

## **Increasing Reserve Assets**

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### **Abstract**

Ample reserve assets used to be a symbol of a rich country. However, what is going on at present has posed a major question to this way of thinking. Countries with ample foreign exchanges are not developed countries excluding Japan, but are developing countries including China as the greatest reserve assets holder, and Japan. A common factor of the structures of balance of payments of China and Japan is that they are based on a large amount of the surplus in their current accounts. Furthermore, the rapid increase in reserves was also the result of an additional factor of the surplus in the capital and financial account centering on direct investment in the case of China, and a decrease in the deficit in the capital and financial account in the case of Japan. It seems to be that increasing reserve assets are becoming a part of the absorption system of world savings by the USA.

Key words: reserve assets, balance of payments, globalization, absorption of world savings

### **Introduction**

Increases in the reserve assets of China, etc. have attracted attention in recent years. The rapid increase in China, which started after the year 2000, is now estimated to exceed these of Japan sooner or later, which the Japanese have had some reputation as the greatest reserve holder in the world, or to have already exceeded them by now<sup>(1)</sup>. This phenomenon, however, did not occur under the circumstances where Japan did not increase too much, or reduce them. It is therefore necessary to note the point that China achieved this rather at a far greater pace than that of Japan, while Japan itself

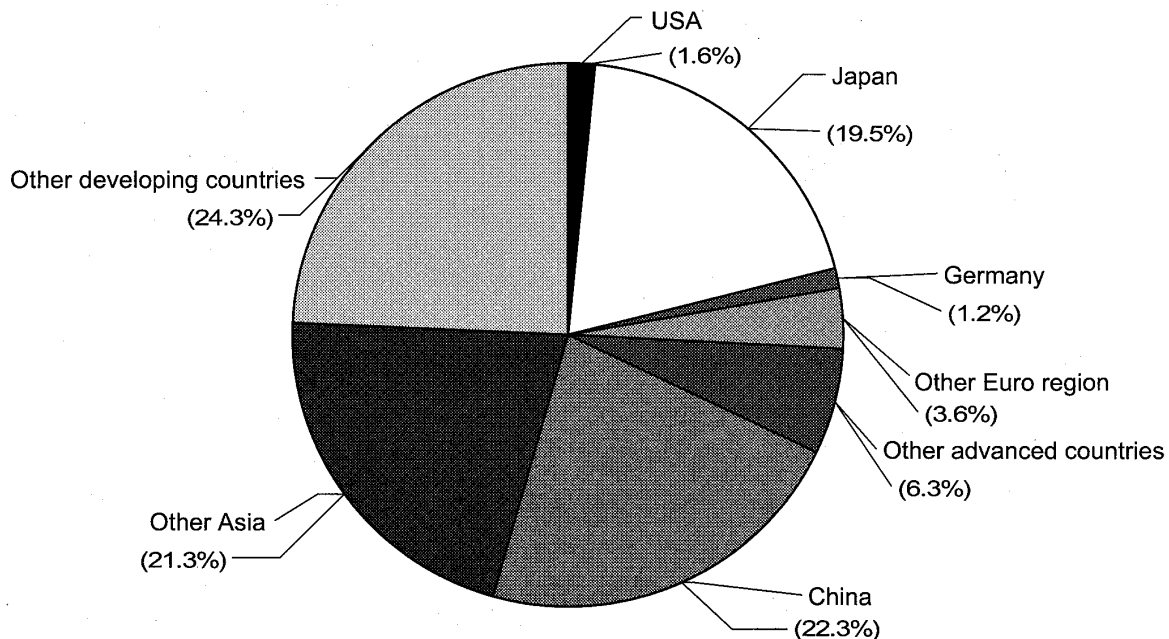
has also rapidly increased them as will be mentioned later. Hitherto, two greatest foreign reserve holders have emerged in East Asia.

In this paper, we will examine various factors which have brought about such a situation, and would like to clarify its economic implication. Firstly, let us examine the change in the state of the allocation of reserve assets in the world today.

### 1. Allocation of Reserve Assets in the World

Let's look at the state of reserve holdings in the world as at the end of 2005. As Figure 1 shows, today's major reserve holders are China and Japan. The total of the two countries exceeds 40% in the world. In addition, if "other Asian countries" are added to this, more than 60% is indeed concentrated in this region. This means that the share of advanced countries including Japan between 30 and 40%. In the past,

**Figure 1 The shares of reserve assets by main countries and regions in the world (at the end of 2005, the total amount is 2,997.6 billion SDR)**

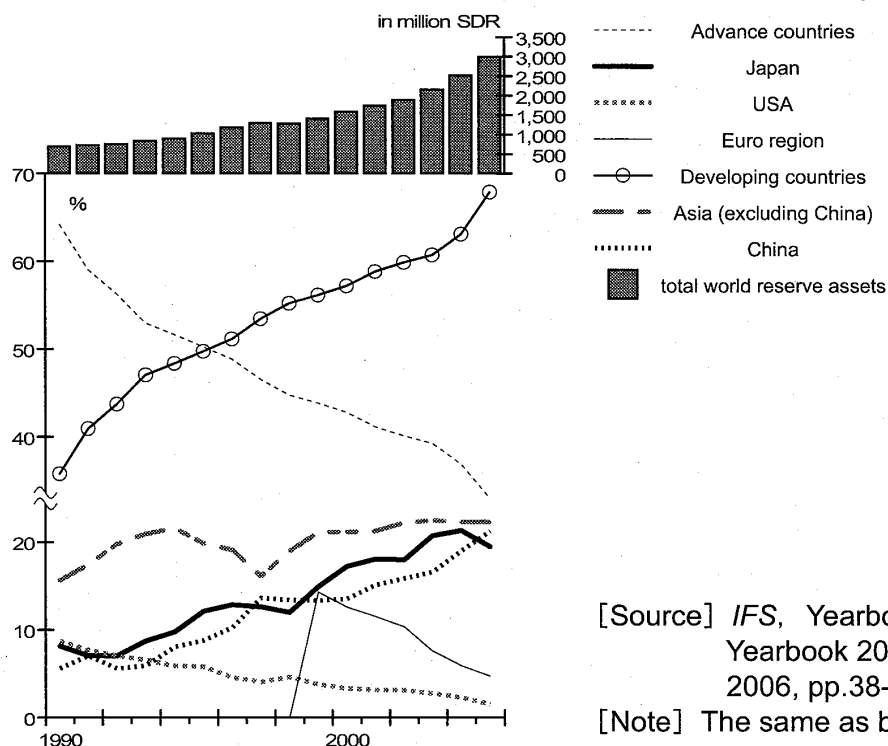


[Source] IMF, *International Financial Statistics* (hereinafter referred to as *IFS*), April 2006, pp. 38-40

[Note] (1) Valuation of gold was made at 35 SDR per ounce.

(2) Chinese figures are the total of mainland China, Hong Kong and Macao.

**Figure 2 The trend of total reserve assets in the world and shares of main countries and regions (at each yearend)**



[Source] *IFS*, Yearbook 2002, pp. 72-77, Yearbook 2004, pp.42-44, April 2006, pp.38-40.

[Note] The same as before.

there was a tendency that advanced countries had ample reserves and developing countries tended to be short of them. The present situation appears to be that the whole picture has been reversed, apart from the circumstances of individual countries. The features of the recent state of reserves in the world can be said to be that developing countries have been relatively rich in foreign exchanges especially in the Asian region, and that Japan being an advanced country and China showing very rapid growth are now major holders.

The trend of the allocation ratios of the reserves in the world after 1990 shows that a dramatic change has occurred in the last ten to fifteen years. As Figure 2 shows, in 1990 developed countries had more than 60% of all in the world, and the share of developing countries was less than 40% in contrast. The present situation, however, is largely in reverse, as already mentioned above. Japan and China rapidly increased their shares. "Other Asian countries" have also done, but the recent trend is towards a slight leveling-off.

**Table 1 Change in allocation of reserve assets (1990→2005, billion SDR)**

	1990	2005	Change	Share of change (%)
World total	688.3	2997.6	2309.3	100.0
Advanced countries	441.9	962.9	521.0	22.6
Japan	56.0	537.8	584.6	25.3
USA	60.0	47.0	-13.0	-0.6
Euro region	217.5	142.4	-75.1	-3.3
Germany	51.1	35.4	-15.6	-0.7
Developing countries	246.3	2034.7	1788.3	77.4
China	38.5	667.1	628.5	27.2
Other Asia	107.6	639.1	531.5	23.0
Other developing countries	100.2	728.5	628.3	27.2

[Source] The same as at Figure 2.

[Note] The Figures for Euro region in 1990 are the total reserves of the present member countries. Other notes are the same as those for Figure 1.

**Table 2 Change in the amount of reserves at the end of the year divided by the amount of average monthly goods import**

	1990	2005
World total	2.3	3.4
Advanced countries	2.0	1.8
Japan	2.8	13.5
Other advanced countries	2.0	0.8
Developing countries	3.1	6.0
China	3.3	8.2
Other Asia	3.9	6.4
Other developing countries	2.4	4.6

[Source] *IFS*, April 2006

[Note] The amounts of import are CIF figures.

On the other hand, the shares of the Euro region and the USA have tended to decline, and the Euro region especially shows a major change<sup>(2)</sup>.

Additionally, what should attract greater attention in this Figure is that the total reserves in the world have also largely expanded as shown on the top part. Let's look at data further from the viewpoint of which countries and regions contributed to such increases, although what is

described above can be deduced to some extent. As Table I shows, the increase in the whole world was as rapid as approximately 4.4 times from 688.3 to 2,997.6 billion SDR. Firstly, almost all the increase in advanced countries (22.6% of the total increase) was that of Japan, while even absolute figures decreased in the USA and Euro region. Nearly two thirds of the share of the increase of developing countries, which is 77.4%, is by Asian region (i.e. China and "other Asian countries"). China and Japan, which are today's two largest foreign holding countries, acquired more than half of the increase in the world. The corresponding number in the whole of Asia including these two countries exceeded a remarkable number, that is, three quarters<sup>(3)</sup>.

Ample reserve assets used to be one of the standards of rich countries, and its scarcity was a symbol of the poverty that developing countries must get out of<sup>(4)</sup>. However, today the state which may change such a concept has occurred in a very short period. Under such circumstances, China and Japan have made a rapid increase. In the case of China, this could be an evidence of its economic progress. Then, what was the reason in the case of Japan, which has been struggling in an stubborn economic slump?

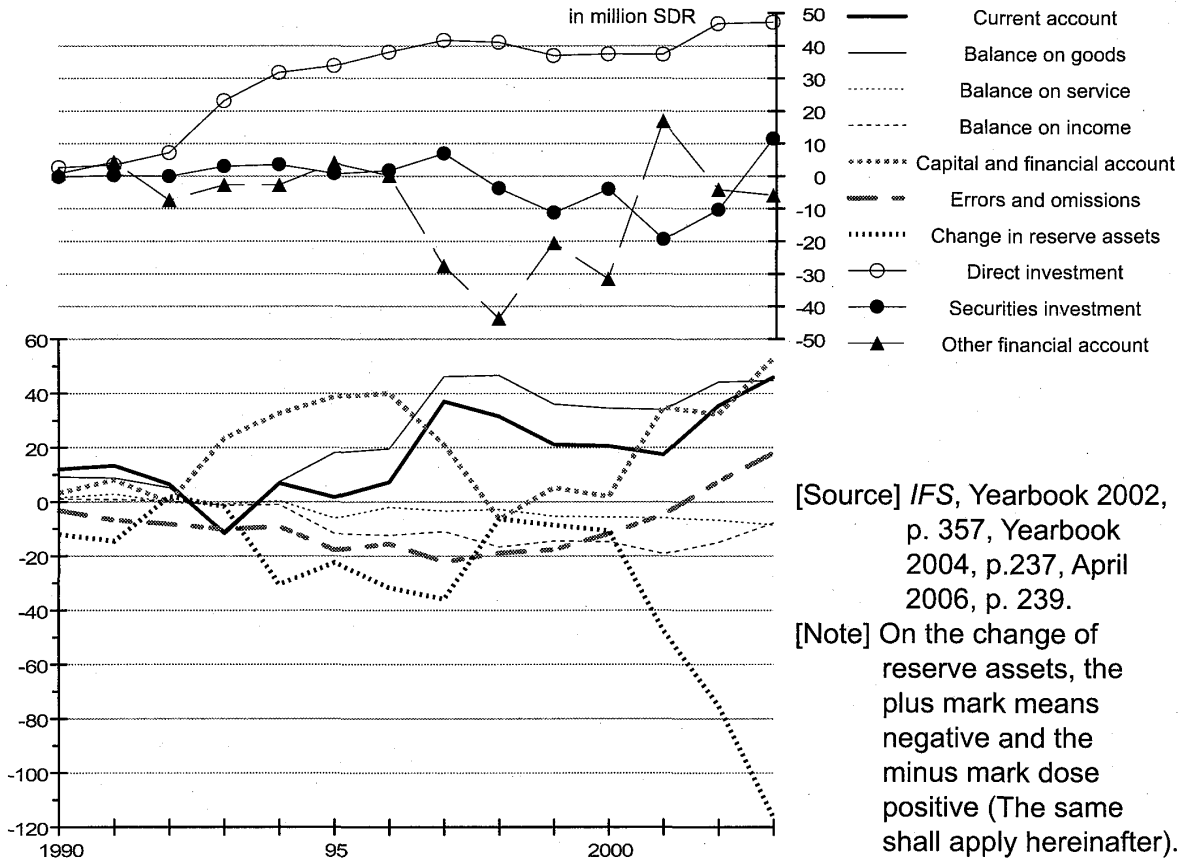
## **2. Balance of Payments of China and Japan**

Apart from gold and the IMF reserve position, needless to say, foreign exchanges, which are foreign currency denominated assets, increase as a result of an increase in income arising from asset management such as interest. It is, however, reasonable to consider that rapid increases in Japan and China as seen in the preceding paragraph were made by major market interventions of selling one's own national currency and buying foreign currencies in the foreign exchange markets.

Accordingly, this problem is closely related to the structure of balance of payments as well. Now, let's examine the structures of China and Japan in the following paragraphs.

Firstly, we would like to have a look at the balance of payments of

**Figure 3 The trend of main items of balance of payments of mainland China**



China, it's recent economic development of which has attracted attention worldwide. Data of balance of payments of Hong Kong have been published by *IFS* only since 1998. Then we will take up the figures of only mainland China, because those of Macao are considered too small to distort.

From Figure 3, there is no doubt that the consistent surplus in the current account since the middle of 1990 has been the basis of the rapid increase in reserve assets. We, however, consider it clear that the net capital inflow from abroad contributed as a major factor, as it coincided with the increase in the surplus in the capital and financial account in the middle of the 1990s and the several years of this century. As the upper graph in Figure 3 shows, the core of this capital inflow is the flow of direct investment.

**Figure 4 The trend of main items of balance of payments of Japan**

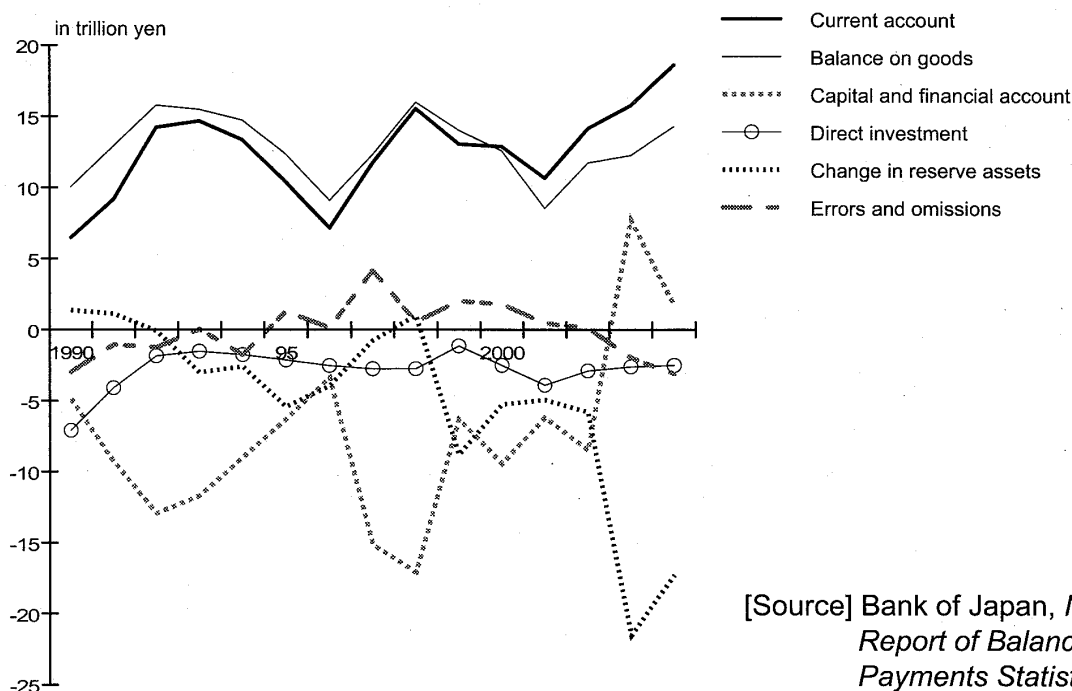


Figure 4 shows the state of the balance of payments of Japan. From this, it can be seen that a major change started to take place in the balance of payment structure of Japan from the beginning of this century. It's balance of payments used to be typical of capital exporting countries where the surplus in the current account absorbs the deficit in the capital and financial account. The deficit in the capital and financial account, however, started to diminish at the end of the preceding century, and the figures tended to turn into the black in 2003 and 2004. Accordingly, Japan became a net capital importing country in terms of the private sector in those two years. As Figure 4 shows, direct investment during the period -although its scale has been reduced, compared to that in early 1990s - remained in the red. It is therefore necessary to consider that such a reverse was caused by the domain of indirect investment. The rapid increase in reserves largely offsets the surplus in the accounts including the current account.

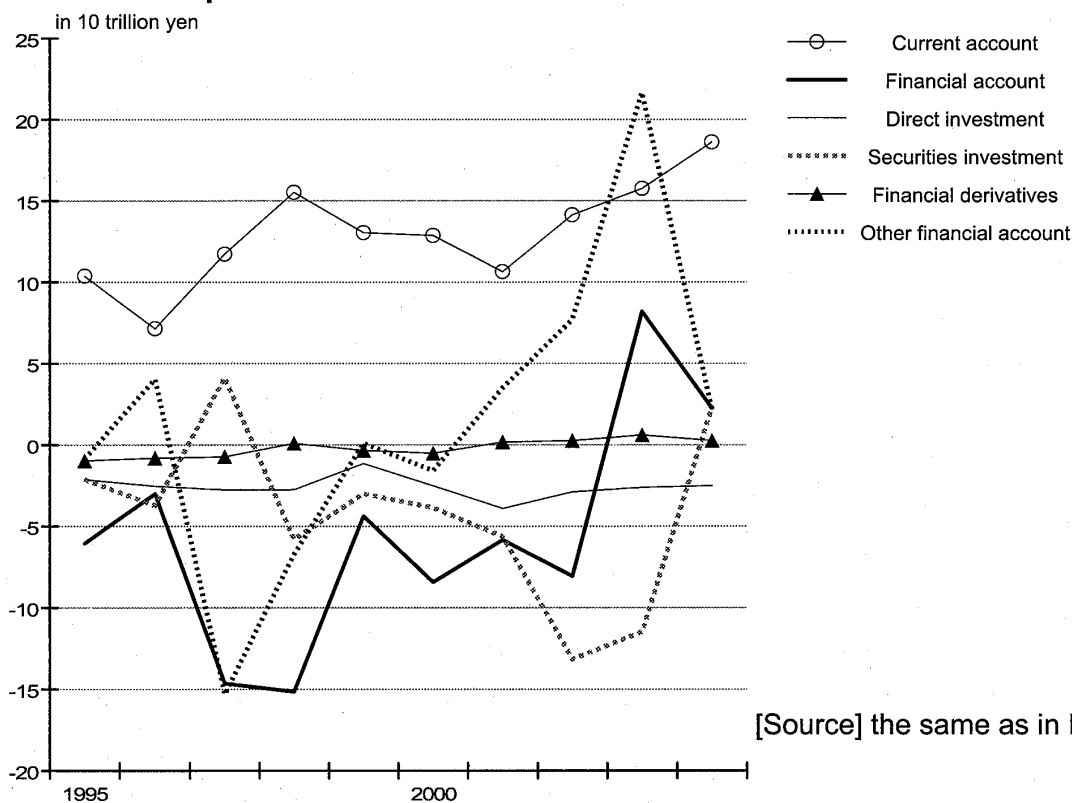
The summary of the above is that it can be said that in the case of China, the background of the rapid increase in reserve assets was a surplus in the capital and financial account centering on direct

investment in addition to the surplus in the current account, while in the case of Japan, the background was the surplus in the current account and a drastic change in indirect investment (turning from deficit to surplus). What is interesting here is that a similar pattern is envisaged behind the background relating to the current account with respect to the rapid increase in their reserves both in China and Japan. However, the fact is that there is a considerable difference between the contents of the capital and financial account of China and those of Japan. Then, let's observe the capital movement of Japan, noting indirect investment in particular.

### 3. Capital and Financial Account of Japan

The capital and financial account mostly comprise the financial account. It is therefore sufficient to see this for the time being<sup>(5)</sup>. As Figure 5 shows, the financial account, which makes a shape contrary

**Figure 5 The current account and main items of the financial account of Japan**





**Table 3 The capital and financial account of Japan in 2003 and 2004 (in 100 million yen)**

	2003			2004		
	Assets	Liabilities	Balance <sup>(1)</sup>	Assets	Liabilities	Balance <sup>(1)</sup>
Financial account	-3,219	78,229	81,448	211,483	234,326	22,843
Direct investment	33,389	7,332	-26,057	33,487	8,456	-25,031
Securities investment	183,961	95,329	-88,632	200,201	218,993	18,792
Equity shares	6,866	98,386	91,520	32,903	105,958	73,055
Bonds	177,095	-3,057	-180,152	167,298	113,034	-54,264
Medium- and long-term bonds	183,927	-16,458	-200,385	173,990	64,090	-109,900
Short-term bonds	-6,832	13,401	20,233	-6,692	48,944	55,636
Financial derivatives	-75,260	-69,185	6,075	-61,061	-58,471	2,590
Other financial account	-145,309	44,754	190,063	38,856	65,349	26,493
Loan (1)	-72,299	31,664	103,963	27,127	79,900	52,773
Long-term	-6,016	-12,988	-6,972	-19,755	239	19,994
Short-term	-66,284	44,652	110,936	46,882	79,661	32,779
Trade credit	2,001	872	-1,129	1,957	747	-1,210
Cash and deposits	-5,783	19,966	25,749	14,928	-4,444	-19,372
Miscellaneous investment	-69,227	-7,748	61,479	-5,156	-10,854	-5,698
Long-term	4,036	-2,941	-6,977	-6,510	-213	6,297
Short-term	-73,263	-4,807	68,456	1,354	-10,641	-11,995
Capital account	5,134	462	-4,672	5,616	483	-5,133
Capital transfer	2,962	326	-2,636	4,859	182	-4,677
Others	2,172	136	-2,036	757	301	-456
Capital and financial account	1,915	78,691	76,776	217,099	234,809	17,710

[Source] *Monthly Report of Balance of Payments Statistics*, April 2005

[Note]

- (1) The balance is obtained by subtracting assets from deficits. In this table, plus figures of assets means an increase and minus dose a decrease.
- (2) "Loan" means "loaning" is for assets and "borrowing" is for liabilities.
- (3) Security loan transactions are excluded from securities investment and other investment. On this point, please refer to Note 6 in the Text.

to the shape of the current account if there were no change in reserve assets, fluctuates to a considerable extent. The direct investment account and the financial derivative account shown are pretty stable. On the other hand, both accounts, i.e., security investment and "other investment" show rather wild movement. It can be said that the whole picture of the financial account has been formed by the composition of the latter two components. The surpluses in the capital and financial accounts for 2003 and 2004 were produced from such backgrounds.

Now, let's look in more details at the capital and financial accounts for both years<sup>(6)</sup>. As Table 3 shows, the capital and financial account in Japan for 2003 can be said to be abnormal. The reason is that the assets in the financial account comprising most of the capital and financial account decreased, and the total of the financial account including an increase in liabilities amounted to a surplus of 8,144.8 billion yen. In other words, it should mean the surplus in those accounts including the withdrawal of assets from abroad. On the other hand, both assets and liabilities showed a considerable increase in 2004. It means the surplus came out as a result of the increase in the liabilities having exceeded the increase in the assets. In addition, the increase in the assets and in the liabilities with respect to direct investment are both approximately to the same extent. It can therefore be confirmed that these items were not the main factors of the change in the capital and financial account.

Firstly, what is conspicuous concerning the decrease in the assets for 2003 is a major reduction of "other investment". This is as a result of withdrawal of "loan" and "miscellaneous investments". In the liabilities where the decrease in "medium- and long-term bonds" was marked, increases in short-term "borrowing" and "cash and deposits" were striking<sup>(7)</sup>.

In 2004, the remarkable increase among the assets was "security investment" mainly in medium- and long-term bonds. This trend, however, has been seen for a long time, and is not new in particular. In other items, short-term "loan" was a little conspicuous, and nothing else appears significant. In the liabilities, "bonds" which decreased in the previous year increased, and amounted to as much as 10 trillion yen nearly in line with "equity shares" (incidentally, securities investment of Japan tended to be medium- and long-term bonds for exportation and equity shares for importation for a long time)<sup>(8)</sup>. In other points, "borrowing" centering on the short-term should be noted.

The huge surplus in the current account and in the capital and financial accounts for 2003 and 2004 that we have examined caused the increases in reserve assets amounting to 16 trillion yen in 2003(on

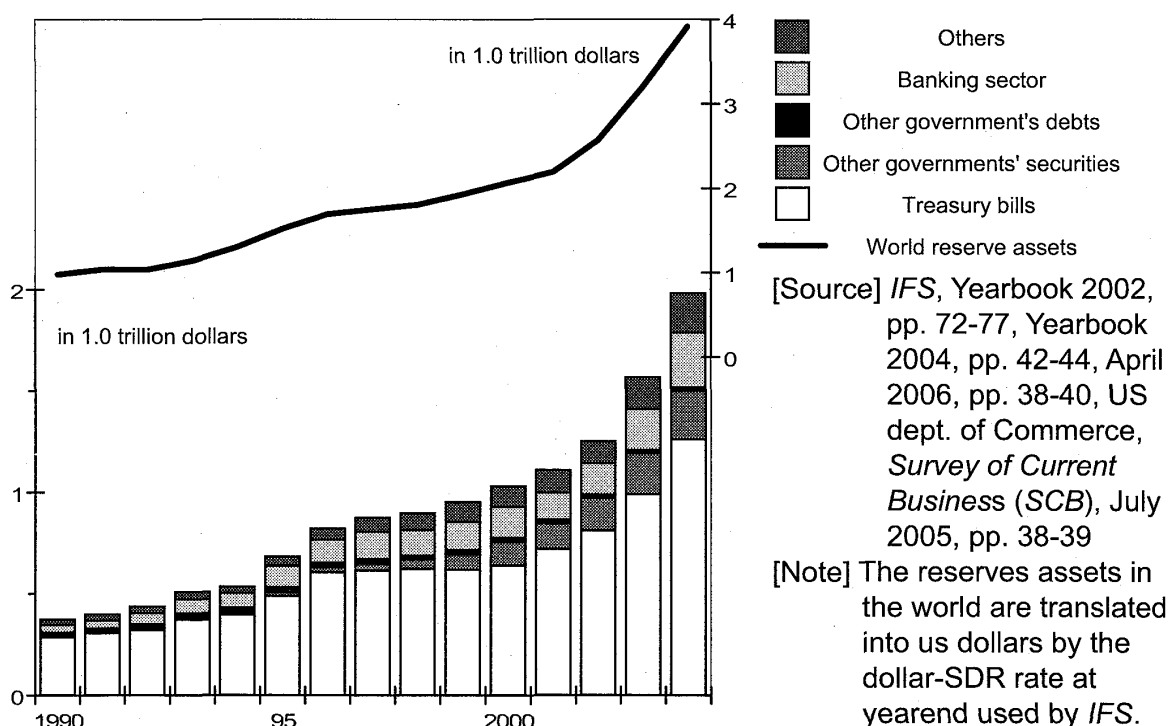
which “transaction factors” corresponded to 21.5 trillion yen) and 15.6 trillion yen (17.3 trillion yen) in 2004<sup>(9)</sup>.

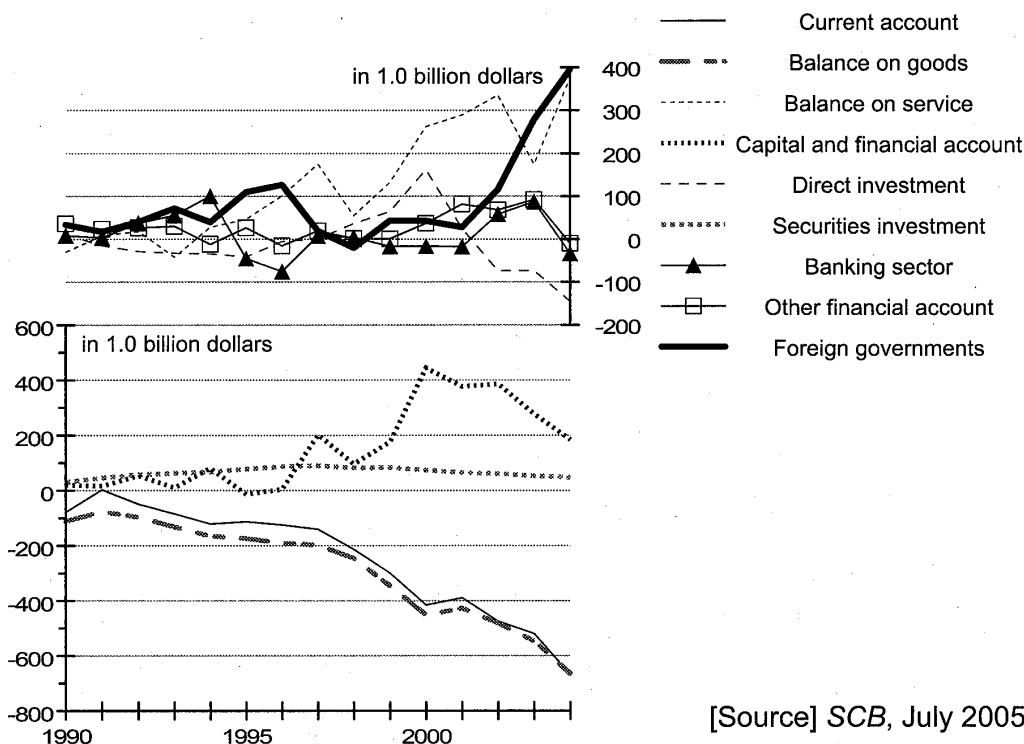
#### 4. Foreign Government Assets in the USA

Breakdowns of reserves assets are seldom announced. This applies in Japan as well<sup>(10)</sup>. The Ministry of Finance in Japan, however, announced in April 2005 that it will carry out management of foreign exchanges centering on dollar denominated assets comprising mainly USA government bills<sup>(11)</sup>. It has been reported that the rapid increase in those of China was the result of buying dollars in the foreign exchange markets<sup>(12)</sup>. A number of documents have pointed out that dollar denominated assets comprise a greater part of foreign exchanges<sup>(13)</sup>. Accordingly, we consider that it will be possible to have a look at the questions so far examined from the USA side.

Firstly, let's compare the increases in reserves assets in the world

**Figure 6 The trend of the reserve assets in the world and foreign government assets in the USA**



**Figure 7 The trend of main items of balance of payments of the USA**

which we have looked at to the state of foreign governments' assets in the USA. It can be seen from Figure 6 that increases in the former and in the latter have parallel progress in recent years. The foreign government assets mainly comprise Treasury Bills, but other government securities have also largely increased. What is the reason behind such increases?

Next, let's examine the recent balance of payments of the USA. As the lower graph shows, the deficit in the current account continued to increase, and its size has become equivalent to that of the deficit in the balance on goods. In other words, this means that the surplus in the balance on services and on income have become unable to offset the deficit in the current account. The deficit in that account has been offset by the surplus in the capital and financial account. According to the details of the capital and financial account shown in the upper graph in Figure 7, the increase of surplus in securities investment has slowed down, and has not increased so much in recent years, and further, direct investment has fallen into the red, and foreign

**Table 4 Flow of foreign government assets in the USA**

	2000	2001	2002	2003	2004
Total amount (in 10 million us dollars)	37,724	28,059	115,945	278,275	394,710
Treasury Bills	-27.1	120.1	52.2	66.5	69.1
Other government bonds	108.4	74.6	26.3	14.4	9.8
Other governments' debts	-4.8	-8.2	0.1	-0.2	0.1
Banking sector	15.2	-106.8	18.3	17.5	17.8
Others	8.3	20.4	3.1	1.9	3.2
Europe	22.8	6.9	21.7	2.9	11.1
Canada	-0.4	-1.0	-2.0	-0.7	0.4
Latin America and Caribbean countries	8.5	21.6	-5.1	5.7	6.2
Asia	60.9	74.0	81.8	90.4	79.4
Africa	4.2	1.7	-0.1	0.4	0.7
Others	4.1	-3.2	3.7	1.3	2.2

[Source] SCB, July 2003, p. 78, July 2005, p. 102

**Table 5 The trend of US Treasury Bills holdings by foreign countries (the total of the governments and the private sector)**

	2000	2001	2002	2003	2004
Total amount (in 10 billion us dollars)	1,026,144	1,063,086	1,285,498	1,533,620	1,900,218
Foreign governments	60.9	66.3	63.2	64.6	66.3
Others	39.1	33.7	36.8	35.4	33.7
Japan	31.7	31.1	30.5	35.8	36.5
China	6.1	8.4	9.7	11.5	12.4
UK	3.6	2.7	4.9	2.9	4.0
Caiman islands	0.8	1.8	1.2	1.1	3.8
Taiwan	3.4	3.6	3.2	3.7	3.6
Korea	2.9	2.7	3.7	3.6	2.9
Germany	4.9	4.0	3.0	2.9	2.8
Hong Kong	3.9	4.5	3.5	3.1	2.4
Others	42.8	41.2	40.2	35.5	31.5

[Source] SCB, July 2003, pp. 20-21, July 2004, pp. 38-39, July 2005, pp.38-39

[Note] The figures for 2000 and 2001 are those before the revision in 2005.

government assets show rapid increase. Foreign exchanges of China and Japan are naturally included in this to a considerable extent. In short, we consider that it can be seen that major factors of the surplus in the capital and financial account which should cover the deficit in the current account have become ascribed to the recent increase in foreign governments' assets, i.e. in the reserves mainly of China and

Japan.

Table 4 shows the recent state of flows of foreign government assets in the USA. Firstly, the increases on and after 2002 are remarkable. In addition, the figures decreased in some years as in 2000, but it is clear that the core part of the management form of foreign government assets is Treasury Bills. In addition, as the lower column shows, the inflow from Asia is overwhelming among the figures by region. We must admit that this agrees with the rapid increase in foreign exchanges of China and Japan. We consider it reasonable to think that a considerable part of them in the USA are Treasury Bills.

Because the state of separate figures of the Treasury Bills held by the government and by the private sector are not published, the combined figures of both are shown in Table 5. Firstly, approximately two thirds of the Bills held by foreigners (more accurately, non-residents), are held by foreign governments, and the largest are Japan and China as shown in the lower column. The total of these two countries is reaching to a half<sup>(14)</sup>.

To sum up, the increase of reserves in the world has become a rapid increase of foreign governments' assets in the USA, replacing for the surplus in the capital and financial account that used to cover the deficit in the current account of the USA. The increases of reserve assets in China, Japan and developing countries occurred in such circumstances.

## **5. Conclusion**

As mentioned earlier, ample reserve assets used to be a symbol of an affluent country, and people have considered it to be one of the indices as a matter of course. However, what is going on at present has posed a major question to this way of thinking. Countries with ample foreign exchanges are not developed countries excluding Japan, but are developing countries where their economy continues to progress and Japan as an exception to advanced countries. A common factor of the structures of the balance of payments of China

and Japan is that they are based on a large amount of the surplus in their current accounts. Furthermore, the rapid increase in reserves was the result of an additional factor of the surplus in the capital and financial account centering on direct investment in the case of China, and a decrease in the deficit in the capital and financial account in the case of Japan.

The fact that the current account is in surplus means that savings are in excess of investment in that country. Accordingly, it means that the country is a net-capital exporter. Where the capital and financial account is also in surplus, this means that savings from abroad have flowed into this country. The rapid increase of reserve assets was effected to offset this. Japan has conserved its own status as a savings excess country (= net capital exporting country) for a long time. The structure, where capital exporting power has lowered in the private sector and foreign exchanges which correspond to capital inflows from abroad have increased, is shown in the figures for 2003 and 2004. In a word, it can be said that the fact that governments have come to play the role of flowing savings in the world into the USA in place of the private sector is represented in those increase.

As seen in this way, no major change can be recognized in the basic structure of globalization today with respect to the aspect of finance and capital such as deregulation of finance and that of capital movement. This is the global savings absorption system for the USA and by the USA. What is new is likely to be that foreign exchanges have been integrated as part of the system and that established ideas of reserve assets are under pressure to change. However, one must remember that this means that accumulated governments' assets always hold the risks of sifting exchange rate<sup>(15)</sup>.

#### Notes

- (1) According to recent data, the reserves of mainland China as at the end of 2005 amounted to 575.45 billion SDR, which was close to the figures in Japan at 584.57 billion SDR. But, Hong Kong and Macao have 86.94 and 4.68 billion SDR respectively as those. If these figures are added, the figures

of China have already exceeded those of Japan. See, IMF, *International Financial Statistics* (hereinafter referred to as *IFS*), April 2006, pp. 38-39.

- (2) As the data in Figure 2 show, decline in the absolute figures of reserves in the Euro region started to be maraked on and after 2002. The Euro was introduced in 1999, and the participating countries' own currencies were extinguished in February 2002.
- (3) From the above, a number of facts can be estimated including that the amount of reserve assets at the yearend divided by the amount of the average monthly goods imports, which is an index to know the extent of the adequacy of those, increased on a global basis, and among such countries Japan, China and "other Asian countries" showed rapid increases, and developing countries' figures also largely increased. These facts are immediately clear if one looks at Table 2. At least on the basis of these values, the foreign exchanges of developing countries are seemed to be considerably wealthier than those of developed countries.
- (4) These facts, however, are not applicable to the country having an international currency. The so-called "ceiling of the balance of payments" during the high growth period in Japan was one of the typical cases where the low level of the foreign exchanges hampered growth. Of course, at that time, the fixed exchange rate system was in force.
- (5) The fifth edition of *Balance of Payments Manual* (1993) published by IMF started to use the terms of "capital and financial account", "financial account" and "capital account" (pp. 40-42). In this connection, in the preparation of this paper, we used *Balance of Payment Statistics* on and after 1995, and so the figures that we used are from the statistics on the basis of the fifth edition from 1995 onwards.
- (6) In Table 3, data excluding security loan transactions are used for security investment and "other investment". The reason for the exclusion is said to be that the feature of these transactions is that "the figures are large, and volatile from month to month, and if these transactions are reflected in security investment and other investment, the actual state of security buying & selling and loan & borrowing will become difficult to determine" ("The Flash Trend of Balance of Payments in 2004" , *Quarterly Survey of Bank of Japan*, Spring 2005, p.133.
- (7) Regarding the surplus of "other investment" in the balance of payments in 2003, Bank of Japan says, "the main factor of the surplus is that surplus funds (in Yen) of overseas offices of foreign banks have flowed into Japan in the form of repurchase agreements, etc., the counterparties of which are the Japanese securities industry (*ibid.*, p.105). Please also refer to H. Okuda, "Balance of Payments Structure in 2003 and the Occurrence of Negative Interest Rates in the Call Market" , *Ritsumeikan International Research*, Vol.



18 No. 2, October 2005, from p. 32 onwards.

- (8) Regarding medium- and long-term domestic reinvestment in 2004, Bank of Japan says, "In addition to the major net acquisition (inflow) of the securities buying and selling position, the reinvestment position has turned to a major net acquisition (inflow) as a result of the net increase in issues (inflow) in the issue & redemption position of foreign bonds by residents "(See, "The Flash Trend of Balance of Payments in 2004" , p. 137). In this connection, on the process of unlimited intervention of the exchange rate by the authorities in both years, please refer to the brief summary of *Reading Currencies* by Y. Takita, Nihon Keizai Shimbunsha, 2004, p.34 on and after.
- (9) These figures have been taken from "International Investment Position 2003," *Monthly Report of Bank of Japan*, June 2004, p. 163 and "International Investment Position 2004" , *Quarterly Survey of Bank of Japan*, Summer of 2005, p.116.
- (10) However, part of them were leaked or announced to the public. For example, considerable details on the state of "Specie Held Abroad" at the end of October 1914 can be available in *Reference Book On Specie*, 1914 (Kyoto University). Professor Okuda shows data of changes in foreign exchanges in 2003 by quoting the "State of Foreign Exchanges, etc." by the Ministry of Finance in the above mentioned thesis (p.35).
- (11) *Asahi Newspaper*, 5 Apr11 2005.
- (12) *Nippon Keizai Newspaper*, 4 May 2006.
- (13) For example, Takita, *op. cit.*, p. 79.
- (14) It is not strange that the share of China exceeds or is equivalent to that of Japan in terms of the total amount of Treasury Bills. This can be, however, explained in the following way. Treasury Bills are mainly held by the government sector in China, while those are held not only by the government sector but also by the private sector in Japan. In addition, reserve assets of China are invested in other than Treasury Bills to a considerable extent, etc.
- (15) The issues on the rapid increase in foreign exchanges of Japan is closely related to the so-called "non-sterilization dispute" which took place at around the turn of the century and those on the easy-money and zero interest rate policy with a quantitative target of Bank of Japan. However, there are a number of documents concerning these subjects. We therefore did not refer to them in this paper.