

# **A Correlative Study on the Stability and Economic Growth of Large Enterprises in China's Provinces and Cities**

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**Abstract.** Economic growth is affected by many factors, and its own value also has great welfare value. This article will study the stability and economic growth of large enterprises in various provinces and cities of China according to the work of Kathy Fogel, Randall Morck, and Bernard Yeung. Based on the methodology of economic development data and stable data of large companies in the 44 countries and regions summarized by the former, this paper analyzes the economy associated with the stability of enterprises and the economic growth within a country through the data of 20 provinces and cities in the eastern and central China. The meaning of learning has drawn conclusions that are close to international studies. The rise of emerging industries on the one hand reflects economic growth. On the other hand, it also promotes growth through wealth creation in corporate development, reflecting the concept of technological progress.

## **Introduction**

Economic growth is affected by many factors, and its own numerical value also has great welfare value. Generally speaking, the stability of large companies represents the relationship between the bosses and emerging companies, which contains many factors such as market size, technological innovation, and government intervention.

Some people associate the stability of large enterprises with creative destruction and believe that creative destruction has promoted the development of the economy; others have linked the stability of large enterprises with government actions, and believe that the scale, governance goals, and legal system construction of the government have affected the stability of enterprises. This has affected economic growth; others have linked the stability of large companies with the internal industry structure of large enterprises, and believe that the financial development represented by financial companies will promote economic growth; similarly, some scholars use foreign companies. The stability of the firm as measured by changes in rankings of large companies reflects the economic growth driven by openness.

These logics are clear and concise. We conclude that there is a hypothesis that the stability of enterprises is negatively related to economic growth. The government factors, financial factors and open factors have affected the stability of the company. This article will analyze this hypothesis by analyzing data from 20 provinces and cities in China's mid-eastern China.

## **Literature Review**

There are two main contexts in the references in this article.

The first context is related to firm stability and economic growth. The creative destruction proposed by Schumpeter (1912) believes that the process of creative destruction is the birth of innovative new enterprises and the demise of old companies with old clocks. Aghion and Howitt (1992, 1998), Angeletos, Banerjee (2005) demonstrated the modelling of this theory. Roy Nelson and White (1982) explain that creative destruction is a collection of slow growth and resistance to changes in the old company.

At the same time, another part of economists believes that economic growth is in line with the interests of large companies. Chandler (1977) believes that large companies have better management standards. Holmstrom (1989) believes that large companies can provide financial

support for innovation and can Innovators provide occupational safety, Galbraith (1967) believes that large companies can use advertising shaping requirements, and Romer (1986) believes that large companies have scale innovation effects.

The second context concerns the theory of economic growth in this model. The economist Samuelson (1948) in his famous textbook on economics, *Economics*, said that economic growth means “a total output across a country Period growth is usually measured by the annual growth rate of a country's real GDP (or potential GDP). Professor of Economics Domar (1946) discussed the relationship between economic growth and investment in “Capital Growth, Economic Growth, and Employment”. Mankiw, Romer, and Weil (1992) studied the relationship between economic growth and technology. relationship. Barro and Sala-I-Martin (1997) explored the relationship between economic growth and trade.

In addition, because the data in this paper still needs to measure the capital stocks in China's provinces and cities, this article has also made a partial review of the relevant literature. The main method for estimating capital stock is the Perpetual Inventory Method (PIM) pioneered by Goldsmith (1951). He Juhuang (1992) separately estimated China's productive capital and unproductive capital stock. Zou (Chow, 1993) concluded that China's capital stock including land in 1952 was 175 billion yuan. Hu Angang (1999) estimated China's fixed capital stock in 1978.

## Data Selection

**Set the model.** (a) According to basic macroeconomic concepts, economic growth is related to the initial income level, initial stock of physical capital, and initial education level of labor. For the purpose of this study,  $w$  is added to the following regression equation as the enterprise stability level.

$$\text{growth} = \beta_0 + \beta_1 \ln(y) + \beta_2 \ln(k) + \beta_3 \ln(h) + \beta_4 w + \varepsilon \quad (1)$$

(b) According to previous scholars' discussion, this paper will mainly use the enterprise database data and the National Bureau of Statistics data to collect data.

(c) Because the creative destruction model of Bear Pitt mainly analyzes long-term data, this article imitates references and sets economic growth as the decade data of 2000-2010.

(d) According to the theory, economic growth is related to the province's initial per capita income level, so the model  $y$  is set as the province's initial per capita income in 2000.

(e) According to the theory, economic growth is related to the province's initial material capital stock, so the model  $k$  is set as the initial per capita fixed assets of the province in 2000.

(f) According to the theory, economic growth is related to the level of labor education in the province. Therefore, the  $h$  of this model is set as the initial level of education in the province in 2000, determined by the number of college graduates in the province.

(g)  $w$  As a measure of the instability of enterprises, to measure the changes in the status of large enterprises, this article simplifies the definition of large enterprise list and directly sends two levels of corporate status to the level of main business income of all provinces and cities. Then the instability degree is defined as 0, and all the top ten are changed. The instability is defined as 10, and between the two is equal weight.

**Data processing.** (a) Build top ten companies in major provinces and cities: This paper uses the data in the stata data table to extract the top 10 list of provinces' main business income by province and city. The data sheet contains more than 160,000 companies in 1999 and more than 330,000 companies in 2007. After using STTA to pick and fetch the corresponding organization code number, go to SAIC to verify the name of the company and compare it with it to calculate the stability of the large enterprise. In addition, due to the relatively long period of time between organization code numbers, some companies have not been able to obtain direct inquiries. This article will use other information in the data, such as the personal history of the chairman of the board, tax information, etc. Software website to be queried. See the appendix for more data on the top ten companies in representative provinces and cities.

(b) Estimation of Capital Stocks in China's Provinces and Cities. According to the definition in

the OECD Capital Measurement Manual, the calculation of capital stock is related to the concept of “output” included in the total fixed capital formation defined by the 1993 SNA. The capital stock here is equal to the tangible fixed assets and intangible fixed assets, plus the significant improvements of tangible non-production assets and the related costs of ownership transfer of non-produced assets. There are two ways to calculate the total amount of capital stock. One is that if there is a long enough sequence of total capital formation, use the death function to estimate the share of assets decommissioned near the average service life, given the useful life of the asset. The residual ratio of investment is calculated by accumulating the product of investment expenditure and residual ratio over the years to obtain the total capital stock. The other is the intuitive understanding of the total capital stock, which is equal to the total capital stock of the previous year plus the increment of the capital stock of the current year. This paper adopts the second method and draws the initial capital stock levels of provinces and cities according to Hu Chunlong's (2014) study, and brings it into the regression equation to make an estimate of the capital stock.

(c) Econometric analysis. This paper first uses the pearson correlation analysis to test the correlation between economic growth and firm stability. The negative correlation between stability and economic growth was found. Secondly, this article makes a regression based on the corresponding measurement model, and the regression result is not significant. It may be due to the fact that the ranking of the company does not remove the monopoly system such as steel and electricity, resulting in the change in the ranking of the company. In the future, we need to increase work in the area of growth accounting or in the ranking of companies. In addition, according to China's reality, future model analysis should include the analysis of the instrumental variables related to the impact of state-owned enterprise reforms and accession to the WTO.

Table 1 correlation between growth rate and stability of large companies

growth	w	
growth	1.0000	
w	-0.0161	1.0000

**Major findings.** (a) In the economic development of China from the 1990s to the 1990s, there emerged the replacement of the status of large enterprises, and the rise of a large number of emerging star enterprises made the list of large enterprises undergo a significant change from 1996 to 2007. However, traditional powers in many regions still have a place.

(b) In China's domestically developed provinces, the top ten companies usually maintain a 30% to 50% degree of overlap. With the rapid changes of large enterprises, during the period from 1996 to 2007, China's domestic metropolises generally achieved rapid economic growth. The relationship between these economic growth and stability is also clearly negatively correlated in the table.

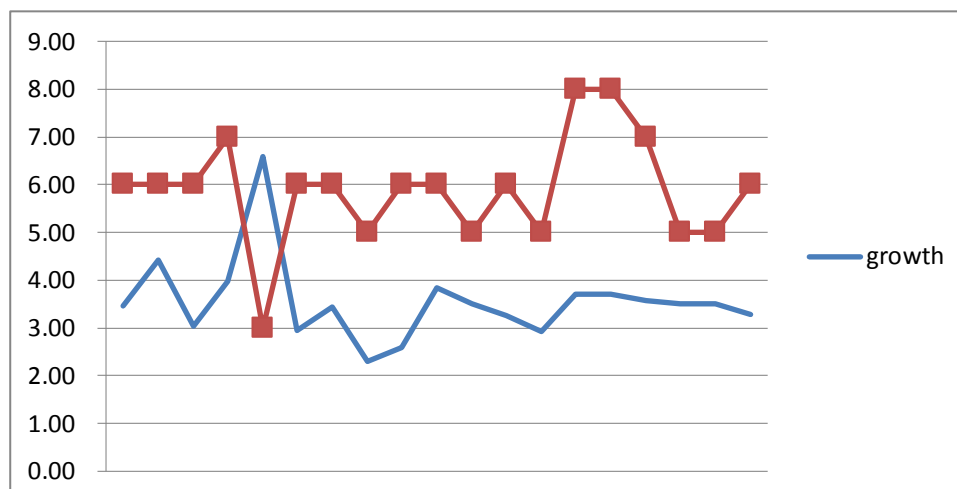


Figure 1. Finite growth rate and stability of large enterprises

(c) In the period of enterprise change during the period from 1996 to 2007, the mutual replacement of enterprise status mainly existed between different industries, reflecting industrial upgrading and technological progress.

(d) The change in the status of the enterprise was obviously affected by the internal integration of the state-owned enterprises. During this decade, the scale of large enterprises in the power, petroleum, and steel industries has grown at an alarming rate. At that time, the overheated economy and the state-owned enterprise system reform showed a Great relevance.

(e) In the corporate data of 1996 and 2007, the status of domestic manufacturing companies still plays an important role. The computer, petroleum, electric power, and automobile manufacturing industries were the mainstays of the company at that time.

## **Conclusions**

China's domestic economic growth and the stability of large companies also show a significant negative correlation, which is consistent with the conclusions of foreign country studies.

In the different lists for 1996 and 2007, the change in the industrial structure is an extremely obvious trend. The rise of emerging industries on the one hand reflects the demand effect caused by economic growth, and on the other hand also through the development of enterprises. Wealth creation promotes growth and reflects the concept of technological progress.

In the past decade of development in our country, theoretically speaking, government behavior, market size, financial development, and open policies all have an impact on economic growth and corporate growth. The impact of the above factors on the two at the same time explains to some extent the negative correlation between firm stability and economic growth.

## **The Highlights, Deficiencies and Future Directions of this Article can Continue to Explore**

(a) The highlights of this article .First, the concept is fair. Combining microscopic enterprise development with macroeconomic growth, exploring the relationship between national economic development and enterprise development will help all parties to correctly understand the rise and development of large-scale enterprises.

Second, the difficulty of this paper lies in a large amount of data processing. This article has compiled the rankings of the revenue rankings of enterprises in various major provinces and cities in different historical periods in the annex, and has contributed to the intuitive data.

(b) The aspects of this article that need to be deepened .First, the establishment of corporate instability is not very rigorous, and more large companies can be selected and ranked.

Second, due to data collection capabilities, this paper only selected the data from 1996-2007 to analyze and did not consider the data in other time intervals for analysis and comparison; the data in this paper adopted in 1996-2007 was subject to state-owned enterprise reform and Due to the impact of WTO entry, this article failed to find a suitable method for quantitative analysis;

Third, this paper does not discuss the classification of state-owned enterprises, foreign-funded enterprises, and financial enterprises. The structural analysis of the changes in the status of enterprises is somewhat insufficient.

Fourth, the other aspect not discussed in this paper is the similarities and differences between domestic analysis and international analysis. Because the domestic elements can be easily distributed and the traffic is more convenient, the difference in the province of the establishment of the enterprise should be related to the country. Differences have different mechanisms and can be further explored.

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