Knowledge-based economy and statistics reform trend

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1. The definition and characteristics of knowledge-based economy

Knowledge-based economy according to OECD, is an economy that bases its production, resource location and consumption on knowledge and information. It is a new-generated concept comparing to the words agricultural economy and industrial economy. Recently, a new definition was emerged which indicates its as an economy that bases upon the production, allocation and consumption of knowledge and information, supports by creative human resources and hi-tech industries.

The characteristics of knowledge-based economy are fourfold: (1) it is an information economy; (2) it is a networking economy; (3) it is a creative economy and (4) it is a economy that can be sustainable developed.

2. The statistics reform and its trend in the circumstances of knowledge-based economy

The development process of the Chinese statistical reforms in the past twenty years has witnessed enormous achievements of statistical reform in China, through which Chinese statisticians have established a brand-new statistical system based on the new SNA system. They have switched their customers from former central-planner to market participants. The investigation methods, social-economic and technical indexes, classifying criteria and the statistical production method of China have undergone far-reaching and deep-rooted changes. With the fast progress of China’s economic system reform, however, the establishment and amplification of socialist market economic system, especially the emerging of knowledge-based economic era, bring forth many new issues ahead of Chinese statisticians. The above-mentioned characteristics of the knowledge-based economy will help to widen the data-collecting content and range, modernizing the analyzing and investigating methods and tools as well. We must therefore continue to deepen the statistics reform, amplify current statistical methods and index systems, build up thoroughly a comprehensive social, economic, technical and information statistical index system and method-evaluation regime, which will be fit for the knowledge-based economy.

First of all, knowledge-based economy is an information and networking economy with information technology being widely used and oozing out throughout the society. Information industry will become the dominant department while information and knowledge important resources and wealth. The information network will change the way by which people manage, collect and deal with data. Thus a comprehensive evaluation index system should be established so as to mirror the information degree and comprehensive ability of a country or area.

According to the status quo of development of information industry in China as well as the scientific, synthetic and practicable principles, we think that information degree index system should include indicators that can reflect the conditions of information resources, investments, output and human resources in informational field and the utilization of information resources. The information ability index system should consist of the index that can reflect the abilities of utilizing and developing information resources, triggering the information industry and the information input-output.
Secondly, knowledge-based economy is a creative economy in which science and technology will play an important role and technical innovation a motor of the economic sustainable increase.

Thirdly, knowledge-based economy is a sustainable, resource saving and developing economy. It is very important to establish a national economic index system that can reflect the overall situation of a country or state sustainable development.

Fourthly, knowledge-based economy is a networking, globalized economy through which the whole world can be united and collaborated to become an un-separated one. The international economic development history in the 20th century shows us that exchanges and cooperation throughout the world will eventually require the emerging of a unified standard statistical set-up. The establishment of China’s new SNA system has paved the road towards this task, yet Chinese statisticians still have to exchange ideas and cooperate with their colleagues in the other countries even further to promote the unification process.

Finally, the epoch of knowledge-based economy will pushes the statistical method to become more suitable for the market economy. In those developed countries, sampling investigation is widely used in collecting statistical data because a lot of social and economic phenomena bear random characteristics. It will also be doomed to become a widely used statistical method since that China’s socialist market economy system is setting up and amplifying and enterprises are becoming independent entities. Although the statistical investigating methodology system has been established, which bases upon periodical census and is supported by frequent sampling, focusing investigations, scientific evaluation and so on, the utilization and application of these statistical methods still need to be strengthened.

All in all, the characteristics of the knowledge-based economy require statistics in China to deepen its reform, widen its accounting field quickly, set up and amplify the standard index system and utilize scientific and systematic statistical methods to assess national economy and social development. Thus the consulting and controlling functions of statistics can be brought into full play.

References:

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Cet article fait une étude profitable sur L’estimation synthétique concernant le niveau informatique et qualité, la créativité technique et qualité et le niveau du développement durable et qualité d’un Etat ou d’une région, plus que le système et les moyens d’objectif, visant à compléter le système de calcul statistique, renforcer la comparaison et l’analyse internationales et rendre service à l’élaboration des politiques.