

Policy Recommendations for China's Industrial Development in 2016: Supply-side Reform

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In 2015, China's industrial development has made some progress, but it is also faced with enormous pressure. Overall, national economy operation and industrial development yields to downward pressure, leading to a gradually subsiding original growth momentum and severe overcapacity, while new growth momentum hasn't been established, and thus cannot meet consumption upgrade demands. The serious inadequacy of the endogenous growth momentum driven by innovation, along with the lack of exogenous impetus guided by government, has made industrial structure transformation more difficult.

From an industrial perspective, dual excess in the amount and structure of traditional basic industries drags them into mature and even recessionary periods. Though there is an increase in scale and interest in emerging industries, the innovation capability of critical technology and sectors is in shortfall. With the development of Internet industries, the integration with and upgrade of traditional practices is yet to take place.

From a regional perspective, eastern coastal industry has entered into a crucial period of industrial transformation, slowing down its development speed. In central China, relocating industries has caused overpopulation and pollution. In the western provinces, industrialization continues apace, it has provoked social polarization. The attempts to modernize traditional industrial sectors of the Northeast have been poorly motivated, with the stagnation acting as a downward pressure on industry.

China must resolve the industrial deficiencies in their structural systems, and enhance their supportive policies with the aim of making the modernization of industry progress smoothly, and aid the national adoption of the development concepts of innovation, coordination, ecological awareness, opening up, and sharing.

The transformation of the industrial system of China is in fact merely the transformation of its supply system and infrastructure. To make it progress smoothly, the effective guidance of the government is necessary. It is therefore crucial that the government establish reasonable and efficacious policies.

To promote the development of Chinese industry, general ideas of classification ought to be adhered to. A differentiated adjustment should

Considering China's specific industrial situation in 2015, the author, from the perspective of supply-side reform, provides six policy recommendations at the macro level to better achieve industrial structure optimization and transformation next year. Here are the six suggestions for the government: adjusting industrial classifications and regional differences; giving priority to market adjustment while supplementing with government guidance; giving priority to stock adjustment while supplementing with incremental adjustment; deepening system reform while reforming dividends; fighting against corporate monopoly while maintaining market fairness; guiding strategic emerging industries while cultivating pilot enterprises.

be adopted for industries in different stages of the industry life cycle as well as for regions with different economic gradients. Following these precepts, the government should allow the market to take the guiding role, and restrain itself to timely and appropriate interventions. Industrial adjustment should be approached in the following order: Stock adjustment, followed by incremental adjustment. After this, Supply-side reform must be prioritized, in order to maximize the ability of various enterprises to transform the economy. Obstacles to the progress of smaller enterprises must then be removed by clearing market environments, and cracking down monopolistic behaviors. Pilot enterprises should play backbone roles, while strategic emerging industries provide direction, and eventually cultivating a series of enterprises and industries having control over the value chain.

I. Adjusting Industrial Classifications and Regional Differences

Classification adjustment is the general idea of industry development and policy making. According to the theory of industry life cycles, different industries and regions develop at different stages and show different characteristics, and therefore strategies must be differentiated to be best applied to the unique contexts of each industry and region.

(i) Upgrading and transforming traditional basic industries, fostering and supporting emerging industries, and promoting the integration of Internet industry development.

Representing traditional basic industries like iron and steel, cement etc., which are in the mature period of the industrial life cycle, their industry growth rate has gradually declined, and they now face struggles to avoid inevitable decline. On the one hand, if the industry growth rates continue to decline, the market will continue to shrink, which makes the industry enter a recessionary period, and gradually withdraw from the stage of history; On the other hand, once new technologies and applications emerge, mature industries may re-enter the rapid growth stage, getting a second wind. Therefore, the maturity of the industry is also an important window phase of upgrading and transformation. Seizing this critical opportunity, the government should introduce preferential policies to these industries, and actively guide the introduction of new technologies and models in traditional basic industries in order to achieve successful industrial improvement and transformation.

Representing emerging industries, new energy, new materials, intelligent manufacturing etc., are in the start-up stage of the industry life cycle, with few newly-established firms' right in the market, and their market demands are relatively small, leading survival is the only problem that enterprises face at this time. Therefore, for the emerging industries,

government policy should focus on fostering and supporting them in the following way: The government should actively take the initiative to remove market barriers, and to provide conditions for more enterprises to enter the emerging industries. At the same time, the government should actively foster and support those enterprises which have entered the market, facilitating their innovation policies.

As representatives of a new generation of information technology industries, like the Internet industry, which are in the growth period of the industrial life cycle, there has been a rapid growth in the industry with emerging innovations and increasing market size. Currently in its most dynamic period, the information technology industry boasts the power and ability to permeate and transform other industries. Therefore, for the Internet industry, the policy should be oriented into tapping its innovative vitality and achieving industrial integration. The country's "Internet Plus" strategy is advantageous to support for the Internet industry. In the future, our country should continue to increase the "Internet Plus" policy support, and vigorously promote the innovative and integrative development of internet industry and other industries, realizing the comprehensive upgrade of the industrial structure.

(ii) Sticking to industrial reconstruction in eastern region, adhering to industrial undertaking in central and western regions, and accelerating industrial upgrading in northeast region

In promoting regional industrial development, national strategies including the "Western Development", "Central China Rise" and "Revitalization of the Northeast" should be carried on unremittingly. Differentiated development strategy must be formulated according to the actual situations in different regions.

With a more complete industrial system and structure than those in other regions, complete industrial development in the eastern coastal areas has kept ahead of the rest of the country. Although in recent years, entering into a crucial period of the industrial transformation, industrial development in the eastern region has slowed down, it has nevertheless achieved certain phased objectives in industrial transformation. At present, in the eastern region, traditional industries including the machinery industry, electronic industry, chemical industry, automobile industry, construction material industry, and textile industry have been basically fully formed, and emerging industries including high-end equipment, new energy industry, biomedicine industry, energy saving industry and environmental protection industry have been equipped with a developmental foundation, while the service industry has also progressed by leaps and bounds. In the future, the industrial development

in the eastern region should continue to unswervingly adhere to the idea of industrial transformation, and persistently develop strategic emerging industries like new energy industry, new materials industry, high-end equipment industry as well as the bio-medical industry. Moreover, high energy consumption, high pollution and backward industries should be eliminated without hesitation. The proportion and quality of modern service industries ought to be continuously improved, striving to be the vanguard of domestic industry transformation.

The central and western regions are the strategic hinterland of China's industrial development. In recent years, with the promotion of national strategies, namely "West Development" and "Central China Rise", the industrial development speed has been accelerated, and the total economic output has been increased. Overall, an industrial structure of "two three one" has been basically formed in the central and western regions. The manufacturing industry has become the leading industry among the three main industries there. In the future, with the acceleration of industrial transfer in the eastern region, original industrial enterprises in the eastern region will provide a new impetus to those in the central and western regions, in which the industrial transfer should be actively undertaken in line with national development strategies and economic development demands, so as to achieve seamless connection. At the same time, high pollution, high energy consumption industries, which contradicts the national development strategy and green development concepts, should be resolutely resisted and eliminated.

With a glorious history, the industrial development in Northeast China has made great contributions to the development of China's economy. Its congenital deficiency of unsustainable development, which caused by an industrial structure based on resource industry and heavy industry in the northeast region, has made the overall economy in this area quickly fall behind that of in the Yangtze River Delta, Pearl River Delta region and Beijing-Tianjin region since 1980s. With unreasonable industrial structuring, uneven industrial development, redundant industries, low industrial relevancy, and low competitiveness, the developmental situation in this area has been tougher. Therefore, the industrial development in the northeast region should not only pay attention to industrial restructuring, but also lay emphasis on transforming industries with new technology and mode, to upgrade industry and enhance industrial competitiveness. Learning from "German Industry 4.0", the industries in northeastern China should take advantage of its strong industrial background to establish intelligent factories by new-generation information technology, promoting the improvement and upgrade of the old industrial base.

II. Giving Priority to Stock Adjustment While Supplementing with

Incremental Adjustment

To deal with the relationship between market and government correctly is the basic principle of industrial development and policy making. In a mature market economy, the market, the primary impetus for industrial development, plays a leading role while the government acts as the "night watchman", which provides guidance and service.

Unfortunately, in our country, the government has obvious and strong characteristics of economic and social interference in the breadth, depth, strength and so on. In practice, due to the improper relationship between government and market, the market plays an insufficiently basic role, solidifying and normalizing policy stimulated by government administration under certain specific conditions. The government seeks or even enforces monopoly and allocation of social resources, forming an all-round "nanny" pattern. The visible hand of government stretches too far, seriously impeding the regulation of the invisible hand of the market, which brings about a series of problems, for example: the nonstandard market order; widespread improper means of seeking economic benefit; backward production factor market which results in an inconsistency between idle elements and effective demands; non-unified market regulations and all-pervading department and local protectionism. All these problems impede the establishment of a perfect socialist market economic system and the social development vitality and power, seriously affecting the smooth progress of industrial transformation and upgrade.

Therefore, the market should play a leading role in the formulation of relevant policies. Through market tools, the motivation and vitality of enterprise can be stimulated, which facilitates initiative their transformation and upgrade, so as to drive an industrial structure transforming and upgrading. At the same time, the government should strengthen the service for enterprise and market, and ensure the effective operation of the market. As for those fields in which the market fail to exercise function, the government should take the initiative to provide timely guidance, making up for market failures.

To straighten out the relationship between government and market is to accelerate the transformation of a management-oriented government to a service-oriented government. The administrative simplification and power transformation should be preceded with caution, and the administrative examination and approval system should be deepened. The government is supposed to standardize the examination and approval system by simplifying procedures and setting clear time limits. Moreover, the list of investment projects approved by the government should be amended timely through a raise of enterprise status in investment, so as to give way

to the market.

III. Giving Priority to Stock Adjustment While Supplementing with Incremental Adjustment

The clear sequence of stock adjustment going first and increment adjustment following next is the basic logic of industrial development and policy making. After more than 30 years' rapid development since the reform and opening up, the industrial economic volume has been great. Capped utilization of labor force, natural resources, and space resources means that the incremental adjustment will be restricted by the stock, so the industrial transformation in the future should give priority to stock adjustment while supplement with incremental adjustment.

(i) Encouraging mergers and acquisitions while letting the fittest stock survive

Stock adjustment should be the main task of current industrial transformation. At present, China's economy volume has reached 63.6 trillion, of which the strategic emerging industry only accounts for less than 10%. And traditional industries have dominated the market. Therefore, the first measure to take is to adjust the stock of traditional industries in order to realize industrial transformation and upgrading.

However, there are many difficulties in the stock adjustment due to various reasons. Some overcapacity industries and enterprises without competitiveness should be eliminated as soon as possible in the long run. But there are many intractable problems related to the elimination, such as staff resettlement, enterprise switching, debt resolving and so on. Besides, for some regions and industries, outdated production facilities are major resources of local tax revenue or even pillar industries, which make it more difficult exiting the market.

Therefore, the government should make full use of the market mechanism to adjust overcapacity industries in the future. Enterprise merger and reorganization is an important mean to fortify competitive enterprises and eliminate backward ones. The government should actively encourage and guide enterprises to participate in mergers and acquisitions by constantly improving industry standards and policy measures, so as to create a favorable environment for enterprise mergers and acquisitions. The service management of enterprise merger and reorganization should be improved, eliminating institutional obstacles which restrict enterprise merger and reorganization. Large-scale backbone enterprises should be encouraged to carry out mergers and acquisitions cross different regions and ownerships. Furthermore, enterprises should be encouraged to extend industry chain through merger and reorganization, which

promotes the formation of strategic alliances, and to take an active part in global resource integration and management under the guidance of "going out" policy, so as to enhance international operation ability and competitiveness. In this case, only the fittest industry stock can survive through enterprise mergers and acquisitions.

(ii) Providing more guidance to investment while adjusting incremental order

The structure optimization of incremental investment has a leading role in industrial structure optimization. As incremental investment is relatively easy, the state focuses more on stock adjustment, while the optimization of incremental investment cannot be ignored.

In the future, the government should actively guide industrial investment to emerging industries and areas relative to people's livelihood. Those key investment fields include new-generation information technology, new energy, new material, high-end equipment, bio-medicine, energy conservation, environmental protection and other emerging industries. Corporate investment in relevant areas can be increased by promoting key projects. Loan approvals for major projects and PPP (Public-private Partnership) projects should be accelerated through a fast-track mechanism established by financial institutions. Effective investment should be promoted to grow continually. People's livelihood projects, like new urbanization and rural construction, are important investment areas. To meet city's new demands for wisdom, green and humanity, an increased investment in the reconstruction of huts and dilapidated buildings in urban and rural areas, as well as in the infrastructure construction of supporting public service facilities is necessary. To achieve three main targets, consisting of beautiful countryside construction, village public service operation and maintenance, along with agricultural socialized service, it is necessary to increase investments in relative fields, like rural public service, agricultural production service and agricultural ecological protection.

The government should give play to the fundamental role of the market when it offers guidance to incremental investments, which can guarantee the dominant role of enterprises. Various types of social capital should be leveraged through different market modes, like an establishment of industrial investment guiding fund and PPP Corporation, etc., gaining higher investment resilience.

IV. Deepening System Reform While Reforming Dividends

Deepening system reform is the institutional guarantee for the development of industrial transformation. China should continue to

deepen supply-side reform, starting from financial, tax, personnel, and other fields, so as to maximize the release of reform bonuses.

Finance is not only the lifeblood of the economy, but also maintenance for industrial restructuring and upgrading. China should start with deepening the financial sector reform, while broadening financing channels for industrial transformation and upgrading, as well as reducing the cost of financing the transformation and upgrading of said entities. First of all, the advantages of policy-based finance, development finance, and commercial finance should be actively used, and support for the new generation of information technology, high-end equipment, new materials and other key areas should be increased. Secondly, a sound multi-level capital market should be established to promote the development of regional equity market norms, raising funds, transforming and upgrading modes like supporting qualified enterprises listed in domestic and foreign markets, and issuing various types of debt financing instruments. Corporate innovation, development, transformation, and upgrading should be supported by actively guiding the venture capital, private equity investment and more. In addition, key areas of large enterprise groups are supported to carry out the combination of production and finance as pilots, promoting the transformation and upgrading of enterprises by means of financing leases.

The intensity of tax reform should be increased. The support for the financial capital for industrial transformation and upgrade should be strengthened by making full use of existing channels. Investments in key transformation and upgrade areas like intelligent manufacturing, the development of "four bases", and high-end equipment should be emphasized, in order to create a good policy environment for industrial development. Social capital ought to be guided to participate in the construction of major projects, technological transformations, and key infrastructure, by operating Public-Private-Partnership (PPP) models. Innovative financial support modes should be transformed from "construction supply" to "operation supply", improving the efficiency of financial fund usage. Tax policies conducive to industrial transformation and upgrading should be implemented to promote the reform of value-added tax and improve the method in calculating enterprise research and development costs, effectively reducing the tax burden on enterprises.

Talent system reform should be improved by focusing on high level talents, professional and technical personnel in short supply, and innovative talents. The professional and technical personnel knowledge updating project should be implemented, so as to create high-quality professional talent teams. Vocational education and technical training should be strengthened by guiding a group of ordinary undergraduate

colleges and universities to transform into supplied technology-advanced institutions, and establishing a number of training bases to carry out a pilot demonstration of the modern apprenticeship, forming technical personnel with complete categories and superb skills. The cooperation between enterprises and schools should be encouraged to cultivate scientific research personnel which are urgently needed by the manufacturing industry, talents with technical skills or compound talents, while simultaneously deepening doctoral and master professional degree enrollment and pedagogical reform in related fields, actively promoting the combination of production, teaching and research. The industry talent level evaluation system should be built up and an information release platform should be established, as there is greater need for industry talent demand forecasts and perfect information database for all kinds of talents. The establishment of talent incentive mechanism will increase the recognition and rewards for outstanding talents. The establishment and improvement of manufacturing personnel service agencies can improve the flow of personnel and the use of institutional mechanisms. The efforts to introduce intelligence, leading talents and talents in short supply should be affirmed.

V. Fighting Against Business Monopoly While Maintaining Market Fairness

A fair market is the foundational environmental basis for industrial transformation and development, and is most threatened by potential monopoly. In market economies, freedom and order are two necessary preconditions. On the one hand, a lack of freedom will restrict competitive behavior, in which case the allocation of resources will not be optimized, and the market will fail to play its role. On the other hand, a lack of order will destroy the price system as well as supply and demand signals, causing market turmoil and a disorder of economic operations, which will ultimately hinder the development of the national economy. The monopoly, which restricts market freedom and destroys market order, clearly runs counter to the market economy. The existence of monopolies will not only disrupt market order and damage consumer interests, but also restrict the innovation and vitality of enterprises, affecting long-term industrial development.

In recent years, with the increase in size of some enterprises, monopoly in the market occurs from time to time. Paying more attention to the regulation of market monopolization, the state's anti-monopoly department has punished foreign companies one after the other, like Qualcomm and Benz. In the future, the relevant government departments should maintain a tough stance against market monopolization, protecting good competitive environments.

To crack down on monopolies, first of all, the government should cease worship of GDP development. Although, monopoly may increase economic value added as well as fiscal income in some areas in a short period, it will also bring an endless flow of disastrous consequences to industrial economic development in the long term. Secondly, the government should reform itself and break down administrative barriers which have resulted in currently existing monopolies. Related research shows that administrative monopolies caused by government interventions into the market have a great effect on prohibiting the enterprise and industrial-level innovation.

In addition, unfair competition and practices like selling fake and shoddy commodities, breaking promises, and dereliction of duty will also affect market fairness. Relevant government departments should effectively strengthen supervision, improving the creation, utilization, management and protection mechanisms of intellectual property rights. In order to create a good environment for enterprise production and operation, unfair competition behaviors like manufacturing or selling fake and shoddy commodities should be severely cracked down on and punished accordingly. The government should actively promote the establishment of enterprise credit systems and enterprise credit databases, as well as set up and improve the dynamic evaluation of corporate credit and credit rewarding and punishing systems. The enterprise product standards, quality, safety self-declaration and supervision systems should be implemented with a stronger sense of corporate social responsibility.

VI. Guiding Strategic Emerging Industries While Cultivating Pilot Enterprises

Strategic emerging industry, the ultimate direction indicator of industrial transformation development, is not simply investing in related industries, but seizing its commanding heights from the top of the value chain. Only in this way can we sit as equals at the same table of international competition with the United States, Germany and other developed countries.

At this stage, a large part of China's strategic emerging industries are still in the bottom of the value chain, charactering with low technological content and value-added, just like the processing or assembly industries. Take the photovoltaic industry, which belongs to the new energy industry, as an example. Under the guidance of industrial substitution, enterprises are all rushing to launch PV production projects in many areas due to the lack of core technology and the low entry threshold of cell-and-module manufacturing technology, which results in an excess production capacity and an entry into cost-competition phase. In the future, China's

strategic emerging industry development should orient itself towards high-end industries on the top of the value chain, characterizing with high technological content, high entry technical threshold and high value additions, just like research and development design as well as brand marketing. For example, in the new-generation information technology industry, it's essential to increase the integrated circuit design level, and develop a core general chip. In the new material industry, it's also vital to promote development of key technology and equipment for new material preparations, including advanced smelting, solidification, vapor deposition, profile processing and efficient synthesis.

It is important to notice the role played by “helmsman” enterprises in the development of high-end strategic emerging industries. A pilot enterprise, with control ability and leading role in the industrial system, is very significant to the development of industrial transformation and upgrading. Especially in this period, full of emerging new standards and technologies, the importance of pilot enterprises cannot be overstated. Different technologies and standards are springing up, competing with each other, and increasing the uncertainty of industrial cooperation, so that the cooperation between innovative enterprises has become very difficult, and the pace of new technological development and maturity has been greatly slowed down. “Helmsman” enterprises can control upstream and downstream enterprises, and affect complementary enterprises in the same industry. By promoting innovative collaboration, pilot enterprises can speed up technological innovation, eventually leading to the maturity of emerging industries.

The choice of industrial pilot enterprises should be mainly among strategic emerging industries, which take control over the industrial chain and favor the transformation and upgrading of industrial structure. Therefore, the state should vigorously support the development of “helmsman” enterprises like new-generation information technology, new energy, new materials, bio-medicine, high-end equipment manufacturing industry, high-end modern service industry and others, promoting the growth and development of these enterprises.

There are three aspects to supporting and fostering pilot enterprises. First, the policy of reform and opening should be unswervingly adhered to. Renowned international companies related to intra-industry should be actively introduced, accompanied by a healthy state of mind, preferential policies, and a sound system. Those enterprises, such as research and development, design and other aspects, which are in key sectors of the industrial chain, have controlling force in the value chain, and thus should gain more support. Second, in the form of tax incentives and financial

subsidies, innovation activities are to be actively supported. With a highlight on cultivating the innovative abilities of pilot enterprises, their international competitiveness and control force of the value chain will be stronger. Third, related enterprises are actively encouraged to provide supporting production for industry pilot enterprise innovations, striving to build an industrial cluster with a core of “helmsman” industries, so as to give full play of the industrial leading role boasted by pilot enterprises.

Thus, the development of the whole industry ecology and industry system can be driven by creating and nurturing industrial pilot enterprises, to promote industrial restructuring and upgrading, and thereby promoting Chinese industries’ international influence and value chain control force.

Translator/Wang Hui