

Challenges and opportunities: China's industry development situation, initiatives and outlook under normalized epidemic prevention and control

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Abstract: Due to the ravages of the new crown epidemic, China's social and economic development has suffered a serious impact and the development of economic pillar industries has slowed down, but despite this, China's high-tech industries are still advancing rapidly and constantly meet the realistic needs of China's social and economic development, and the future industrial development of China is still full of potential. Through the research and analysis of the development situation of China's industry under the normalized prevention and control of the epidemic and the effective measures taken by the current state and government at the same time of epidemic prevention and control, we propose suggestions and prospects for promoting the high-quality development of China's industry in the post-epidemic era, aiming to improve China's industrial development and economic recovery with certain practical significance and reference value.

Keywords: Epidemic normalization; Industry; Development

1. Introduction

These years under the influence of the global epidemic in China's economic downturn have generated enormous pressure, the national real economy manufacturing, and industrial industry development is slow, despite this, the trend of industrial transformation and upgrading in China has not changed, and some new industries and new business models continue to change and innovate, and strive to gradually move in the direction of new momentum and new areas of development. In addition, the impact of this new crown epidemic on our economy is large, but this impact is short-lived and unsustainable. The reason is that China's industrial transformation and upgrading has no extreme negative impact on socio-economic development, but rather fit very well with the current socio-economic development realistic needs and requirements of the times, and it will lead to a high level of socio-economic development, and also influence and drive other industrial development changes and upgrades. Therefore, exploring the opportunities and optimization strategies for China's industrial development in the post-epidemic era is a current issue that needs to be urgently considered.

2. China's industrial development situation under the normalized epidemic prevention and control

Since the new crown epidemic in 2020, different sectors and industries in China have been affected by the corresponding impact and influence, which may have less impact on some industries, but the impact on industrial industries and the real economy is huge. But these impacts have not crushed the lifeblood of Chinese industry, but instead, put the death of the latter, these impacts on the development of industry have also given birth to many new industries new industry new modes of development and growth, and the future of industry new momentum new drive resilience is still full of fresh energy. In 2021, high-tech industry investment from the previous year grew 17.1%, and the growth rate from January-November accelerated by 0.5 percentage points, 12.2 percentage points higher than the growth rate of all investment, pulling all investment growth of 1.2 percentage points (Chinese government website, 2021) [1]. From these data, it can be concluded that the current development of China's high-tech industry leads and drives the transformation and upgrading of China's real economy, and gradually plays an important role as the mainstay. Therefore, understanding the current pulse of China's industrial development and boosting the future breakthrough development of China's industry lays a good foundation for development and innovation significance.

2.1. Digitalization and intelligence are constantly coupled with industry in depth

Nowadays, the world is stepping into the era of digitalization and intelligence, especially in recent years, due to the impact of the new crown epidemic, the development of digitalization and intelligence has achieved fruitful results in fighting the epidemic, and its impact has also deeply changed people's lives. At the same time, due to the continuous adaptation of people in the field of digitalization, resulting in different industries are also actively transforming and upgrading, constantly integrating deeply with digitalization, and striving to innovate and change in the direction of intelligence. In particular, the development of China's industrial Internet industry is the most representative. For example, the deep coupling of digital technology and other industries such as smart business, smart agriculture, and 5G gradually becomes the mainstream trend of China's current industrial development. Therefore, the integration and development of digital and intelligent technology and industry has to a certain extent improved the awareness and independent enthusiasm for China's industrial transformation and upgrading, and powerfully broken through the technical barriers of China's manufacturing industry in high-end fields, while also accelerating the development of industry-wide digital economy, playing an important role in the high-quality development and core competitiveness of China's industry. According to Xu Anming (2022) [2], the integration of digital and intelligent means with the cultural industry has helped the change and innovation of big data and intelligent technologies while promoting the transformation of the development of the cultural industry. First, the cultural industry is empowered by these technologies, which can reduce costs to a certain extent and obtain the corresponding multiplier effect. Secondly, the cultural industry chain, empowered by these technologies, can improve the economic efficiency and resource allocation of the production, consumption, and dissemination stages and links of the cultural industry chain, thus accelerating the digital development process of the cultural industry and promoting the high-quality development of the cultural industry.

2.2. China's traditional industries are gradually changing to green and low-carbon type

New energy vehicles are currently one of the most important initiatives in China's automotive development. Due to the global economic recession, some events such as soaring oil prices and rising unemployment have led to a gradual decrease in the preference for traditional energy vehicles. Nevertheless, people cannot live without transportation in their daily lives. Therefore, new energy vehicles came into being in this situation. The main outstanding feature of new energy vehicles is that they are cheap and inexpensive. That is, the cost of paying for electricity is less than the cost of paying for gasoline. As a result, there is a clear trend of growth in the production of new energy vehicles and solar cells in China, which has led to a gradual increase in demand for new energy products, generating a large number of new green and low-carbon technology updates and iterations. Today's new energy industry has gradually become an effective driving force for the transformation of China's traditional industries to green and low-carbon, as well as a driving core for the optimization and upgrading of China's energy-intensive industries. Therefore, the gradual transition of China's traditional industries to green and low-carbon marks the progress of China's industrial green development level and the effective connection of the "double control" and "double carbon" goals of energy consumption. According to Meng Li (2021) [3], with the acceleration of technological innovation and upgrading, the traditional automotive industry will usher in new industrial changes in the future. This is because, in China, many policies have strongly supported the new energy vehicle technology industry and promoted the development of automotive technology in the direction of intelligence, sharing, and electrification.

3. The current effective initiatives are taken by the Chinese government for industrial development

3.1. Phases of epidemic prevention and control are effective, and full resumption of work and production is gradually realized

With the strict implementation and dynamic control of epidemic prevention and control in China, the epidemic situation is generally on a downward trend. However, the industrial and economic situation in China has not yet fully recovered and will require some time and process of improvement. In particular, the economic situation in Shanghai is gradually easing, with nearly half of the more than 9,000 industrial enterprises above the scale having resumed work and production. Some large industrial

enterprises affected by the epidemic have recovered to the normal level before the epidemic and show continued growth (People's Daily Online, 2022)[4]. In May 2022, the value added of industries above the national scale increased by 0.7% year-on-year, compared with a decline of 2.9% in April; it increased by 5.61% from a year earlier. Among them, the value added to the mining industry increased by 7% year-on-year, and the electricity, heat, gas, and water production and supply industry grew by 0.2% (China Bank Insurance News, 2022) [5].

3.2. The role of investment continues to be strong, promoting infrastructure and manufacturing development

Investment has an important link and bond with economic growth. It is likewise an important way to dynamically stabilize social welfare distribution regulation as well as to influence the urban-rural income gap. Due to the relatively vast territory of China, the development levels between the regions are uneven. To narrow the gap between regions, society and the government is constantly exploring and innovating corresponding mechanisms to make adjustments and strive to narrow the development gap between regions. Zhang Yuling et al. (2022) [6] argued that foreign and government investments have a certain positive impact on economic growth, especially very obvious in the western region where infrastructure construction and manufacturing industries are relatively weak (Lian Chao et al., 2021) [7]. Therefore, since this year, the state has accelerated the introduction of the use and issuance of some special funds and liabilities these funds are used for the construction of infrastructure settings. Among the funds for these investments, the state budget funds are growing faster and are well-funded, which is very favorable for the stable growth of infrastructure investments in China. In addition, the production and operation difficulties of manufacturing enterprises under the influence of the epidemic have increased, and the regions, to promote the steady growth of the real economy such as manufacturing and industry, have made major investment projects for the transformation and construction of these entities to enhance the comprehensive strength and sustainable development of the real economy, and have strong confidence in the future growth of investment in the development of the real economy. 2022 January -April, manufacturing investment increased by 12.2% year-on-year, pulling all investment growth by 2.9 percentage points (National Development and Reform Commission of the People's Republic of China, 2022) [8].

3.3. Online consumption and upgraded consumption boost the quality development of the whole industry chain

The recovery and upgrading of consumption will contribute to the high-quality development of the whole industrial chain. The most obvious aspect is that it will improve the transformation and upgrading of the industrial structure. Secondly, in a certain region of industrial development, its spillover effect is also obvious. Because the spatial effect of consumption on industrial upgrading is easily constrained by the level of economic development, the weaker the economy, the weaker the spillover effect. Therefore, there are still different degrees of influence of consumption upgrading among some regions on the transformation and upgrading of industrial structure, for example, the economic development in the western region is weaker, the ability of consumption upgrading is relatively low, and the consumption area is mainly concentrated in the main economic development areas of the region, which has no positive influence on the transformation and upgrading of industrial structure in other regions. In other words, consumption potential affects economic development and economic development affects industrial structure transformation and upgrading (Xu Zhuoshun, Zhao Xi, Xia Haili, 2022) [9]. Therefore, restoring consumption in all regions at present is one of the important measures to accelerate and innovate industrial development at present. The national economic operation kick-off meeting held in April 2022 showed that due to the development of digital technology in China, some traditional consumption patterns are gradually dovetailing with digital technology in depth, the pace of consumption upgrading is accelerating, and residents' willingness and motivation to consume are increasing, which is conducive to industrial development and economic growth (CCTV Internet, 2022) [10].

4. Suggestions and Outlook

4.1. Promote new diverse types of employment to promote the interactive development of employment, consumption and industry

Employment is an important means to stabilize economic development and industrial development. Due to the impact of the new crown epidemic, the traditional real industries have shut down their production, resulting in lagging industrial development and economic development. Some young people in the new era have to find another way out and gradually innovate new forms of employment to solve their own living needs. At present, some new forms of employment are gradually emerging. For example, the ground stall economy can solve the multiple roles of employment, consumption, and industrial development. Because the floor stall economy can give disadvantaged groups and low-income groups more convenient and relaxed access to income channels. In addition, the ground stall economy is popular because of its low cost, high mobility, freedom of operation, and substantial income cost benefits. In addition, the stalled economy has a certain linkage effect on the real economy. The prosperity of the ground stall economy to a certain extent can revitalize a certain industry and industry, thus pulling the recovery and growth of various layers and stages upstream and downstream of the industrial industry (Xue Li, 2021) [11]. For example, in 2020, the city of Chengdu in Sichuan Province, China, introduced a series of measures to stimulate the synergistic development of employment, consumption, industry, and economy employing the ground-floor economy. In particular, Chengdu city increased employment by more than 100,000 people by allowing 20,130 mobile vendors to operate (Xinhua, 2020) [12]. Therefore, in the context of economic recession and high unemployment, the vigorous promotion of the floor stall economy can effectively promote the recovery and development of industries and economies, and bring into play the economic effectiveness of flexible employment, thus stabilizing the virtuous cycle of our economy, social stability, and harmony, safeguarding people's livelihoods, and alleviating employment pressure with certain positive effects.

4.2. Explore different products and forms of online consumption and upgraded consumption

With the rapid development of education popularization in China, people's desire to acquire knowledge has become stronger and stronger, and knowledge-based consumption has become more and more concerned and popular. According to the analysis of user groups in the knowledge payment industry by Ai Media Consulting (2022) [13], the age group of online knowledge consumption is mainly concentrated in people around 35 years old in first-tier and second-tier cities. The characteristics of these groups are mostly ordinary employees, enterprise managers, etc. They have certain cultural literacy and income and have a strong willingness to consume. In addition, besides these groups of people around 35 years old, college students in the new era also begin to gradually favor online knowledge consumption (Liu Yihan, 2020) [14]. Knowledge consumption is mostly for learning knowledge and improving skills, and it is evident that people's knowledge consumption channels are no longer limited to face-to-face instruction, but through networked forms. Now that China has promulgated a new vocational education law and the state has gradually increased the promotion of skill enhancement and vocational education, knowledge consumption also has a certain consumption potential in the future. Therefore, in addition to the online consumption of agricultural products and other products, online consumption and upgraded consumption modes such as knowledge consumption should be actively promoted. Some e-commerce platforms and knowledge consumption institutions can adopt a combined online + offline model based on compliance with consumer laws and regulations. Knowledge consumption and learning can be conducted both online and offline. They can also link online and offline, i.e., online consumption and offline learning, or online knowledge consumption and learning and offline practical operation and experience, etc. In addition, knowledge-based consumption can be combined with the development of different industries, thus indirectly promoting the high-quality development of industries. For example, the online learning courses launched by the Ministry of Industry and Information Technology of the People's Republic of China integrate the current development of digital technology. Through the online learning process, one can not only acquire digital technology learning but also understand the frontier of current technology development and the prospect of future industry development, which helps to improve people's sense of smell and opportunities for future technology development and increase the enthusiasm of public innovation.

4.3. Synergistic development of industrial upgrading and vocational education under the new vocational education law

Industrial transformation and upgrading require the supply and supplement of talents, and if the supplement and supply of vocational talents cannot be completely solved, the pace of industrial transformation and upgrading will slow down until it is difficult. On May 1, 2022, the Law of the People's Republic of China on Vocational Education was officially implemented, marking the beginning of China's gradual attention and emphasis on industrial talents and vocational and technical talents, and greatly promoting the development of industrial upgrading scale and growth rate. Industrial development transformation and upgrading need vocational education. Because the advanced technology level is one of the important factors to improve the development ability of industrial upgrading. For example, the manufacturing, maintenance, and design of some high-end precision instruments need to rely on a large number of experienced technical personnel and high-end scientific and technological personnel to support them. However, the development of vocational education in China today is not solid and optimistic enough, and some higher education institutions in remote areas are still lacking in terms of talent, teachers, technology, policies, and financial support (Ye Qian, 2022) [15]. Therefore, higher vocational institutions and general colleges and universities should also seize the opportunity of this era, integrate advantageous resources, and actively build technical advantages and technical brands with international competitiveness. Higher education institutions should play a high field and high technology and high quality three high-skilled talents cultivation mechanism, orientation, aim at the direction of technological innovation and industrial upgrading and strive to constantly align with the globalized industrial chain, industrial system, and industrial standards, to cultivate more internationalized high-skilled talents for industrial development and meet the needs of industrial upgrading and the requirements of the times for high-quality development of vocational education.

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