

# Comparative analysis of the BRICS Trade

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## Abstract

This article analyzes how economic growth, economic population, budget deficit, disposable income per capita and currency affect the theoretical scale of a country's trade with traditional economic perspective. The study found that China owns the strongest trade competitiveness in the "BRICS" five countries, the second is Russia. India, Brazil and South Africa are respectively after that. From the point of view of trade competitiveness, though economic population, economic growth, and fiscal deficit on China trade scale role better than the rest of the four countries, but the disposable income per capita in South Africa have the greatest positive affect of foreign trade scale, and almost no impact to China. In addition, the exchange rate appreciation for China's foreign trade scale of most negative effects. In the short term, therefore, China could continue to maintain strong trade competitiveness, but not necessarily if in the long run..

## 1 Introduction

BRICS is the acronym for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa. The group was originally known as "BRIC" before the inclusion of South Africa in 2011. The BRICS members are all developing or newly industrialized countries, but they are distinguished by their large, fast-growing economies and significant influence on regional and global affairs; all five are G-20 members. Since 2009, the BRICS nations have met annually at formal summits. Russia Currently holds the chair of the BRICS group, and hosted the group's seventh summit in July 2015.

As of 2015, the five BRICS represent over 3 billion people, or 42per cent of the world population; all five members are the top of the world by population, and four are in the top 10. The five nations have a combined nominal GDP of US Dollar16.309 trillion, equivalent to approximately 20 per cent of the gross world product, and an estimated US Dollar4 trillion in combined foreign reserves. The BRICS have receives both praise and criticism from numerous commentators. Bilateral relations among BRICS nations have mainly been conducted on the basis of non-interference, equality, and mutual benefit (win-win).

In 2010, South Africa began efforts to join the BRIC grouping, and the process for its formal admission began in August of that year. South Africa officially became a member nation on 24 December 2010, after being formally invited by the BRIC countries to join the group. The group was renamed BRICS – with the "S" standing for South Africa – to reflect the group's expanded membership.

In April 2011, the President of South Africa, Jacob Zuma, attended the 2011 BRICS summit in Sanya, China, as a full member.

With the development of "BRICS" economy and the expansion of foreign trade, trade competitiveness is bound to be some changes. So, "BRICS" trade competitiveness strength? This article uses the modern economics method to analyze this problem, with the perspective of the traditional economics.

From the existing research around the world, contrasting "BRIC" the overall competitiveness and research in developed countries, but also between China and other trade-related comparison of the competitiveness of the BRIC countries, there are also studies "BRIC" or "BRICS" service trade competitiveness, as well as the use of research relevant competition index "BRIC" or "BRIC Five" trade or industrial competitiveness, but there is no use of modern econometric methods, from traditional Economics analysis of economic growth, economic population, budget deficit, per capita disposable income and the currency exchange rate impact, respectively national trade competitiveness. This paper begins with the traditional view of economics analysis of economic growth, economic population, budget deficit, per capita disposable income and the currency exchange rate may trade theory a country the size of the impact, and then build relevant econometric model, re-use model constructed "BRICS" trade competitiveness.

## **2 The trade scale factors Theoretical Analysis**

There are many factors that affect a country's trade competitiveness, which including economic growth factors as well as other factors, such as price level and exchange rate which are generally with previous research on the theory of support.

### **2.1 The economic impact on the population size of the trade theory**

In theory, a country's economic size of the population of the country has an impact on trade. Western economic assumptions are rational individuals and businesses, the so-called rational assumptions. Either individuals or companies will pursue their own utility maximization and profit maximization. The individuals who pursue utility maximization would inevitably put more effort into work at their young age. So the income, after satisfying themselves a certain amount of consumption, will as well have some surplus, thereby guarantee the necessary consumption in their own old age. Thus, young people consequentially will work hard to create wealth, but also may consume import goods, especially in the open economy, which is bound to promote the expansion of foreign trade scale. Whilst the enterprise, whether it is production-oriented enterprises or export enterprises, its pursuit of "Perpetual Machine" with profit maximization will inevitably continue to force their employment of able-bodied young people engaged in the production or trade, which will lead to the increased demand for imported materials and increase the supply of export commodities, the scale of foreign trade will naturally expand.

## **2.2 The of trade scale effect in theory**

In theory, a country's exchange rate has impact on the country's trade scale. Exchange is that, a currency exchange to other country, which is also a currency express the price of another currency. The change of exchange rate will cause the change of import and export commodity prices, which affect the country's import and export trade. It is believed that, lower rate, that is, undervalued exchange, will boost exports and curb imports. That is to say, foreign decline in the value of a currency is beneficial to the country's increasing exports and curb imports. Higher exchange rate, namely the overvalued currency, will stimulate imports, curb exports. In return, the exchange rate changes on the influence of the balance of trade is similar to its impact on trade balance, which means a country's foreign currency appreciation is helpful to its import, but not to the export. Therefore, a country's exchange rate changes will lead to trade linkage effect of the size.

## **2.3 The disposable income of trade scale effect in theory**

The theory of a country's residents disposable income level has influence on the country's trade scale. For a personal pursuit of utility maximization, there must be certain proper arrangement of the consumption of various goods, in order to realize their own utility the most exaggerated. At this point, the position of the budget line decided its possible utility levels that it could reach. To actualize the utility maximization, due to there are many more indifference curve, consumers are merely required to find a tangent with indifference curve line in the established budget online. And the point of tangency is the consumer utility maximization equilibrium. Hence, if consumers' disposable income level is higher, the more likely for them to find a higher utility indifference curve, thus to maximize its own utility. From the praxis, the variety of consumer goods is the base of the improve of consumers utility, and that in a variety of goods, as well as in open economy, imports is rather necessary. Such results will undoubtedly enlarge the scale of a country's foreign trade. And yet the emerging economies of the country's per capita disposable income level increase at the same time, often accompanied by the expansion of foreign trade.

## **2.4 The fiscal deficit effect the trade scale in theory**

A country's fiscal spending has impact on the country's trade scale. Keynesian School, who was born in the 1930s, their core idea of economic policy is to influence aggregate demand through activist stabilization and economic intervention policies by the government. They claimed that state intervention is the core of expand the government function, to expand the government regulating resident's consumption and the function of business investment. By means of monetary policy and fiscal policy consumer can be stimulated to consume and to invest in business. Keynes considered, it is difficult to take effect to entirely rely on monetary policy. The fiscal policy should also play a role. The reason why fiscal policy is more effective than monetary policy is that there is an difference of inherent time delay and external delay of two kinds of policy difference. The intrinsic time-delay of fiscal time delay is longer, while external delay is very short, which can directly stimulate the consumption and the investment.

Nevertheless the monetary policy with short time delay, but its outer time-delay is longer, which make the stimulation of consumption and investment not obvious. It will work usually only when the interest rates fell. As a result, the deficit fiscal policy will be based on the consumption of the drive from trade and investment to promote changes of the scale.

## 2.5 Economic growth effect on the theory of trade scale in theory

A country's economic growth has impact on the country's trade scale. G. M. Grossman and E. Helpman (2003) argue that the goods prices of a small countries in trade is lower than the price when the country provides itself. Trade can promote the growth of country economy. Also, small country economic growth can promote the expansion of trade and domestic commerce competitiveness. There is a point that economic growth will promote to the expansion of trade, which the traditional economic growth theory fit. Exogenous growth theory believe that economic growth depends on exogenous technological progress, that economic growth depends on investment scale increase and that economic growth depends on the rising capital-output ratio. Similar to exogenous growth theory, economic growth and trade scale expanding promote each other. Such as endogenous growth theory think the "endogenous technological progress is the determinant of sustained economic growth".

## 3 Conclusion

can be seen from the above research conclusion that in the "BRICS", every economic variable of the influence has quite difference of all countries. In the "BRICS", China owns the most outstanding trade competitiveness, then is Russia, then India, Brazil and South Africa. Although by observing the results, the competitiveness of China's overall stronger, but blindly optimistic still should not be hold. Among the economic variables, economic growth promotes the largest size of foreign trade is China, followed by Russia and India, close to the influence of Brazil and South Africa. Economic and population size of foreign trade promotes China most, however, influences India and South Africa negatively. Fiscal deficit scale have positive effect on foreign trade, China is the biggest beneficiary, followed by Russia and India, while for South Africa is negative. These almost have no effect on Brazil. Disposable income per capita have most positive effect on foreign trade scale in South Africa, followed by Brazil and Russia. The impact on India is not significant, on Chinese is almost none. Moreover, the exchange rate appreciation brings most negative effect of the foreign trade in China, followed by India and Brazil. The impact on Russia is hardly. However, the currency appreciation can promote the increase of foreign trade in South Africa, instead of its impact on South Africa, which is positive.

## 4 Trade competitiveness policy Suggestions to China

As a Chinese students, the author has concerned about the suggestion to promote the expansion of China's foreign trade. To improve the trade competitiveness, China should start from the following several aspects work:

First, China should promote the economic sustainable development and encourage the healthy development of foreign trade. China is the country with the world's fastest economic growth, which benefits to enhance it's trade competitiveness. It is an inevitable requirement to maintain steady and rapid economic growth, which ensure the trade competitiveness advantage of China. But the increase of the economy can not be blindly pursued. It is also worth attention to adjusting the structural of industrial even economic of China. Only by promoting the sustainable development of Chinese economy through a variety of measures, China's foreign trade can develop soundly.

Second, China should adjust the population policy, to obtain demographic dividend. According to the traditional definition, which tells that an aging society is that 65 years old and above is more than 7 per cent of the total population. China has entered an aging society. Since the 1970s, China has actively implemented in order to improve the population quality, control of population as the target of population and family planning policy, China achieved in a short time from the "high birth rate, high mortality and high natural growth" to "the low birth rate, and low natural growth rate" of the demographic transition. But the age structure of population has also changed. With the rapid increasing proportion of the aged, China's demographic dividend almost disappeared. Therefore, China should timely adjust the population policy, improve the proportion of the population from young people.

Thirdly, China should take moderate deficit fiscal policy to stimulate the development of foreign trade. Though financial deficits can expand China's foreign trade scale in some degree, the continuous expansion of fiscal deficit scale should not be open-ended. Continuous expansion of fiscal deficit is likely to lead to inflation, and may also lead to rising the government debt burden, even the sovereign debt risk, and the China's sovereign credit rating. Sovereign credit rating's falling will inevitably affect the macro economy of a country's health, accordingly, the country's trade competitiveness will be weakened. Hence, China should take moderate deficit fiscal policy, promote the development of foreign trade, but not to make the deficit scale out of control and lead to the loss of fiscal sustainability.

Fourthly, China should improve social welfare system and reduce the residents savings rate. Perfect social welfare system will provide people with a good expectation for the future, and accordingly reduce people's savings rate, enhance people's marginal propensity to consume, stimulate consumption level enhancement and promote the expansion of trade scale. Also, more people consumption will also bring economic sustained growth. Then economic growth will promote the development of trade. The to achieve the perfect social welfare system, China should focus on complete the endowment insurance, employment insurance, medical insurance, disability pension system, etc.. While the Chinese social welfare system has been gradually improved in recent years, but the social welfare system security level is still low.

Fifthly, China should curb rapid yuan appreciation, to keep the yuan relatively stable. In short term, the RMB appreciation will do more harm than good, but in the long run, not do more harm than good. Because of this, governments and central Banks must weigh the pros and cons, do the "two evils choose the light, noble in question take the heavy", must strengthen the management of the RMB exchange rate. To focus on the following three aspects: first is the gradual change. Elasticity of RMB exchange rate changes should be ensured to rise slightly, floating, not ups and downs, so as not to cause economic fluctuation will affect the stability of the macroeconomic. The second is endogenous. To arouse the subjective initiative of the RMB exchange rate reform, one by one step to speed up the rate of "two" (interest rates, exchange rates) pace of market-oriented reform. The third one is controllable. For the RMB exchange rate, it is vital to implement a managed floating exchange rate and make full control at the economic operation within the framework of adaptable.