

## **Preliminary analysis about the Characteristics and Influence of International Capital Flow**

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**Abstract:** Since the 1990s, with the continuous advancement of economic globalization, the scale of international capital flows has been increasing. Especially since the outbreak of the global financial crisis, the cross-border capital inflows of developing countries represented by China have increased significantly. , thus increasing the difficulty of policy implementation. This paper analyzes the characteristics of international capital flows from the aspects of international capital flow speed, fluctuations, flow patterns, and flow subjects, and summarizes its impact on different types of countries through empirical research methods, and proposes corresponding policy recommendations.

### **1. Introduction**

International capital flows are the transfer of capital from one country or region to another, that is, the transfer of capital between countries. According to the flow direction, there are two types of inflow and outflow: capital inflow refers to the export of capital by foreign countries (or regions), and the capital input into the country is manifested by the increase of foreign assets in the country, that is, the increase of domestic liabilities to foreign countries, or the foreign countries' The debt is reduced, that is, the assets of the country abroad are reduced; the capital outflow refers to the export capital of the country, and the foreign capital is imported, which is manifested by the increase of the assets of the country in the foreign country, that is, the increase of foreign debts to the country, or the reduction of domestic debts to foreign countries, that is, foreign countries. The assets in the country are reduced. The flow of international capital is often driven by political and economic factors, which will have a far-reaching impact on the development of a country, study the characteristics of its current international capital flows and its impact, and maintain a cautious science for a country's capital flows to the state. The attitude has helped the economic development of the country to be of great significance.

### **2. Overall overview and characteristics of international capital flows**

Since the 1990s, many countries have realized the free exchange of capital and currency, and the flow of international capital has shown rapid growth. This chapter provides a descriptive analysis of the overall profile and characteristics of global international capital flows, providing a data base for empirical analysis.

#### **2.1 The overall growth of international capital has grown rapidly.**

Since 1995, global international capital flows have fluctuated. After 2003, growth has accelerated significantly. Global international capital flows increased from 1.9 trillion US dollars in 1995 to 22.6 trillion US dollars in 2008, with an average annual growth rate of 20.8%, significantly higher than The average annual growth rate of global cargo import and export of 9.5% and the annual growth rate of world GDP of 5.6% eventually led to a significant increase in the proportion of global international capital flows to one world GDP from 7.1% to 40.8%. After the global economic crisis broke out in 2008, the global international timber flow shrank sharply. By 2010, the global international capital flow was only 2.6 trillion US dollars (accounting for only 4.5% of the world GDP), which was shrinking before the crisis broke out in 2007..

## 2.2 The financial crisis has frequently exploded and the volatility of international capital flows has increased.

During the 16 years from 1995 to 2010, international capital flows experienced multiple rounds of decline during the 1997 Asian financial crisis, the 2001 US technology bubble crisis, and the 2008 global financial crisis. The duration was roughly 1-2 years. During the three crises, global production growth has experienced a decline or slowdown, and the impact on international trade flows and capital flows has gradually increased. During the three years from 2008 to 2010, global international capital flows shrank by 88.7%, which significantly exceeded the decline in global import and export of goods (11.4%), and also exceeded the shrinkage of international capital in the previous two crisis periods.

Table 1

<b>The share of various countries in global international capital inflows and outflows from 1995 to 2010</b>									
Classification	Inflows account for the world			Outflows account for the world			Inflows - Outflows (\$1 billion)		
	1995	2008	2010	1995	2008	2010	1995	2008	2010
world	100	100	100	100	100	100	195.2	1073	629.7
Developed country	76.0	84.5	48.7	85.4	88.9	53.6	66.9	437.5	259.6
Emerging and developing countries	20.1	14.7	45.4	8.6	10.2	36.5	139.1	632.9	371.7
Asian development country	7.2	3.8	19.1	0.8	2.3	12.3	70.0	201.9	186.7
China Mainland	3.4	2.0	10.4	0.4	1.6	2.4	32.6	70.4	142.8
Central and Eastern Europe	0.8	1.4	3.4	0.2	1.2	-0.1	7.0	44.0	55.2
Middle East and North Africa	2.1	2.9	3.9	-0.3	3.4	7.4	25.4	-18.6	-9.9
Sub-Saharan Africa	1.1	0.6	3.4	0.6	0.3	0.8	7.0	32.6	46.7

## 2.3 The status of emerging and developing countries in international capital flows is rapidly increasing.

From 1995 to 2010, the proportion of foreign capital absorbed by emerging and developing countries in the world total increased from 20.1% to 45.4%, with an average of 12.2%. The proportion of foreign investment in emerging and developing countries to the world total increased from 8.6% to 36.5%. The international capital flows of emerging and developing countries mainly have the following characteristics: First, they have been in the state of net capital inflows since 1994. In 2010, the net inflow of international capital from emerging and developing countries was \$371.7 billion, a 41.3% contraction before the crisis and 59.0% of the world's net inflow. Despite this, some regions experienced a rapid rebound in 2010 after experiencing a sharp decline in net international capital inflows in 2009, and exceeded the pre-crisis level. For example, in mainland China, Central and Eastern Europe, and sub-Saharan Africa, the net international capital inflows in the three regions in 2010 were US\$142.8 billion, US\$55.2 billion, and US\$46.7 billion, respectively, up 102.7%, 25.4%, 43.5 before the 2008 crisis. Second, emerging and developing countries use

foreign capital to focus on direct investment, while foreign investment is dominated by other investments. From 1995 to 2010, the average share of direct investment, securities investment, and other investments absorbed by emerging and developing countries was 57.1%, 15.7%, and 27.2%, respectively. It is worth noting that securities investment and other investments in developing countries in Asia are highly volatile. From 1995 to 2010, the average share of foreign direct investment, securities investment, and other investments in emerging and developing countries was 23.3%, 21.7%, and 55.0%, respectively. The volatility of foreign securities investment in Asian developing countries is significantly greater than that of other two-investment investments, and is also greater than the fluctuations of various types of investment in other countries. Third, emerging and developing country direct investment projects have been in a net inflow, and securities investment is also in a net inflow in most years, while other investments are net outflows in most years. After the global financial crisis broke out in 2008, private capital flowing into developing countries shrank sharply, while official institutions including the IMF injected large sums of money into developing countries, resulting in private capital inflows to developing countries in 2010. The proportion of total capital fell to 91.7%, and the share of official capital in total international capital inflows rose to 8.3%.

### 3. The impact of international capital flows

This chapter explores the impact of international capital flows on the economic growth of host and investor countries through empirical models.

#### 3.1 model introduction

This paper uses the Panel Data model to analyze the role of international capital flows in economic growth. The Panel Data model is a panel data model that is suitable for analyzing multidimensional time series composed of multiple cross-section individuals at different time points. This model usually contains many data points, which increases the degree of freedom and reduces the impact of multicollinearity, which greatly enhances the effectiveness of the estimation. Moreover, the combined information of the cross-section data and the time data can effectively improve the accuracy of the short-term time series dynamic model estimation. Considering the differences in economic growth rates among countries, this paper directly adopts the most widely used variable intercept model, which assumes that the parameters satisfy the time consistency, and the parameter values do not change with time. Individual members have individual influences without structural changes, and individual influences can be accounted for by differences in intercept terms. That is to say, in this model, the intercept terms of the individual body member equations are different, and the regression slope coefficients are the same. Its basic form is:

$$y_i = a_i + x_i\beta + u_i \quad i = 1, 2, \dots, N$$

The above formula lists the relationship between the  $k$  economic indicators at  $N$  individuals and  $T$  time points. Where  $N$  is the number of individual cross-section members and  $T$  is the total number of observation periods for each cross-section member.  $Y_i$  is a  $T \times 1$  dimensional interpreted variable vector,  $x_i$  is a  $T \times k$  dimensional explanatory variable matrix, and each component of  $y_i$  and  $x_i$  is an economic indicator time series of individual members.  $\beta$  denotes a  $k \times 1$  dimensional coefficient vector corresponding to the explanatory variable vector  $x_i$ .  $a_i$  represents the constant term of the model and represents the individual characteristics of the section element.  $u_i$  is a random error term that satisfies the assumptions of independent and zero mean and same variance. The variable intercept model is divided into two types: fixed effect model and random effect model. The fixed-effect model is suitable only for the condition of the sample's own effect, that is, it only cares about the individual sample; the random effect model is to take the sample individual as a random sample of the whole, and use the sample to infer the whole. In this paper, the SAS software will be used to test whether the model adopts the fixed effect model. In view of the fact that the per capita GDP growth rate can better measure the level of economic growth of a country or region, this index takes this indicator as the explanatory variable. The explanatory variables are mainly domestic

savings rate, trade openness, per capita GDP, and international capital flows.

### **3.2 An Empirical Study of the Impact of International Capital Outflows on Economic Growth**

For all sample countries, international capital inflows have a significant role in promoting their economic growth. Among them, direct investment and securities investment inflows have a significant role in promoting economic growth. During the period of model study, direct investment is for the economy. The promotion of growth is significantly higher than that of securities investment; the effect of international capital outflow on its economic growth is not significant, and further investigation of the different outflows of international capital has also yielded the same results.

For the developed countries, international capital inflows have a significant role in promoting their economic growth. Among them, direct investment and securities investment inflows have a significant role in promoting economic growth, and direct investment inflows have contributed to the economic growth of developed countries. It is 2.5 times the inflow of securities investment. This is consistent with the current situation in which international capital flows mainly occur between developed countries and direct investment is the mainstay. By promoting technological progress and the improvement of total factor productivity, the role of international capital outflows in promoting its economic growth is also significant. The direct investment outflow has promoted the economic growth of developed countries nearly three times that of other investment outflows. It is worth mentioning that the inflow of direct investment has a stronger effect on the economic growth of developed countries than its outflow.

## **4. Related policy recommendations**

From the results of the study on the effects of the world's major countries and China's international capital flows, it can be seen that for countries with higher levels of development, due to the high level of domestic economic and financial development, and their unique international capital constitute relatively stable capital flows, international capital flows. It will indeed promote its economic development. For developing countries and countries with transitions with relatively low levels of development, due to the underdeveloped domestic economy and finance, various international capitals are highly volatile, which in turn affects the role of international capital in its economic development. How to make rational use of foreign capital, scientific foreign investment, and play a positive role in the development of international capital in China's economic development should be the focus of China's investment and investment. The following is a few suggestions on the supervision and utilization of China's international capital flows.

### **4.1 Optimize the structure of international capital inflows and improve the efficiency of foreign capital utilization.**

Although China has always used foreign capital for direct investment, its direct investment funds attracted by China are excessively concentrated in coastal areas, capital-intensive manufacturing industries, excessive preferential treatment of government foreign companies, and the existence of technological monopolies. The "spill effect" of FDI. Since direct investment inflows play an active role in promoting economic growth in both developed and developing countries, it is recommended that China should increase policy guidance on direct investment and guide more in accordance with China's future regional development and industrial restructuring plans. The funds are invested in key industries in the central and western regions and the country's priority development. In addition, it is necessary to strengthen post-regulation of foreign exchange settlement purposes, ensure that funds enter the real economy, and effectively promote China's economic development. In addition, in view of the positive effects of securities investment in China's economic growth, in order to better play its positive effects, China can gradually open up the capital market according to the domestic and international economic and financial development, make full use of securities investment, and establish and improve. Relevant policies and regulations on the internationalization of financial markets and the development of related financial derivatives will give full play to their

positive effects on China's economic development on the basis of preventing financial risks.

#### **4.2 Accelerate the pace of "going out" and earnestly improve the rate of return on foreign investment.**

As China is still in the initial stage of foreign investment, the amount of foreign investment is relatively small, and the external business is still not mature. In order to improve the rate of return on China's foreign investment, China should first create a good policy environment and institutional environment for domestic institutions: First, accelerate the pace of exchange rate and interest rate reform, and create a good market environment for domestic enterprises to go global. The second is to further simplify the approval process for enterprises to go global. The third is to give certain policy support to foreign investment in key industries, such as market consulting services and tax incentives. The fourth is to further improve the construction of the QDII system, gradually expand investment channels, increase investment ratios and investment varieties, and further improve the economic effects of China's foreign securities investment. Second, China should cultivate a group of multinational companies with international competitiveness. Accelerate the reform of the modern enterprise system, actively promote the reorganization of enterprises across regions and across ownership, encourage technological innovation, and form a group of large-scale enterprise groups with independent intellectual property rights and core competitiveness to participate in international competition.

#### **5. Conclusion**

The international capital flow has a significant impact on the economic development of a country. Under normal circumstances, the capital flow behavior formed as a market mechanism should be based on the effective grasp of market rules and the characteristics of international capital flows. The impact is systematically evaluated and standardized management is carried out through reasonable administrative means to prevent the adverse effects of order demonstration on capital outflow countries and capital inflow countries, and promote the healthy and stable operation of the global economy.

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