

The Role and Significance of Statistics in Economic and Social Development

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Abstract: With the rapid development and great progress of the social and economic system in China and the world in the new era, the application of statistics has played an increasingly important role in the development of the national economic operation system and economic society. Statistics is an important means of collecting, sorting, analyzing, processing, and demonstrating data related to economic and social development in economic development. The theoretical system and method play a key role in sorting out and analyzing the economic situation, process and trend of the Chinese people and the world. At the same time, it has extensive and far-reaching significance for governments and departments at all levels to scientifically formulate economic development directions, understand the laws of economic and social operation, and grasp the basic state of economic trends. This paper mainly starts from the basic concepts of statistics, combines the current situation of economic development, and explains and discusses the important role and effect of statistics in economic development according to the application and reaction of relevant knowledge of statistics in the current rapid economic development. profound meaning.

Keywords: statistics, Economic development, Role, Significance.

1. Introduction

With the rapid development of my country's economy, the traditional inefficient economic analysis methods have been unable to meet the growing needs of economic development. Facing this situation, the application of statistical knowledge in economic and social development plays an obvious role. and effective. In view of this situation, it is particularly critical to analyze the role and significance of statistics in economic and social development. In this way, on the one hand, we can gradually and clearly recognize the main situation of current economic and social development by using the method of statistical analysis, and summarize and summarize the existing economic and social development; Statistical analysis makes reasonable deductions for future economic and social development, and provides guidance for subsequent economic and social development [1]. Therefore, it is necessary and sufficient to study the role and significance of statistics in economic and social development. Next, this paper will describe the role of statistics in economic development and the significance of applied statistics to economic development and social progress through the decomposition of statistics and the in-depth analysis of economic and social development.

2. The Concept of Statistics

2.1. Basic Concepts of Statistics

To put it simply, statistics is based on data, using data to speak, and using big data analysis methods to obtain conclusions that are most in line with scientific research concepts. Today, statistics have established a unique system and a complete academic system through long-term development and evolution. Statistics is basically a comprehensive scientific research that uses the technical means of collecting, summarizing, classifying, explaining, and demonstrating statistical data to obtain and infer the nature of the measured object, or to predict the future trend of the object. Because statistics use a lot of knowledge in

mathematics and other professional fields, its scope of use basically covers various fields in social sciences and natural sciences [2].

2.2. Classification of Statistics

Statistics can be classified into two categories: descriptive statistics and inferential statistics.

Descriptive statistics mainly studies how to organize a large amount of data obtained from experiments or surveys, clarify the whole picture of these data, and show the basic content and nature of a thing. The main specific methods include: how to group data reasonably, how to use statistical tables and graphs reasonably to describe how a group of data is grouped and the specific distribution, how to compare a series of data, analyze and calculate some characteristic numbers, and further show Description - The overall picture of the set of data. That is, descriptive statistics is the use of tables, pictures or numerical values to display and describe the information in the data

Inferential statistics includes both parameter estimation and hypothesis testing. Parameter estimation refers to estimating overall parameters from sample statistics, and the estimation methods include point value estimation and interval estimation. Hypothesis testing, also known as statistical hypothesis testing, is a statistical inference method used to judge whether the differences between samples and samples and between samples and the population are caused by sampling error or essential differences. Inferential statistics are statistical methods that infer a population from a sample. In general, it is reflected by the quantitative characteristics and parameters of the overall distribution. Therefore, inferential statistics include: estimating unknown parameters of the population; checking assumptions about parameters; making predictions about the population, etc. The samples used in scientific inferential statistics are generally conducted by random sampling. The theoretical and methodological basis of statistical inference is probability theory and mathematical statistics. Speculative statistical analysis refers to a statistical method that uses the actual

situation of the collected sample data to make statistics to determine the results of the overall prediction of the nature of the sample. It is based on the analysis of the actual situation of a certain statistical sample. The reasoning analysis method is to push the sample situation to the population, so as to obtain certain results. That is, speculative statistical analysis refers to the use of statistical data obtained from samples to predict and test the nature of the population.

3. The Status Quo of My Country's Economic and Social Development

At present, my country's economic development is in the midst of a new era, and it is of great significance to maintain a stable, sustained and efficient economic growth trend, and to maintain a good situation of good economic development and continuous improvement of economic and environmental benefits. Today, my country's economic growth model is still not very perfect, and there is still the possibility of facing the impact of the world economic crisis, which will lead to the possibility of national economic collapse. And it is at a time when my country's economic development is in the current period of obvious transformation of demand. How to restrain the current average annual GDP growth rate has declined compared with the previous average annual GDP growth rate, which is also the dilemma that my country's economic development is facing today. Of course, according to the comparison of the data of the whole year, the quality and efficiency of economic development growth in the future will be significantly better than the previous ones. Therefore, a reasonable understanding of the economic development trend and the pursuit of quality development or quantitative development are also issues to be considered in my country's economic and social development.

Today, since our country put forward "actively promote the transformation of economic growth mode, take the improvement of economic benefits as the center of economic work, and change from extensive to intensive." It has been many years, and relevant data and materials have shown that my country's economic and social development pattern has been Significant changes have taken place and there are also some economic sectors undergoing significant changes, from a quantitative development to a qualitative development pattern. Not only has the economic efficiency and growth model changed, but also promoted the rapid development of the national economic industry. In addition, the development of leading companies has driven the entire industry to pay more attention to future development and long-term development. However, in the face of such a situation, economic development cannot be the same as in the past, blindly pursuing high growth rates and ignoring efficient economic development benefits [3]. Therefore, after entering the new era, where will my country's economic development go, it is still necessary for practitioners in the economic industry to stay true to their original aspirations and seek an efficient and high-quality economic development model, so that my country's economy can be "profitable" in the wave of global economic development, and will not "take chestnuts from the fire".

4. The Role and Significance of Statistics in Economic and Social Development

4.1. Summarize the Development Law of Economic Industry

In economic development, the use of statistical knowledge can help relevant practitioners summarize the laws of industry development and avoid industry development risks. It is a powerful weapon to encourage and develop the efficient and high-quality development of economic industries. In addition, economic researchers can sort out the development of the past economic industry through a large amount of data analysis and statistical results, make a reasonable inductive summary, and then obtain relevant information that conforms to the law of development of things, so as to provide reasonable follow-up practitioners. Yes, correct economic knowledge. Moreover, with the combination of descriptive statistics and inferential statistics, statistics will make reasonable plans for economic development. Different types of statistical analysis work can play different roles [4], and the main role of applied statistics in social and economic development lies in the analysis of social and economic data collected through scientific methods, so as to provide insights into the macro-social economy. It can effectively reveal the inherent laws in the process of social and economic development.

4.2. Assist in Scientific Development

The rational use of statistical knowledge in economic and social development will provide assistance for the rational advancement of economic development. The role of statistics in the economic industry is not only in the sorting and analysis of existing data. Using inferential statistical methods, it is possible to make reasonable predictions and correct guidance for the future development of the industry. In addition, the rational use of statistical knowledge will make the development of the industry more scientific, abandon unreasonable upper-level command and wrong market guidance, and based on a large amount of data, after sorting and analysis, it is possible to get The most correct scientific development concept of the law of social development, so as to help economic development and even the entire industry to follow the correct scientific development. Moreover, in the category of modern statistics, the rise of political economy has also led to the emergence of econometrics as a professional discipline. It can be seen that in the future and even now, the combination of economics and statistics is inevitable and will be popular. Therefore, the importance of statistics in economic development is self-evident.

4.3. Improve Economic Budget Feasibility

Correct use of the guiding and inductive role of statistics in the process of economic development will correctly guide the feasibility of improving the economic budget in the economic industry. In the current economic and social development environment, if the economic budget cannot be increased in the correct relevant aspects, it means launching the relevant market, and the rational use of statistical knowledge will keep the economic development on a reasonable development track, and prevent the Due to the influence of horizons and the environment [5], wrong estimates of economic development are made, resulting in wrong economic budgets and even irreversible economic disasters. In addition,

statistical data plays an important role in forecasting and forecasting economic development. A large amount of data is the best guide for how the economic budget should be allocated [6]. Therefore, only by correctly and objectively understanding the important role of statistics in economic development can we take the initiative in future economic development.

4.4. Identify Economic Development Problems

Statistics, as a practical tool for a large amount of data, is the leading and prophetic characteristic of using statistical knowledge in the process of economic development [7], and it can effectively and accurately detect the occurrence of economic development in a short time. Therefore, when things do not develop and are irreversible, they can accurately find the problem, solve the problem with the most appropriate means in the shortest time, and reduce the loss and harm to the lowest level. For example, if you encounter a bottleneck in economic development, if you can apply statistical knowledge [8], you can correctly understand the main reasons for the current economic development dilemma, and then correctly guide the economic development to return to the correct track. The track will be easier than if there is no statistical guidance.

5. Summary

Today, statistics, as a professional comprehensive discipline, has no doubts about its feasibility in data analysis and data forecasting. Rational use of statistics as a guide and guidance for economic and social development can not only help the analysis of past data. A correct analysis of rationality can also give reasonable pointers to future economic development. The role of economic and social development is mainly reflected in the inductive, scientific, rational and leading aspects. Under the current economic operating system,

only a correct and reasonable view of the role and significance of statistics in economic development can play a correct guiding role in economic and social development. And it is of far-reaching significance to understand the economic development and operation situation of our people, and to study the law of national economic development in decision-making in the face of social and economic problems.

References

- [1] Yuan Xuemei. The role and significance of statistics in economic and social development[J].*Modern Marketing (Latest Issue)*, 2018(04):7.
- [2] Li Jingli. On the Application of Statistics in the Financial Field [J]. *Time-honored Brand Marketing*, 2021(12):79-81.
- [3] Zhu Shasha. Analysis of the development prospect and employment analysis of economic statistics [J]. *Economic and Trade Practice*, 2017(20):55.
- [4] Jin Xiaoping. Statistical characteristics and laws of Ningxia's economic development and fiscal revenue growth since the reform and opening up[J]. *Public Finance Research*, 2015(06):75-86.
- [5] Kong Zhenyun. Analysis of the role of statistics in economic development[J]. *Modern Economic Information*, 2015(02):40.
- [6] Xu Weihong. Application Research of Economic Statistics under Economic Construction[J]. *Financial Economics*, 2015(14):129-131. DOI:10.14057/j.cnki.cn43-1156/f.2015.14.049.
- [7] Wang Xing. Discussion on the application of statistics in the field of economics and management [J]. *Modern Marketing (late issue)*, 2018(07):20.
- [8] Li Lan. On the Application of Statistics in Economic Management [J]. *Modern Economic Information*, 2018(16):121.