

Research on Innovation Mechanism Based on Supply-side Structural Reform

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Abstract: Chinese economy has stepped into a new period, which is called “New Normal”. “New Normal” put forwards new requirements for Chinese economy development. Promoting supply-side structural reform is a major innovation to help China adapt to this significant time period. By interpreting the policies of various documents of supply-side structural reform, this paper finds innovation-related terms, analyses the innovation mechanism in the supply-side structural reform and proposes measures to promote China’s economic development. The purpose of this paper is to provides methods to the to further optimize industrial structure, improve the efficiency of supply development, and sustain Chinese economy to cope with the “New Normal”.

1. Introduction

China’s economic society has stepped into a period of “new normal”, which means that high-speed growth has been transformed into medium-high growth; the economic structure has been constantly improved and upgraded; factors-driven and investment-driven have been transformed into innovation-driven. These characteristics puts forward new and higher requirements for the development of productivity and promotes the transformation of productivity to a higher and more advanced level. However, the new and higher level of productivity requires the transformation of the original and old production relations and the establishment of a new production relation. Only through innovation can we seize the historic opportunity and adapt to the period of “new normal” [1]. This paper analyses the innovation mechanism in the supply-side structural reform and proposes measures to promote China’s economic development.

2. Theoretical Review of Supply-side Structural Reform

The term “supply side” has recently appeared frequently in the official conference and has become a new perspective in China’s macroeconomic policy. On November 10th, 2015, Xi Jinping, the chairman of People’s Republic of China put forward the “supply-side structural reform” in Central

Financial and Economic Leading Group Meeting. Eight days after this meeting, national leaders also mentioned “supply-side structural reform” at the Executive meeting of the State Council, the work meeting of the 13th Five-Year Plan Outline and the APEC meeting. The Central Economic Work Conference concluded on December 21, 2015 that promoting supply-side structural reform is a major innovation to adapt to a period of “new normal” of economic development. Supply-side structural reform is an active chance to adjust to comprehensive national competition’s new situation after the multinational financial crisis. In the coming period, it should be strengthened with supply-side structural reform with appropriately expanding aggregate demand.

Supply-side structural reform aims to adjust the economic structure, make the optimal allocation of factors of production and improve the quality and quantity of economic growth. In order to better meet the needs of people and promote the sustainable and healthy economic and social development, supply-side structural reform starts from improving the quality of supply, with promoting structural adjustment to correct the allocation of factors of production, expand the effective supply, and improve the total factor productivity. In government Work Report of the State Council for 2019 released on March 5, 2019, Premier Li Keqiang mentioned that supply-side structural reform unleashed the vitality of the real economy in the past year.

3. Supply-side Structural Reform and Innovation

3.1. Innovation and Economic Growth

Schumpeter believed that there is a force within the economic society that can break any equilibrium it has reached. Such a change does not only depend on external forces but will result in the transformation of the economic society from one equilibrium to another [2].

3.1.1. The Core of Innovation Development: Connotation and Extension of Innovation

Schumpeter pointed out that the static “circulation of economic life” is balanced, which is similar to the circulation of blood in human body and the circulation of production process. The innovation of entrepreneurs is the power to break circular equilibrium and realize dynamic economic development. First, innovation is to establish a new production function to achieve a new combination of various production factors. Second, innovation is different from invention. The latter merely proposes new approaches to the problem, while the innovator, “entrepreneur”, has the “wisdom, will, and ability beyond normal” to drive “new combinations” and make them happen. Third, entrepreneurship is not a profession and cannot be a class in society. Fourth, the motivation of entrepreneurs’ innovation includes dream and will, conquest and struggle, and enjoyment of the pleasure of creation. Innovation development process: “Creative destruction”.

3.1.2. Innovation Development Process: "Creative Destruction"

In *Capitalism, Socialism and Democracy*, Schumpeter articulated the concept of “creative destruction” clearly and systematically for the first time. In terms of connotation, Schumpeter mentions that the innovation process is a creative destruction process, which is a process of internal transformation from destroying the old economic structure to forming the new economic structure. In terms of meaning and attributes, Schumpeter underlines the “creative destruction” in the core position in the production process of technological change, and points out that new sources of supply, new technology, new types of competition and new products are worth more than the price competition. Schumpeter also expounds that the innovation is not only a technical change phenomenon, but also a social process [3].

3.1.3. Entrepreneur and Monopolies

In *the Theory of Economic Development*, Schumpeter pointed out that the subject to realize the means of new combination of production is the entrepreneur, whose role is embodied in promoting the emergence of new production functions through “creative destruction”. Later, in his book *Capitalism, Socialism and Democracy* in 1942, Schumpeter summarizes the advantages of large monopolies and argues that monopolies can replace entrepreneurs as the subject of technological innovation. This argument highlights the endogenous research and innovation activities of enterprises [4].

3.1.4. Endogenous Growth, Innovation and Development Fluctuation: Innovative Ideas of Economic Cycle

Schumpeter points out that innovation leads to increasing returns, which can offset the diminishing returns of other factors and thus promote economic growth. However, innovation is not evenly distributed in the historical process, so the economic system does not move forward continuously and steadily, and economic growth shows a leap development. Entrepreneurial innovation, imitation and adaptation drive “creative destruction” and promote economic growth. From the breaking of the old equilibrium to the establishment of the new one, the industrial structure changes and a country’s economy experiences various stages of contraction and prosperity, thus forming the economic cycle.

3.2. Innovation in Supply-side Structural Reform

By interpreting the terms of various documents of supply-side structural reform, we can find the following innovation-related terms.

3.2.1. The Innovation of Development Concept

“Five development Concepts” are “innovative, coordinated, green, open and inclusive”. To adapt to the economic development of the new normal, we will follow the overall approach of keeping macro policies stable, industrial policies targeted, micro policies flexible, reform policies solid, and social policies supportive. We will focus on the five key tasks of cutting overcapacity, reducing inventory, deleveraging, reducing costs, and strengthening weak links

Many of today’s economic problems are rooted on the supply side rather than the demand side. Many structural problems in the economy can be fundamentally solved only by reforming the traditional extensive supply mode oriented by quantity from the perspective of supply side. Supply-side structural reform is to improve factor input in production through innovation and other means directly from the supply side, eliminate ineffective supply, and solve the structural contradiction between supply and demand as well as other structural problems in the economy [5].

3.2.2. The Innovation of Institutional Arrangement

A major task of supply-side structural reform is to strengthen areas of weakness. There are many shortcomings in China’s social economy, and the reasons leading to them are not the same. However, from the perspective of industry, the most core factors that cause the existence of weak links are probably some unreasonable institutional arrangements and some policy mistakes, which lead to the lack of motivation in the whole society and the difficulty in forming endogenous independent innovation mechanism. As a result, China’s industry is in a relatively weak position at the lower end of the global industrial chain, and its products lack international competitiveness.

Therefore, it is necessary to start from the reform and innovation system and stimulate the innovation spirit of the whole society.

3.2.3. Technological Innovation

“Green” and “cost reduction” put forward the requirement of technological innovation for supply-side structural reform, making enterprises become the main body of technological innovation. Low-carbon technological innovation refers to the realization of energy conservation and efficient utilization as well as the protection and improvement of the natural environment through the development and utilization of new technologies to reduce energy consumption, reduce environmental pollution and damage, reduce carbon emissions and improve energy utilization efficiency and benefits brought by unit energy consumption. Low-carbon technology innovation is the foundation of the development of low-carbon economy. It determines the development direction of low-carbon economy and plays a crucial role in the development of low-carbon economy. In traditional factors of production, land supply is fixed and limited, and the increase of labor and capital input is mainly reflected in economies of scale and is subject to resource constraints and environmental constraints. Only technological improvement can reduce costs, form excess profits, and improve total factor productivity. Therefore, technological innovation is the core of enterprises’ long-term development.

With the expansion of the market, more enterprises enter the market; therefore, market competition intensifies. The continuous expansion of the market is bound to drive the expansion of market demand, which not only provides targets and opportunities for enterprises to carry out technological innovation activities, but also urges enterprises to continuously improve technologies and services. In order to compete for market share and improve competitiveness, enterprises need to carry out technological innovation competition, introduce new technology or improve existing technology, produce new products more efficient than competitors and launch new brands and guide consumption, in order to expand and increase product market share.

3.2.4. To Create New Supply through Innovation and Entrepreneurship

In the market environment, in order to meet the new needs of users, enterprises develop new products through incremental innovation or seeking for sudden innovation, thus enhancing their R&D and innovation capability. At the same time, the development of new products, and so did the chain link intermediate product research, affect the flow of the personnel of enterprise research and development. The research and development personnel flow generate new knowledge overflow. The further training mechanism expands the overflow, which significantly enhance the enterprise knowledge capacity and improve the ability of independent research and development.

3.2.5. The Innovation of Management

Enterprise’s production, research and development, marketing, logistics, service is a series of the process of creating value. The advanced nature of the modern enterprise system lies in the reasonable arrangement of the enterprise’s value-creating activities through scientific management, the achievement of the enterprise’s business objectives and the enhancement of the enterprise’s development vitality, to gain a place in the fierce market competition. Apple, Microsoft, Google, Nike, Samsung, Huawei and other well-known companies, all can grasp the market, progressive research and development, marketing layout, service tracking and other system arrangements, in the production and consumption related links for management innovation. Apple, for example, focus on research and development and the assembly to outsourcing, at the same time to roll out the 5 s, 6 s, and other products of huge conference to attract global attention. These new products bring

extremely rich profits and accumulate a lot of capital for the further development of the enterprise, which is also the successful way for the enterprise to achieve sustainable development.

4. How to Achieve Innovation and Promote Sustainable Economic Development

4.1. Innovation of Development Concept

“Supply-side structural reform” starts from the supply and production side, to adjust economic structure by liberating the productive forces, in order to achieve the optimal allocation of factors and improve the quality and efficiency of economic growth. It is to foster new growth drivers by stimulating innovation and entrepreneurship, creating new supply and new growth areas, and promoting long-term, healthy and sustainable economic development. To promote supply-side structural reform, there are four battles of annihilation to conquer. First, cut overcapacity and promote industrial optimization and restructuring; second, reduce costs to help enterprises maintain competitive advantages; third, reduce the inventory of real estate and promote the sustainable development of real estate; fourth, prevent and defuse financial risks and accelerate the formation of a complete financial market. These four aspects are the key areas of the supply-side structural reform. The “supply-side structural reform” will use the four operations of “addition, subtraction, multiplication and division” to complete the five key tasks of cutting overcapacity, reducing inventory, deleveraging, reducing costs and strengthening weak links. Specifically, “addition” means to develop new industries, strengthen the weak links in soft and hard infrastructure, and increase investment in people. “Reduction” means that the government will streamline administration and delegate more power to lower costs for enterprises in the real economy, clean up zombie enterprises and eliminate backward production capacity. “Multiplication” means accelerating the growth of new drivers of growth and upgrading of traditional ones through reform and innovation and fostering a “multiplier” for economic growth. “Division” means to remove excess production capacity, remove “roadblocks” on the road to economic development, and clear the way for China’s smooth economic development [6].

4.2. Institutional Arrangement Innovation

To enhance endogenous innovation of enterprise, the government in the system and the policy level should gradually eliminate the interests dominant behavior, such as monopoly protection, land hoarding property speculation, etc., thus gradually squeezing the innovation enterprise take the gaining of space, to improve enterprise innovation development and to build healthy social innovation environment; on the other hand, it is recommended to further improve the intellectual property rights legislation, improve the intellectual property infringement to report complaints, strengthen the administrative law enforcement of intellectual property rights, increase the intensity of tort law to punish, innovation and long-term development, increase investment in innovation, imitation, manufacture and gaining rent-seeking regression innovation-driven development way, improve profitability through innovation and competitive ability, and obtain the sustainable healthy development of the enterprise[7].

At the same time, the government should actively adopt various reform measures to cut overcapacity and eliminate zombie enterprises. It is suggested to adjust China’s current foreign trade policy, build a China-led regional value chain trade and investment liberalization system, and form an external environment conducive to promote China’s innovation capacity through the new pattern of opening. All types of enterprises, especially state-owned enterprises, should actively promote institutional innovation. It is recommended that unswervingly deepen the reform of state-owned enterprises, pay attention to institutional innovation, accelerate the establishment of a

modern enterprise system, give full play to the enthusiasm, initiative and creativity of all types of talents, and stimulate the vitality of all factors of production. At present, to deepen the reform of state-owned enterprises, it is particularly necessary to accelerate the formation of an effective corporate governance structure, as well as a flexible and efficient market-oriented operation mechanism. In short, only by making institutional innovations in various aspects can fully stimulate economy vitality, enhance country competitiveness, and provide a powerful driving force for supply-side structural reform.

4.3. Technological Innovation

It is recommended to promote the “in-depth cooperation between the enterprises, universities and research institutes”. Firstly, in the system and policy design, it is suggested to improve the science and technology management system, change the government management function, perfect competition optimal evaluation mechanism, optimize the allocation of funds, strengthen the evaluation of input-output, multi-source fund input, and improve the measures for the management of funds. Secondly, in terms of project design, it should be considered to promote multiple pairs of industry-university-research subjects, so as to facilitate information communication between each other and promote the relationship between the industry and university. Thirdly, we should improve the scientific research evaluation system of academic and research organizations, attach equal importance to the academic value and market value of scientific and technological achievements, and form a diversified scientific research evaluation system, so as to guide the initiative and enthusiasm of scientific research for enterprises, markets and applications[8].

4.4. Innovation and Entrepreneurship Vitality, Create New Supply

First, we need to focus on promoting supply-side structural reform, establish and improve mechanisms and systems, streamline administration and delegate more power to lower levels, create a favourable environment for technological innovation, and encourage all elements of innovation to flourish in the region. At the same time, the regulatory system should be improved to create a healthy and fair development environment, so that enterprises can do their best without any worry. Second, practice is the key to the implementation of the plan. It is recommended to increase publicity for policies, promote the implementation of policies, expand the benefits of enterprises, and remove obstacles to innovation. Third, under the supply-side structural reform, the government should give full play to its supervision role, constantly establish and improve the intellectual property protection system, crack down on all kinds of infringement and piracy, and ban all kinds of counterfeit, so as to effectively protect the intellectual property and technological innovation achievements and stimulate the innovation vitality of the whole market.

4.5. Management Innovation

As the foundation and individual of micro-economy, enterprises need to set reasonable business objectives to maintain continuous management innovation. When carrying out the supply-side structural reform, the main enterprise should take the market demand as the core, combine with the enterprise’s own conditions to set the reasonable operation target, check whether the management innovation is in line with the market and achieve the operation target. Enterprises test the effectiveness of the management innovation adopted by the supply-side structural reform according to the goal setting, to further tap the potential from the management level.

At the same time, enterprise management innovation needs existing traditional industry support policies and innovation subsidy, and reward policies generally implemented by governments at all

levels, which closely depends on the comprehensive innovation and redesign of effective systems to stimulate innovation, so as to form a positive incentive mechanism for the government to promote the improvement of independent innovation ability of microeconomic sectors.

5. Conclusions

Supply-side structural reform is the starting point to adapt to and lead China's "new normal" economy. It requires to promote the synergies between enterprises and the government, among which innovation is the key. Through concept innovation, system innovation, technology innovation, entrepreneurial vitality innovation, management innovation to form a new driving force for economic growth, the industrial structure will be able to further optimize, efficiency of supply can be improved, and development of China's economy can be sustainable.

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