

# The Composition of the Global Flow of Funds in East Asia

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## **Abstract**

The reverse of the flow of funds sometimes occurs in different stage of economic development. At first, the fund flows from advanced countries to developing countries while poor, then the fund flows again from developing countries when they become wealthy. After that, capital flight flows from developing countries to advanced countries; a bubble blows easily in the flow of the fund; a financial crisis occurs, and the gap of per capita incomes between developing countries and advanced countries expands again. Therefore, international financial cooperation becomes necessary with the maintenance of the financial structure of the developing countries.

**Key Words:** Global Flow of Funds, Capital Flight, Balance of Overseas Fund Supply

## **1. Introduction**

Developing countries have existed for a long time, and for much of their history they have attempted two related tasks: to build their local financial institutions and markets, and to attract international investment. Some have succeeded quite admirably while others have a great deal of work left to do. As time has gone by, the words we use to describe these countries and their markets have undergone considerable change. The phrase “emerging financial market” (EFM) caught on in the 1990s, as a worldwide change of ideas away from state-sponsored development and toward the opening of free markets brought a burst of progress and performance. The financial crises of the late 1990s pose a new challenge to successful openness and liberalization.

In the 1990s and early 2000s, the financial world changed fundamentally in a way that is not likely to be reversed. The fund flows in East Asia, which included Asian NIES (Newly Industrialized Economies), ASEAN (the Association of Southeast Asian Nations), and China, not only increased quantitatively, but also changed forms. This research will explain the characteristics of the fund flows in EFM, why did fund flows resume so quickly after the losses of the Asian financial crisis, the transformation of the structure of fund flows in East Asian economies, the characteristics of the Chinese overseas fund flows, other related problems, and future prospects.

A financial market analysis is an analysis about the characteristics of the financial liquidity of funds, and it is tied to investment, savings and the current balance of the real economy. The

financial markets indicate the debts and credits of funds as a whole including the total process of financial liquidity. When the items of financial markets are looked at more carefully, there are inflows of domestic funds, overseas funds by domestic savings and credit loans of banks on the side of fund-sources (fund inflows). On the other hand, there is fund supply to the domestic economy and fund outflows overseas in fund uses (fund outflows). When the flow of funds in financial markets is tied to the international balance of payments, the overseas sector will become fund outflow excess (net capital outflows) if the current account is in surplus. Conversely, the domestic sector will become fund inflow excess. Therefore, when the real economy side of the domestic economy and overseas is analyzed under an open economic system, the balance of savings-investment of the domestic economy corresponds to the current account balance. However, domestic net fund outflows-inflows funds that correspond with the capital account balance, when the relationship between domestic and overseas on the financial side is examined. Therefore, relations between the domestic savings-investment balance, the financial surplus or deficit, the current account, and the overseas net fund outflow can be expressed in the following structural formulae. We can get the outline of the overseas fund flows analysis from the above structural formula.

Savings-Investment and Current Account Balance

$$S - I = \Delta FA - \Delta FL = EX - IM \quad (1)$$

The Overseas Income and Expenditures Balance

$$EX - IM = (FO - FI) + FER \quad (2)$$

The Financial Markets Balance

$$FO_d + FO_o + FER = FI_d + FI_o \quad (3)$$

The upper formula is transformed as follows.

$$FO_o - FI_o + FER = FI_d - FO_d \quad (4)$$

Net fund supply to overseas balance

$$NFO_o + FER = NFI_d \quad (5)$$

Notes:  $\Delta FA$ : financial assets increase,  $\Delta FL$ : financial liabilities increase,  
 $EX$ : export,  $IM$ : import,  $FO$ : fund outflow,  $FI$ : fund inflow,  
 $FER$ : Foreign exchanges reserves,  $FO_d$ : domestic fund outflow,  
 $FO_o$ : overseas fund outflow,  $FI_d$ : domestic fund inflow,  
 $FI_o$ : overseas fund inflow,  $NFO_o = FO_o - FI_o$  (net outflow of overseas fund),  
 $NFI_d = FI_d - FO_d$  (net inflow of domestic fund)

## 2. The characteristics of the fund flows in emerging financial market

According to neo-classical investment theory that based on diminishing returns of the capital, poor developing country of the capital should be able to realize rapid economic development by the promotion of the capital inflow from foreign countries. However, some facts different from such theoretical expectations exist in the international capital markets.

As shown in Table 1, there was external financing of about 4 times of current-account deficit from 1994 to 1997. But only 30% of current-account deficit was derived from the

external financing, close to 30% of reserves was derived from the external financing, and resident lending that included capital flight about 40% of external financing. In other words, the 30% brought increase in foreign exchange reserves as US dollar was returned to the United States and capital flight that flows out from Emerging Financial Markets (EFMs) about 40% of external financing. These data tell us that about 70% of the external financing which flowed into EFMs was unstable existence.

**Table 1. Emerging Market Economies' external financing (billion of dollars)**

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current account balance	-94.7	-70.8	6.6	26.8	42.6	26	76.9	118	151.9
External financing, net:	329.2	330.7	193.5	168	240.2	137.8	119.5	192.3	286.8
Private flows, net	324.5	283.6	143.3	155.7	187.2	126.6	124.2	213.7	317.4
Equity investment, net	125.9	140.2	133.6	166.1	151.9	147.6	113.2	128.9	167.5
Direct equity, net	92.7	118	122.3	161.8	138.8	139.8	112.1	95.9	132.2
Portfolio equity, net	33.1	22.2	11.2	14.5	13.1	7.7	1.1	33	35.3
Private creditors, net	198.7	143.4	9.7	-10.5	35.3	-21	11	84.8	149.8
Commercial banks, net	118	59.5	-55	-48.4	-0.9	-26.7	-6.2	25.4	61.1
Non banks, net	80.7	83.8	64.7	37.6	36.2	5.8	17.2	59.4	88.7
Official flows, net	4.7	47.1	50.2	12.3	53	11.2	-4.7	-21.4	-30.6
IFIs	7	30.8	38.7	3.2	2.3	22.6	9.7	-6.6	-16.4
Bilateral creditors	-2.3	16.3	11.6	9.2	-6.3	-11.6	-14.3	-14.8	-14.2
Resident lending/other, net	-147.8	-219.6	-143.1	-139.2	-137.4	-76	-45.8	-37.6	-38.6
Reserves (- = increase)	-86.7	-40.2	-41.9	-55.5	-70.3	-87.7	-150.7	-272.6	-400

Sources : The Institute of International Finance, *Net Private Capital Flows to Emerging Markets Economies*, January, 2005.

Notes:

Major emerging markets included in the IIF's report on capital flows are the following:

Africa/Middle East	Asia/Pacific	Europe	Latin America
Algeria	China	Bulgaria	Argentina
Egypt	India	Czech Republic	Brazil
Morocco	Indonesia	Hungary	Chile
South Africa	Malaysia	Poland	Colombia
Tunisia	Philippines	Romania	Ecuador
	South Korea	Russian	Mexico
	Thailand	Federation	Peru
		Slovakia	Uruguay
		Turkey	Venezuela

After 1998, the current-account of EFMs became in the black. At the same time, international capital inflow decreased rapidly, and then moved from \$330.7 billion in 1997 to \$119.5 billion in 2002. In 1998, the capital flight more than 70% of the external financing and the current-account deficit, but was decreased by 26% in 2004. The ratio of the increase for foreign exchange reserves was also raised to 74% from 22%. Many people assume capital that flowed into EFMs dried up due to these crises, but the reality is more complex; the result that treatment of the financial failure and the recovery of the market confidence will proceed.

Three facts explain the large-scale international capital flows existed in EFMs. First, the international capital, which flowed into the United States, has been reinvested to EFMs by U.S. investor. Secondly, international capital dealings became possible because each country doesn't pass through the United States; enabled the countries to make access market easily the development of the financial liberalization and the internationalization. The international financial use by Euro-currency banking market is an example here. Thirdly, not only increased official reserves US dollars with the developing country, but also had the action which made the exchange in dollars international trade of the enormous private flows expand with the exchange rate policy of virtual dollar peg.

In this way, the flows of the unstable funds have existed in EFMs since the first half on the 1990s. We understand that the each country of EFMs imported the large-scale capital in the high interest from the advanced countries in the interim; they used the borrowed funds to purchase the U.S. national bonds by the low interest. The movement that caused the return of the global flow of funds was called a doubtful recycling<sup>1</sup>.

A large quantity of funds flowed from various more advanced countries into East Asia in the first half of the 1990s, as the EFMs boom occurred. Let's begin with looking at the background from both East Asia and the advanced countries.

First, we have stated that there were increases in demand for the funds because of economic development, and the maintenance of the financial and capital markets which developed at the same time with in East Asia. When we look at the average growth rate between 1990-1996, we see that China grew by 11%, ASEAN by 7% and NIES by 6.3%<sup>2</sup>. But, the same area caused full demand of funds by making worldwide economic growth that was high as well. However, the countries of East Asian were lacking in domestic funds. Thus, East Asian countries preferred that growth in investment of an expansive type, which introduced foreign capital.

As for each country, (except for Singapore, Taipei and China) as can be seen in Table 2, the scale of investment, which exceeded domestic savings, was seen in East Asia when the Financial Crisis occurred in 1997. This meant that these countries had to assure investment that exceeded domestic savings funds in order to assure economic growth, if the domestic funds couldn't cover necessary investment.

When we look at the savings and investment balance of the advanced countries, we also realize the savings of America were continuously insufficient in the first half of the 1990s. That is the consequence of the restoration of the America economy and the increase of consumption in that period. As for the other principal nations Japan that was the pure creditor nation of the world, had always had an excess of savings since the latter half of the 1980s, and the EU was also almost in the condition of savings excesses. Moreover, Japan and the EU had large current-account surpluses, and the condition of fund surplus continued in these countries.

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<sup>1</sup> Financial times. April 25, 1998.

<sup>2</sup> IMF. *World Economic outlook, May 2003*, p. 200.

**Table 2. Balance of Savings-Investment (percent of GDP)**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Hong Kong	5.3	7.0	1.2	-4.3	-1.4	-2.9	1.3	5.6	4.8	5.1	9.7	9
Korea, Rep. of	-1.4	0.3	0.4	-1.8	-3.9	-0.5	13.2	6.0	4.1	3.2	3.1	2
Singapore	9.6	8.6	16.1	15.6	12.2	11.9	19.5	16.4	15.6	19.4	23.6	22.1
Taipei	2.1	1.8	1.9	1.7	3.4	2.2	1.1	2.7	2.8	6.5	8.6	7.6
Indonesia	2.9	3.0	-0.3	-1.3	-0.6	-0.3	9.7	8.1	9.3	7.4	6.8	4.9
Malaysia	1.4	-0.1	-1.6	-3.9	1.4	0.9	22.0	25.0	20.0	18.4	17.4	16.8
Philippines	-3.8	-8.4	-6.5	-8.0	-5.1	-5.1	2.3	8.7	7.4	0.4	1.7	2
Thailand	-4.8	-4.3	-4.3	-8.0	-4.2	-0.1	15.7	12.3	8.3	6.1	6.7	4.7
China	1.0	-2.0	1.3	1.7	1.5	3.3	2.1	2.0	0.9	0.0	0.2	0.0

Sources : [http://www.adb.org/Documents/Books/ADO/2004/ADO2004\\_STATAPP.pdf](http://www.adb.org/Documents/Books/ADO/2004/ADO2004_STATAPP.pdf)

Asian Development Bank. *Asian Development Outlook 2004*.

Moreover in the advanced countries, there was a decline of the expected growth rate due to depression and the interest under the conditions mentioned before. Therefore, there was a movement of looking for places where investment could expect a high profit and a high yield from advanced countries capital. For East Asia in the first half of the 1990s, there was not only a full demand for funds because economic development was accelerating, but also maintenance of the finance, and capital markets developed, as well. Therefore, many internal and external banking agencies and investors faced a volatile East Asian capital market, and they raised concerns about this.

Under the above conditions, the long-term capital and short-term capital of the advanced countries were depleted by direct investment, bank lending and portfolio investment to the East Asian area as dictated market by principles, and wide fund flows to the same area thus took place. This is the background of the Emerging market boom in East Asia in the first half of the 1990s.

The existence of a savings- investment gap in East Asia before 1997 meant that wealth and services was more than could be produced, because of the economic development of the same area. In other words, East Asia, where it conformed to the growth of the investment expansion type, accepted direct investment in a large quantity from advanced countries. However, supporting industry didn't develop fully which supported local production by the direct investment of the advanced countries, so East Asian countries have to import most of raw materials, goods, and services. We can see the changes in the current account in Table 3. It reflects the above circumstance so that current account changed with the deficit base with the movement of the investment excess in each county and area of East Asia except for China until 1997. However, this current account shifted the surplus base while savings-investment balance shifted to the savings excess in each country, except for the Philippines after 1998. We thus presume the Asian currency crisis in 1997 was the conversion point of the East Asian economy overall.

The savings-investment balances of each East Asian country shifted to the savings excess

tendency after 1998. It is important of economy that direct investment showed a decreasing tendency for short-term influence by the Asian currency crisis. On the other hand, while the economies of East Asia began recover to from the end of 1998, an increase in exports due to a rising demand for import in the advanced countries created a surplus in the current-account balance.

**Table 3. Balance of Payment on Current Account (percent of GDP)**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Hong Kong						-3.1	1.5	6.4	4.3	6.1	8.5	11
Korea, Rep. of	-1.3	0.3	-1.0	-1.7	-4.4	-1.7	11.6	5.5	2.4	1.7	1.0	2.0
Singapore	11.4	7.6	17.2	17.3	14.1	19.2	22.7	18.6	14.3	18.7	21.4	30.9
Taipei	4.0	3.2	2.7	2.1	3.9	2.4	1.3	2.8	2.9	6.4	9.1	10.0
Indonesia	-5.7	-5.1	-5.4	-12.1	-8.1	-2.1	4.3	4.1	5.3	4.8	4.5	3.7
Malaysia	-2.0	-1.2	-1.6	-3.2	-3.4	-2.4	13.2	15.9	9.4	8.3	7.6	13.0
Philippines	-3.7	-4.7	-6.2	-9.7	-4.4	-5.9	2.4	9.5	13.2	1.8	5.6	4.2
Thailand	-1.6	-5.5	-4.6	-4.4	-4.6	-5.1	12.8	10.2	7.6	5.4	5.5	5.6
China	1.3	-1.9	1.3	0.2	0.9	4.1	3.3	2.1	1.9	1.5	2.8	2.2

Sources: [http://www.adb.org/Documents/Books/ADO/2004/ADO2004\\_STATAPP.pdf](http://www.adb.org/Documents/Books/ADO/2004/ADO2004_STATAPP.pdf)

Asian Development Bank. *Asian Development Outlook 2004*.

### 3. The un-stability of fund flows in East Asia

There was a problem in the flow of funds of East Asia from 1990s until the first half of the 2000s. In other words, the fund inflows from the foreign countries had become the means financing the current-account deficit.

#### 3.1. The financial form for the current account deficit

When it was analyzed, there were three routes to the above form. The first route was that fund flow as non-debt-creating inflows. There was direct investment as a main function of Official Development Assistance (ODA) as a gratuitous condition in non-debt creating inflows. The second was debt-creating inflows, that is, net external borrowing, which includes commercial bank loans, other private creditors, and public loans except for ODA and ODA payment conditions. The third is what the IMF calls Exceptional Financing. There are “Arrears” when the date of payment comes due, and “Rescheduling” which means postponing payment of debt. This is not fund inflow, but it means compression of the fund outflows by the same methods. At any rate, this type of fund flow deregulates the influence of the current-account deficit.

#### 3.2. The resumption of fund flows in Asia

Table 4 shows an aggregate of fund flows in 24 developing countries in the Asian,

including India, ASEAN and China<sup>3</sup>.

When we observe the fund flows of Asia in Table 4, we can understand changes in fund flows before and after the Asian currency crisis. The slow increase before the crisis continued, and the non-debt inflow, made up mainly of direct investment of gratuitous condition ODA recorded \$72.1 billion in 1996. However, though the movement of recovery in 2000, it is shown that it was changing by a decreasing tendency until 1999 when a crisis was caused after 1997. On the other hand, though an increased base changed debt-creating inflows until 1996 and in shifts they too decreased after 1997. Then what had become a minus for 1998 and 1999 are recovered into the plus column in 2004. When the items of these debt-creating inflows are seen, the official creditor change with the plus figure from the viewpoint of base, and increasing width rather expanded in 1998 and 1999 when the debt-creating inflow total became negative.

**Table 4. The Form of Financing in Developing Asia (US\$. billions)**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Balance on current account	-42.1	-39.2	7.7	49.3	48.5	46.1	40.7	72.3	84.8	93.0
Net external financing	101.9	113.2	171.3	55.7	67.3	70.7	51.6	75.5	101.2	196.2
Non-debt -creating inflows	60.7	72.1	127.9	67.8	66	70.2	57.0	69.4	82.9	106.8
Net external borrowing	41.2	41.1	43.4	-12.2	1.4	0.5	-5.4	6.0	18.3	89.4
Official creditors	7.4	-1.3	11.4	19.0	19.7	-3.8	-0.5	9.6	-0.2	21.0
Banks	29.6	27.9	13.5	-12.5	-11.8	-13.1	-5.3	-5.0	2.6	22.9
Other private creditors	4.2	14.5	18.4	-18.7	-6.6	17.5	0.4	1.4	15.9	45.5
Exceptional Financing	0.6	0.7	0.5	14.6	7	6.1	6.6	7.5	6.2	3.1

Data: IMF, *World Economic outlook*, Sep. 2005

However, after the Asian currency crisis occurred, the bank loans and the private creditors stagnated, and the private creditors especially changed to negative after 1998 until 2004. In other words, the flow of funds became stagnant in Asia on the whole negative after the Asian currency crisis of 1997. Still, non-debt inflow has never become negative. And, as for debt-creating fund flows, official creditors loans also increased. Yet, bank loans and private creditors' debt became negative, and a change in the flow of funds that the debt-creating fund flows totally shifted to negative as a result. It was the characteristic of the change seen in the financial form of the current-account deficit in Asia that it was formed after the occurrence of the Asian currency crisis.

In a word, the short-term securities investment so-called "Hot Money", commercial bank loans and private creditors debt ran away after the Asian currency crisis in Asia even in debt-creating fund flows. It suggests that the general crisis and a debt crisis took place as a

<sup>3</sup> Developing Asia covers the following countries: Afghanistan, the Islamic State of. Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Kiribati, the Lao People's Democratic Rep. Malaysia, Maldives, Myanmar, Nepal, Pakistan, Papua New Guinea, the Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand Tonga, and Vanuatu.

result.

In addition, Exceptional Financing is another route to finance the current account deficit and to compress outflows of the fund monies. Exceptional financing was comparatively small before the Asian currency crisis. However, it increased drastically after 1998, and to a scale exceeding beyond \$15 billion every year. The seriousness of the Asian accumulation debt problem has been clearly appearing here.

#### 4. The doubtful flows in East Asia

When we try to collect the aggregate net resource flows of the East Asian area in emerging-markets, we can understand that the Asian developing countries' using the funds borrowed at high interest from the advanced countries to purchase U.S. national bonds at a low investment earning rate caused the return of fund flows in the first half of the 1990s. This phenomenon is expressed with doubtful flow, which is shown by the number of fund flows into East Asia as shown in Table 5.

##### 4.1. The return of fund flows in East Asia

**Table 5. Net Fund Flows to East Asian Region<sup>4</sup> (US\$ million)**

	1970	1980	1990	1996	1997	1998	1999	2000	2001	2002
Net resource flows	1,730	10,657	26,203	103,701	98,847	61,699	56,139	56,816	45,028	58,471
Net flow of long-term debt	906	8,206	12,148	32,627	34,178	4,346	-128	-9,035	-9,041	-6,062
Foreign direct investment	201	1,312	10,341	58,636	62,222	57,582	48,871	44,046	48,913	57,000
Portfolio equity flows	0	-4	1,625	10,090	25	-2,757	4,650	19,254	2,930	5,410
Grants	623	1,143	2,090	2,348	2,424	2,528	2,746	2,552	2,227	2,123
Official net resource flows	1,090	3,527	7,993	6,085	13,764	10,202	13,358	8,313	8,211	2,616
Private net resource flows	640	7,130	18,210	97,616	85,083	51,497	42,781	48,503	36,817	55,854

Data: World Bank, *Global Development Finance 2003*

The above table notes that the amount increased in the previous year ratio of fund inflows (the figure for 1994 is the increase of the ratio for 1990 to restrict ex-data). The rapid change of fund flows can be grasped because of the movement of the real economy of the same area through the scale of capital inflows and its change in composition. There are three points that are given as follows on the characteristics of the fund inflow pattern of East Asia.

Supposing that the fund inflow into East Asia means that financing the current-account deficit of the area suggested above. But two different patterns, which moved 1997 to the border of stability appeared when the movement of net fund inflows were observed. In other words, though tendency of net inflow of funds until 1997, they became a net outflow after 1998. The change was brought about due to the direction of fund flows such as changes in the economic

<sup>4</sup> Cambodia, China, Fiji, Indonesia, Korea, Rep., Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, the Philippines, Samoa, Thailand, Tonga, Vanuatu, Vietnam, Kiribati, and the Korean, Dem. Rep.



growth pattern of East Asia. Though the movement of leaving East Asia after 1997 was observed, such direct investment, portfolio investment, and the net long-term debt of private funds were flowing to the same area again in 2000.

The flow of long-term debt such as bank loans, and trade can be presumed to reflect general economic conditions in the area. Though the long-term trust of East Asia in 1996 increased by \$32,627 million, it declined in 1999 after the currency crisis by -\$128 million, and this tendency was continued until 2002.

#### 4.2. The competition in exploiting direct investment

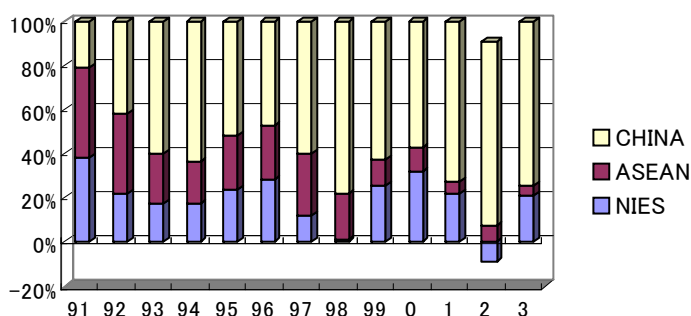


Figure 1. The Area Share of FDI

Sources: <http://www.adb.org/Documents/Books/ADO/2004/>

Asian Development Bank. *Asian Development Outlook 2004*.

Even during the period of the Asian currency crisis, foreign direct investment (FDI) still had an important vitality. FDI had the character of a stable long-term capital inflow, and will exert positive effects such as the creation of employment opportunities improvements in income, increases in fixed capital formation, the expansion of production ability, export increases, and the acquisition of foreign currency. With the influence of the Asian currency crisis though, the amount in FDI has continually declined by \$2,894 million in 2003 since \$20,602 million in 1996. The ratio of FDI that is occupied in fund inflows in East Asia in the 1990s was 86% in 1999 since 40% in 1990. This has helped a big part in the growth of East Asian economics. Moreover, the inflow of FDI not only increased from the advanced countries, but also from Asian NIES, ASEAN and China. A change in the market share by area occupied the inflow of FDI to East Asia as observed in Figure 1. From 1991 to 2003, ASEAN fell from 41% to 4%, the NIES from 38% to 21%, while China increased from 21% to 75%<sup>5</sup>.

At the same times, the Expansion of Portfolio Investment was a factor when the scale of the securities market in East Asia steadily expanded in the 1990s, while portfolio investment was reaching 30% of the amount of fund inflow

<sup>5</sup> Asia Development Bank. *Asian Development outlook 2004*, p.224.

As for the stock price earning rate in 1994 there the movement was remarkable for the fact that it was 2.5 times in the Philippines, while even in Hong Kong and Indonesia it was more than 2 times, and exceeded America's (13.7% of annual earning rates), Europe (Germany, 46.7%) and Japan (2.9%) drastically<sup>6</sup>. Therefore, East Asia became the biggest worldwide for the inflow of portfolio investment. However, the increase of portfolio investment became risky in the East Asian financial market, as well, because there were such large inflows and outflows of speculative short-term capital, also beginning in the early 1990's.

#### **4.3. The existence of private funds and economic recovery**

Private funds occupied a large amount in the fund inflow to East Asia. However, after 1997, not only private funds, but also official funds fell drastically. Therein, big public fund inflows began a stable decline after 1998, and private fund inflows also suddenly decrease. In other words, this can be thought about as net fund outflows in East Asia after 1998 being mainly due to the outflows of private funds. Yet, private fund net inflows observed a wide increase of \$30,524 million like the previous year ratio as well in 2000, and that ratio also recovered to 88% of the higher levels. The recovery of the East Asian economy can also be shown beyond the influence of the Asian financial crisis.

### **5. The characteristics of overseas fund flows in China**

The overseas fund which flows to China have been changed huge since the 1990s. Not only was there an increased inflow of overseas fund, but also there was an increased outflow of domestic funds. We can observe the survey of Chinese overseas fund flows and net fund outflows as follows.

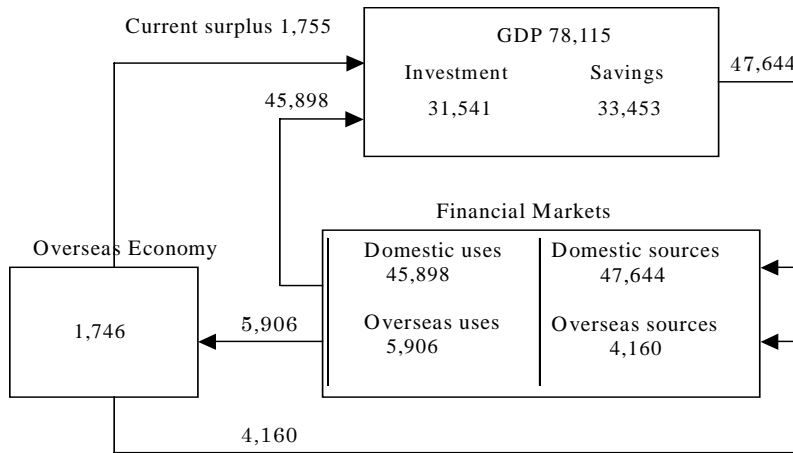
#### **5.1. The survey of overseas fund flows to China**

Based on the four balance structural formulas mentioned before, we used the related data to compose Figure 2. The survey of overseas fund flows to China was examined (There are some errors in the calculation, because the monetary unit of the Flow of Funds Account and the Balance of Payments is different.). Still, the fund flow figures of the 1990s Chinese economy drawn in Figure 2 can be put in order in the following 4 balance-types.

Domestic Economy

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<sup>6</sup> World Bank. *2001 World Development Indicators*, pp.340—342.



**Figure 2. The Flow of Funds to China (the average of 1992 - 2004, 100 million RMB)**

Sources: *The people's bank of China quarterly statistical bulletin and the Statistical yearbook of China.*

Balance of Savings-Investment

$$(\text{Saving } 33,453 - \text{Investment } 31,541) = 1,912 \quad (6)$$

Balance of financial assets and liabilities in domestic economic section

$$(\Delta FA 47,644 - \Delta FL 45,898) = \mathbf{1,746} \quad (7)$$

Balance of the overseas income and expenditures

$$(FO_o 1,649 + FER 3,779 + EO^7 478) - FI_o 4,160 = \mathbf{1,746} \quad (8)$$

Balance of financial markets

$$\begin{aligned} FO_d 45,898 + (FO_o 1,649 + FER 3,779 + EO 478) \\ = FI_d 47,644 + FI_o 4,160 \end{aligned} \quad (9)$$

This is transformed to

$$\begin{aligned} (FO_o 1,649 + FER 3,779 + EO 478) - FI_o 4,160 \\ = FI_d 47,644 - FO_d 45,898 = \mathbf{1,746} \end{aligned} \quad (10)$$

Therefore

$$\begin{aligned} \text{Net fund supply to overseas } (-2,511) + FER 3,779 + EO 478 \\ = \text{Domestic net fund inflow } \mathbf{1,746} \\ = \text{Financial assets net increase of the domestic sector } \mathbf{1,746} \end{aligned} \quad (11)$$

Therefore, from 1992 to 2004, the average total net annual overseas fund supply was -2,511 hundred million RMB, the foreign exchanges reserve was 3,779 hundred million RMB, and the errors and omissions was 478 hundred million RMB. This meant a net inflow of 1,746 hundred million RMB of domestic funds to the financial market and a net increase of 1,746 hundred million RMB in domestic financial assets.

The flow of funds in the Chinese economy is "the flow of the fund export type", as a result put in order by the above average in the 1990s and early 2000s. That becomes the

<sup>7</sup> *EO*: Errors and omissions in the BOP.

relation of "the current account surplus – and the capital account deficits (net capital outflows)" externally, and also becomes the relation of "The occurrence of savings excess – and the formation of net financial assets" in the domestic economy.

## 5.2. Net outflows from China

China in the 1990s had "doubtful circulation" of fund flows that existed in Asia (Table 6). It declined drastically in 1998 though the fund inflow was changing with an increased base when the overseas Chinese fund flows became apparent. On the other hand, an increasing tendency is shown fundamentally toward fund outflows from 1992 to 2004. However, when the balance of fund inflows and fund outflows was observed, net inflows to China were positive except for 1992 and 1998.

**Table 6. Changes in Overseas Fund Flows in China (100 million RMB)**

		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Inflows	(A)	1,667	2,929	5,326	5,654	5,901	5,005	2,976	3,808	4,877	3,488	4,236	5,807	8712
Outflows	(B)	1,681	1,604	2,514	2,427	2,588	3,109	3,431	3,041	4,643	557	1,464	1,224	-551
Net inflows	(A-B)	-14	1,325	2,811	3,228	3,313	1,896	-454	767	234	2,931	2,772	4,583	9263
FER	(C)	117	-102	-2,631	-1,877	-2,632	-2,961	-532	-704	-873	-3,917	-6,250	-9,686	-17080
E.O	(D)	-456	-565	-832	-1,487	-1,294	-1,405	-1,372	-1,361	-1,056	-450	550	1,377	2135
S or D	(E)	-353	658	-651	-137	-613	-2,470	-2,359	-1,298	-1,695	-1,436	-2,928	-3,726	-5682

Sources: Statistics Department of the People's Bank of China. *The People's Bank of China Quarterly Statistical Bulletin 2005*.

Note: E = (A - B) + C + D; FER (- = increase); S or D: Financial surplus or deficit

However, when we verify the changes of the Financial Surplus and Deficit that puts Foreign Exchange Reserves in a net inflow situation and adding Errors and Omissions, we can get the actual situation. That is the overseas sector was always in financial deficit except for 1993. In other words, the financial surpluses in the domestic sector also became a net fund outflow from China. And the flow of the funds is like the "return of capital" which means to flow to the advanced countries and other areas. Those returns of capital, however, increased rapidly after 1997, and due especially to the Asian currency crises, fund outflows from China increased markedly. This appears in the last row of Table 6.

In a word, the conversion of the increase in large-scale fund outflows with the big decrease in the net fund inflow will be able to be said to be the main characteristic of overseas flow funds in China after 1997.

## 6. Problems and future prospects

Thus, for the Asian economy in the 1990s and the first half of the 2010s, fund flows on a historical record-breaking scale can be understood from the above analysis. Then, though "doubtful circulation" existed in this large-scale flow of funds, it existed not only for ASEAN

countries, which had current account deficits, but also for China, which had a surplus. Although the economical phenomenon of the funds flowing from foreign countries returned again in the same way, the causes are different.

### **6.1. The difference in “doubtful flows” in East Asia**

Though hot money was used as the means to finance the current deficit, it caused an Asian currency crisis in ASEAN countries for the first half of the 1990s. The net fund outflow in China was always caused by capital flight. The main reasons are as follow; the legal system which hasn't developed an immature account system, delays in the financial system originating from the lack of the examination ability of banks, the growing difference in domestic outside interest in China, and the gap in the treatment of domestic enterprise and foreign capital enterprise.

### **6.2. Creation of an environment for stabilized fund flows**

Fund inflows are not a misfortune for a receiving country, and they can become a chance for economic growth. They can promote the improvement of the management environment in the developing countries and the maintenance of the financial market. However, at an early stage without being equipped with a solid financial system and a prudent risk control system, the regulation of the free movement of capital is unavoidable to maintain the safety of the economic growth from the variation of the international capital. The sixth article of the IMF agreement recognizes that a member nation may regulate the movement of capital within the range where neither the freedom of the current account dealings nor the fulfillment duty of existent contracts is obstructed. Therefore, it seems that it is analyzed by this, and that should concretely restrict capital movements in the short term whose risks are bigger than long-term capital movements.

Moreover, it is greatly divided into the capital movement regulation, and there are varied inflow regulations at the entrance stage and outflow regulations at the exit stage. Regulation at the entrance stage is there to prevent a crisis from happening. If inflows of hot money from a sudden rise were controlled in advance by regulations, shocks due to capital flight from a sudden fall situation would be small and finite. Then, the regulation to the inflow of capital should be able to stem the tide of the inflow of hot money, and through tighter domestic policy it influences the expansion of the interest both on the inside and the outside the effect that prevents the overestimate of a country's currency can be expected as well. Therefore, the target is limited to the entrance of the short-term capital, and the whole regulation is more suitable at a relatively early stage of development.

However, the idea is to move from a policy of foreign capital treatment to a market guidance plan rather than simply deciding how capital movement can be regulated in the long run. Concretely, a country should consider how capital movement is efficiently guided by financial regulations and the maintenance of the financial market. Therefore, one can see where international cooperation with other countries such as building up the financial

information network of East Asia and creating an environment for stabilized fund flows, becomes necessary.

Since 2000, the economy of East Asia has been recovering rapidly. Moreover, China finally joined the WTO at the end of 2001, and the international fund flows of East Asia are being confronted with structural change. Such a situation will make it more important for government and enterprises to moderate economic management in the developing countries of East Asia led by China from the perspective of global economy. For the stability of the economic growth, comprehending the pattern and principle of fund flows will become more realistic and indispensable.

### **6.3. Enlightenment from the crisis and new challenge**

As was stated above, there were huge capital inflows of about 4 times of current-account deficit in East Asia since 1990s. The unstable international capital which came in with the purpose of the profit search done like this has risk, but it becomes the chance of the economic development for developing countries which completed an investment environment like stability, too. The ability that copes with a financial crisis in East Asian area has become stronger through strengthening of the enterprise financial affairs system, the decrease of the short-term capital debt, the maintenance of the financial structure. Moreover, an economy faced rapid recovery in 1999, and international capitals have been returned to East Asia since 2000.

On the other hand, fund flows of the United States became net outflows after fourteen years. Those were influenced by the American terrorism event in 2001, and the enterprise defective account event in 2004. The inflow of FDI of the United States against have decreased by one third last year in 2004, and the possibility that the composition of the Global flow of funds, which moved the United States to the center, collapses have been turned up. At the same time, the economy of China that is said the factory of the world is getting high growth, however, Chinese overseas fund flows have affected the international money market mainly through the Global flow of funds. East Asia will become the center of the International fund flows through that interlock and the adjustment inside the area. We think this composition is realistic.

Comovement in financial markets clearly rose during the 1990s as the Global flow of funds increased. There is some evidence that financial and real comovements feed on each other. However, financial and real synchronization have not always moved in unison. We are in the early stages of understanding these relationships. Predicting trends is also difficult since the huge increase in Global flow of funds in the 1990s was partly the consequence of a bubble, and, hence, such comovement will inevitably decline. But even if it declines, financial market integration is still high, and shocks to large financial markets will continue to be transmitted to other countries. Policymakers will continue to struggle with how to respond to real and Global flow of funds in other countries. Globalization is a fuzzy—and often abused—analytical concept. A focus on the economic and institutional drivers of global and regional comovements

could bring more discipline to our understanding of ongoing complex and exciting changes.

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