Study on revitalization of old industrial base in northeast China under the background of new and old kinetic energy conversion

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Abstract
When the economic development of any country or region reaches a certain stage, it needs to adjust its development mode accordingly according to the change of its economic environment. In essence, it is a process of transforming old and new kinetic energy. What is the connotation of the conversion between old and new kinetic energy at the present stage? How to foster new growth drivers and develop the new economy? How to transform the old and new drivers of growth to accelerate the growth of the weak new economy? This is especially important for old industrial areas like the northeast. Starting from the conversion of old and new kinetic energy in northeast China, this paper analyzes the basic situation of the current conversion of old and new kinetic energy in northeast old industrial bases, finds out the main problems affecting the conversion of old and new kinetic energy in new areas, and puts forward measures and suggestions for accelerating the conversion of new and old kinetic energy in new areas.

Keywords
Conversion of old and new kinetic energy; Old industrial base in northeast China; The economic development.

1. Introduction
At present, the world economic recovery is difficult and uncertainties and destabilizing factors are on the rise. Domestic economic development has entered a new normal, with major changes in economic growth momentum and conditions of resources and elements, and industrial development facing a grim situation. According to the report of the 19th national congress of the communist party of China (CPC), China's economy has been transformed from a stage of high-speed growth to a stage of high-quality growth. Under the new normal of the economy, the development model, which is mainly based on rough processing and relies on the traditional driving forces such as resource consumption and investment stimulus, is no longer sustainable.

Northeast China is an important base of energy and raw materials, equipment manufacturing base and textile processing base. Due to the long-term consolidation of the development model and development path, prominent regional structural problems, high proportion of traditional industries, and insufficient vitality of innovative development, it is inevitable for the old industrial base in northeast China to promote industrial transformation and upgrading and the transformation of old and new driving forces. Enter the new normal, attenuate as much as possible, lack of development and innovation. The transformation of old and new drivers of power into healthy and sustainable economic development is the key to solving the current problems of economic and social development.
2. The basic situation of the old industrial base in northeast China

2.1 The connotation of transformation of old and new kinetic energy

To truly grasp the connotation of the conversion between old and new kinetic energy, we need to first clarify which is the new kinetic energy, which is the old kinetic energy, and why the conversion between old and new kinetic energy is necessary.

The old driving force mainly refers to that in the past, the driving force of China's economic development mainly came from a large number of human resources and other natural resources, a large amount of investment, a large number of medium and low-end product exports, and a large amount of investment in real estate. The new driving force mainly refers to that the current driving force of economic development mainly comes from innovation, including institutional innovation, technological innovation, industrial structure transformation and industrial upgrading.

Why is it necessary to convert old and new kinetic energy? New and old drivers of growth are the "twin engines" of economic growth in the context of the new normal. The stage of China's economic development determines that economic growth needs to shift from old to new drivers of growth. On the one hand, the old drivers of growth have become inadequate. Growth is very weak, and it is difficult to achieve sustained, healthy and stable economic development relying on the old drivers. On the other hand, the new economy is becoming more and more important to economic growth, but traditional industries are still an important support for economic development. Growth in economic development under the new normal, traditional industry structure adjustment, the time of conversion, whole new industries and new economic breakthroughs are still on the road, the kinetic energy of the old industrial upgrading and enhance development efficiency and quality, can be converted into kinetic energy, new old and the new kinetic energy constitute support economic growth under the background of the new normal power, keep the layer continuously development of Chinese economy. Therefore, to accelerate the economic growth rate and change the sluggish state of economic growth, we need to speed up the transformation of old and new momentum.

The basic connotation of the transfer of old and new kinetic energy is to accelerate the cultivation of new kinetic energy, transform and upgrade traditional kinetic energy, develop the new economy represented by new technologies, new industries, new models and new forms of business, realize the continuous transfer of old and new kinetic energy, and maintain sustained, steady and sound economic development. In a word, the essence of the transformation of old and new kinetic energy is the process of actively guiding, creating, organizing and activating the internal development power of the society with the help of various regulation methods, or the process of "the change of old and new" in the development of the dynamic system.

2.2 The old industrial base in northeast China is in a state of conversion

As a traditional old industrial base and a source of resources, northeast China has a relatively undiversified industrial structure and enterprise ownership structure, which is vulnerable to the national economic cycle. The sharp economic downturn, it is because of the heavy chemical industry system backbone of the industry life cycle has walked to the end, the resources dries up, the market environment is weak, curing system under the influence of such factors as technological transformation of the traditional industry lags behind, make the advantages of traditional industries in northeast China was basically out of the process industry division of labor system. Because of this, the situation of death and rebirth will force northeast China to give up the transformation of traditional superior industries and enter into the process of new industrial revolution with the construction of new industrial system more thoroughly and directly. In this sense, the economic recession in northeast China is the inevitable result of industrial development, and it is also a good thing to accelerate industrial revolution and industrial innovation in northeast China.
In recent years, northeast China has actively sought new economic growth points, tapped the potential of economic development and fostered the driving force of economic development. It's easy to compare the old kinetic energy with the new, and find that many of the old kinetic energy can't be used anymore, or can't be relied on, or need to be used less and used more. With supply side structural reform deepening, the transformation and upgrading of industry achieved positive results in northeast China, the quality of growth benefits present positive change, traditional industries to achieve positive results, capacity selection dissolve the iron and steel, coal, as well as in areas such as the backward production capacity and excess capacity, in the industry to speed up to the high-end, high-end, greening, intellectualization and integration level enhances unceasingly. However, due to the structural, institutional and elemental constraints, it still takes time to adjust and transform the growth pattern of traditional industries, and the overall breakthrough in emerging industries and new economy is still on the way.

3. The outstanding problems in the transformation of old and new kinetic energy in northeast China

3.1 Old kinetic energy power is insufficient, industrial structure is unitary

As a traditional old industrial base, the development of northeast China has strong characteristics of resource dependence, labor dependence and investment dependence. Resource-based industries face the threat of unitary production structure and gradual exhaustion of resources. The heavy industry manufacturing industry faces the problem of backward production level and asymmetrical production and sales.

3.2 The internal driving force of new kinetic energy is weak

Although the northeastern region has made positive progress in capacity reduction and industrial upgrading, it has yet to form an integrated breakthrough, making up for the growth gap caused by the traditional economic downturn and failing to take up the pillar role of stable growth in the short term. Due to the obvious gap between the old and new industries, although the traditional advantageous industries such as steel, petrochemical and building materials have been expanded at a high speed, it is difficult to find the replacement of new industries with similar volume and similar driving force in a short term, and the internal driving force of the development of new industries is relatively weak.

3.3 Limitations of the inherent institutional mechanisms

In terms of the overall environment of business development, the policy and institutional environment that supports the development of emerging industries and facilitates the innovation and investment and financing of enterprises or investors is not sound yet. The management mode of a large part of the management institutions still stays in the management of traditional industries, which is not compatible with the development of new economy in emerging industries.

In recent years, environmental protection has been mentioned at an unprecedented high level, and relevant policies have been introduced intensively, with frequent adjustments of policies and regulations and "expected instability" interfering with development. From the top level design to the concrete implementation is in a strong push. Due to the frequent improvement of industrial environmental standards by relevant departments, insufficient information communication and expected guidance, enterprises are unable to make accurate development expectations and effectively respond to adjustments.

3.4 Enterprise independent innovation capability needs to be strengthened

The economic growth in northeast China is more dependent on the traditional industry "quantity growth" and capital investment. Affected by the stagnant market, the lack of enterprise capital and the rising production cost, the industrial enterprises have insufficient confidence in development, little
investment in research and development, and weak capacity for independent innovation. Their development is far below the national average.

3.5 Severe shortage of high-end talents

According to the survey data of all parties, in the face of the new normal and the needs of transformation and upgrading, the enterprise research and development team is weak, and there is a lack of high-quality inter-disciplinary talents, high-end technology research and development talents and excellent project managers. The key technology breakthroughs are weak, and there are many difficulties in the implementation of excellent projects. At the same time, due to the inelasticity of mechanisms such as the transformation of scientific and technological achievements, the incentive of talent innovation and the cooperation between industry, universities and research, etc., the innovation system with enterprises as the main body and the close combination of industry, education and research has not been formed, and the conversion rate of scientific and technological achievements is generally low.

3.6 The financial service platform is not sound

In terms of financial service platforms, the capital market in northeast China has been developing for a short time and at a single level. Financial institutions supporting the development of emerging industries are especially lagging behind. At present, financial institutions in northeast China have not established a special scientific and technological credit system, intellectual property pledge, etc., and the venture capital market is still not active. There is little investment in early-stage and early-middle stage enterprises, especially for strategic emerging industries.

4. Measures to accelerate the conversion of old and new kinetic energy

The conversion of old and new kinetic energy is a system engineering. It is necessary to find the entry point, grasp the point of strength, define the general grip of work and plan the dynamic mechanism to replace the old kinetic energy.

4.1 Address the problem of overcapacity in coal and steel industries

First, a large number of small enterprises that fail to meet the requirements of environmental protection and safety production, such as those that fail to meet the requirements, have low level of design capacity and equipment, or are not standardized in employment, should be closed and eliminated. This kind of elimination has certain policy rigid demand, do not have environmental protection and safe condition, cannot produce.

Second, some resources are exhausted or production capacity to a certain period of production capacity must be withdrawn.

Third, improve product quality, look for new and more advanced product requirements, and adopt new techniques and technologies to achieve industrial transformation and upgrading.

4.2 Find new economic growth points and accelerate the development of producer services

One is to develop modern agriculture and promote deep processing of agricultural products. In agriculture, northeast China has natural advantages, developing grain deep processing, making full use of the advantages of commodity grain base, and developing green agriculture industry without pollution. To develop the agricultural industry, we will carry out refined processing of high-quality agricultural products with northeast characteristics, such as non-genetically modified soybeans, rice fragrant rice and plant bacteria, to create our own brand. We will protect the brand image of the region, increase the added value of agricultural products, and promote sound economic development.

Second, we will promote industrial transformation and upgrading. We will promote the development of producer services, foster new drivers of growth, and ensure steady economic growth and development. Producer service industry is a supporting service industry directly related to the
manufacturing industry. It is an emerging industry independently developed from the internal production and service sector of the manufacturing industry and runs throughout the production and sales of enterprises. In view of the situation that most manufacturing enterprises in northeast China are manufacturing enterprises, we can vigorously develop productive services and seek new driving forces in the development of tertiary industry, so that the old and new driving forces can be converted into higher quality, more efficient and healthier development in the market economy.

4.3 System innovation

First, it is the task of the whole country to cultivate new driving forces and develop new economy. In order to realize the transformation of old and new kinetic energy, we must do a good job of connecting the old and new kinetic energy, which requires a good system and mechanism. Innovation system system, make relatively weak new economy is accelerated foster and grow. In terms of innovation of system and mechanism and breaking through the inherent mode of traditional system and mechanism, the specific reform can be learned from shandong province, which implemented the new and old leaders.

Second, in view of the frequent introduction of policies and systems, policies should be formulated and implemented in accordance with the principles of clarity, stability and predictability to avoid repeated frequent and administrative imperative to launch policies, as well as repeated drift and evolution between different technical paths and standards. We will firmly stick to policies for industrial transformation and development and structural upgrading, continue to deepen efforts to eliminate outdated production capacity, strengthen environmental protection and prevent the resurgence of industrial activities. At the same time, we will strengthen the publicity and implementation of policies and ensure that all policies are fully and deeply implemented.

4.4 Talent policy

One is to cultivate and introduce high-end talents and increase the supply of skilled talents and "top-notch" talents. We will innovatively implement the "top quality" action plan for talent introduction and the "skilled talent cultivation" plan, establish a talent introduction system for mature talent in a timely and appropriate manner, and at the same time focus on cultivating a number of creative and versatile professionals who are urgently needed for development, and improve the talent utilization and incentive system.

Second, we will strengthen the ranks of entrepreneurs. If the enterprise wants to achieve innovation and highly realize technological modernization, it must have a high-level team of entrepreneurs in management decision-making. Those entrepreneurs, especially young entrepreneurs, are encouraged to go to campus, go abroad and study in famous enterprises, and boldly carry out technological innovation and technology to create.

Third, strengthen the construction of enterprise technical personnel. According to the requirements of the enterprise, the construction of the technician team should be focused on, with the core of improving professional quality and skills, strengthening the in-service training of technical employees, fully implementing the vocational skills appraisal, and establishing a working team that integrates theory with practice.

4.5 Strengthen financial support

First, we will increase financial support for the new economy in emerging industries and break the financial shortfalls of industrial transformation and kinetic energy transformation. We will accelerate the establishment of a multi-tiered financing system covering the financing needs of science and technology enterprises in the seed, initial and development periods, and encourage financial institutions to research and formulate credit granting support policies for emerging industries and innovative enterprises, improve financing guarantees for science and innovation enterprises, and develop insurance products and services that meet the needs of scientific and technological innovation.
Second, we introduced differentiated financing support policies to avoid policy discrimination. Provide differentiated financing support for projects with good development prospects.

5. Conclusion

To sum up, the transformation of old and new kinetic energy is both an opportunity and a challenge for northeast China, a traditional industrial base. The economic development of the old industrial base in northeast China is in a critical period of alternating old and new kinetic energy. The old kinetic energy can hardly support the economic development in northeast China. In this critical period of economic integration, enterprises can start from the most fundamental aspect of capacity reduction, and focus on reducing the old kinetic energy of traditional industries such as coal and steel. Then, under the guarantee of reform, system and system innovation, scientific and technological innovation and financial service platform innovation, we will seek for new driving force development points and realize gradual progress and leapfrog development in northeast China.

References