

Seminar Component

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Title of Paper: Exploration and Practice of New Economy Statistics within NBS

Abstract

In recent years, China's economy is experiencing a significant and positive transformation. New economy, especially new industries, new business forms and new business models related to the fast development of the new generation information technology, is developing rapidly. The new situation of economy development produces rigorous challenges on the government statistical work, so to explore and to solve the problem of new economy statistics is an important issue faced by national bureau of statistics of China.

Since 2015, NBS has done a lot of work on new economy statistics, such as tried to research the connotation and extension of new economy, tried to define and describe the scope and main characteristics of new economic activities, organized pilot projects, developed new economic statistics classification standard, built a new indicator system for economy development, established and improved a new economy statistical investigation program, and initially measured the new economic energy index and the new economy added value.

The new economy will lead China's economic development, and the new economy statistics will still be one of the most important tasks of China's government statistics for a long time to come. NBS will continue to push forward reform and innovation of the statistical system, including further improving the statistical standards, index system and the statistical investigation program related to new economy statistics, expanding the data source, making better use of big data, and strengthening the ability of data mining, in order to reflect the development of new economy more accurately, more comprehensively and more timely, monitor the transformation of China's economy growth mode more effectively, and to provide some practical experience for other countries and regions.

I. Contents

| | | |
|------|--|---|
| I. | Contents..... | 2 |
| II. | Introduction..... | 2 |
| III. | Body of Text..... | 3 |
| A. | The Concept and Scope of New Economy | 3 |
| 1. | New Industry..... | 3 |
| 2. | New Business Form..... | 3 |
| 3. | New business model | 4 |
| B. | Work on New Economic Statistics..... | 4 |
| 1. | Organize pilot projects of new economic statistics | 4 |
| 2. | Establish new economic statistics classification standard ¹ | 4 |
| 3. | Establish the new economic statistics indicator system ⁵ | 4 |
| 4. | Establish the new economic statistics investigation program ⁵ | 4 |
| 5. | Explore new economic accounting method | 5 |
| C. | New Economic Development Status in China..... | 5 |
| 1. | The proportion of new economic added value to GDP has risen..... | 5 |
| 2. | The new economic structure is continuously optimized..... | 5 |
| 3. | The growth rate of new economic indicators is higher than traditional related indicators. | 6 |
| 4. | The new economic energy index has accelerated growth. | 6 |
| D. | Future prospects of new economic statistics..... | 7 |
| 1. | Further improve the new economic statistics system..... | 7 |
| 2. | Explore the application of modern information technology in new economic statistics. | 7 |
| IV. | Conclusion | 7 |
| V. | References | 8 |

II. Introduction

In recent years, with the deepening of China's reform and opening, the integration of technology and industrial revolution has accelerated in China, and new industries have grown rapidly. At the same time, the application of the new generation of information technology,

represented by the Internet, has also led to profound changes in new business forms and business models. The vigorous development of the new economy has greatly stimulated the vitality and creativity of market. New economy has become a new bright spot of the Chinese economy.

The Chinese government attaches great importance to new economy. The report on the work of the government from 2016 to 2018 sets clear requirements for developing new economy. All walks of life are also very concerned about the new economy. Enterprises need the new economy statistics support in developing new technologies and products, experts also need new economy statistics in organizing research projects.

Statistical departments must actively respond to social concerns, follow up new hot spots, produce and release more new economic statistics quickly, provide faster, updated, more detailed and specialized statistical service to meet the new economic statistics needs from government and all walks of life.

III. Body of Text

A. The Concept and Scope of New Economy

The new economy is widely used to describe the new forces in economy, but it has not yet formed a rigorously defined and unified concept that widely recognized by the international community. It has different connotations for different occupational groups and different countries. At present, the new economy is still an open and evolving concept, and its scope is constantly changing.

After investigation and research, we believe that China's new economy refers to economic activities that driven by scientific innovation, supported by new technologies, aimed at realizing transformation and upgrading of economy, and promoting the sustainable development of China's economy. Specifically, it includes the following aspects:

1. New Industry

A certain scale new economic activity formed by applying new science and technology. Specifically, the new industries directly applied to the industrialization of new technologies, the new industries from traditional industries that adopt modern technology, the new industries arising from the integration of different industries.

2. New Business Form

New industrial chains and new forms of business activities arising from existing fields according to diversified and personalized demands. Specifically, business activities based on the Internet, Innovation of business process, service mode or product form, more flexible and fast personalized service.

3. New business model

An efficient and competitive business model, which formed by integrate internal and external factors, to achieve sustainable profitability. Specifically, integration of Internet and industrial innovation, hardware and service integration, one-stop service for consumption and entertainment.

B. Work on New Economic Statistics

1. Organize pilot projects of new economic statistics

Based on studying and researching the latest theories and methods of international economic statistics, we organized the statistics bureaus of Shanghai, Zhejiang, Guizhou, Chongqing, Sichuan and Shenzhen to carry out pilot projects for new economic statistics. These pilot projects have provided valuable experience for the new economic statistics of the National Bureau of Statistics.

2. Establish new economic statistics classification standard¹

With the help of local statistics bureaus, we collected more than 2,000 cases of new economic activities. Based on these activities and Industrial classification for national economic activities² and refer to Classification of strategic emerging industries³, Classification of high-tech industries (service industry)⁴, we reclassify related activities that meet the characteristics of the new economy and establish the new economic statistics classification standard, which consist of 9 major categories, 50 medium categories, and 278 subcategories.

3. Establish the new economic statistics indicator system⁵

In order to reflect the development of the new economy, analyze the potential, progress and effectiveness of the new economy, according to measurable and operational requirements, we established the new economic statistics indicator system, including 40 indicators, and divided into 5 aspects: knowledge, economic vitality, innovation, digital economy, transformation and upgrade.

4. Establish the new economic statistics investigation program⁵

In 2016, we establish the new economic statistics investigation program. This investigation program covers 13 aspects, such as comprehensive situation of the new economy, emerging modern agriculture, strategic emerging industries, new products, new services, high-tech industries, enterprise innovation, e-commerce, Internet platforms, financial technology platforms, and development zones status. We revise this investigation program once a year, and organizes a survey each year based on the investigation program and provides detailed basic new economic data.

5. Explore new economic accounting method

According to the new economic survey data, we formulated a new economic value-added accounting method based on the principle of GDP accounting, and measures the added value of the new economy. Besides, according to the new economic statistical indicator system, we proposed a calculation method of new economic energy index⁵.

C. New Economic Development Status in China

In recent years, according to the monitoring of new economic statistics by NBS, China's new economy has grown rapidly and played an increasingly important role in promoting economic growth.

1. The proportion of new economic added value to GDP has risen.

In 2017, the national new economic added value was 1,29,579 million yuan, equivalent to 15.7% of GDP, and its growth rate was 14.1%, which was 2.9% higher than the GDP growth rate. Detailed data is as follows in Table 1.

Table 1. Added Value Equivalent to GDP of New Economy From 2015 to 2017

| | 2015 | 2016 | 2017 |
|--|-------|-------|-------|
| new economic added value equivalent to GDP | 14.8% | 15.3% | 15.7% |

2. The new economic structure is continuously optimized.

According to the 2017 data, the new economic added value of primary industry⁶ was 599.8 billion yuan, equivalent to 0.7% of GDP; the new economic added value of secondary industry⁶ is 5425.3 billion yuan, equivalent to 6.6 % of GDP; The new economy added value of tertiary industry⁶ grew the fastest, at 6932.6 billion yuan, up by 17% and equivalent to 8.4% of GDP. Detailed data is as follows in Table 2.

Table 2. Added Value and Equivalent to GDP of New Economy in Three Industries

| | added value (billion yuan) | | equivalent to GDP (%) | |
|-----------------------------------|----------------------------|--------|-----------------------|------|
| | 2017 | 2016 | 2017 | 2016 |
| new economy in primary industry | 599.8 | 583 | 0.7 | 0.8 |
| new economy in secondary industry | 5425.3 | 4849.7 | 6.6 | 6.5 |
| new economy in tertiary industry | 6932.6 | 5926 | 8.4 | 8.0 |

3. The growth rate of new economic indicators is higher than traditional related indicators.

In 2017, from the perspective of consumption, as the new economy relies on new technologies such as the Internet and big data, it can be deeply integrated with the e-commerce platform to effectively meet the diversified needs of consumption, which in turn drives consumption to rise rapidly. Compared with 2016, the national online retail sales increased by 28%, more than double the growth rate of total retail sales of consumer goods. From the perspective of production, the high-tech manufacturing industry has a strong momentum, with the added value increasing by 13.4%, which is 6.8% higher than the added value growth rate of industrial enterprises above designated size. From the perspective of investment, new economy sectors are more favored. High-tech investment increased by 17%, more than three times the growth rate of manufacturing investment.

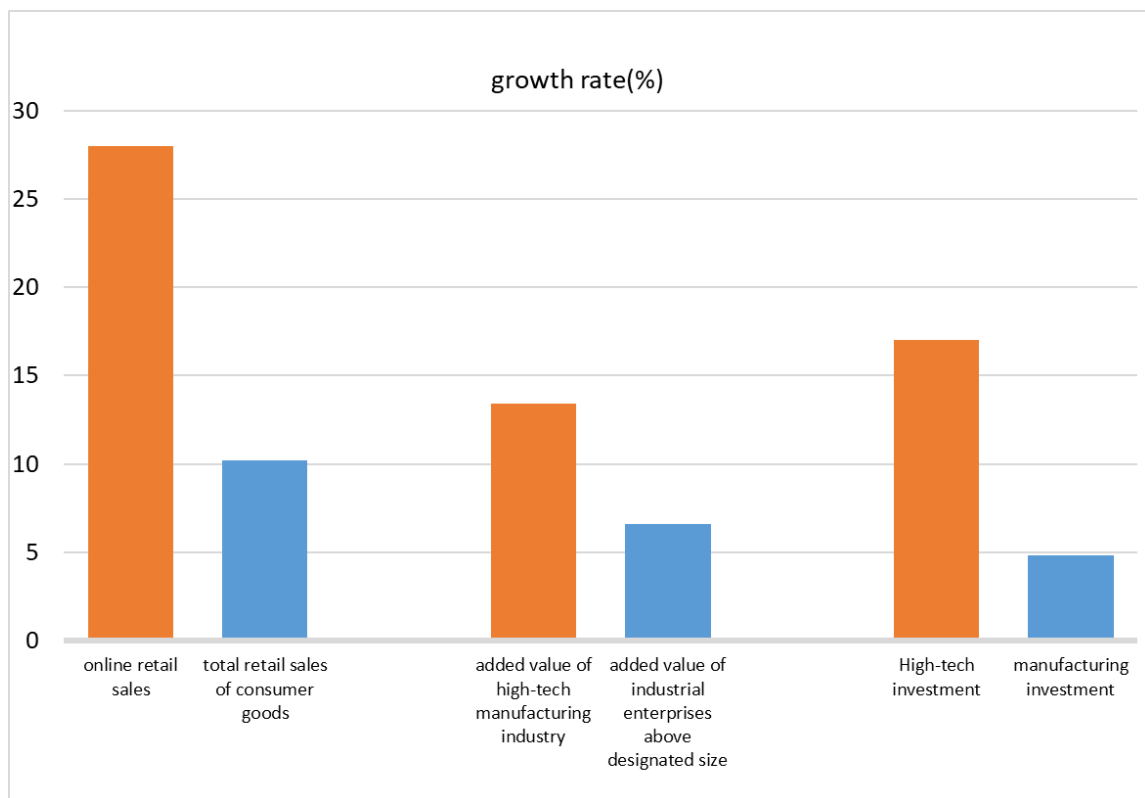


Fig 1. The Growth Rate of New Economic and Traditional Related Indicators

4. The new economic energy index has accelerated growth.

Based on the new economic investigation data, and according to the new economic statistical indicator system⁵, the new economic energy index⁵ from 2015 to 2017 were 123.5, 156.7 and 210.1, with an increase of 26.9% and 34.1% over the previous year. In addition, the five sub-indices achieved an increase from 2015 to 2017. Detailed data is as follows in Table 3.

Table 3. New Economic Energy Index and its Five Sub-indices from 2015 to 2017

| | 2017 | | | 2016 | | | 2015 | |
|----------------------------|-------------|-----------------|-----------------------|-------------|-----------------|-----------------------|-------------|-----------------------|
| | Index value | growth rate (%) | contribution rate (%) | Index value | growth rate (%) | Contribution rate (%) | Index value | contribution rate (%) |
| new economic energy index | 210.1 | 34.1 | 100 | 156.7 | 26.9 | 100 | 123.5 | 100 |
| knowledge | 128.5 | 2.7 | 12.2 | 125.1 | 11.1 | 16 | 112.6 | 18.2 |
| vitality | 284.3 | 38.4 | 27.1 | 205.5 | 42.3 | 26.2 | 144.4 | 23.4 |
| innovation | 143.3 | 13.4 | 13.6 | 126.3 | 11.3 | 16.1 | 113.5 | 18.4 |
| digital economy | 362.1 | 79.1 | 34.5 | 202.2 | 47.3 | 25.8 | 137.3 | 22.2 |
| transformation and upgrade | 132.3 | 6.4 | 12.6 | 124.3 | 13.3 | 15.9 | 109.7 | 17.8 |

D. Future prospects of new economic statistics

1. Further improve the new economic statistics system.

In the next step, we should further improve the statistical standards, enrich the content of the investigation, establish a statistical investigation program for the Internet platform, and accurately and quickly reflect the development of the new economy by collecting and processing relevant information on the Internet.

2. Explore the application of modern information technology in new economic statistics.

In addition to traditional statistical survey methods, we will actively explore the application of modern information technology such as big data, cloud computing, and Internet of things in new economic statistics. On the one hand, we will adapt to the "Internet +" trend, make full use of non-traditional data such as Internet information, government administrative records, and enterprise production and operation records to reflect the new economy more comprehensively, accurately, and objectively; on the other hand, we will actively promote the re-engineering of statistical business processes to realize the digitalization, networking, intelligence and cloud of statistical production processes.

IV. Conclusion

This paper introduces the background of new economic statistics in China; expounds the concept and scope of new economy that apply to the China's economy; discusses the work have done for new economic statistics from the aspects of organizing pilot projects, establishing standards, indicator systems, investigation program, and exploring accounting

methods; presents the new economy status in China with figures, and puts forward suggestions for new economic statistics work in the future. This paper has a reference for other countries to study new economic statistics.

V. References

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