

Changes in China's Official statistics and the Outcome of its Key Data Since 2000

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1. The new situation faced by China's official statistics since the new century

As human society entered the twenty-first century, China started a new phase of development for building a moderately prosperous society in all respects and speeding up socialist modernization. With the increasingly important role played by statistical data in supporting national economic development, the Party and government have attached great importance to official statistics and it is the common concern of society. Changes in economic and social development objectives make new and higher demands on official statistics, and China's official statistics is facing a rare chance for development. Meanwhile, the deepening of reform and opening-up process and the profound social changes brought by the rapid development of economy and society make China's official statistics faced with an unprecedented challenge.

1.1 China's official statistics is facing a rare chance for development

i . China's official statistics is playing an increasingly important role

With the development of China's socialist market economy, economic decision-making bodies are more and more diversified, economic structure is more and more complex and more and more factors are affecting economic development. Therefore, official statistics is playing an increasingly important role in judging national economic performance, implementing the policies of macroeconomic regulation and testing its science and effectiveness.

ii . China's official statistics has become highly valued and concerned

The Central Committee and the State Council attach great importance to the official statistics. Since the Sixteenth National Congress of the Communist Party of China (CPC), the Central Committee and the State Council have issued several documents setting clear demands on official statistical work. General Secretary Hu Jintao and Premier Wen Jiabao made important instructions on official statistical work. Relevant ministries and local governments pay close attention to the work related to official statistics and choose to make official statistics an effective tool for reflecting their economic and social development and an important basis for developing their policies in economic and social development.

Businesses, the public and the international community are increasingly concerned about China's official statistics. Some important statistical indicators, such as GDP, CPI and resident income, bear on the immediate interests of businesses and the general public, so the quality of statistical data and reform of statistical system and methods become an increasing focal point of public attention. Moreover, with China's rapid economic growth and the rising of economic strength, the international community is increasingly concerned about China's official statistics.

iii. Changes in economic and social development objectives make new and higher demands on official statistics

At the beginning of the new century, the Sixteenth National Congress of CPC set the goal of "building

a moderately prosperous society in all respects” in the first 20 years of this century. In 2007, the Seventeenth National Congress of CPC made new and higher demands on “building a moderately prosperous society in all respects”. In order to thoroughly implement the scientific outlook on development, achieve the goal of building a moderately prosperous society in all respects and promote China’s economic and social development in a comprehensive way, the Party and government made new and higher demands on official statistics.

The report to the Seventeenth National Congress of CPC was focused on promoting the sound and fast development of national economy and made the deployment of the strategic task of economic construction from eight aspects. Among them, improving the self-renovation capability and making China an innovative nation, accelerating the transformation of the ways to achieve economic growth and optimizing and upgrading the industrial structure, making overall planning for urban and rural economic and social development and promoting the building of new socialist countryside, strengthening energy preservation, environmental protection and ecological conservation and strengthening the ability of sustainable development and expanding opening up in greater scope and depth make new and higher demands on economic statistics, trade and foreign capital statistics, rural statistics, scientific and technological statistics, and resource and environment statistics.

In order to speed up the transformation of the ways to achieve economic growth, optimize and upgrade the industrial structure and accelerate the social development focused on the improvement of people's livelihood, the Central Committee and the State Council imposed a series of specific requirements on the official statistical work. These requirements include: the establishment and improvement of the statistical indicator system which could reflect the capability of independent innovation (proposed in 2005), the improvement and implementation of the statistical, monitoring and assessing system of energy saving and emission reduction (proposed in 2007), the establishment and improvement of the information system and statistical system of real estate market and the improvement of market monitoring and analysis mechanism (proposed in 2008), and the improvement of the assessing system for the target responsibility of energy saving and emission reduction and the establishment of the assessing system for the recycling economy and scientific development (proposed in 2009).

1.2 China’s official statistics is facing severe challenges

i .Demand for statistical data is sharply increased and is characterized by diversity and complexity

China's economy has developed rapidly and its globalization has accelerated so that maintaining the momentum of a sustained, rapid and sound economic development is more important and the macroeconomic regulation need more, more complete and accurate statistical data. To build a harmonious society, a lot of statistical data in resources and environment is required. China's economy has been integrated with world economy, the international community and foreign investors are increasing in demand for China’s statistical information. This makes the demand of China's official statistics diversified and complicated and increasingly difficult to meet.

ii . Changes in social and economic environment make it difficult to conduct survey

Profound changes in the economic system in China, rapid economic development, changing in economic environment and rapid changes in statistical respondents pose great challenges for the maintenance and update of directory database of basic units and the implementation of statistical survey tasks. Moreover, with the development of market economy, businesses' sense of protecting business secrets and cost effectiveness are increasingly enhanced, the people’s sense of protecting privacy is increasingly enhanced, but cooperation with official statistics is now decreasing. These make it more difficult to organize survey.

iii. Factors of interference exist in statistical data

Evident comparing phenomenon existing in key statistical indicators which reflects economic and social development in all localities causes interference on statistical data to a certain extent.

2. Important changes in China's official statistics

Being faced with great opportunities and challenges, China's official statistics actively carries out reform and innovation and keep improving statistical system and methods. These measures include: to actively and steadily promote the reform of GDP accounting system; to adopt the system of cyclic censuses consisted of population census, agricultural census and economic census; to carry out statistical monitoring of building a moderately prosperous society in all respects and scientific development; to promote the reform of price statistics in real estate and consumer price index; to establish and improve the statistics system of energy saving; to establish and improve the system of period-on-period statistics; to adjust the standard of up-scale industrial and investment statistics; to improve the important statistics on the people's livelihood, such as labor wages, employment, etc.

2.1 Promoting the reform of GDP accounting system

Since the reform and opening up, especially since the early 90s of last century, national accounting work has been developing rapidly. However, compared with the needs of macroeconomic management, the public and external work under the socialist market economic system after joining WTO and the international standards, the gap is still wide. Therefore, since entering the new century, the National Bureau of Statistics of China has carried out a series of work to promote national accounting system reform.

Since 1999, the National Bureau of Statistics has conducted a comprehensive and systematic revision for the China National Accounting System (on trial) promulgated in 1992 and implemented the China National Accounting System (2002) since 2003. Linking up with the United Nations SNA (1993) has basically been achieved.

Since 2004, the reform of the system for GDP accounting and data issue has been carried out, and the system for the issue of annual and quarterly GDP data in three steps, preliminary accounting, preliminary verification and final verification, has been established.

In 2004, the provisions was made for the computational methods of regional GDP per capita, the Chinese translations for regional GDP and related indicators, regional GDP accounting and data issuing procedures, and the time for submitting preliminary accounting data of regional GDP. Since 2005, the system of joint examination and approval for regional GDP data has been established.

Currently in China, an accounting system of the national GDP and regional GDP being accounted separately is used, but the international practice is a unified accounting system in which regional GDP is accounted by the state. Therefore, in the future, the reform of regional GDP accounting system will be promoted steadily to ultimately achieve the unified accounting of regional GDP by the State.

2.2 Improving the system of cyclic censuses

In 2003, the projects and the cyclic arrangements for the national censuses were adjusted and the system of national cyclic censuses consisted of population, agriculture and economy census was adopted.

(1) The census for the tertiary industry was integrated with the industrial census and basic unit census, and the construction industry was included in a census, collectively referred to as the economic census. In 2004, the first economic census was carried out throughout the country. The census will be carried out twice every 10 years, respectively in the year that has its last number of 3 or 8. So far, two economic censuses have successfully been carried out.

(2) The agricultural census is aimed at the entities and the peasant households, who engage in the primary industry, and focuses on the development and changes in agriculture, forestry, animal husbandry and fishery. The census is carried out once every 10 years. The year in which the census should be carried out

was changed from its last number of 7 to 6. So far, two agricultural censuses have successfully been carried out.

(3) The population census takes natural persons as the object and focus on the national population, housing and related important issues. The census is carried out once every 10 years in the year that has its last number of 0. So far, six population censuses have successfully been carried out.

2.3 Establishing a supervisory system of building a moderately prosperous society in all respects

The Sixteenth National Congress of CPC set the goal of building a moderately prosperous society in all respects in the first 20 years of this century. To supervise and evaluate the achievement degree of the goal of building a moderately prosperous society in all respects, that is the economy being more developed, democracy being further improved, science and education being more advanced, culture being more prosperous, the society is more harmonious and the people being better off, from the statistical point of view, since 2003, the National Bureau of Statistics of China has devoted some study to a statistical monitoring and evaluation system in respect of building a moderately prosperous society in all respects. The system was raised formally in August 2006. In 2007, the Seventeenth National Congress of CPC made new and higher demands on building a moderately prosperous society in all respects; accordingly, the National Bureau of Statistics of China organized experts to conduct comprehensive research and made significant changes to the system for building a moderately prosperous society in all respects. In 2008, the Statistical and Supervisory Programme for Building a Moderately Prosperous Society in All Respects was issued to the all provinces, autonomous regions and municipalities. The system in the Program includes 23 indicators in 6 aspects, including economic development, social harmony, living quality, democracy and legal system, culture and education, and resources and environment.

According to the Statistical and Supervisory Programme for Building a Moderately Prosperous Society in All Respects, the Research Institute of Statistical Sciences of the National Bureau of Statistics of China and the statistical departments at the local levels respectively conducted monitoring on the process of building a moderately prosperous society in all respects of the country and all provinces from 2000 to 2009. The monitoring results show that building a moderately prosperous society in all respects has proceeded smoothly and there has been a steady increase of the achievement degree of building a moderately prosperous society in all respects throughout the country.

2.4 Carrying forward the reform of price statistics

(1) The reform of real estate price statistics

Housing problem is of vital importance to the nation's economy and the people's livelihood, and is both an economic problem and an important people's livelihood. The National Bureau of Statistics of China has attached great importance to the work of real estate price statistics, carried out the reform of the system of real estate price statistics to adapt to new situations and decided to implement a new system of real estate price statistics since January 2011. The main elements of reform include:

A. The adjustment of data collection methods. Data from the contracts signed online in the local department for housing administration is used to compute the sales price of new housing in 35 large and medium-sized cities, including municipalities directly under the Central Government, provincial capitals, capitals of Autonomous Regions (excluding Lhasa City) and cities specifically designated in the state plan, without further survey. For other cities that are temporarily unable to obtain data from the contracts signed online, the sales price of new housing is calculated according to data of classified trading area and amount of all housing projects collected by the statistical statements for real estate development in the statistical system.

B. Adjustment of survey indicators. Housing sales price index is changed as sales price index of new housing and second-hand housing. The new housing is divided into indemnificatory housing and commercial housing. The commercial housing and second-hand housing are divided into the housing of 90 square meters or below, 90-144 square meters, or 144 square meters or above.

C. Adjustment of the computational method of index. The computational method of new housing price index on a month-on-month basis is adjusted as the average price method which classifies housing according to areas of projects. Laspeyres chain formula, a common international practice, is used to calculate the fixed base price index with base year of 2010.

Before adjustment, the average growth rate of housing prices in 70 large and medium-sized cities was issued. The average will cover the typical characteristics of each city because of great differences in local conditions, which is very different from the public's actual feelings and easily leads to misunderstanding. Moreover, when the housing price has a great change, the calculated average has little meaning. After adjustment, the average will no longer be calculated and issued and attention will be paid to releasing the house price data of each city.

(2) The reform of statistics of the consumer price index

Since 2000, the statistics, releasing and using of price index have been changed from the retail price index to the consumer price index. This is an important step in reform and improvement of China's price statistical system. Since 2001, the consumer price index (CPI) benchmarked in 2000 has been compiled in all provinces (autonomous regions and municipalities). The base year is replaced every five years, and the second base year is 2005. At the same time, the reform of the approach to calculate CPI was carried out, the kinds of commodities and services surveyed were increased from 325 to 550, the base period changed monthly was fixed, while increasing new price index series and adjusting weight in time.

In 2011, in order to adapt to China's economic and social development and changes in consumption structure of urban and rural residents better, and ensure the accuracy and science of CPI calculation, the CPI survey plan was adjusted on a routine basis. The adjustment in base period, weights, survey network and representative products is involved: a. From January 2011 onwards, the consumer price index series benchmarked in 2010 will be calculated; b. According to the data from the nationwide survey of the consumption expenditures of urban and rural households and the survey conducted by related departments in 2010, the weights were adjusted; c. According to the up-to-date situation of commercial activities, farmers' market and service units of the cities and counties investigated in 2010, according to the principles and methods regulated, 13 thousand survey networks was newly established. There are 63 thousand survey networks currently in China.

(3) The reform of price statistics of the industrial producers

Since January 2011, the National Bureau of Statistics has implemented new statistical survey system and methods for the price statistics of industrial producers. The original "Industrial Goods Price Statistics" has been renamed as "Industrial Producer Price Statistics"; accordingly, "industrial price index for manufactured goods" and "purchasing price index of raw materials, fuel and power" have respectively been renamed as "producer price index" and "producer purchasing price index".

According to the new industrial classification and the Product Classification for Statistics, the inventory of survey products was recompiled. The new inventory of producer price survey includes 11000 kinds of industrial products which belong to 39 sectors, 191 divisions, 525 items and 1702 primary divisions, and increases about 2000 kinds. The new inventory of producer purchasing price survey includes more than 6000 kinds of industrial products belonging to 900 primary divisions and increases 2500 kinds.

According to the industrial output value from 2008 to 2010 and the survey data from 60,000 typical enterprises, the weights were recalculated. By using Laspeyres chain formula, a common international practice, the price index series benchmarked in 2010 were established.

2.5 Establishing and improving a statistical system for energy saving

According to the requirements of strengthening energy saving statistics, at the end of 2005, the National Bureau of Statistics declared that the system for issuing GDP energy consumption indicators would be implemented from 2006. The indicators include energy consumption per RMB 10 thousand GDP, energy consumption reduction rate per RMB 10 thousand GDP, electricity consumption per RMB 10 thousand GDP, and energy consumption per RMB 10 thousand industrial added values of up-scale industrial enterprises of all provinces (autonomous regions and municipalities). In July 2007, the National Bureau of Statistics of China issued the energy consumption per unit GDP throughout the country in 2006. According to the Implementing Program for Statistical Indicators System, Monitoring System and Evaluation System of Energy Consumption per Unit GDP approved by the State Council, the National Bureau of Statistics of China decided to make a tentative calculation for the total energy consumed, energy consumption per unit GDP and its reduction rate on a quarterly basis throughout the country and in the provinces, autonomous regions and municipalities since the first half of 2007.

National energy consumption data per unit GDP (Figure 5) show that, since 2000, the energy consumption per unit GDP has declined, but it is increased in the period of rapid growth in the economy and investment.

2.6 Establishing and improving a system of period-on-period statistics

For a long time, most of monthly and quarterly statistical indicators have been counted year-on-year growth rate, not period-on-period growth rate. The year-on-year growth rate is easy to count, but it has a longer interval between two periods and is not easy to reflect recent changes. The period-on-period growth rate is the result of a comparison between one period and next period, can better reflect short-term economic changes and is internationally recognized as an effective tool for short-term economic analysis.

Currently, most of developed countries have carried out the period-on-period statistics for major economic indicators, made seasonal adjustments and released period-on-period statistical data. The indicators involve quarterly GDP, employment, prices, industry, import and export, investment, housing construction, transportation, health care, agriculture, energy, finance and so on. Some developing countries have also released the period-on-period data. Some of them release various indicators and some only release period-on-period data of key economic indicators, such as quarterly GDP, industrial production index, etc.

In order to adapt to new circumstances and changes in China's economic and social development, and strengthen and improve the statistical system, the National Bureau of Statistics of China has carried out research on period-on-period statistics from early 2009, and actively cooperated with domestic and foreign research institutions. After study and argumentation for two years, a seasonal adjustment method with Chinese characteristics and seasonal adjustment software of NBS-SA belonging to the National Bureau of Statistics were developed, key indicators were selected for period-on-period statistics and had been carried out a tentative calculation within the Bureau for a year.

From April 2011, the National Bureau of Statistics will issue the period-on-period data of four statistical indicators, including GDP, industrial added-values of up-scale enterprises, fixed assets investment (excluding farmers) and the total retail sales volume of consumption goods. To improve the quality of statistical data on a period-on-period basis, a monthly, quarterly statistical survey system will be gradually established and the seasonal adjustment model and software will be improved in practice.

2.7 Adjusting the standard of up-scale industrial and investment statistics

With the sustaining and rapid development of economy and society, the scale of industrial enterprises and fixed assets investment has been steadily enlarged and the number of up-scale industrial enterprises and fixed assets investment projects has been multiplied. Meanwhile, economic operation has been noticeably accelerated and relevant departments have placed more demands on timeliness of statistical data. In this case, we need to adapt to the needs of the situation and to appropriately adjust the standard of up-scale industrial and investment statistics. In 1988, the standard of up-scale investment statistics was increased from the planned total investment of RMB 20 thousand Yuan to RMB 50 thousand Yuan, and was increased from the planned total investment of RMB 50 thousand Yuan to RMB 500 thousand Yuan in 1997. In 1998, the standard of up-scale industrial statistics was changed from the industrial enterprises at the town level or above to the industrial enterprises that the annual income of their main business has reached RMB 5 million Yuan. Since 2011, the standard of up-scale industrial statistics will be changed from the industrial enterprises that the annual income of their main business has reached RMB 5 million Yuan to the industrial enterprises that the annual income of their main business has reached RMB 20 million Yuan, and the standard of up-scale investment statistics will be increased from the planned total investment of RMB 500 thousand Yuan to RMB 5 million Yuan. After the standard of up-scale industrial statistics is raised, for the enterprises or entities meeting the standard, survey is made one by one; for others, a sample survey or scientific accounting is made. Raising the standard of up-scale industrial and investment statistics is an important measure for strengthening and improving the statistical work and improving the quality and timeliness of statistical data.

Figure1-7 show that the changes in key indicators of economic and social development in China since 2000.

3. Conclusion and outlook

With the improving of China's socialist market economic system and the rapid development of the economy and society, the statistic system and methods should also be changed accordingly. The official statistics has grown stronger in the course of reform and innovation. Practice has proved that the official statistics has well accomplished the censuses on the major national situation and strength, plentiful routine statistical survey and special survey and has provided a considerable amount of reliable statistical data and a solid guarantee for economic and social development.

Looking ahead, China's official statistics will closely be focused on improving our statistical ability, improving the quality of statistical data and raising the credibility of official statistics, will further promote the standardization, innovation and transparency of statistical work, concentrate on constructing four projects, including the database of directories of basic units, a system for using one set of statements for enterprises, software system of data collection and processing and a direct submitting system by internet, accelerate the statistical modernization and work hard to bring about a new situation of scientific development of statistics.

Appendix: The key indicators of economic and social development in China since 2000

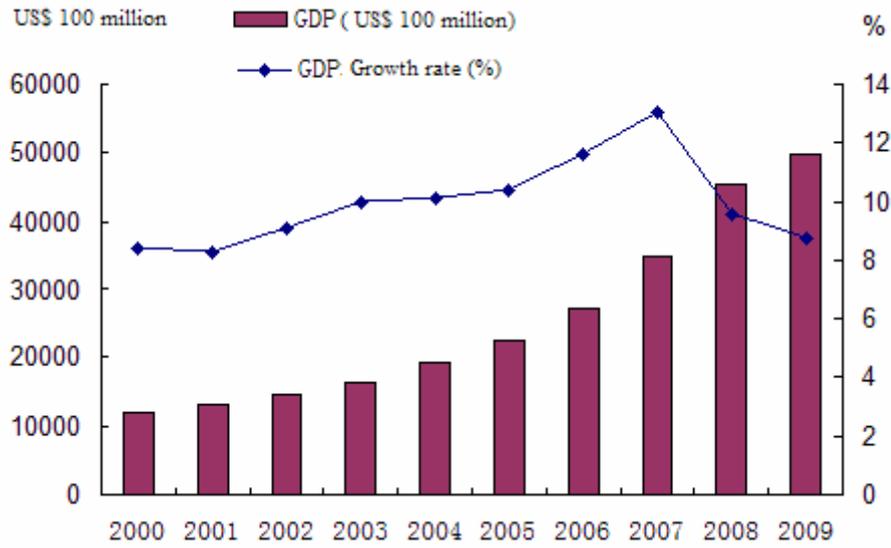


Figure 1 China's GDP and its growth rate (2000-2009)

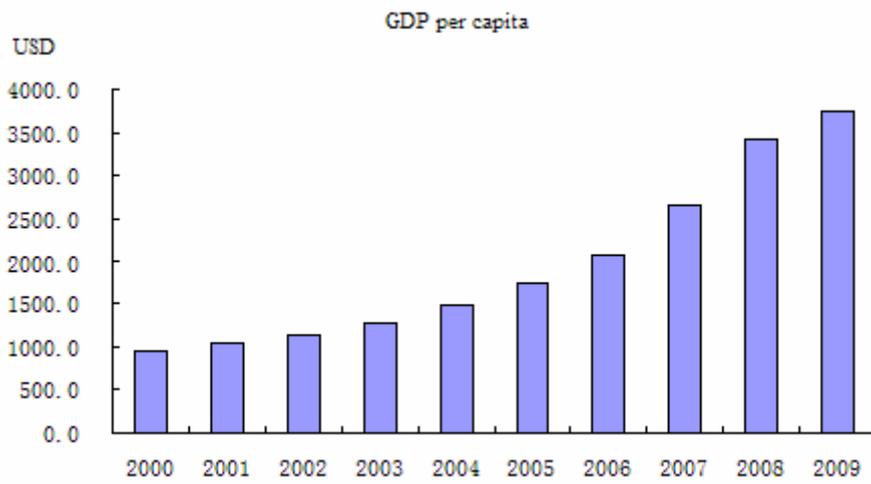


Figure 2 China's GDP per capita (2000-2009)

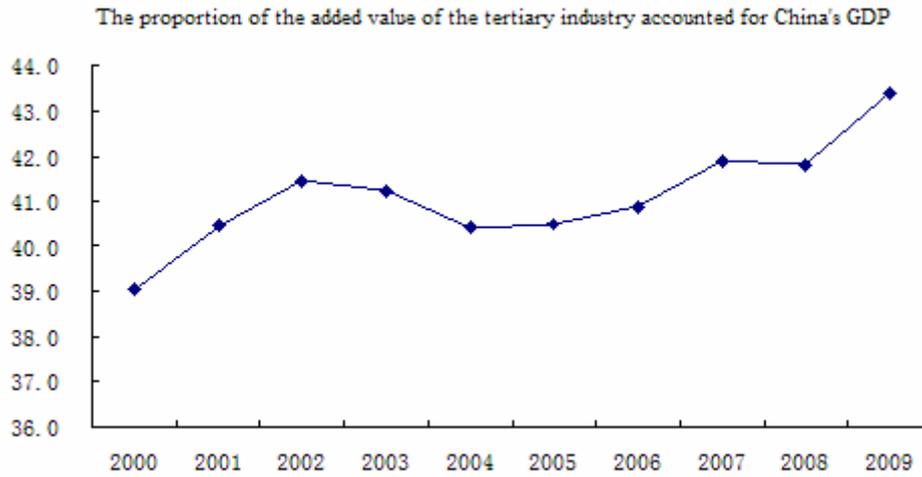


Figure 3 The proportion of the added value of the tertiary industry accounted for China's GDP (2000-2009)



Figure 4 Changes in China's key price index (2000-2009)

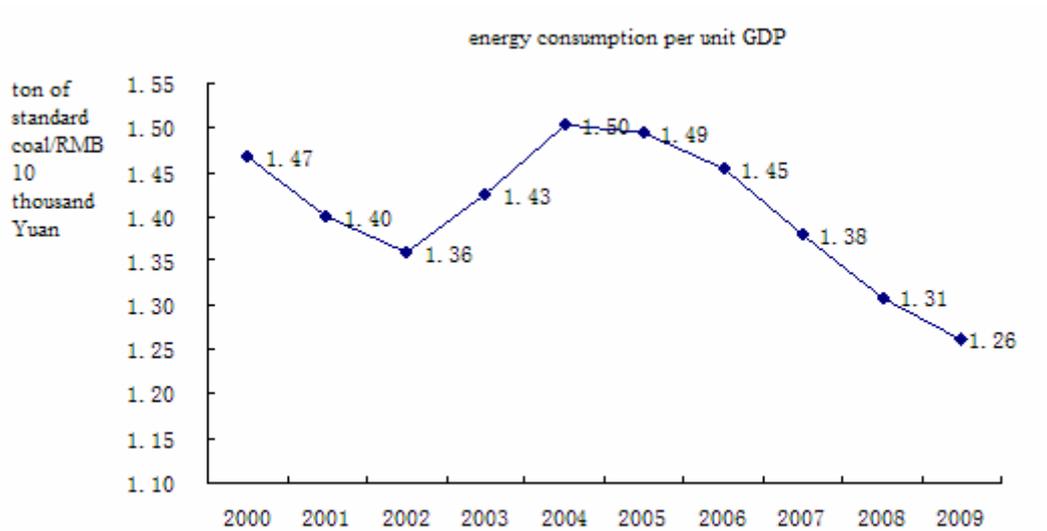


Figure 5 Changes in energy consumption per unit GDP in China (2000-2009)

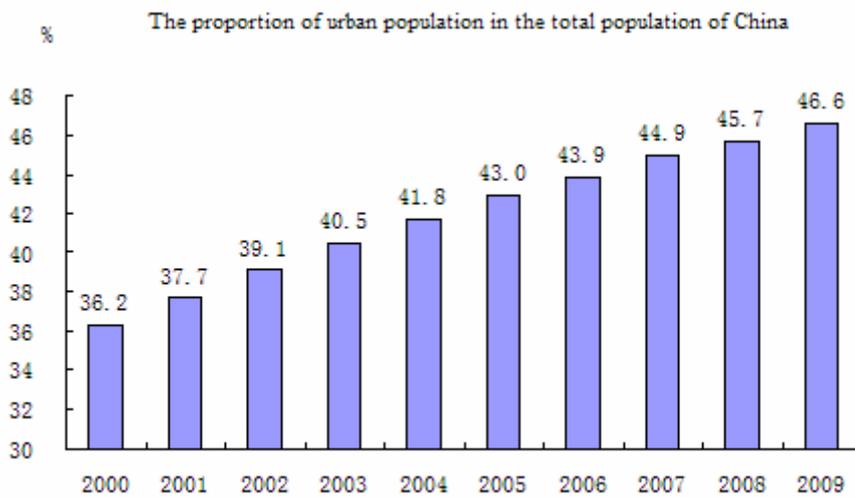


Figure 6 The proportion of urban population in the total population of China (2000-2009)

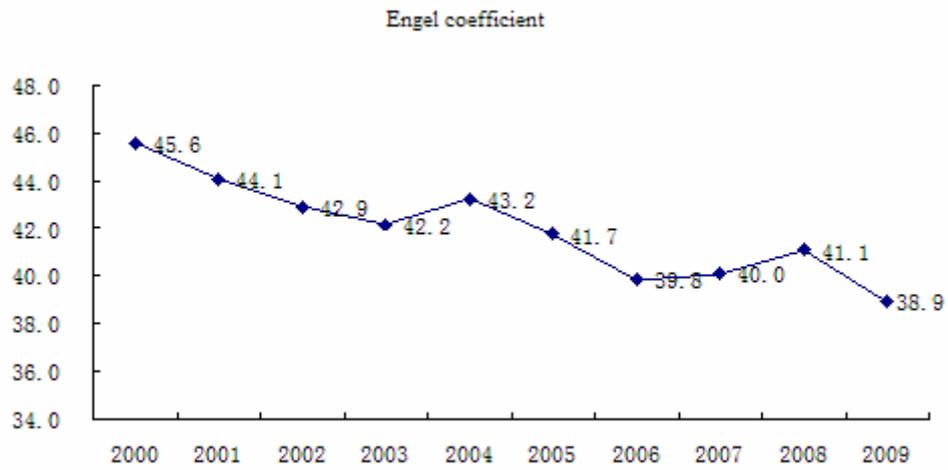


Figure 7 Changes in Engel coefficient in China (2000-2009)