becoming high-growth enterprises, but the mode of ownership does not influence the longevity of high-growth status (Moschella et al., 2018). Moreover, state ownership has a positive influence on R&D input, but it reduces the impact of R&D input on innovation production, making ownership of a minority state ideal for the creation of innovation (Zhou et al., 2017). Moreover, empirical studies show that companies in the provinces and cities of China with more developed institutions (non-state-controlled companies) retain higher (fewer) cash reserves than those in regions with less developed institutions (state-controlled firms).

This thus reflects that for non-state-controlled companies, the significant impact between institutional growth and cash holdings is more significant. These findings support the theory that more sophisticated organizations acknowledge a challenge from political extraction to non-state-controlled companies, leading to increased cash holdings among these companies. In addition, studies validate the effect of institutional growth on cash reserves for non-state-controlled companies with political relations are declining (Kusnadi et al., 2015). Remarkably, the ability to mimic high growth over time does not have great predictive power over structural features and results. Nevertheless, productivity suggests a positive correlation with the continuation of high-growth status concerning state-controlled businesses. This firm attribute was the only case in which authors find contributions to high-growth persistence (Moschella et al., 2018).

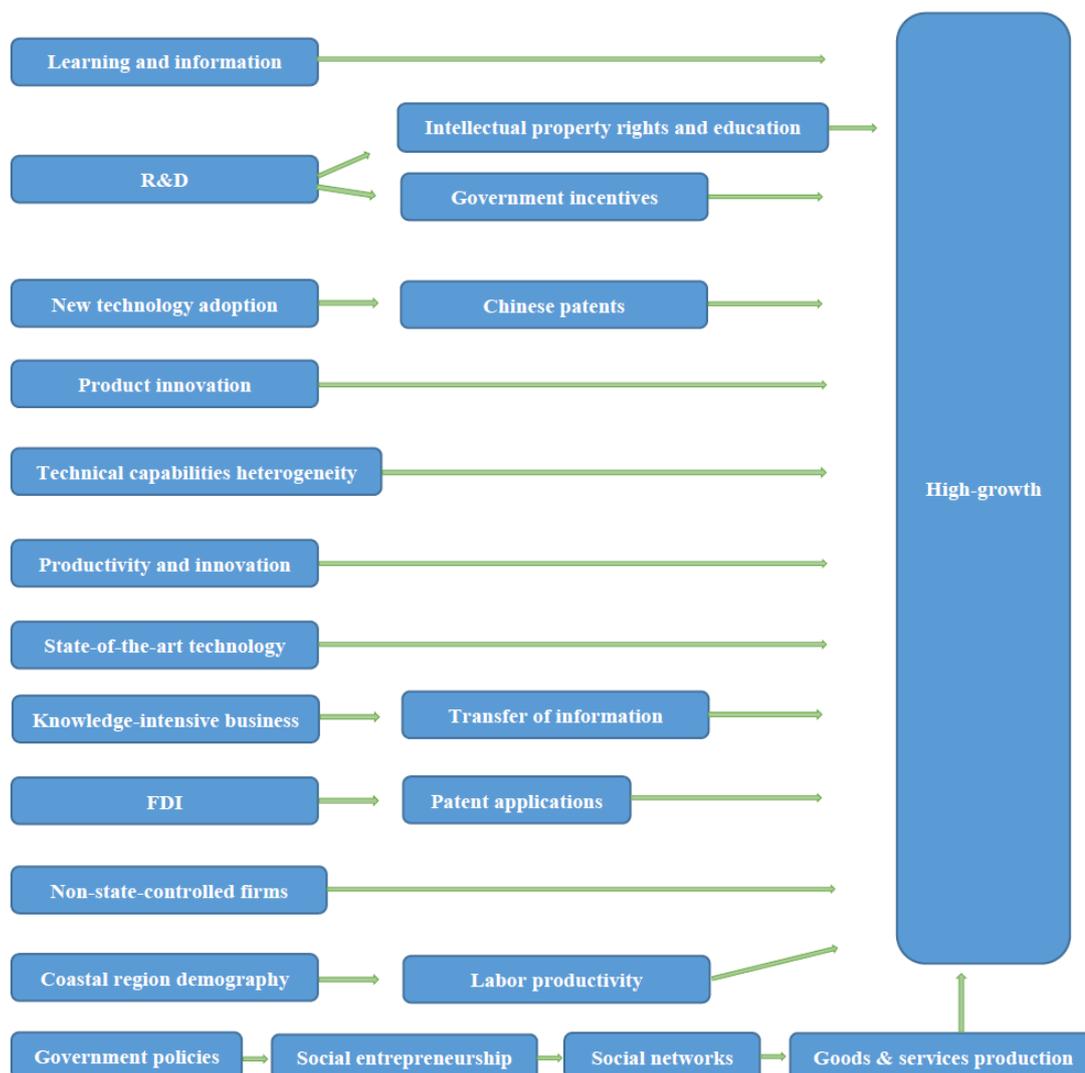


Fig.1: Conceptual framework

4. CONCLUSION

In just thirty years, China has performed a phenomenal milestone in transforming itself in its second largest economy as one of the poorest countries in the world. Yet the determinants of its effective growth are far from well-established or well known. This analysis has contributed in many respects to the development of literature. Many characteristics causing high growth have been addressed, and some have suggested that they impair the persistently high growth of the Chinese economy. Indeed, considering all the aspects and features addressed in this paper, the “Chinese miracle” essentially implies a big mechanism for growing the returns obtained through learning and information accumulation, as well as the heterogeneity of technical capabilities dependent on companies based on literature and empirical studies, this paper confirms the firm persistence of high growth. The factors mentioned include a variety of data that can help companies achieve fast growth. Unfortunately, some can, depending on all of the variables listed above, offer high-growth longevity to the company and may not do so in other situations. Some results support strong growth as a random operation, thus guided by chance that could confuse policymakers (Moschella et al., 2018).

Indeed, literature speaks against unnecessarily clear views on the broad benefits commonly attributed to policy initiatives that underpin the rise and creation of high-growth firms. We see proof that such a policy may be destined to only have a short-term economic effect.

Indeed, the few firms that display a structural capacity to reliably sustain fast growth over time do not differ from other firms in any of the aspects of industrial and financial output considered. Consequently, they cannot be predicted to contribute to a medium-term increase in the average performance of the economy (Moschella et al., 2018). This paper highlighted some important changes that need to be taken into account in a more constructive and optimistic way. First, it was suggested that policy makers should better emphasize the benefits of NIS in economic development of the country and pay attention to the role of government social entrepreneurship policies in rural growth in the economy. The Government should commit more R&D money to the activities of applied R&D to boost rural economic development in the interior and to plan various policy areas for innovation (Wu et al., 2017).

Besides, an increasing interest that has been partially explored is the convergence of the regional innovation framework and the methods of the company's innovation system in the study of the success of company innovation. As described below, by introducing and disseminating, assimilating, interacting, and integrating them into their workplaces, businesses can develop their technological competence. The study showed that external channels had a strong relationship with all technological breakthrough capacities when financed by knowledge-intensive business providers (Yam et al., 2011). The companies cooperating with the regional innovation framework can boost their efficiency in terms of technical innovation and achieve global competitiveness.

Productivity was shown to be consistent with an additional factor of high-growth status and is thus favorably linked with high-growth persistence. Taking profitability by itself, however, does not justify the high growth of non-persistent high-growers. Product innovation in businesses raises the possibility that a non-high-growth business can shift to high-growth status, but product innovation does not lead to companies' high-growth persistence.

Concerning interest rates over sales, the same applies. In this regard, the findings do not provide a statistically relevant correlation for both investment strength and leverage between high growth status or the durability of high growth status (Moschella et al., 2018). It was argued that younger and smaller companies tend to have greater prospects for high growth and the same works for non-state-controlled exporter companies concerning demographic and government interference (Moschella et al., 2018). Investments in local private sector businesses and foreign-invested firms are more important in R&D in most size categories and yield more patents relative to state-owned firms (Wei et al., 2017).

Interestingly, authors notice that company-level efficiency is growing faster for those who are more involved in innovation by relating the topic of total factor productivity and innovation. In reaction to wage inflation and global opportunities, Chinese firms have shown the potential to be more innovative. From a quantitative and qualitative point of view, knowledge of Chinese patents is sufficiently optimistic to be confident about China's predictions of a strong transition to a more disruptive development paradigm (Wei et al., 2017).

China is supposed to achieve its goal of entering into a high-income club earlier and earlier by embracing a shift to a more innovative market. Government incentives favor state-owned enterprises, but local private sector firms and foreign-invested firms benefit from the transfer of R&D funding to patent-based invention results. Notice that China will mitigate its apparent misallocation of creative capital by leveling the playing field for businesses of all types of ownership. The government restricts its discretion on research and development subsidies and ensures that private sector companies receive equal subsidies. This will be a supportive institutional change that will balance greater enhancements in both the defense of intellectual property rights and education systems (Wei et al., 2017).

China's future growth is forecast to come mainly from labor productivity growth. Meanwhile, China's investment-to-GDP ratio was already remarkable 43.3 per cent in 2015, making it impossible to expect solid productivity gains from continued physical investment (Wei et al., 2017). Finally, to sustain development, countries should, in addition to innovation, give more importance to better technology, and management practices, in addition to innovation. The study reports that countries with enhanced policies and state-of-the-art technology and management strategies are more likely to catch up with high-income nations (Bulman et al., 2017). Countries should engage in the development of "new and more agile property rights institutions, capital markets, active venture capital, competition, and a critical mass of highly qualified individuals to develop through innovations" (Bulman et al., 2017), which seems to sustain growth. Ultimately, the economic development of China today is stable, so transforming the economic structure is a key factor in preserving this growth (Liu and Cai, 2018).

In fact, this paper makes some significant contributions to the economic literature by way of analyzing aspects impacting economic growth as presented in the discussion, but more significantly, it offers specific factors that have important effects on growth of Chinese firms.

5. RECOMMENDATIONS

There is a lack of current literature in the Chinese scope, focusing on high-growth dynamics. Indicating that technological and economic radical innovation ensure that China's national policy, which continues to maintain China's social stability, is maintained. China's government should insist on investment growth and technological advances in the future strategic direction. This is what in further researchers should focus their studies on since both are indispensable because it would promote Chinese economy to sustain economic growth. Besides, most of the studies frame the inventiveness of the Chinese economy around the entrepreneur, focused on the innovations and novelties undertaken over the last two decades by Chinese citizens or domestic firms, and on the socio-political changes that have sustained them (Yang and Li, 2008; Moschella et al . , 2018). Also, this area is ideal for dramatic improvement in which further studies by future researchers could be completed. Since education levels are dramatically influenced by government policies in many areas, there is an immediate need for more academic exposure to the role of the government policy in education that successively boosts the influence of the national innovation framework on economic growth (Wu et al., 2017).

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