

## Positive fiscal policy from the perspective of inflation - evidence from China

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**Abstract:** Generally speaking, fiscal policy is an economic policy in which the state or government uses various financial instruments to achieve certain fiscal goals. It can be seen that fiscal policy is a collection of fiscal policy subjects, fiscal policy instruments, and fiscal policy objectives. The purpose of this paper is to examine the effectiveness of China's fiscal policy in recent years, especially the definition of positive fiscal policy in recent years, to test the effectiveness of the policy tool itself and the realization of the goal and possible follow-up in the process of policy transmission. Influencing research to provide a reasonable reference for the formulation and implementation of China's fiscal policy in the future.

### 1. Introduction

As we all know, in 1929, Western countries were generally caught in the Great Depression. In this context, John Maynard Keynes (1883-1946) observed the social phenomena and government policies and combined his own understanding of economic theory in 1936. In the year, he published the *General Theory of Employment, Interest, and Money*. In this book, Keynes denied the view of traditional economics. He pointed out that the so-called equilibrium in traditional economics was based on the false employment theory of supply itself to create demand. This is only suitable for special circumstances, and usually, it is less than the equilibrium of full employment. Therefore, his employment theory is the general theory, that is, general theory, which can explain the situation of full employment and explain the situation less than full employment. Keynes pointed out that the root cause of this situation is the lack of effective demand, and the level of employment in a country is determined by effective demand. Effective demand refers to the total demand when the total supply price of goods and the total demand price reach equilibrium, and the total supply will not change greatly in the short term, so the employment level actually depends on the total demand or effective demand. Therefore, only abandoning the traditional economic theory, abandoning the traditional *laissez-faire* fiscal policy, using active fiscal policy and active monetary policy can ensure that the effective demand is at a sufficient level, and the government intervenes in economic theory to lay the theoretical foundation. However, along with the widespread "stagflation" in Western countries in the 1970s, namely, stagnant economic growth, increased unemployment, and inflation, many schools have questioned Keynesianism.

Since then, the debate about whether countries or governments should follow relatively fixed policy rules or to use government policies to make camera decisions based on economic development has never stopped. From different economic theories, there are different developments. Discussion of the way.

Market mechanisms play an important role in the economic development of a country or region. Lucas further developed into a rational expectations school based on Friedman's liberal monetary theory, based on a critique of the effectiveness of policy implementation (Robert Lucas, 1976), Kydland and Prett. Edward Prescott (1977) developed a theory of real economic cycles, as well as a dynamic inconsistency study of camera choices, and a quantitative dynamic stochastic general equilibrium model (Finn Kydland and Edward Prescott, 1982). Lucas criticizes the continuous improvement of the quantitative general equilibrium model, taking into account the incomplete market, price rigidity and other market factors of financial markets (Cooley, 1995). These models strictly define the ideal fiscal policy. However, it should be noted that intertemporal distortions will

have different effects on the GDP of different countries in the future. Therefore, in order to achieve the best possible results, fiscal policy must reduce intertemporal distortions.

## 2. Review of fiscal policy types

The non-Keynesian effects of fiscal policy mean that expansionary fiscal policy can not reduce private consumption or total social demand, and thus inhibit economic growth, which means that the multiplier effect of government expenditure is zero or negative. The most classic negative financial multiplier representation theory is the Barrow-Ricardo equivalence principle. In the early 19th century, Ricardo mentioned in "Political Economics and the Principles of Taxation": "Under certain conditions, whether the government adopts bond financing or tax financing, the effect is the same or equivalent: tax financing Fundraising with bonds is not the same on the surface, but in reality, government-issued bonds will need to be repaid in the future and will result in higher taxes when repaid." In 1994, Barro published "Do government bonds are net wealth? In the article, the Ricardo equivalent is re-improved, that is, if the consumer has rational expectations in the intertemporal neoclassical growth model, then whether the government adopts bond financing or tax financing will not affect the variables in the economic system. (such as consumption, investment, prices, output, and interest rates), this is the famous Barrow-Ricardo equivalent proposition.

From the current relationship between economic growth and future debt, the fiscal policy of the fiscal authorities can be divided into two types: Ricardo's fiscal system and non-Ricardo financial system. The former emphasizes that future taxation should be used to pay off debts. The latter does not emphasize the use of future taxation to pay off debts. It describes how fiscal authorities can achieve debt sustainability and price stability by adjusting fiscal surpluses. It is the rule that the government's fiscal surplus responds to the debt gap (Leeper, 1991, 2011). The basic meaning is that when the government's national debt balance exceeds the set national debt balance target, the government needs to adopt measures such as tax increase to adjust the fiscal surplus to ensure the sustainability of debt and price stability. In addition, fiscal policy rules can also be expressed as rules for government taxation to respond to debt gaps (Leeper, 1991, 2011), which is in the form of fiscal surplus.

$$s_t = s^* + \alpha(b - b^*) \quad (1)$$

$$s_t \equiv \tau_t - g_t \quad (2)$$

$s_t$  is the government's fiscal surplus (deficit),  $s^*$  is the equilibrium fiscal surplus,  $b$  is the government debt balance,  $b^*$  is the equilibrium government debt balance,  $\tau$  is the actual government tax, and  $g_t$  is the actual government expenditure. Suppose the fiscal authority finances the actual government expenditure  $G$  for each period by means of taxation and issuance of public debt. In order to simplify the analysis, it is assumed that the public debt mainly includes the risk-free nominal treasury bill of the first period, then the government's cross-time budget liability constraint, etc. The formula can be expressed as:

$$b_{t+1} = (1+r)b_t - (1+r)s_t \quad (3)$$

It indicates that the next period of debt is used to repay the current debt balance after the current fiscal surplus has been used. After finishing, you can get the following formula:

$$b_{t+1} = (1+r)(b_t - s_t) \quad (4)$$

$$\lim_{T \rightarrow \infty} \frac{b_T}{(1+r)^{T-t}} = 0 \quad (5)$$

Where  $b_t$  is the actual balance of the national debt at the beginning of the period  $t$ ,  $b_t \equiv \frac{B_{t-1}}{P_t}$ , (4)

The formula is the cross-sectional condition. Substituting equation (1) into equation (4) can be

obtained:

$$b_{t+1} = (1+r)(1-\alpha)b_t + (1+r)(\alpha b^* - s^*) \quad (6)$$

Woodford (1998) argues that the Ricardo system can be replaced by a local Ricardian system in which the actual government debt balance converges to a finite value. When  $| (1+r)(1-\alpha) | < 1$ , the fiscal policy rule (5) converges to a finite value, and this fiscal system is called the local Ricardo fiscal rule. When  $| (1+r)(1-\alpha) | \geq 1$ , fiscal policy rule (5) is called the non-Ricardo financial system.

### 3. China's fiscal policy development at different stages

Fiscal policy has different orientations at different stages of economic development, namely, expansionary fiscal policy, tight fiscal policy, and neutral fiscal policy. According to Keynes's macro-control thinking, the camera selection policy should exhibit significant counter-cyclical adjustment characteristics. That is to say, when the economy goes down, the government should adopt an expansionary fiscal policy to achieve recovery, and when the economy prospers, adopt a tightening policy to prevent the economy from overheating. Countercyclical fiscal policy has always been seen as a more scientific policy tool in social development. Because policy instruments (including taxation, fiscal expenditure, etc.) can effectively smooth economic fluctuations, and thus achieve long-term sustainable economic development.

Through fiscal policy to adjust economic fluctuations, mainly from the two main directions of fiscal revenue and fiscal expenditure: from the perspective of fiscal revenue, the government can influence exports through adjustment of export tax rebates, tariff rates, etc., through tax incentives, land preferential policies and other measures. To influence investment, influence consumption through measures such as consumption subsidies and reduction of turnover tax. From the perspective of fiscal expenditure, the government's active adjustment ability is stronger, and the effect on the economy is faster. Fiscal expenditures are mainly divided into consumer expenditures, investment expenditures, and transfer payments. China's fiscal policy stimulates the economy to be dominated by investment expenditures. On the one hand, it can promote structural industrial adjustment and development, on the other hand, it can directly affect the economic aggregate.

In 2018, China's public finance expenditure exceeded 22 trillion yuan, accounting for about 25% of GDP. If the land transfer income, city investment bonds, PPP, government guidance funds, etc. are not narrow-minded, the government still has a large influence. The proportion will be further increased. According to the latest data, from the perspective of GDP, the proportion of government consumption expenditure and infrastructure investment directly related to finance has reached 35.84% in 2017. Judging from the historical data, the proportion of the sum of the two in GDP has been increasing year by year.

Looking at the changes in fiscal policy from a long-term perspective, since the tax reform in 1994, the orientation of China's fiscal policy can be roughly divided into four stages: The first stage is 1994-1997, and the state adheres to a moderately tight fiscal policy, mainly to Suppress economic overheating and inflation in the first half of 1993.

The second phase, from 1998 to 2004, implemented a proactive fiscal policy aimed at expanding demand. After the Asian financial crisis, external demand has decreased significantly. Faced with the tide of corporate closures and the pressure of output and employment, the fiscal policy has shifted to: first, expanding infrastructure construction expenditures and issuing additional national debts; second, increasing export tax rebate rates and lowering some tax revenues; The third is to reform the income distribution system and focus on raising wages and expanding domestic demand. A proactive fiscal policy has been implemented until 2004.

The third stage is 2005-2007, and the fiscal policy is relatively stable. During the period, China's economy was partially overheated, but overall kinetic energy was insufficient, and inflationary pressures remained but not serious. Therefore, a sound fiscal policy came into being.

The fourth stage is the proactive fiscal policy from 2008 to the present, mainly to hedge against

the global financial crisis and the economic downside risks caused by the decline in external demand. This active fiscal policy comprehensively uses two types of policy instruments: reducing fiscal revenue and expanding fiscal expenditure. In terms of reducing fiscal revenue, substantial tax reductions and reductions, including raising export tax rebates, lowering home and car purchase taxes, raising personal income tax thresholds, canceling and phasing out 100 administrative fees, etc.; The 4 trillion economic stimulus plan has expanded government investment on a large scale, and local governments have used various means to achieve indirect fiscal expansion.

During the two rounds of fiscal policy expansion (1998-2004 and 2008-present), the fiscal policy stability period (2005-2007) is moderately tight (1994-1997) for the difference between fiscal expenditure growth and income growth. Year) The average level is high.

#### **4. Definition of active fiscal policy**

In macroeconomic theory, the different mechanisms of active fiscal policy can be divided into two kinds of fiscal policies: automatic stability and camera choice. The automatic and stable fiscal policy can automatically play a role in the unstable macroeconomic situation, so that the macroeconomy tends to be stable, and the effect of its "inner stabilizer" can produce direct regulatory effects under certain conditions; the fiscal policy of camera choice It refers to the government's initiative to choose different types of anti-economic cycle fiscal policy tools based on the economic situation in a certain period of time to alleviate the economic situation of output fluctuations. Among them, the government's active use of camera choices in fiscal policy (often through close attention to economic development and the use of taxation, government spending, issuance of national debt, implementation of loose monetary policy and import and export policy means to achieve macro-control objectives) is called Positive fiscal policy.

As a choice of policy measures, whether a proactive fiscal policy may be expansionary or deflation depends on the specific economic situation and the objectives to be achieved. Whether it was the domestic economic recession in 1998 and the negative impact of the Asian financial crisis, or the impact of the 2008 world financial crisis, the Chinese government did not call it a proactive fiscal policy when adopting countercyclical policies. It is called a positive fiscal policy. Of course, Chinese scholars have more choices for this word and have made their own interpretations.

#### **5. Active fiscal policy and inflation**

Some scholars believe that a proactive fiscal policy is a means for the government to achieve stable economic growth through active fiscal policies. The means of economic expansion are mostly fiscal deficits and government liabilities. If there is no limit to expansion, inflation risks will arise. The government may have a certain degree of inflation risk in the case of a proactive fiscal policy. This is mainly based on the government's implementation of active policies that will promote the expansion of total social demand, which may lead to demand-driven inflation. Based on the expansion of the public sector deficit, the government will be relatively difficult to borrow abroad. The government-issued government bonds will be mainly purchased by the central bank. On the formation of the government through the central bank currency issue to increase public sector deficit financing, resulting in increased money supply in the market, which in turn generates a certain inflation risk. In addition, when the government debt is borne by the national debt, if the government does not borrow money to directly expand the currency issue to achieve fiscal deficit financing, the risk of inflation will increase. Some scholars also oppose the view that China's active fiscal policy has no inflation risk, and there is no significant correlation, and there is no Granger causality, which shows that positive fiscal policy is not the main reason for domestic inflation. On the contrary, through active fiscal policy, increased support for economic restructuring and industrial upgrading, and promotion of technology research and development and infrastructure improvement, it can effectively promote the increase of total social supply and effectively curb inflation. Some scholars also believe that there is a certain relationship between inflation and positive fiscal policy in China, mainly because the ratio of inflation has a negative correlation with

the degree of expansion of positive fiscal policy, which indicates that when appropriate fiscal policy is adopted, domestic currency is used. The rate of expansion may be effectively lowered to curb inflation. However, the realization of this ideal situation must be based on the support of active fiscal policy, effectively improve the total supply of society, especially the industrial sector structure of the current overheated investment, more funds flow to the industrial restructuring, and promote social employment to promote the economy. Under the premise of growth, this is also the key issue that China needs to pay attention to when implementing a proactive fiscal policy. On the whole, positive fiscal policy can promote economic development, promote employment, promote domestic demand growth and increase social supply to a certain extent, and there is the possibility of inducing inflation, but the degree is less than the possibility of economic growth. Therefore, in the long run, the implementation of active fiscal policy has strong feasibility. For the inflation that may be induced, we should focus on analyzing the growth of total social demand, and adopt a comparative analysis of potential output and potential demand to determine the positive fiscal policy. Policy-oriented, formulate policy content suitable for economic restructuring and balanced economic development while taking into account economic growth and curbing inflation. On the other hand, government expenditures mainly come from taxes. By increasing government spending, it mainly increases government purchases of goods or services and services. In this way, on the one hand, the government expenditure in the total social demand can be partially increased, thereby directly increasing the total demand. On the other hand, it can also stimulate private consumption and investment, and indirectly increase aggregate demand. Moreover, under the effect of government expenditure multipliers, increasing government spending can also cause multiple increases in national income and employment. When the industrial structure and product structure are unbalanced, and inflation and economic stagnation coexist, the primary goal of the government to regulate the economy is to adopt a loose fiscal policy and a tight monetary policy coordination model to control “stagflation” and stimulate economic growth.

## **6. Conclusions and policy recommendations**

In 2018, the moving average of the difference between fiscal expenditure and income growth has fallen back to the level of fiscal policy stability, mainly due to the growth of public finance revenue in the first half of the year by 10.6%, especially the tax increase of 14.4%, but the fiscal expenditure only increased by 7.8%. For half of the tax growth rate. In the same period of 2017, the fiscal expenditure growth rate reached 15.0%, which was 6.0 percentage points faster than the fiscal revenue growth rate. At the same time, in the first half of 2018, fixed assets investment in 10 provinces and cities fell to negative growth, and the issuance of new local bonds also fell sharply. Therefore, the State Council executive meeting in July 2018 and the Political Bureau of the Central Committee stressed the need to adhere to the implementation of a proactive fiscal policy, which should play a greater role in expanding domestic demand and structural adjustment. Since then, the financial cycle has begun to turn heads. The Central Economic Work Conference at the end of 2018 and the 2019 Government Work Report further emphasized that active fiscal policies should be strengthened.

Therefore, according to the current situation of China's fiscal policy, the following suggestions are proposed for the future fiscal policy:

- 1) Since China does not clearly define the functions of the government and the market, the development of the national economy requires a proper macro-control system and government intervention. The market is carried out separately through multiple functional departments, so fiscal policy is generally not possible to implement independently. For China, the government deficit is a very common phenomenon, so the Chinese economy also has the root cause of inflation. Since tax cuts and increased public spending are the most important policy tools for active fiscal policy, both tools will continue to expand the deficit size, and the expansion of the deficit to a certain extent will lead to inflation. Therefore, the active fiscal policy cannot be implemented continuously, otherwise, it will definitely cause inflation to occur, which in turn will affect the stability and development of the economy.

2) Implementing fiscal policies such as tax cuts and increased fiscal expenditures, but it is necessary to cooperate with the use of tight monetary policies to help curb inflation. At the same time, we should also pay attention to the structural adjustment function of fiscal policy, optimize the industry and product structure, promote economic growth, and alleviate stagflation. The continued implementation of a proactive fiscal policy has undermined the fiscal balance to a certain extent and needs to be transformed into a sustainable neutral fiscal policy. Since the beginning of the year, China has implemented a proactive fiscal policy to cope with the deflation of domestic exports after the Asian financial crisis. The continuous issuance of constructive national debts to stimulate domestic demand and guide the Chinese economy to gradually move out of the cyclical downturn and achieved good results. However, the active fiscal policy is mainly based on the issue of social supply and demand. It is only a special measure within a certain period of time. It is not sustainable in itself. It needs to be faded out at an appropriate time according to changes in objective economic conditions.

3) On the one hand, the dependence between China's national debt repayment rate and central debt is rising, and it also exceeds the international "warning line". The positive fiscal policy stemming from continuous implementation has accumulated financial risks; if it continues, It may trigger a government debt crisis and even lead to social unrest and political instability. On the other hand, expansionary policies cannot always be used during the period of macroeconomic cycle economic recovery and prosperity. As government investment has succeeded in stimulating private investment, China's economic growth has entered another round of rising channels. The problem of deflation caused by insufficient demand has been resolved, and positive fiscal policies should be faded out in due course. Therefore, it is necessary to reduce the scale of new government bonds as much as possible while ensuring the necessary funding needs, slow down the progress of expenditures, and shift to a balanced neutral fiscal policy in due course.

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