

Study on the Relationship between Financial Development and Economic Growth

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Abstract. Judging from the existing research on the relationship between financial development and economic growth, most of the research is "supply-guided" in terms of methods. Few people study the problem from the perspective of what kind of financial development is needed in economic growth. This paper measures the development of indirect finance by the variables of the bank, measures the development of direct finance by the variables of the stock market, and compares the causal relationship between the development of financial intermediation in economic development, stock market development and GDP growth. This paper puts forward a theoretical framework for the analysis of financial development from the perspective of economic growth. The endogenous growth model in economic growth theory endogenous knowledge innovation and human capital on the basis of Solow model, better explain the problem of capital marginal return does not decline. The conclusion of this paper is consistent with the basic situation of our country in the transition from a transitional economy to a mature market economy, and provides strong support for both the supply-led hypothesis and the demand-compliance hypothesis.

Keywords: Financial Development, Economic Growth, Multiple Equilibrium.

1. Introduction

The relationship between financial development and economic growth has always been one of the central topics of economic research. A good financial system can lead capital from inefficient investment to efficient investment, thereby enhancing the overall efficiency of investment [1]. The history of economic development contains many examples of the relationship between financial development and economic growth. More and more economists believe that financial development plays an important role in promoting economic growth. Therefore, how to promote the sustained and balanced economic growth is the core issue in the field of economics research [2]. The economic growth of a country depends on the country's capital accumulation, resource endowment, technological innovation, labor education level and industrial structure, social system, growth model and many other factors [3]. Financial institutions can provide appropriate and appropriate payment tools to make social payment functions more complete. Financial institutions, as intermediaries of savers and investors, re-loan savings deposits to enterprises for investment, forming so-called "productive capital" [4]. Therefore, we may use the corresponding technology to determine the relationship between these variables, so that we can grasp the law of economic development in more depth, and grasp the law is the basis for formulating the correct policy.

In recent years, many scholars have studied the relationship between China's financial development and economic growth, and have drawn many valuable conclusions, but the role of China's financial development in economic growth has not been fully investigated [5]. To this end, we need to prove the existence of multiple equilibriums and describe their dynamic characteristics under the condition of endogenous growth under the condition of general equilibrium of the three sectors; The second is to test the existence of the multiple equilibrium relationship between financial development and economic growth by using the sample data of our country and give the critical region. This paper insists on the Marxist labor value theory that labor creates value from the research point of view. The reason of economic growth can ultimately be attributed to the effective labor paid by workers, which can also explain the economic growth differences in different regions.

2. Methodology

In dynamic equilibrium economic analysis, the method of modeling is usually to select the object of economic subject concerned according to the needs of economic analysis, and then to analyze their respective economic optimization behavior. Financial correlation ratio is used to measure regional financial deepening. When comparing the level of financial development between countries or regions, financial growth is usually used as an alternative indicator of the level of financial development. The correlation among these indicators can be verified and compared with each other [6]. The advantage of the first method is that multiple indicators can be selected to measure financial development and economic growth at the same time. It is simple to operate and convenient for qualitative analysis. The degree of correlation can be obtained from the degree of correlation. It is generally believed that the measurement of financial intermediaries using quasi-currency is more accurate because it excludes cash and demand deposits in the money supply, and these two components of the total money supply are often viewed as currency transactions rather than asset demand. Using various dynamic analysis tools to examine the characteristics of equilibrium stability, we will follow this modeling approach here. This variable measure how much credit and currency created by financial institutions have an impact on actual output. In terms of data processing, because financial assets, direct financing and indirect financing do not have complete statistics, this paper uses stock financing to represent this indicator than nominal GDP.

Assuming that the consumer's substitutional elasticity is constant at different times in the steady state, the consumer's utility function can be taken as the following constant relative risk aversion utility function:

$$u(c) = \frac{c^{1-\gamma}}{1-\gamma} (\gamma > 0, \gamma \neq 1) \quad (1)$$

The transformation from savings to investment by financial intermediaries can be expressed by the following first-order homogeneous functions:

$$S(t) = \frac{y(t)}{l} \quad (2)$$

Financial development is achieved through the expansion of financial market scale and the intensification of financial market competition. Similar to the case of the manufacturer, under the assumption that the expansion of the savings scale only leads to the increase of labor, the first-order homogeneity of the available function can be exploited:

$$R_j = \frac{f_{ij}}{T_j} \times S_j \quad (3)$$

Let the convergence behavior of the economy near the i th stable equilibrium point be described by the following step-by-step adjustment model:

$$S_j = \frac{1}{\sum_{i=1}^n (S_r)}, (0 < (S_j) \leq 1) \quad (4)$$

Therefore, after properly deforming the above formula, we can set the model to be estimated as follows:

$$D_j = \sum_{i=1}^n (H_p \times V_p) \quad (5)$$

Figure 1 below, for example, shows income levels from low-income countries to high-income countries. Point A represents the lowest-income countries and point B represents the highest-income nationals. From one point to another, all points can reflect a country's income.

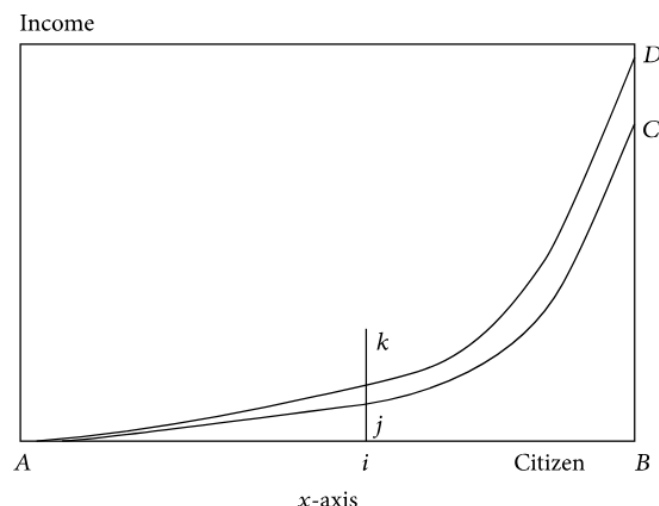


Fig. 1 The order of citizens on the x-axis can (and probably will) change from one year to another

To internalize financial development, build an endogenous model based on endogenous economic growth theory. According to the endogenous economic growth theory, the internalization of the indicator variable of financial development is taken as an independent variable, and the influence mechanism of the financial development index variable on the economic growth indicator variable is analyzed. In underdeveloped countries, domestic credit is mainly used to finance the investment activities of domestic enterprises, and it represents the single most important source of investment funds. Therefore, we assume that the economy consists of three sectors: consumers, financial intermediaries, and vendors, given their initial resource endowments and technical constraints. The larger the ratio, the larger the size of the stock market, and vice versa. In theory, the size of the stock market is positively correlated with the difficulty of raising funds, and has a close positive correlation with the ability of risk diversification. Individual pursues the maximization of consumption utility in the whole life cycle. Individual consumption function depends not only on the current income, but also on the property he owns. Combining qualitative analysis with quantitative analysis, the correlation between financial development and economic growth is verified by mathematical analysis and empirical analysis. All the main indicators of financial development have shown significant growth, and the growth rate of financial development is faster than that of the real sector. If there is a consistent time path between real per capita GDP growth rate and real per capita consumption growth rate, it would be redundant to take real per capita consumption growth rate as the explanatory variable.

Economic growth is measured by the average per capita real GDP calculated by the number of employed persons. As far as indirect finance is concerned, the proportion of money supply to nominal CDP is used as an index to measure "financial deepening". Through the change of employment structure and savings scale, the real economic sector can influence the intermediary income and wage rate of financial intermediaries, thus establishing a link between the real economy and financial development. The increase of financial assets means the increase of wealth. Financial development makes the capital market more mature and developed. Under the condition of mature and developed capital market, financial assets can magnify the wealth effect and thus increase household consumption. By constructing a financial development indicator system with multiple indicators, the financial development index obtained by comprehensively assessing the level of financial development using factor analysis can reflect the overall level of financial development more realistically and comprehensively from various aspects of financial development. High liquidity can reflect low transaction costs. Although a large stock market is not necessarily a liquid market, it can directly measure the degree of enthusiasm of market transactions from liquidity indicators. On the one hand, the penetration, influence and driving force of finance on the technological innovation process is getting stronger and stronger. The development of finance itself has formed the necessary basic conditions for technological innovation and development; on the other hand, technological progress has become an important material for financial development. Means and support space.

3. Result Analysis and Discussion

Economic growth is a prerequisite for social development. In economics research, economic growth theory is also the core issue in the field of economics. In a smooth time series, if an external shock is encountered, it will only have a temporary effect. Over time, the effect of the impact will disappear, and the time series will return to the long-term equilibrium level. The factors affecting economic growth can be divided into two levels: First, basic factors, such as labor, capital, land resources, etc., the increase of these factors can directly form economic growth, called input factors; the relationship between the two will exceed an instability. The equilibrium point, along the incremental trajectory, achieves equilibrium at a high level of equilibrium. In the long run, the causal relationship between GDP growth and the development of financial intermediaries and stock market still exists, and the development of financial intermediaries and stock market is also the cause of GDP growth. The relationship between mechanism factors and economic growth is affected by time and space changes, which is uncertain and time-sensitive. Sometimes it has a positive impact on growth, sometimes it may have a negative impact. The impact of mechanism factors on economic growth is not always positive. At the present stage of China's economic development, we should pay more attention to the internal quality of economic growth while realizing the scale of economic growth by means of financial expansion.

The break point test of the parameter estimates of the relationship model between financial development and economic growth based on theoretical analysis shows that there is indeed a multiple equilibrium between financial development and economic growth in China. As far as China's experience is concerned, with the deepening of the marketization process, the development of the stock market has not greatly affected the role of financial intermediaries in promoting economic growth, reflecting the immaturity and irregularity of China's financial market. Effective labor is the direct embodiment of the quality of workers, the quality of workers is the most basic factor of economic growth; the quality of labor tools is the lever of labor to become effective labor, through which unit output labor can be saved. Financial development diversifies asset portfolios, which can reduce investment risks for savers and provide them with more options for increasing returns; financial development requires the disclosure of investment project information to reduce the cost of information collected by investors, which proves the promotion of financial development. Economic growth. The correlation coefficient of capital formation is positive and is statistically significant in each case. However, the coefficient of labor not only shows negative signs in each case, but also its statistical significance is low. Therefore, it is not advisable to use a single equation to measure the relationship between financial development and economic growth in a long sample interval. The correct method is to first determine the equilibrium interval between the relationship between financial development and economic growth, and then the measurement is performed separately in the interval section.

Although financial development cannot become a new economic growth point in the short term, it should also be reformed to promote long-term equilibrium of economic growth. Efforts should be made to create an environment for endogenous development for financial intermediation and financial markets, and to improve the efficiency of financial intermediation. The productivity of a society is not only the result of the accumulation of material wealth, but also the accumulation of human spiritual wealth such as science and art, state and social systems, intellectual cultivation, and inventions. Financial development promotes economic growth, emphasizing that financial services supply precedes demand; demand compliance means that financial development is only a passive development of economic growth under the demand for financial services, emphasizing that as the economy grows, there will be demand for financial institutions and financial services. With the wide application of science and technology in the field of production, the position and role of labor force in economic growth is becoming increasingly important. In addition, because different variables have been used in previous studies on the relationship between financial development and economic growth, the conclusions on whether there is a causal relationship between financial development and economic growth and the direction of causal relationship are different. Finally, it should be noted that our analysis and conclusions on the relationship between financial development and economic growth

in China are based on the two measurement indicators we selected, and the relationship between these measurement indicators may not be able to fully infer the relationship between financial development and economic growth.

4. Summary

Following the main line of increasing effective labor wealth, this paper theoretically and empirically analyses the relationship between financial development and economic growth by analyzing the different effects of input factors and mechanism factors on economic growth and historical data of economic development. Insurance industry plays the most important role in promoting economic growth, followed by banking industry and securities industry. More specifically, the correlation between financial scale and economic growth is weak, and there is no causal relationship. Government expenditure can improve investors' expectations and play a leading role in the process of expected effects. The institutional environment is the most important factor for rapid economic growth. On the contrary, economic growth has not promoted the development of the banking industry; the correlation between the development of the securities industry and economic growth is also strong, and economic growth is the reason for the development of the securities industry. The results of the causality test provide strong support for the supply-led hypothesis that financial development promotes economic growth and demand compliance hypothesis that economic growth leads to financial development, and the results are mixed. The financial function of the financial market's financial market can promote economic growth and improve the financial market system; enable the financial industry to play its financial and financial functions to better promote economic growth.

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