Journal of Financial, Accounting and Managerial Studies
ISSN 2352-9962/E-ISSN 2572-0147
Vol 08, Number 02 – June 2021

OEB Univ. Publish.

Fostering Economic Growth through Innovation and Entrepreneurship: A Consideration of the Chinese Experience

الابتكار والمقاولاتية للدفع بعجلة التنمية الاقتصادية: قراءة في التجربة الصينية

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Date of receipt: 14/04/2021 Date of revision: 09/05/2021 Date of acceptation: 31/05/2021

Abstract

This study aims to study the fundamentals of economic development through the consideration of innovation in the promotion of entrepreneurship. The work provides the Chinese experience that is the world's leading experiences in this field. The aim is to benefit from this experience and promote the enterprise that depends on innovation. The study used the descriptive and analytical approach. The results show that the Chinese experience in innovation and entrepreneurship is one of the pioneering experiences that should be followed for the development for many third world countries, including Algeria, which is endowed with enormous human and material capacities.

Keywords: Entrepreneurship; Innovation; Research; Chinese experience; Economic development.

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ملخص

تهدف الدراسة التطرق إلى مقومات التنمية الاقتصادية بالاعتماد على الابتكار في ترقية المقاولاتية، بعرض تجربة من التجارب العالمية الرائدة في هذا المجال وهي التجربة الصينية، لأجل الاستفادة من هذه التجربة وترقية المقاولاتية التي تعتمد على الابتكار، مع الاعتماد في الدراسة على المنهج الوصفي والتحليلي، وتم التوصل إلى أن التجربة الصينية في الابتكار والمقاولاتية من التجارب الرائدة، التي يمكن الاقتداء بها للدفع بعجلة التنمية للكثير من دول العالم الثالث، ومنها الجزائر التي تزخر بإمكانيات بشرية ومادية كبيرة للرفع من عجلة التنمية الاقتصادية بالإعتماد على الابتكار والمقاولاتية.

الكلمات المفتاحية: المقاولاتية؛ الابتكار؛ البحث؛ التجربة الصينية؛ التنمية الاقتصادية.

Introduction:

Research and innovation are considered the main drivers of economic and sustainable development for both developed and developing countries. Many examples of innovation in leading businesses and entrepreneurial development at the international level have appeared recently. Among these examples is the Chinese experience, which has made great steps in fostering the country's economic development. China plays a vital role in the field of innovation. China has long been working under the slogan "comprehensive contracting and global innovation" to achieve its economic and social goals by undertaking multiple programs of innovation and entrepreneurship.

Research question:

This research work is based on the following question:

How do the capabilities deployed by China for innovation and entrepreneurship contribute to pushing forward the Chinese economic development?

Hypothesis:

From the above question, we hypothesize that the principles of innovation and entrepreneurship in China are considered a pioneering experience compared to international experiences.

Objectives of the study:

The study aims to:

- Provide an overview of China's policy in developing entrepreneurship by focus on innovation.
- Benefit from the Chinese experience in pushing forward the country's economic growth for developing countries like Algeria.

Research methodology:

The study is based on the descriptive and analytical approaches through data collection of innovation and entrepreneurship in China and their analysis, and investigating the main factors China has relied on for economic growth to benefit from its experience.

1. Development of innovation and entrepreneurship in fostering Chinese economic growth:

The Chinese renaissance started in the spring of 1978 through the reform that first touched scientific and technological disciplines under the slogan “the Chinese spring of science”. After the death of former President "Mao Zi Thong" in 1976, the people of China established a strategy to stimulate the nation through science and education, and another strategy to strengthen it through human resource development ((Evgeny Sheenko, Vasily Belov, 2016, p. 10).

As a result, the central government started to encourage the establishment of horizontal, market-based linkages between research institutes, universities and institutions of various forms. Similarly, promoting entrepreneurship and innovation among unemployed youth and eliminating disrupted research institutes through mergers with industrial or university-affiliated companies were taken as further steps (David Ahlstrom, Zhujun Ding, 2014, p. 613).

In order to frame the national intellectual property law, the Chinese Patent Office was created in 1980, and patent and copyright laws were established in 1985 and 1990, respectively.

In addition, the strategies applied to industrial companies, notably those following the National Technology and Innovation Conference, were put in 1999. Research and development were strengthened, and patent acquisition emerged in this sector. In addition, the performance of industrial enterprises in research and national development increased from -40% to +65% for ten years (1990s -2000s) (Ka Ho Mok, Kan Yue, 2013, p. 177).

Since 2009, the entrepreneurship strategy has been subject to certain transformations that aim at stimulating the innovative activity of small and medium-sized companies. Therefore, a government program called "Collective Entrepreneurship and Global Investments" was launched in 2009, with an annual funding of $ 6.5 billion (Reshetnikova, M.S, 2018, p. 508).

In addition to this program, the government launched the "SBIR" (Small Business Innovation Development and Research) program in 2010. This program sought to attract private companies to solve scientific and technical problems facing the 10 largest federal ministries and national agencies that

contribute about 2.5% of their of private budgets to finance research and development in small and medium-sized enterprises as well as everything related to entrepreneurship. In 2016, the "SBIR" program allocated more than $ 42 billion to support 28,410 technology projects to promote independent modernization and innovation in small and medium-sized enterprises (Reshetnikova, M.S, 2018, p. 508).

Since the first half of 2018, strategic emerging industries, contracting and service industries have grown 30% faster than the overall national growth and have started to drive the Chinese economic development consistently (Deloitte China report, 2019, p. 8). The digital economy also drives the Chinese innovation to globalization, making it an important source of the Chinese overall local production growth. In 2018, the Chinese digital economy grew to 31.3 trillion Yuan (an increase of 20.9%), accounting for 34.8% of Gross Domestic Product GDP (Deloitte China report, 2019, p. 3).

2. Overview of research indicators and development in China:

Throughout this study, we will try to put focus on the most important indicators of research and development in China to get an overview on China's global position in the field of innovation and development for enterprise growth as with the development of various industries:

2.1. patent:

Patent applications and awards are among the most important measures of innovation and knowledge creation. In 2013, domestic patent applications in China reached 705,000 patents, representing 44% of the total 40 countries and being ranked the first in the world for four consecutive years. The number of domestic exported patents reached 144,000 units, representing 21.4% compared to a total of 40 countries and being the second after Japan (WIPO, 2015, p. 5). The following table demonstrates China’s ranking and the number of submitted invention applications in comparison to some developed countries.

Table 01: Number of applications and grants of domestic patents (2000-2014) (number / rank)

Countries	Number of applications and grants of domestic patents ranked globally		Number of granted patents and international ranks	
	2000	2014	2000	2014
USA	164795 (2)	285096 (2)	85071 (2)	144621 (3)
China	25346 (6)	801135 (1)	6177 (7)	162680 (2)
UK	26409 (5)	19922 (8)	4380 (10)	4 388 (9)
Germany	71840 (4)	73826 (5)	17167 (4)	23 714 (5)
Japan	384201 (1)	265959 (3)	112 269 (1)	177750 (1)
Russia	23377 (7)	24370 (7)	14444 (5)	23 305 (6)

Source: WIPO, 2015, p. 5

Table 1 Shows that China is one of the first countries in patent applications between the years (2000-2014). During the same period, China obtained the largest number of "triple complementary" patents. In 2018, China occupied the second place in international patent application after the United States (Deloitte China report, 2019, p. 10).

2.2. Number of researchers and published works:

The increase in the number of researchers and scientific productivity (paper and electronic publications) is considered among the most important criteria of the country's ability to create knowledge, and hence, innovation. China ranks the second after the United States of America in scientific research in 2013. The total number of research in China reached 213,000, representing 15% of the total international published research (Evgeny Sheenko, Vasily Belov, 2016, p. 10). The Chinese scientific research concern shifts from the control of a large number of research papers to quality amelioration and international impact. In 2018, China ranked the

fourth in the world in terms of the number of published papers in international academic journals; the second in terms of the number of citations; and the fourth in the field of innovation and technology (Deloitte China report, 2019, p. 10). Since 2014, the number of artificial intelligence papers in China has exceeded the United States to exceed other countries later. This is closely related to the rapid development of scientific research and artificial intelligence institutions. Similarly, scientific research institutions are considered a major driver for patent applications for emerging companies. Therefore, analyzing the results of scientific research in economic institutions in each city has aided in understanding its technological strength. Every year, more than 1.2 million university and engineering graduates are part of the Chinese manpower (Deloitte China report, 2019, p. 33) . In 2015, China had 364 high-tech and economic development zones, an increase of 13.5%, compared to 49 in 2011 (Aikman, 2016, p. 17). China's growth in scientific research is estimated at 15% annually, which is one of the highest rates in the world. (Evgeny Sheenko, Vasily Belov, 2016, p. 10).

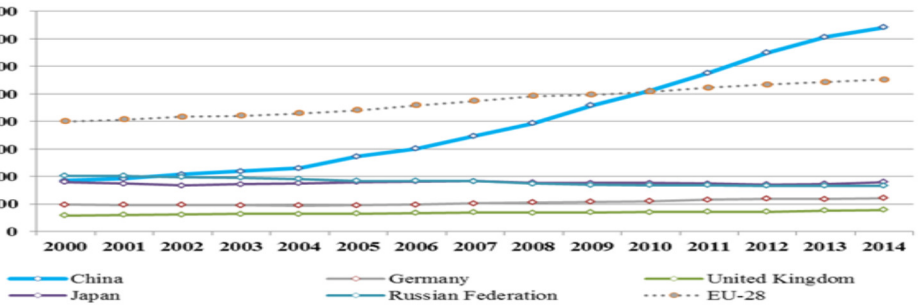
2.3. Research and development expenditures

Research and development expenditures represent a large percentage of China's GDP, growing continuously every year. In 2014, it reached 2% of GDP, which is close to some developed countries, such as the Netherlands and the United Kingdom, but not like others, e.g. Japan (3.59%) and South Korea (4.29%) (Evgeny Sheenko, Vasily Belov, 2016, p. 10).

The increasing research and development budget and labor supply are considered positive contributors to innovation. The corporate spending increased from $ 1.2 billion in 2005 to $ 39.4 billion in 2015, an increase of 32 times in 10 years. In 2015, the Chinese government spent a total of 1.4 trillion Yuan on research and development; this has made it ranked the second largest research and development expenditure after the United States. The latter reach 2.1% of China’s GDP in 2019. Chinese universities had progress of 3% on research and development worldwide, where six universities were ranked among the top 100 according to QS ranking of world universities in 2019 in comparison to four universities in 2017 (Deloitte China report, 2019, p. 10). In 2017, the Chinese company "Huawei" ranked the first in the world with research and development

(R&D) investment of 10.363 billion Euros (Zhifeng Shen, Ahsan Siraj, 2020, p. 2).

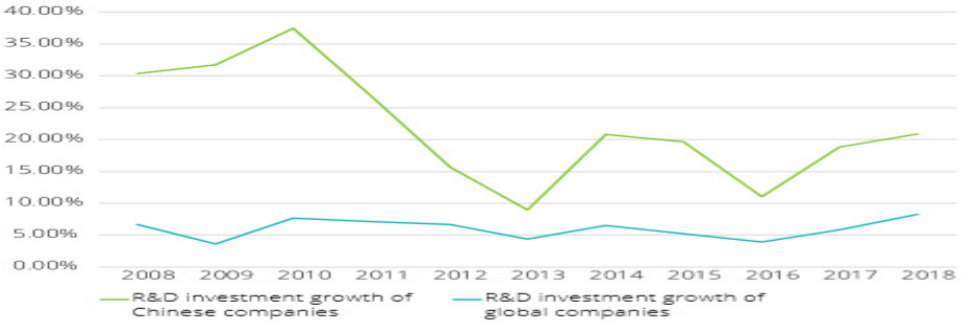
Figure 1: The evolution of the number of permanent employees in the field of scientific research during the period (2000-2014)



Source: Evgeny Sheenko, Vasily Belov, 2016, p. 10

Figure 1 shows an increase of the total number of researchers in China more than 3 times between the years 2000 and 2014. Similarly, the total number of working professionals exceed164 million people (Reshetnikova, M.S, 2018, p. 508); some other countries show a moderate increase; and other countries show some decrease. In addition, R&D investment for Chinese companies grew significantly vis-à-vis international companies during the period 2008-2018, as demonstrated in the following figure:

Figure 02: The growth of R&D investment of Chinese companies vis-à-vis global companies during the period (2008-2018) %

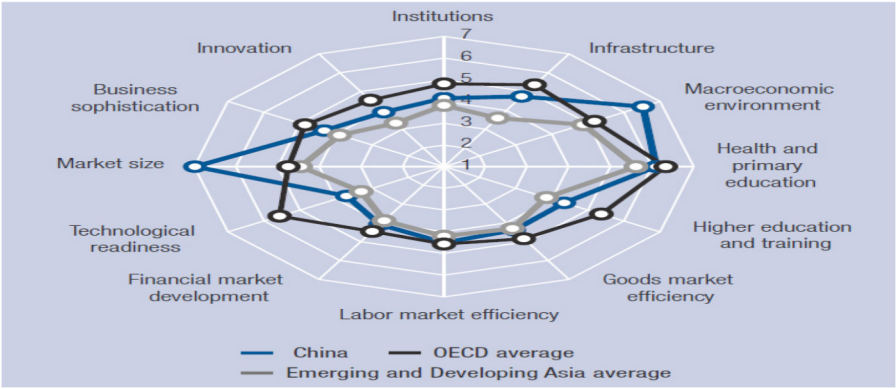


Source: Deloitte China report, 2019, p. 10.

2.4. Global competitiveness

In its Global Competitiveness Report 2015-2016, the World Economic Forum reported that China has a strong economic base, which is the result of the consideration of education and public health areas. China has invested heavily in transport and energy infrastructure; this has made its macroeconomic environment relatively stable. The size of the Chinese market provides significant advantages (World Economic Forum a, 2016, p. 5), as the following figure shows:

Figure 03: China's position in 12 indicators of global competitiveness (%)



Source: Global Competitiveness Report, 2015-2016, p. 76.

Figure 3 illustrates China's first rank in macroeconomic environment and market size. In addition, it achieved advanced ranks in cultural and educational areas, market efficiency, institutions, products, infrastructure, innovation and technology.

3. Foundations of innovation and entrepreneurship development for fostering Chinese economic growth:

Decentralization in the Chinese economy led to the emergence of non-state companies (e.g. private companies), which used to pursue more productive activities than state-owned companies with a central control. The great increase in innovation and entrepreneurship was largely driven by a number of factors. The most important factors are highlighted this section:

3.1. Launching several development initiatives:

China has adopted many successful initiatives aimed at advancing economic development. The following are some examples:

3.1.1. Chinese Spring of science initiative:

This initiative began in the spring of 1978 focusing on the reform of science and technology. A significant national conference was held in Beijing in March 1978 where the government announced a policy for encouraging scientific research. During the conference, the Chinese President Deng Xiaoping proposed a thesis "Science and Technology are Productivity", where there was an establishment of a plan and goals lasting for 8 years to: develop science and technology; train 800.000 highly qualified professional researchers; build an integrated system of national scientific and technological research; approve 108 projects as major projects for the national scientific and technological research (then adapted to 38 national research projects in 1982); and establish 8 main comprehensive scientific and technological fields based on the adaptation of scientific expertise and knowledge from developed countries, and relying on industrial espionage (Evgeny Sheenko, Vasily Belov, 2016, p. 15).

3.1.2. Belt and road initiative (One belt, One road):

This initiative was launched in 2013 to: promote economic integration and communication (such as infrastructure, trade and investment) with China's neighbors and various trading partners in Asia, Africa, Europe and beyond; enhance coordination between economic policies; enhance integration of interconnected development and development strategies to achieve shared prosperity (Xinhuanet, 2017).

3.1.3. Made in China 2025 initiative:

This initiative was announced in 2015, being one of several ambitious projects aiming at: increasing the competitiveness of Chinese industries, promoting Chinese brands, increasing innovation, and reducing China's dependence on foreign technology by making China a key country in the economy or the dominant global manufacturer of various technologies. The initiative aims to "transform China from a manufacturing giant to a global manufacturing power" by the year 2049 (Xinhuanet, 2017), through focusing on ten major sectors: aviation equipment, advanced numerical control machines and robots, Offshore engineering equipment and offshore ship high-tech manufacturing, advanced railway equipment, alternative energy, biological medicines and high performance medical devices, ... etc.

The plan sets out a goal of achieving 40% of essential components and locally manufactured materials by 2020 and 70% by 2025 (China Daily Report, 2018).

3.2. Programs preparation for innovation and acquisition of advanced technologies:

The technological development in China is based on rapprochement with major developed countries (through their adoption of foreign technology), which has enabled it to increase the level of productivity gains. The Chinese government made innovation a top priority in its economic planning through a number of prominent initiatives (Congressional Research service, 2019, p. 9). The state-owned companies has been heavily involved in research and development projects and diffusion of new technologies in various economic sectors in the country. It is estimated that these companies will employ more than 1.2 million technologists with high efficiency and will own more than 214,000 patents by the end of 2011 (China Institute report, 2018, p. 13). The government has also conducted a series of research programs at the national level to foster development and innovation. Among these programs and initiatives:

3.2.1. Key Technologies R&D Program:

This program is considered the largest science and technology program in China in the 20th century (1982), aiming at rebuilding the national economy. The main purpose of this program was to solve major and comprehensive problems that were encountered during the era of Chinese social and economic reform. Three decades after its launch, the program has covered a wide range of fields of science and technology, such as agriculture, electronic information, energy resources and transportation. It has attracted tens of thousands of employees from more than 1,000 research institutes nationwide (Ka Ho Mok, Kan Yue, 2013, p. 178).

3.2.2. National High-Tech Research and Development Program:

In March 1986, after reviewing a comprehensive study by several hundreds of Chinese scientists from the sectors of science and technology, the Chinese President "Deng Xiaoping" approved another program called the National High-Tech Research and Development Program or the 863

Program for high-end Technological Exploration. It includes a total of 20 topics, such as: biotechnology, space exploration, information, laser, etc.. Unlike the Key Technologies R&D program, the state's involvement in operating this program is much less, except for administrative treatment or provision of the necessary legal and administrative services (Ka Ho Mok, Kan Yue, 2013, p. 178).

3.2.3. Torch technology program:

Two years after launching the national High-Tech Research and Development Program, the Chinese Ministry of Science and Technology started another innovation program called "Torch" program to further increase its high-tech capacity in several fields. This program plays an important role in developing the necessary capabilities for innovation and obtaining the necessary technologies. It reduces the burden of excessive regulation on developing science and technology and provides material support for the infrastructure to attract foreign high-tech companies and private investors. In addition, it promotes domestic and international marketing and industrialization of science and technology (Ka Ho Mok, Kan Yue, 2013, p. 178).

3.2.4. Science and Technology Development Program (2006-2020):

Among the strategies used to develop science and technology in the selected disciplines and increase domestic innovation capacity, the State Council of China issued a medium and long-term program that came to review fiscal and tax policies to create a favorable climate for innovation in the field of entrepreneurship in 2006. Moreover, the integration between universities, research institutes and enterprises has been encouraged, ending up with the creation of 11 fields, 68 scientific research topics, 16 special programs, 27 new technologies, 18 basic science topics, and four scientific research plans. The program prioritized research for the next fifteen years (Ka Ho Mok, Kan Yue, 2013, p. 178).

3.2.5. The creation of the Chinese Science and Technology Innovation Council in 2019:

This council was established to facilitate the work of companies in high-tech and emerging strategic sectors; for example, Next Generation Information Technologies, advanced equipment, new materials and energy, energy saving and environmental protection, and biomedicine, to include but a few. This council provides greater financing support for innovative companies and strengthens the link between science and technology, capital, and real economy. Therefore, it fosters the transfer of scientific results into high productivity. By using a registration-based system, the Science and Technology Innovation Council adopted more diversified standards. This allowed powerful technology startups to register quickly through questions and answers on the basis of revealing information (Deloitte China report, 2019, p. 63).

3.3. Education and scientific research reforms:

China has gradually reformed the way educational institutions and scientific research are managed, and funding on research has increased. Similarly, the government has financed institutes for implementing independent projects. Some institutions of technology development have become able to compete financially by either moving to the public sector or investing from the private sector. These institutions have made significant contributions in improving the functioning of sectors like transport, energy and information engineering (David Aikman, August 2016, pp. 9-10).

According to the Chinese Ministry of Education statistics, about 82% of universities and colleges have opened compulsory or optional courses on entrepreneurship and innovation. These courses increased by 14% in 2015 in comparison to 2014. The Chinese universities and colleges have established special funds for entrepreneurship projects for about 1.02 billion Yuan (160.4 million US dollars) in 2015. More than three million university students participated in innovation and entrepreneurship activities. These universities and colleges respond to employers' requests by providing information, services and necessary training that aid graduates in finding appropriate entrepreneurship programs (Chien Wen Yu, 2018, p. 6).

The Chinese universities were increasingly pursuing and developing joint projects with companies, and universities have established their own technology companies, technology parks and startups to link businessmen with local resources (Evgeny Sheenko, Vasily Belov, 2016, p. 24). In addition, they have created Hacker spaces. The latter ones provide several assistance in coordination with scientific research institutes in organizing research for private enterprises, providing small and medium-sized innovative companies with infrastructure, bringing expensive research professionals as well as analysis and measurement equipment (Reshetnikova, M.S, 2018, p. 508).

3.4. Importing scientific competencies:

The strong ties immigrant businessmen maintain with their local communities through transfer of technological knowledge and exchange of information is quite noticeable in China. Business individuals, returning from abroad, are usually individuals with higher education (e.g. scientists and engineers) who have been trained in developed countries and returned to China to start technology projects. The Chinese government started to realize the importance of innovation and introduced policies to support high-tech companies to attract talented individuals. In order to attract top scientists and experts from abroad, China introduced the recruitment program for global experts in 2008.By the end of 2015, the program attracted 5,208 experts from abroad who have made great achievements in their fields (David Aikman, 2016, pp. 12-13).

Many Chinese economic cities have also implemented many procedures to attract scientific competencies. For example, the city of "Shenzhen" developed a plan called the "Peacock Plan" through adopting a number of measures to attract talents. By the end of 2015, this plan attracted 59 innovative research and development teams, and a total of 1,219 individuals were appointed as highly qualified foreign professionals. Similarly, the plan attracted 18 research and development teams specialized in high-tech fields (David Aikman, 2016, p. 14).

3.5. Openness to internal and external financial sector:

This is done through: allowing small and medium-sized financial institutions and private banks to carry out their activities; reforming the policy of financial institutions; developing capital markets and increasing direct financing shares; improving insurance and economic compensation systems; promoting inclusive finance; encouraging financial innovation; enriching financial market products and liberalizing market mechanisms; as well as improving the mechanisms of controlling interest and exchange rates, etc. (Ken Davies, 2013, p. 39).

3.6. Establishing investment funds to support entrepreneurship and innovation:

China has developed investment funds and provided various financial aids to innovation-based enterprises. On August 6th, 2015, the State Council, the National Development, Reform Commission, and the Ministry of Finance officially approved the establishment of investment funds to develop national initiatives, promote innovations and support them in enterprises, and develop the field of investment by the end of 2015. In addition, the country has contributed to granting 10.5 trillion Yuan to more than 200 investment funds to support entrepreneurship, covering 26 provinces and cities across the country. Moreover, the state-owned companies contributed in the investment of 179 funds, with a capital exceeding 160 billion Yuan as with providing financial aids. At the end of 2015, China established 780 government-lending funds to finance investment production capacity of emerging companies with more than 2180 billion Yuan ($ 330 billion). These are considered the largest investment amounts for emerging companies collected in the world (Evgeny Sheenko, Vasily Belov, 2016, p. 10).

3.7. Tight control to combat corruption and corporate governance reform:

The basis of corporate governance reform was laid according to the law of companies (1995). The control over state-owned companies was strengthened through laws that encourage direct foreign investment. At the same time, other laws of control were set not to manipulate public money (Garnaut, Ross (Ed.); Song, Ligang (Ed.); Fang, Cai (Ed.), 2018, p. 345).

To combat corruption, the Chinese government has taken many measures through the creation of mobile inspection teams. In December 2012, government officials announced the "eight-point regulation", which includes a number of guidelines to eliminate corruption. More than 1.3 million people were punished for getting involved in corruption, and more than 70,000 Chinese officials were inspected in October 2017. In March 2018, the establishment of the National Supervisory Commission (NSC) was announced to have superior authority than that of the Supreme Court, controlling all public officials who exercise public authority. (نيفين حسين، ندى الهاشمي، 2018، صفحة 4)

In addition, the Chinese Banking Regulatory Commission and its offices issued more than 1050 laws on administrative penalties for 631 banking institutions (including their branches) in 2016. It also imposed fines of 240 million Yuan against banks violating of the law and confiscated the illegal incomes of banking institutions, estimated 29.59 million Yuan. Similarly, 442 people were subjected to personal penalties: 255 of them were warned and 165 were fined of 10.48 million Yuan (China Banking Regulatory Commission (CBRC), 2016, p. 109).

3.8. Protection of intellectual property rights:

China has made great progress in protecting intellectual property rights. Intellectual-property-right courts were established in Beijing, Shanghai and Guangzhou in 2014. These court shad the ability to adjudicate civil and administrative cases related to patents, new plant species, integrated circuits, designs, protected technology and computer programs (World Economic Forum a, 2016, p. 5). In December 2015, the State Council called for a national strategy to strengthen intellectual property protection. through setting a number of laws: the new trademark law, the patent law, the unfair competition law, and making amendments to the copyright law. This is to achieve stricter protection of intellectual property and related interests (State Council of china, 2015, p. 15).

Concerning legal protection, major changes have been made in the provisions of property rights. The most important changes may relate to the amount of awarded compensation. In 2015, a report of intellectual property cases in the Beijing court showed 92.45% of the total of 5432 lawsuits; the

average trial time was 125 days in more than 70% of cases; and fines reached more than 100,000 Yuan (World Economic Forum a, 2016, p. 12).

3.9. Financial and tax benefits:

The Ministry of Finance, along with the state, tax administration and other institutions, has approved a set of financial privileges. Examples of these privileges: the reduction of value-added tax; exemption from commercial taxes for long periods; and granting of secured loans at low interest rates to enterprises that rely on Innovation. In 2017, the Chinese Tax Administration issued guidelines on tax incentives for enterprises that rely on collective entrepreneurship relying on innovation. The corporate income tax for small businesses has been cut in half, and the scope of taxes gradually expanded to less than 300,000 Yuan of annual taxable income to less than 3 million Yuan. In July 2019, the China Tax Administration issued 89 preferential tax procedures regarding vital sectors and major areas for business start-ups and employment, covering the entire life cycle of an enterprise that relies on innovation ((Deloitte China report, 2019, p. 9).

3.10. Establishing specialized high-tech start-ups:

China has witnessed rapid development of more than 130 high-tech institutes. These areas represent less than 1% of China's land area, nearly 40% of investment in research and development of the total enterprises in the country, and 32.8 % of revenue from sales of new products. An example is the Zhong guancun Science Park (Z-Park) in Beijing, which recorded 4.07 trillion Yuan of revenue in 2015, covering only 3% of China's technology space and contributing to 37% of development. Z-Park has been the global leader in many sectors such as Internet+, biomedicine, and smart manufacturing and new materials. Strategic emerging industries contributed to 71.6% of their revenues (World Economic Forum a, 2016, p. 6) in 2016.In the same year, the Beijing Technology Zone attracted 18,000 scientific and technological institutions as well as more than 10,000 high-tech enterprises, where the "Changzhou" district attracted more than 468,000 small and medium-sized enterprises that operate successfully, to receive the status of "innovative enterprise" (Reshetnikova, M.S, 2018, p. 508).

In 2018, China reached more than 4,849 start-ups and 6,959 industrial parks, and ranked the first worldwide. More than 60% of the start-ups were operated by private investment companies (Deloitte China report, 2019, p. 13).

3.11. New trend of small and medium-sized companies:

The Chinese government policy of "comprehensive entrepreneurship and global innovation", by turning it into a new source of innovative development, stimulated its activity and called for the development of new elements of the infrastructure of the Chinese innovation, focusing primarily on small and medium-sized enterprises. In 2015, the annual growth rate of newly registered private companies in China increased to reach more than 21%. Similarly, there were 4.2 million newly registered companies, representing 11,500 new private companies registered every day. By the end of 2015, there were 19.1 million private sector enterprises (23.4% year-on-year), where their capital reached 90.5 trillion Yuan (52.9%), and the total number of employees reached 164 million permanent employees (13.9% year-on-year). There are still significant regional differences among Chinese provinces. The Eastern Province remains the core in terms of newly established companies depending on entrepreneurship, accounting for more than half of the new companies. Beijing and other developed cities have witnessed high rates of high-tech (Evgeny Sheenko, Vasily Belov, 2016, p. 24).

Conclusion:

The study demonstrates that China has deployed all its capabilities, notably the financial ones, and has given great importance to both creativity and innovation in modern companies and enterprises. This resulted in improved performance and local and global competitiveness. The link between scientific research institutes, universities as well as technological projects has increased as well.

Therefore, the results go in the direction of the hypothesis meaning that China is a pioneer in entrepreneurship that depends on innovation. A set of suggestions and recommendations are, hence, presented to increase the efficiency and performance of entrepreneurship in the economic sector:

- The need to benefit from the experiences of developed and emerging countries in fostering innovation and entrepreneurship to increase economic development.
- Giving great importance to creativity and innovation in new enterprises, especially small and medium projects.
- The link between scientific institutions, such as universities, and technological projects, and the use of technological start-ups for their great contribution to transforming ideas and applied research into successful productive and industrial projects.
- The adoption of national policies capable to create a qualitative shift in the structure of economy, to move from a rent-based and traditional economy with low added value to a new developmental structure that stems from knowledge economies.
- The application of knowledge in the country's economy requires the integration of its efforts in the private sector and society in order to diversify the economy and develop it and, hence, achieve social development

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