

Section 3 Japanese economic development and the future balance of payments

【 Key points 】

1. Stages of economic development and the international balance of payments

Looking back historically at national economic development and changes in the international balance of payments structure, countries usually pass through certain stages of development. Beginning as immature debtors, they become mature debtors, move on to debt repayment, become immature creditors and then mature creditors, and finally reach credit disposition status.

Japan's international balance of payments structure too has evolved in line with this development theory. The current dwindling of Japan's surplus on goods and services even as the surplus on income and external net assets expand suggests that Japan is following the United States and the United Kingdom in shifting to mature creditor status.

2. Medium- to long-term current account prospects and issues facing Japan

If Japan is in the process of becoming a mature creditor nation, any immediate reduction of the current account surplus should not be a cause for concern. However, maintaining economic dynamism is important even for a mature creditor nation, and Japan will need to maintain its export competitiveness, grow the service industry, and stimulate the domestic and external investment activities of Japanese companies. Further, it will be difficult to ensure stable capital inflows if Japan is unable to maintain its international credibility and standing by revitalizing the economy and bolstering international competitiveness.

First of all, it will be important to continue creating internationally competitive exports. Japan's exports have continued to grow over the years even as the exports themselves have changed, with Japanese industry not only constantly producing exports in new areas but also finding overseas markets for general products.

Secondly, new service industries with international competitiveness too will need to be created and fostered.

Thirdly, ongoing stable income revenues will require the sound operation of external assets and active investment activities based on a solid grasp of changes in the profit structures of the world's industries and their profit rates.

Fourthly, domestic systemic reform must be pursued to create an investment environment which will attract not only foreign but also domestic companies.

As described above, Japan will have to constantly develop new sources of revenue, provision of the necessary environment for which will mean advancing economic structural reform and promoting innovation across the economy as a whole.

1. Stages of economic development and the balance of payments

(1) Balance of payments and stages of economic development theory

Japan's current account balance and trade balance have recorded surpluses since the 1960s, remaining at the relatively high level of 2-4 percent of GDP since the 1980s. Looking to other countries, the Netherlands and Switzerland have also sustained large current account and trade surpluses, while the United States, formerly the world's largest creditor nation, began to experience a current account deficit as of the 1980s and is now the world's largest debtor nation. The United Kingdom too ran a current account surplus of more than five percent of GNP from the 19th century into the early 20th century, but has subsequently seen its current account balance alternate between surplus and deficit.

One approach to national economic development and changes in the balance of payments structure is the balance of payments development stage theory. This theory focuses on the changes in a country's IS balance which occur in the course of economic development, explaining changes in the balance of payments structure from a long-term perspective in combination with the asset accumulation process.

Crowther¹ uses two main criteria in classifying countries' balance of payments structures, namely whether they are creditor nations (positive income balance) or debtor nations (negative income balance), and whether they are capital importers (positive capital balance) or capital exporters (negative capital account balance). He then divides balance of payments development into six stages² (Fig. 2.3.1). Figure 2.3.2 shows balance of payments structures around the world in the late 1990s. When the main powers are classified according to the above theory, the results are as follows.

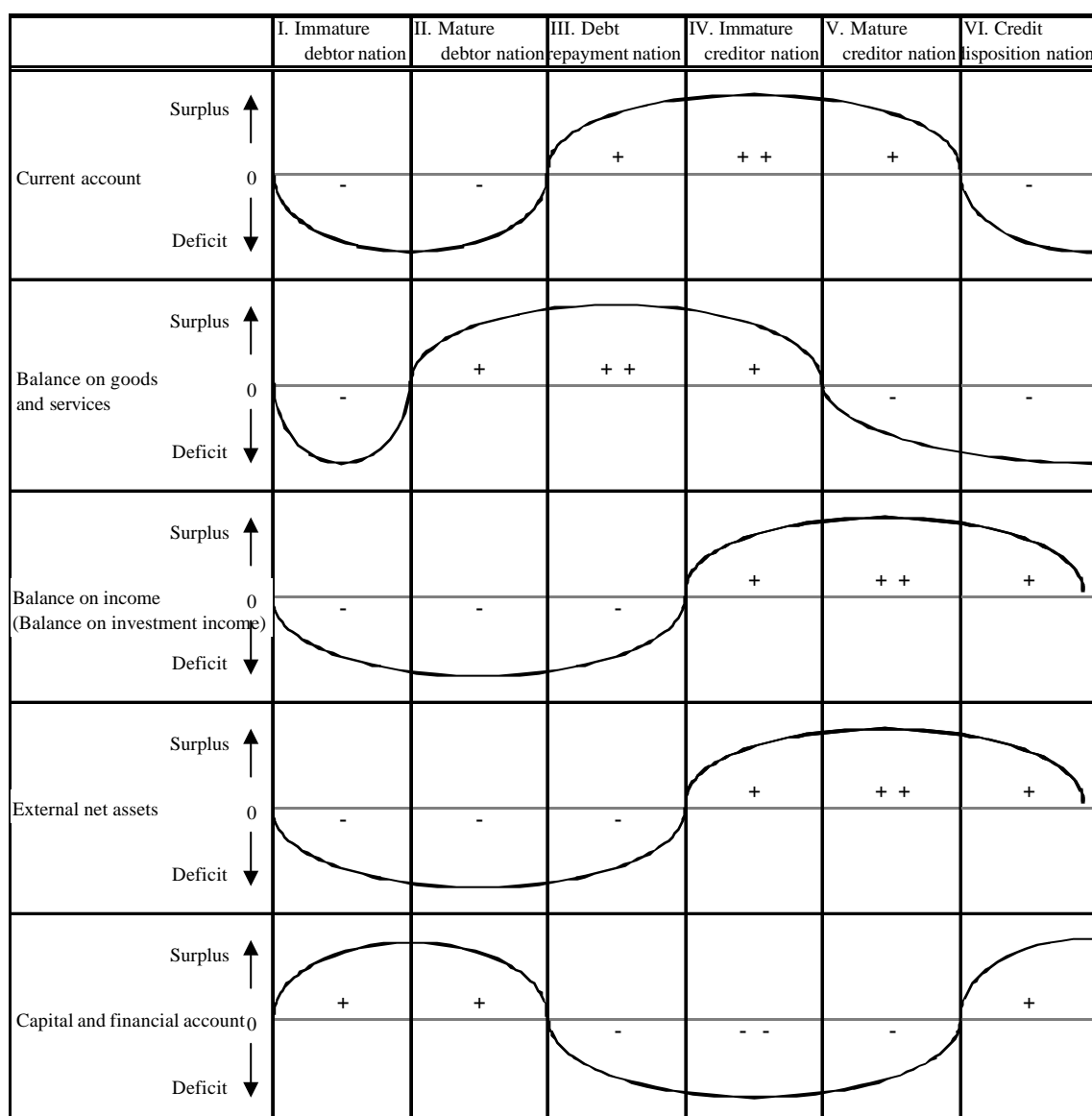
(a) Young debtor nation

At this stage, the lack of economic development and inadequate domestic savings force a country to depend on the offshore procurement of goods and capital. Imports outweigh exports and interest payments are met by further borrowing, resulting in goods and services and balance on income (or investment income) deficits, while the capital and financial balance runs a surplus, positioning the country as a capital importer. Mexico and other Latin American nations are currently in this situation.

¹ Crowther (1957)

² However, Crowther himself regards this development as to some extent cyclical, and countries do not simply cease economic development once they reach the sixth stage.

Figure 2.3.1 Image of international balance of payments development stage theory



Note: “+” denotes a surplus, “-” a deficit.

Source: Bank of Japan (2001).

Mexico, Brazil, Argentina, Chile, Peru (Fig. 2.3.3) and other Latin American countries engaged in swift industrialization in the 1970s based on expanded fiscal spending, procuring capital from abroad in the form of loans from developed countries to cover fiscal shortfalls. However, in the 1980s, high interest rates on the US dollar and plummeting prices for primary goods caused Latin American exports to stall and made it difficult to repay claims. The 1982 Mexican crisis pushed claim payments into arrears, temporarily braking the supply of new capital to debtor nations. Consequently, the Latin American nations prioritized balancing current accounts about all other policy goals, and as trade-restricting measures brought down

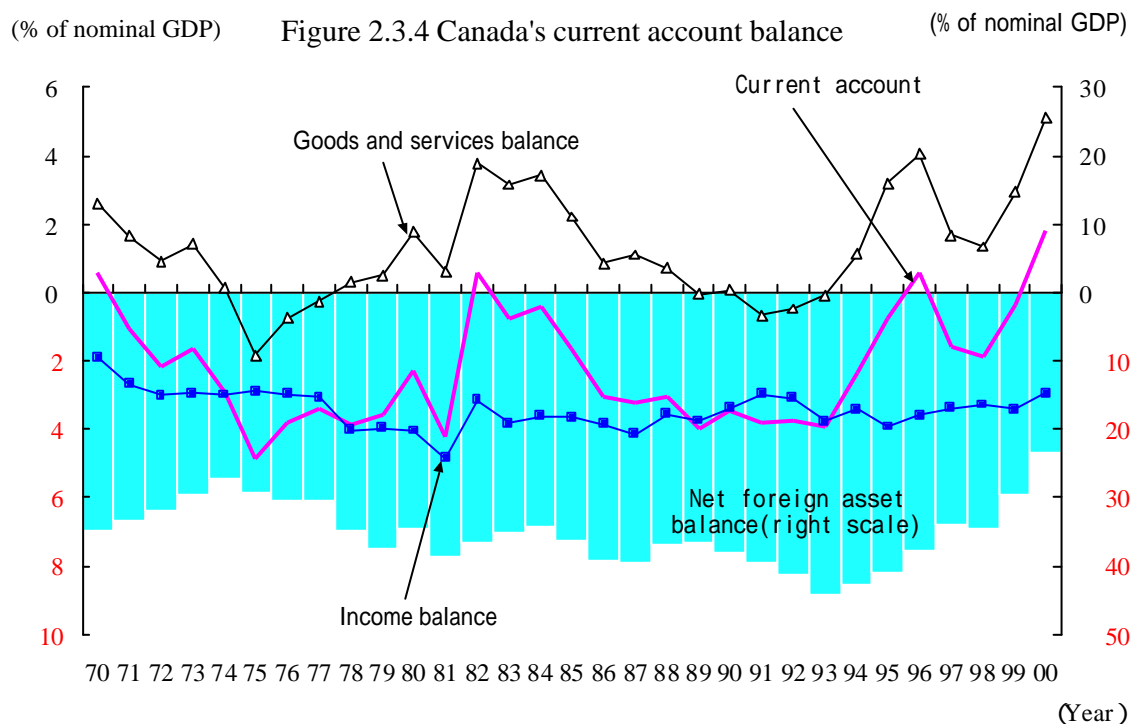
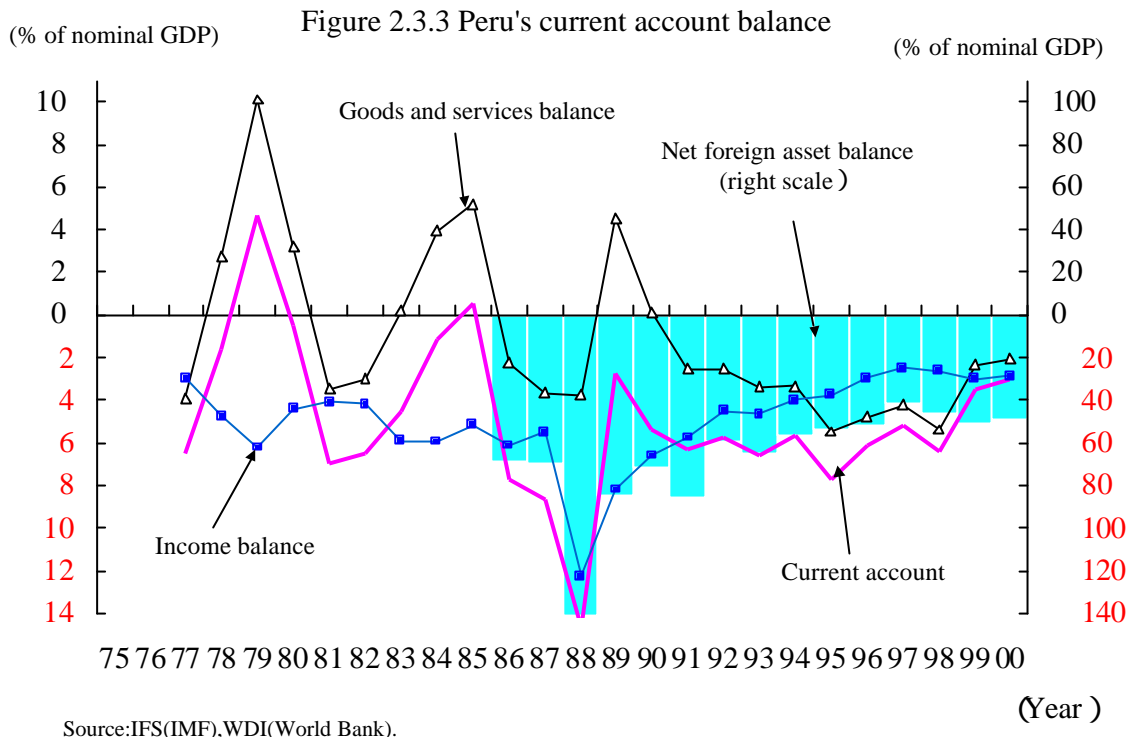
imports, current accounts also started to balance out. However, these measures came at great cost, depressing domestic investment levels and impeding economic growth. Capital inflows later resumed, and the capital surpluses achieved by the Latin American countries since the 1990s have held at 2-5 percent of GDP.

Figure 2.3.2 Balance of payments structures and development stages in the late 1990s

Against nominal GDP (%)						
	Stage of development	Current account	Balance on goods and services	Balance on income	External net assets	Capital and financial account
Austria		2.5	0.9	0.8	16.5	2.5
Spain		1.0	0.2	1.3	19.6	2.0
Portugal		7.3	9.6	1.3	21.8	8.3
Peru		4.8	3.8	2.8	47.7	4.3
Chile		3.5	0.9	3.3	22.9	4.7
Argentina		3.8	1.5	2.4		4.3
Brazil		3.7	1.6	2.3		3.8
Mexico		2.5	0.8	3.0		2.1
Australia		4.3	1.1	3.2	51.9	4.3
New Zealand		6.2	0.1	6.9	83.0	5.5
Canada		0.3	2.9	3.3	31.9	0.1
Denmark		0.9	3.7	2.1	21.1	0.0
Norway		5.1	8.0	1.0		3.8
Sweden		2.5	6.0	2.1	35.8	0.8
Finland		5.6	8.1	2.1	95.6	4.1
ROK		3.2	3.7	1.0		2.3
Malaysia		4.7	12.3	5.6		4.7
Thailand		4.1	5.8	2.1	40.8	1.6
Italy		1.5	3.1	1.1	0.9	0.5
Japan		2.4	1.3	1.3	22.9	2.6
Netherlands		5.1	6.1	0.7	0.8	2.3
France		2.2	2.7	0.6	10.4	2.4
Singapore		21.4	16.7	6.1		22.1
Switzerland		7.8	4.8	7.1	126.8	10.4
UK		0.4	1.0	1.1	10.6	0.4
US		2.8	2.2	0.0	15.0	3.2

Note: Average values 1996-2000.

Sources: *IFS* (IMF), *WDI* (World Bank).



(b) Mature debtor nation

Economic development is accompanied by export industry growth, with goods and services beginning to run a surplus. However, that surplus is not enough to cover interest payments on debt, and the current account and income balances remain in deficit against the capital

accountsurplus. Canada and New Zealand, as well as Malaysia, Thailand and other East Asian nations, fall within this category.

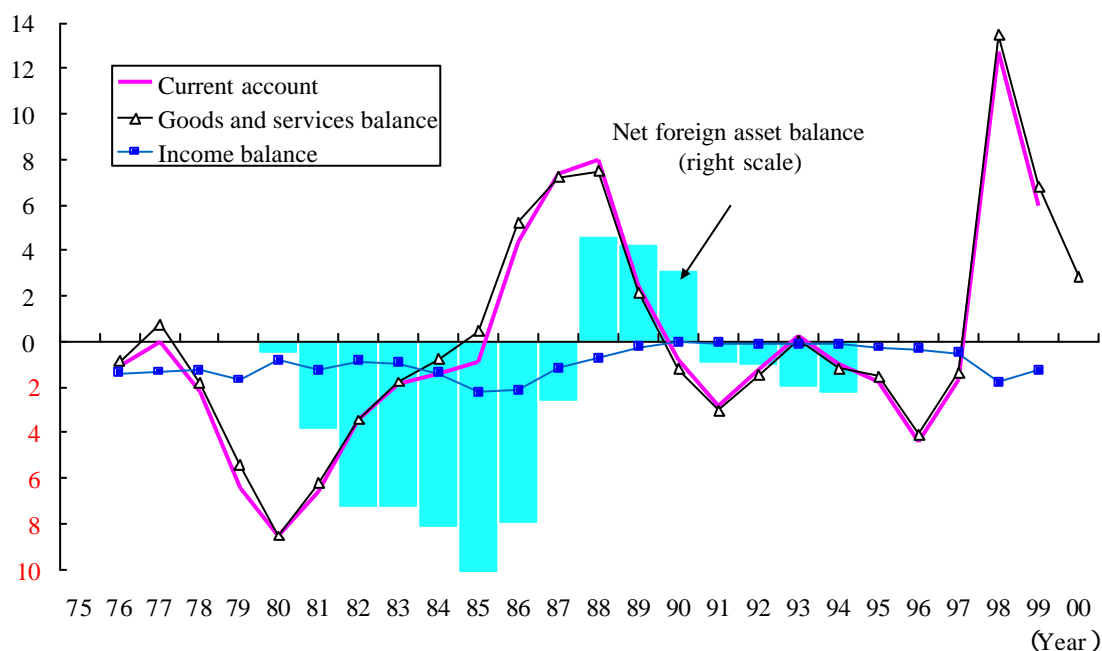
(Canada, New Zealand)

These countries have run long-term current account deficits, but have no difficulty procuring international capital and have achieved comparatively stable economic growth due to abundant inward investment, particularly securities investment, and the high level of inward investment against GDP. Canada in particular (Fig. 2.3.4) receives the bulk of its investment from the United States and the United Kingdom, and uses this stable capital inflow to maintain economic growth.

(East Asia)

South Korea, Malaysia, Thailand and other East Asian nations initially depended on imports of the goods and capital necessary for economic development, sustaining goods and services and current account deficits and a capital and financial surplus. Subsequently, after a certain amount of development had been achieved, changes began to occur in the balance of payments structure. These countries became goods exporters, and began to record goods and services and current account surpluses as capital exporters. South Korea (Fig. 2.3.5) and Thailand have seen reduced income deficits in recent years due to diminishing net foreign debts.

(% of nominal GDP) Figure 2.3.5 South Korea's current account balance



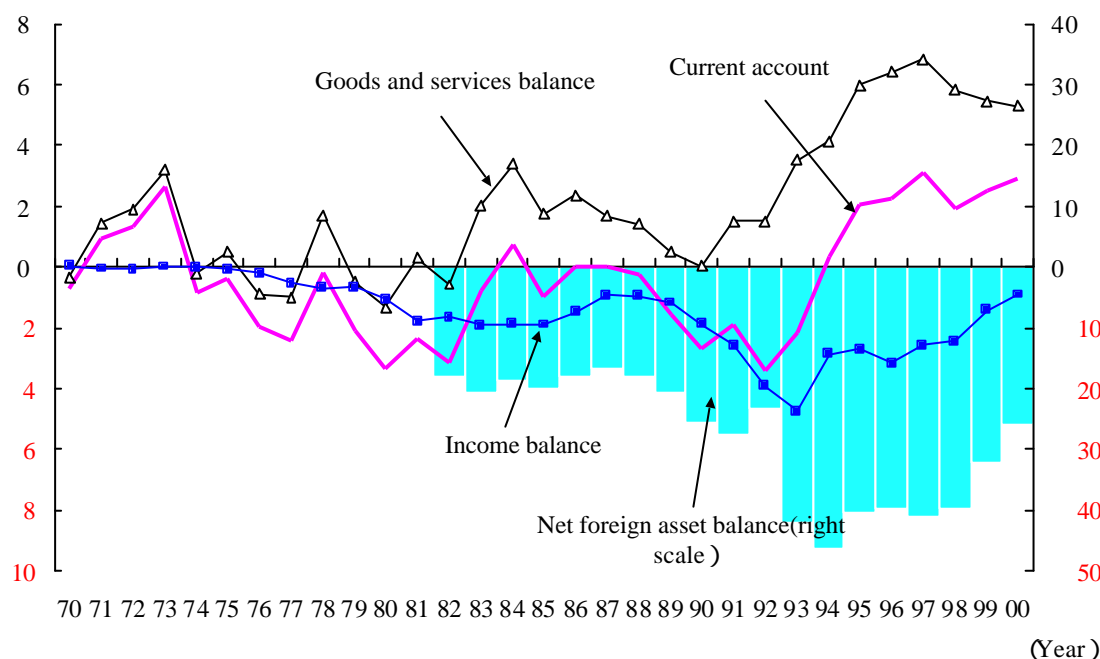
Source: IFS(IMF), WDI(World Bank).

(c) Debt repayment nation

Exports expand and the goods and services surplus begins to outweigh interest payments, bringing the current account balance into surplus. Goods and services record a substantial surplus, while income and capital run into deficit. Norway, Sweden, Denmark and other Northern European countries are thought to be in this category. In recent years, the graying of society has temporarily slowed, lifting the savings rate above the investment rate and taking the current account balance into surplus.

Other common points are falling net foreign claims and deficits on income balances. Norway, Denmark and Sweden (Fig. 2.3.6) have seen their net foreign debts fall in recent years to around minus 20 percent of GDP, reducing the income deficit as a result.

(% of nominal GDP) Figure 2.3.6 Sweden's current account balance (% of nominal GDP)



Source:IFS(IMF),WDI(World Bank).

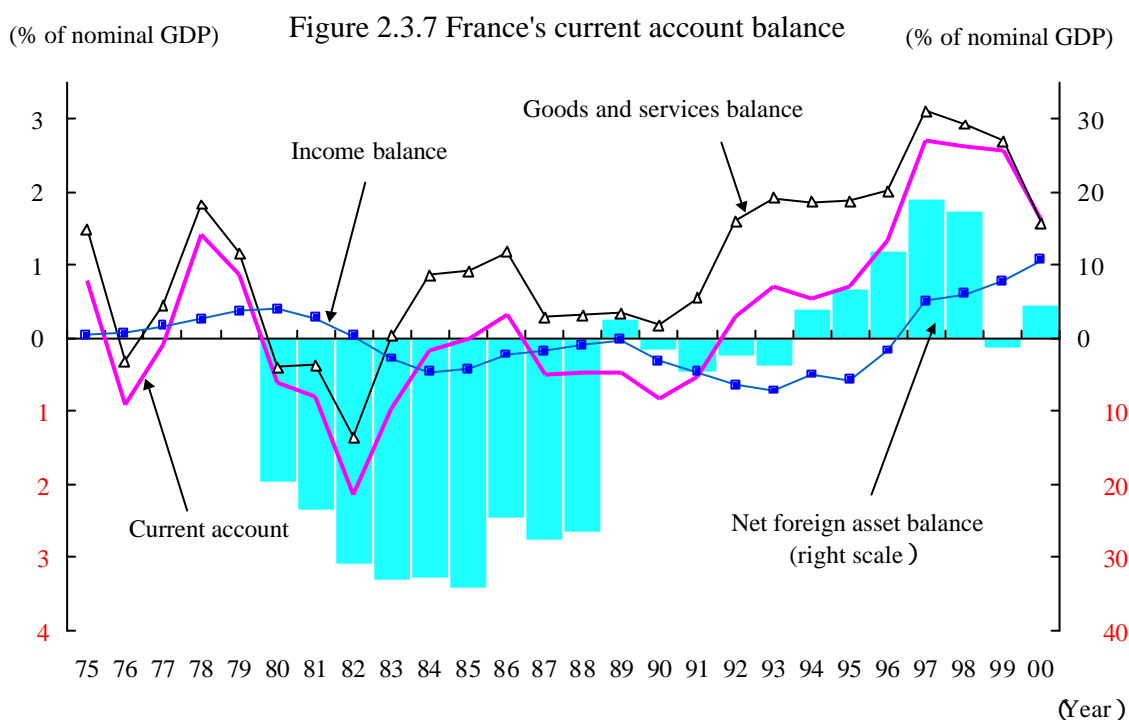
(d) Young creditor nations

The current account balance burgeons, while net foreign debts and the income balance also move into an expansionary phase. Increasing foreign assets lead interest, dividends, and other receipts above payments, creating an income surplus, while the growing capital account deficit becomes clear. France, the Netherlands, Japan and Singapore are all at this stage.

Features common to France (Fig. 2.3.7), the Netherlands and Japan include current account and goods and services surpluses of 2-7 percent of GDP, expanding foreign assets and a

subsequent income surplus derived from these assets.

Singapore has been experiencing changes in its balance of payments structure in line with the development stage theory for the last 30 years. In the early stages of economic development, goods and capital were both imported, while now that Singapore has achieved a certain level of development, it is instead exporting goods and capital, and has a growing foreign income surplus.



Source:IFS(IMF),WDI(World Bank).

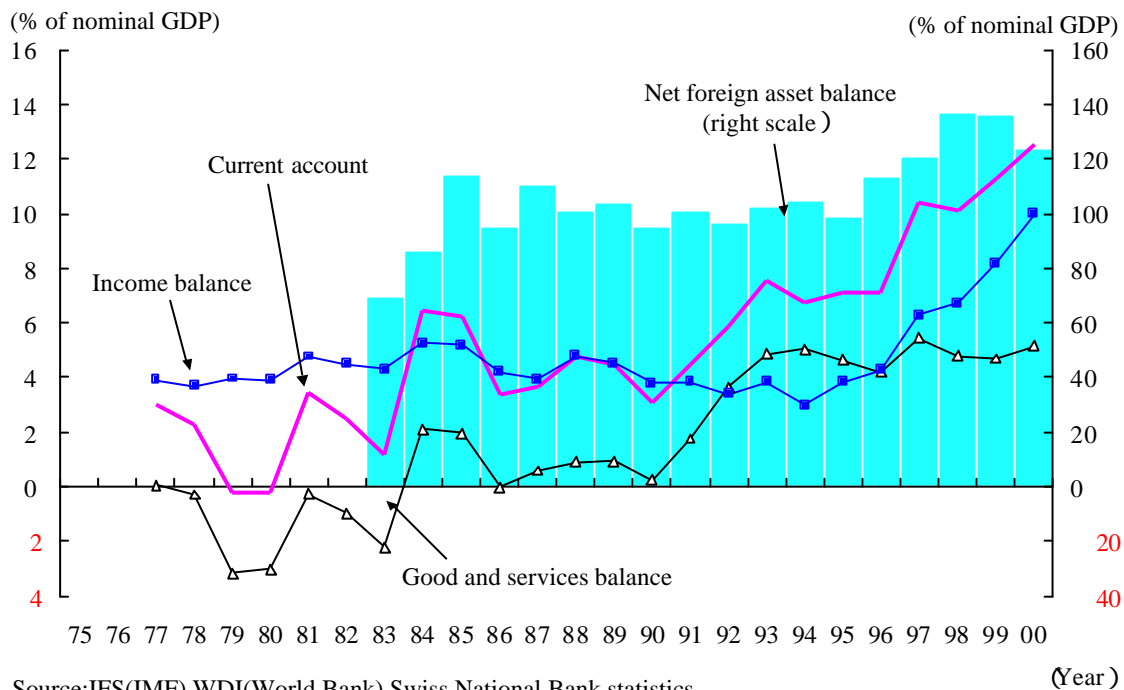
(e) Mature creditor nations

Accumulated net foreign assets reach a major scale, with the income balance derived from these expanding heavily as a result. The greater income balance pushes some income into consumption, while the aging of society and higher wages lower international competitiveness, creating a goods and services deficit.

Switzerland has a goods and services surplus of five percent of GDP, and a substantial income surplus of 10 percent of GDP, while the current account surplus is even greater still at more than 10 percent of GDP. Net foreign assets far outweigh GDP, positioning Switzerland as a net creditor. The net foreign debt balance has also recently shifted from a level on a par with GDP to more than 120 percent, making Switzerland the second largest creditor nation in the world after Japan (Fig. 2.3.8).

Switzerland's goods and services balance still stands at five percent of GDP. However, with the income surplus at 10 percent of GDP, and net foreign debts at more than 120 percent of GDP, Switzerland has reached the level of the United States and the United Kingdom, both mature creditor nations in the past, which suggests that Switzerland too has become a mature creditor nation.

Figure 2.3.8 Switzerland's current account balance



(f) Credit disposition nations

Because consumption lifts above the income surplus, this surplus is outweighed by the goods and services deficit. As a result, foreign assets and income run surpluses, while the current account deficit is accompanied by a capital accounts surplus. The country therefore becomes a capital importer.

The United States and the United Kingdom, which both achieved economic development and industrialization earlier than other nations, saw their goods and services balance and current accounts in surplus as a result of growing exports, transforming them into capital suppliers. Their income and investment income surpluses subsequently expanded as net foreign assets accumulated, positioning them clearly as major creditor nations. In recent years, both countries have experienced twin goods and services and current account deficits, and are in the process of moving from this stage into the first stage—namely, early-stage debtor nations—as they dispose

of their foreign assets. At the same time, the international credibility of their domestic economies and markets have enabled both countries to maintain stable capital inflows.

(United Kingdom)

The United Kingdom, which achieved economic development before any other nation, already had a current account surplus by the early 19th century. The current account balance steadily expanded against GDP, recording an average of four percent in the late 19th century. The capital account, however, ran a deficit, identifying the United Kingdom as a capital supplier. The net foreign assets accumulated accordingly outweighed GDP by the end of the 19th century, and the investment income derived accordingly led to the gradual expansion of the current account surplus. The United Kingdom became a creditor nation in the late 19th century, with its net foreign assets growing to 140 percent of GDP by the early 20th century, while the investment income derived from foreign investment also reached more than seven percent of GNP.

From around 1930 through to WWII, the United Kingdom became a capital importer, but in the 1970s, soaring oil prices pushed the current account balance back into surplus, and net foreign assets reached 20 percent of GDP, marking the United Kingdom again as a creditor nation. The UK goods and services balance and current account balance subsequently fluctuated heavily. The income balance remained in surplus, but foreign assets fell below foreign debts, with the United Kingdom again becoming a net debtor nation.

(United States)

The United States was the next nation to achieve economic development, recording a current account surplus and a capital account deficit by the end of the 19th century to become a capital supplier. In the 1920s, foreign assets rose above foreign debts, taking investment income into surplus. Following WWII, accumulated net foreign assets reached around 10 percent of GNP, with the United States taking over from the United Kingdom as the world's largest creditor and capital supplier. From the 1970s through the 1980s, the investment income surplus expanded, while net foreign assets also grew to more than 13 percent of GDP.

However, the current account balance dipped into deficit in the late 1970s, while the expansionary fiscal policies of the late 1980s saw this deficit burgeon. In 1989, foreign assets undercut foreign debts, and the United States became a debtor nation. The prolonged economic boom of the 1990s encouraged a vigorous inflow of capital, and the current account deficit reached US\$444.7 billion in 2000 (minus 4.5 percent of GDP), while net foreign debts also grew to minus 22 percent of GDP. Investment income and the income balance consequently fell

into deficit in 1999. Once the world's largest creditor, the United States became the world's largest debtor.

(2) Development stage of Japan's balance of payments

(a) Changes in Japan's balance of payments structure

Japan's balance of payments structure to date has evolved along the general lines of the development stage theory. Figure 2.3.9 compares Japan's balance of payments structure from 1986 to 1990, from 1991 to 1995, and from 1996 to 2000. In terms of trends, the current account and trade surpluses have continued to shrink, while net foreign assets have grown, the interest derived from these expanding the income surplus. Japan therefore seems to be evolving into a mature creditor nation. Changes in Japan's balance of payments structure and the development stage of its balance of payments are examined below.

Figure 2.3.9 Changes in Japan's balance of payments structure

Period	Against nominal GDP (%)				
	Current account	Balance on goods and services	Balance on income	External net assets	Capital and financial account
86-90	2.8	2.3	0.7	10.1	2.1
91-95	2.6	1.9	0.9	14.0	2.5
96-00	2.4	1.3	1.3	22.9	2.6

Note: Average values for each period.

Sources: *IFS* (IMF), *WDI* (World Bank).

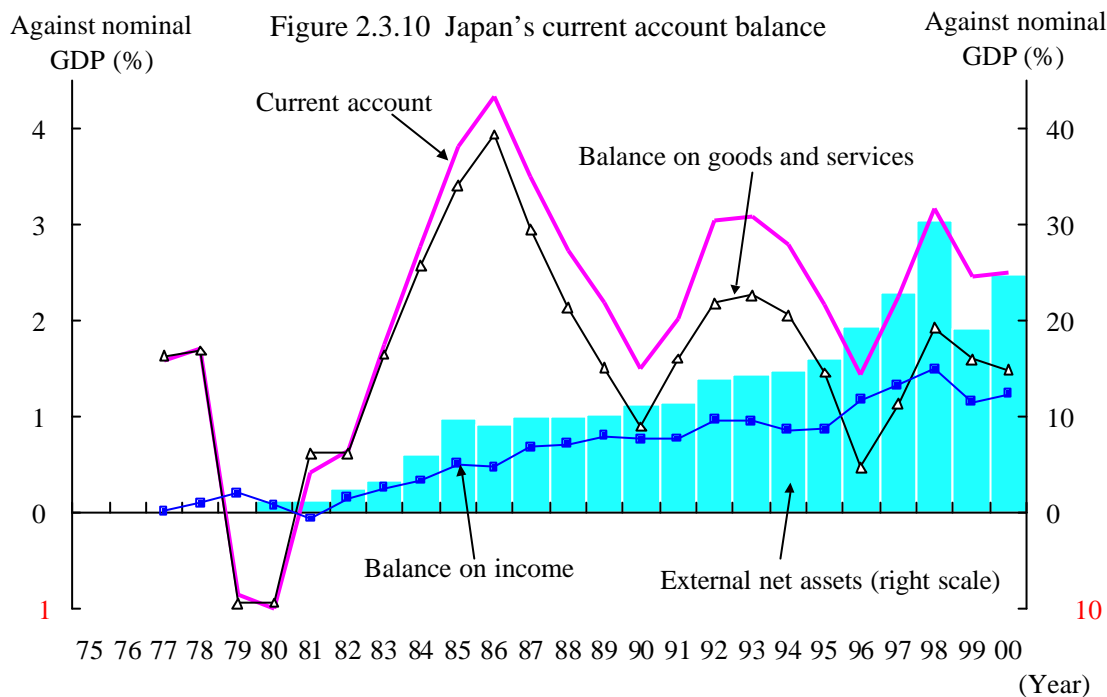
(b) Trends in the current account, balance on goods and services, and capital account

Japan's current account surplus expanded steadily as of the late 1960s, with the exception of the period following the two oil shocks in the 1970s, reaching 4.2 percent of GDP in 1986 (Fig. 2.3.10). However, since the late 1980s, the current account surplus has gradually shrunk, although maintaining a level of more than two percent of GDP, slipping from an average of 2.8 percent of GDP in the late 1980s to 2.6 percent in the early 1990s and 2.4 percent in the late 1990s. The goods and services surplus also shrank, although holding a level of more than one percent on GDP. The capital account deficit expanded, falling from an average of 2.1 percent on GDP in the late 1980s to 2.6 percent in the late 1990s.

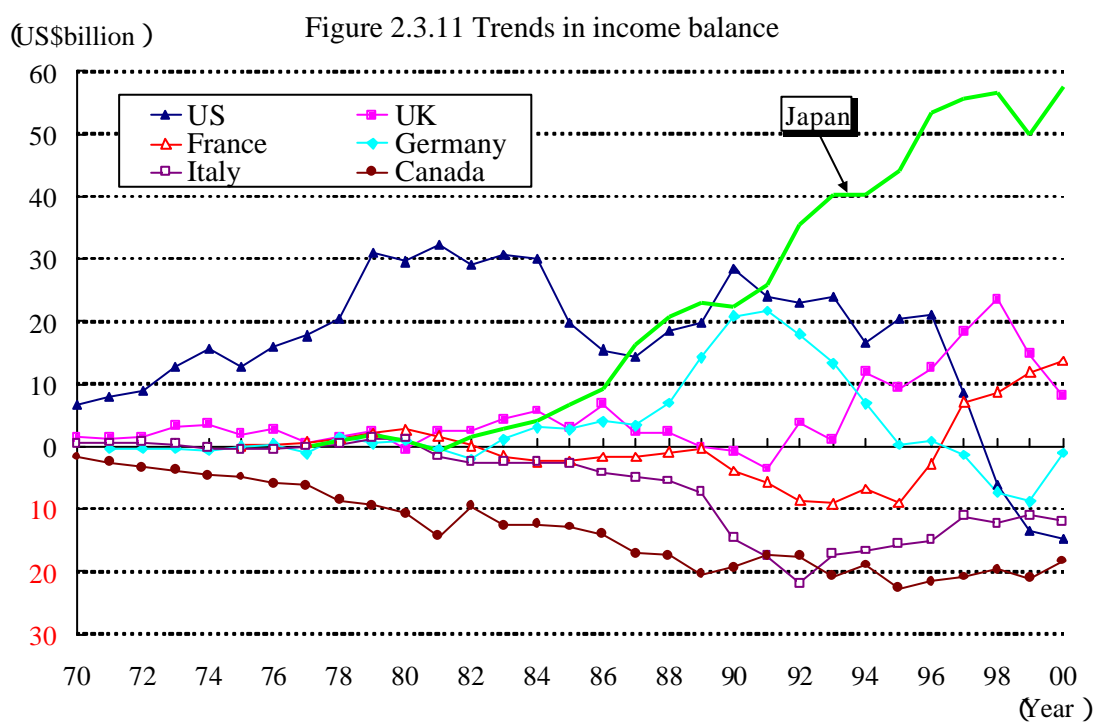
(c) Income balance trends

Japan's income surplus has steadily risen to equal the goods and services surplus, the result of the current account surplus which has accumulated since the late 1960s building up foreign assets and gradually increasing the interest and dividend income deriving from these assets.

Japan's income surplus is large even by international standards. Figure 2.3.11 looks at trends in the income balances of the major developed powers (Canada, France, Germany, Italy, the United Kingdom, and the United States), revealing Japan's surplus as large compared to these. In 1991, the income balance reached around US\$26 billion (3.5 trillion yen), and has since remained the world's largest surplus in terms of actual value.



Sources: IFS (IMF), WDI (World Bank).



Source: IFS (IMF), WDI (World Bank).

The expansion of the income balance, or the investment income which comprises the bulk of this, has proceeded as follows in other countries. Around 1990, the United Kingdom, which was considered to be a mature creditor nation at the time, recorded an investment income surplus of six percent of GDP, while the US investment income surplus in the 1970s and 1980s reached three percent of GDP. Switzerland, which is now considered to have become a mature creditor nation, has an income surplus of 10 percent of GDP.

By contrast, Japan's current investment income and balance on income surpluses are both around the one percent mark. Accordingly, while Japan's surpluses in these areas may be high, they have not reached the stage of maturity of the United Kingdom and the United States in the past and Switzerland in the present.

(d) Accumulation of net foreign assets

Japan's net foreign assets have expanded since the late 1980s, reaching 179 trillion yen at the end of 2001, or 36 percent of GDP.

Figure 2.3.12 compares the net foreign assets of the major developed powers at the end of 2000, revealing Japan as the world's greatest net creditor. Japan's US\$1.158 trillion stands out even internationally at around four times the level of second-placed Switzerland with US\$297 billion. In terms of GDP ratio, Japan follows Switzerland's 124 percent at 25 percent.

Figure 2.3.12 External net assets at end of 2000

Country	Actual value	Against nominal GDP
	(US\$ billion)	(%)
Japan	1,158	25
Switzerland	297	124
Germany	69	4
Belgium	61	25
France	60	5
Italy	44	4
Iceland	5	60
Denmark	27	17
Austria	32	17
New Zealand	39	-
Portugal	39	38
Netherlands	42	11
Greece	47	42
Sweden	59	26
Spain	114	21
Canada	162	24
Finland	181	151
UK	184	13
Australia	208	53
US	2,187	22

Source: *IFS* (IMF).

This tops 13 percent of GDP, which was the net foreign asset level of the United States around 1980, when it was a mature creditor nation. However, the percentage of GNP and GDP did not cross the 100 percent mark, as was the case in the United Kingdom at the end of the 19th century through into the 20th century and with Switzerland today.

(e) Japan in transition to mature creditor status

To summarize, Japan is currently sustaining the level of its current account surplus while the balance on goods and services shrinks and the income surplus and net foreign assets expand, suggesting that Japan is in the process of transition to mature creditor status. However, while the income surplus may be expanding, it has not reached the level of Switzerland today or the US and the UK in the past, suggesting that Japan's sources of income revenue are insufficient for its economic scale. Japan's accumulated net foreign assets top past US levels, but are not as high as those of the UK in the past or of Switzerland today. Further, while the goods and services balance is decreasing, it is still sustaining a surplus.

The balance of payments development stage theory would therefore suggest that Japan has not completely reached the level of a mature creditor nation but is in the process of transition to that status. Whether Japan's income surplus and net foreign assets continue to expand and Japan reaches mature creditor nation status will depend on future developments in balance of payments and the domestic economy.

2. Medium- to long-term current account forecast and challenges for Japan

(1) Savings and investment forecasts

(a) Savings trends

If the Japanese economy revives and government finance and the social security system are placed on a sustainable basis, reducing future uncertainties, the savings rate should fall again. According to the lifestyle hypothesis³, whereby the elderly draw on the assets which they accumulated during their working lives, the aging of society should increase the ratio of unemployed elderly with relatively low savings rates, reducing the savings rate of the country as a whole.

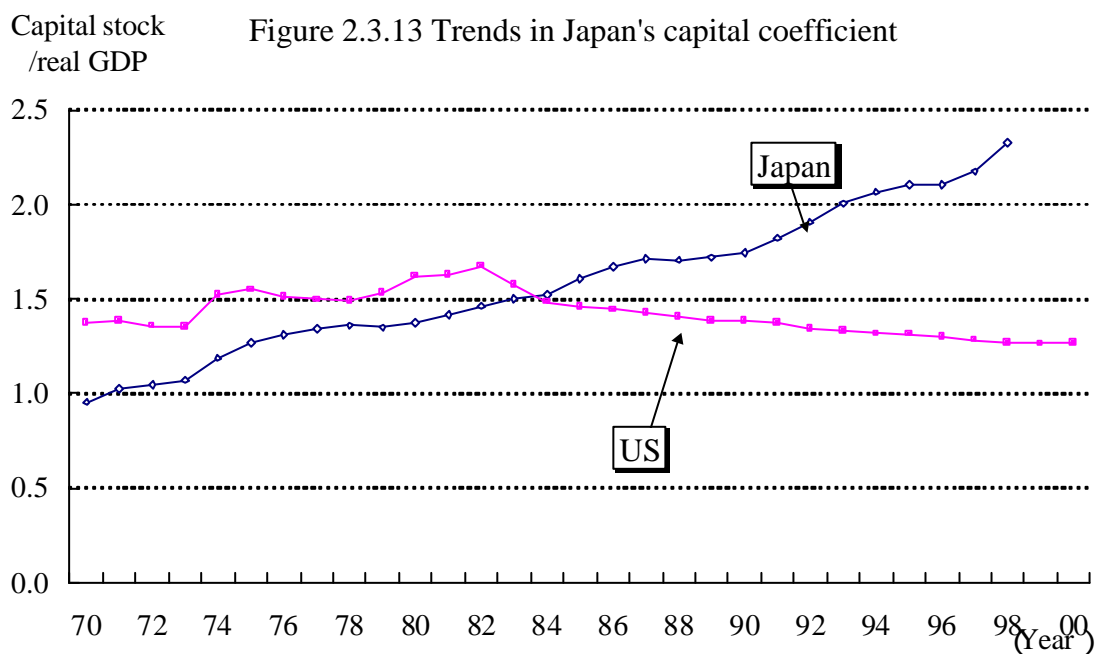
Looking at the household savings rate in terms of age brackets, the elderly employed have higher savings rates than the young, but the savings rates of the unemployed are below zero, suggesting that the unemployed are already drawing on their savings to live. The aging of society is proceeding at a much faster pace than in other developed countries, and given that

unemployed households at least will have already eaten into their savings, the graying of society seems likely to reduce the savings rate over the medium- to long-term.

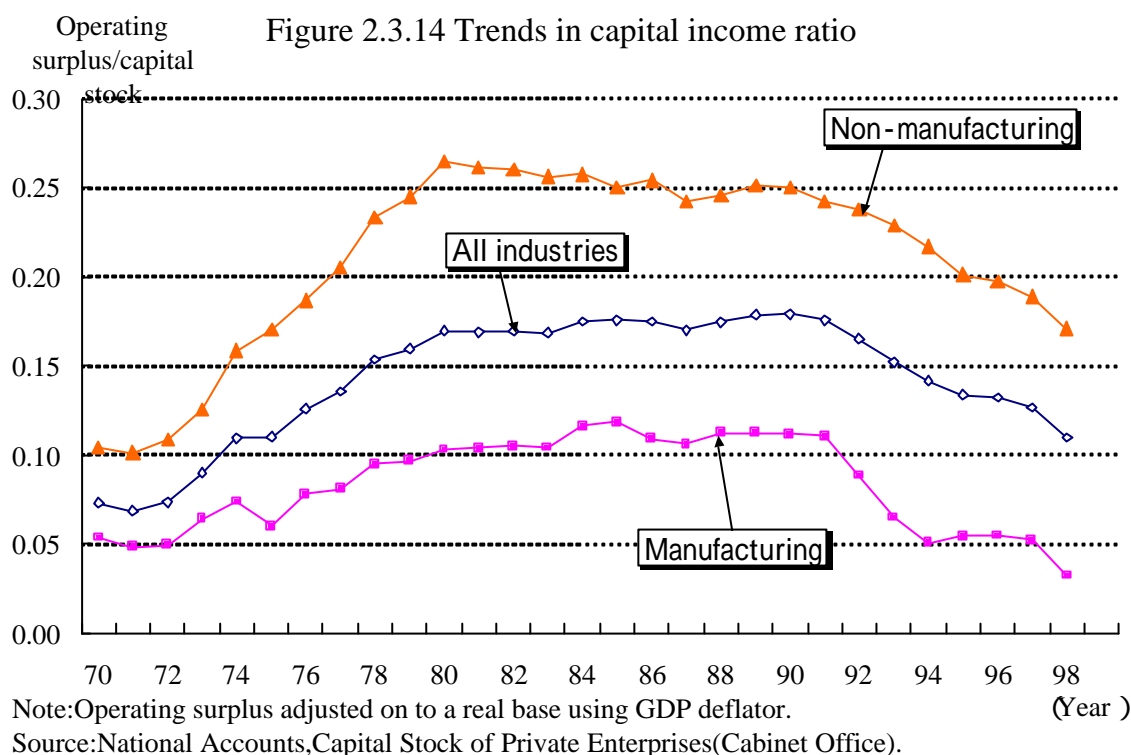
However, the savings rates of the elderly employed are actually rising in employed households. In terms of forecasting the savings rate, therefore, the possibility must also be considered of higher employment rates for the elderly and women in future.

(b) Investment trends

If the economy recovers, investment too may revive from its currently sluggish levels, but if the population decline relieves the need for economic expansion and increased investment, investment could conversely start to fall away. The rise in the capital equipment ratio per worker in postwar Japan was one of the major factors behind Japan's high economic growth. However, Japan's capital coefficient (productivity reciprocal) has gradually risen, and currently tops that of the US (Fig. 2.3.13). A rising capital equipment ratio pushes down the return on capital rate as a capital surplus emerges, and in fact Japan's capital income rate has been gradually falling since the 1990s (Fig. 2.3.14). Future investment trends will depend in the short-term on progress with working out excess capital and improving the income rate, in the long-term on the impact of factors such as population decline.



³ The lifestyle hypothesis assumes that the employed are not elderly.



(2) Current account prospects and stimulation of investment and the economy

As a result, all other conditions being equal, if the extent of the drop in the investment rate is less than the drop in the savings rate, the current account surplus will diminish⁴, but if Japan can maintain the international credibility of the domestic economy and secure a stable capital inflow, this is not a cause for concern. On the other hand, if the investment rate falls below the savings rate, the current account surplus itself will expand, but Japan will become a country lacking in domestic investment opportunities and, consequently, dynamism. While the direction of the current account balance will therefore be determined by trends in savings and investment, any immediate decline in the current account should not be regarded as problematic given that Japan is currently in the process of transition to mature creditor status. However, even where Japan becomes a mature creditor nation, it will be important to sustain Japan's economic dynamism, and sustaining international competitiveness, developing the service industry and stimulating domestic and foreign investment by Japanese companies will all be critical issues. If economic dynamism and international competitiveness cannot be boosted to maintain Japan's international credibility and standing, it will be difficult to realize a smooth capital inflow.

⁴ The view has been expressed that because the drop in the investment rate has not been as extensive as the decline in the savings rate, the decline in Japan's current account surplus will be moderate (Horioka (1994), etc.)

Accordingly, it remains vital to secure international sources of income by (1) ensuring that Japan's exports are internationally competitive; (2) fostering an internationally competitive service industry; (3) ensuring sound foreign asset management; and (4) developing an attractive environment for inward investment.

(a) Fostering internationally competitive export industries

Where accompanied by stimulation of the domestic economy and expanded inward investment, a declining current account surplus would in fact become preferable. However, if Japan found itself nursing a large current account deficit, unless capital and labor inflows were as vigorous and sustained as in the United States and Canada, it could become difficult to sustain that deficit over the long term, given that it represents a debt which must be repaid in future. In that sense, Japan needs competitive industries.

(Evolution of export boom products and creation of new boom products)

Figure 2.3.15 maps the evolution of Japan's main export boom products⁵ since the 1990s. Japan's total export value generally increased through the 1990s, but the composition of export goods changed. As the manufacturing industry moved offshore, exports of general-use goods which were technically easy to manufacture or assemble peaked out, while new products and parts have continued to emerge and sustain a high rate of growth. The successive emergence of internationally competitive products has underpinned the overall growth of Japanese exports.

Figure 2.3.16 reveals trends in the export values of main export boom products in 2001 and 2000. Many of these products, which sustained strong growth until quite recently, related to leading-edge technology and were produced in Japan. They were also capital-intensive products, with the labor cost factor having little effect on competitiveness.

(Maintaining international competitiveness and fostering export industries)

Japan's exports fell in 2001, and many of the export products which have recently powered Japan's exports saw their export value drop compared to 2000. However, it should be noted that even in 2001, when the export environment was suffering as a result of the world economic slowdown, there were still some export goods which boosted their export value. Many of those products, moreover, retained a comparative advantage even in terms of their trade specialization coefficient.

⁵ Here, "export boom products" indicates those which have recorded the highest export values in the various years up to 2001.

Figure 2.3.15 Change in export boom goods

Year	Main goods
2001	Commodities and transactions not classified according to kind; Parts and accessories of the motor vehicles; Transmission apparatus for radio-telephony or television,etc.; Parts suitable for use with the engines; Reception apparatus for television,etc.; Optical fibres and sheets of polarising material,etc.
2000	Electronic integrated circuits and microassemblies; Machines and mechanical appliances; Diodes,transistors and similar semiconductor devices; Electrical capacitors,fixed,variable or adjustable; Semiconductors and other manufactured devices; Electrical machines and apparatus(with independent functions); Parts for televisions,radios and mobile phones,etc.
1999	Engines; Video games and electronic game equipment; Electric generating sets and rotary converters; Records,tapes and other recorded media for sound
1998	Motor vehicles for the transport; Parts and accessories for computers,etc.; Cruise ships; Instruments and appliances used in medical or surgical sciences; Motorcycles; Tyres; Parts of aircraft
1997	Computers and units thereof; Photo-copying apparatus; Construction machinery; Television camera tubes,microwave tubes,etc.; Transmission shafts and cranks
1996	Instantaneous water heaters,dryers,etc.; Lifts,escalators and conveyors; Forging machines and presses; Revolution counters,taximeters,milemeters,etc.
1995	Diesel engines; Flat-rolled products of stainless steel; Machinery parts; Cigars and cigarettes; Yachts and other vessels for pleasure or sports; Copper tubes and pipes
1994	Electric motors and generators; Parts and accessories for VTRs,stereos,etc.; Electrical lighting or signalling equipment; Centrifuges,filtering or purifying machinery
1993	Parts and accessories of vehicles and motorcycles; Sulphuric acid; Sheet piling of iron or steel,shapes and sections of iron or steel; Plans and drawings,etc.; Tubes,pipes and hollow profiles of cast iron; Malt
1992	Motor vehicles for the transport of goods; Flat-rolled products of iron or non-alloy steel; Woven fabrics of synthetic filament yarn; Motor vehicles for the transport of ten or more persons; Air conditioning machines; Sewing machines and sewing machine needles,etc.
1991	Pocket-size radio and walking stereo players; Synthetic organic colouring matter; Photographic cameras and photographic flashlight apparatus,etc.; Microphones and loud-speakers,etc.; Machines for textile
1990	Video recording or reproducing apparatus; Radar apparatus,radio-navigational aid apparatus and radio remote control apparatus; Automatic banknote dispensers and other office machines; Photographic paper and paperboard,etc.; Magnetic tape recorders and other sound recording apparatus

Note: 4-digit HS Code used.

Source: *Trade Statistics* (Ministry of Finance).

However, the export value of 2001 export boom items comprised only 19.5 percent of total export value in 2001, compared to 42.4 percent in 2000. Even the export value of those products retaining their comparative advantage dropped from 27.2 percent to 17.8 percent in terms of total export value. Looking to Japan's future, to maintain export dynamism and competitiveness, the export ratio of these export boom products needs to be boosted. As many export products become the subject of intensifying international competition, sustaining the dynamism of the Japanese economy will hinge on stimulating innovation in new areas in order to create a succession of new competitive products, and on continuing to foster internationally competitive export industries.

Figure 2.3.16 Recent main boom exports and export value

Item	HS Code	Value of exports (US\$ 100 million)		Trade specialization coefficient	
		2000	2001	2000	2001
Export total		516,542	489,792		
Items peaking in 2001					
Total		86,821	95,496		
Share of total		16.8%	19.5%		
Commodities and transactions not classified according to kind	0000	18.142	19.546	0.51	0.47
Parts and accessories of the motor vehicles	8708	18.551	18.719	0.79	0.76
Transmission apparatus for radio-telephony or television, etc.	8525	10.612	10.690	0.83	0.79
Parts suitable for use with the engines	8409	5.127	5.349	0.84	0.84
Reception apparatus for television, etc.	8528	3.586	3.918	0.30	0.25
Optical fibres and sheets of polarising material, etc.	9001	2.826	3.174	0.48	0.43
Insulated wire, cable and other insulated electric conductors	8544	2.571	2.796	0.07	0.06
Measuring or checking instruments (excluding HS9030)	9031	2.034	2.176	0.14	0.12
Cyclic hydrocarbons	2902	1.886	1.966	0.86	0.85
Instruments and apparatus for physical analysis	9027	1.543	1.686	0.21	0.19
Lenses, prisms, mirrors and other optical elements	9002	1.647	1.682	0.76	0.72
Rice	1006	15	1.135	0.90	0.65
Apparatus based on use of X-rays or of alpha, etc.	9022	875	976	0.17	0.19
Photographic plates and film in the flat	3701	926	968	0.56	0.70
Refined copper, copper anodes for electrolytic refining	7403	628	859	0.20	0.44
Items peaking in 2000					
Total		143,770	117,914		
Share of total		42.4%	34.7%		
Electronic integrated circuits and microassemblies	8542	32.619	26.755	0.26	0.22
Machines and mechanical appliances	8479	12.527	8.937	0.77	0.67
Diodes, transistors and similar semiconductor devices	8541	9.261	7.034	0.68	0.62
Electrical capacitors, fixed, variable or adjustable	8532	5.679	4.094	0.85	0.77
Electrical apparatus for switching or protecting electrical circuits	8536	5.515	4.723	0.50	0.46
Semiconductors and other manufactured devices	9010	4.852	4.162	0.91	0.88
Electrical machines and apparatus (with independent functions)	8543	4.671	3.612	0.20	0.18
Parts for televisions, radios, and mobile phones, etc.	8529	4.354	4.062	0.42	0.23
Electric accumulators (for mobile phones, cars, etc.)	8507	4.099	3.186	0.86	0.83
Air or vacuum pumps, air or other gas compressors, etc.	8414	3.778	3.752	0.62	0.57
Instruments and apparatus for measuring or checking electrical quantities	9030	3.715	2.238	0.58	0.32
Liquid crystal devices, lasers and other optical appliances	9013	2.978	2.495	0.38	0.41
Printed circuits	8534	2.961	2.354	0.65	0.53
Flat-rolled products of iron or non-alloy steel	7208	2.815	2.640	0.51	0.62
Ball or roller bearings	8482	2.708	2.487	0.71	0.69

Note: 1. 4-digit HS Code used.

2. Trade specialization coefficient = (export value - import value) / (export value + import value).

Source: *Trade Statistics* (Ministry of Finance).

(b) International competitiveness of service areas

Japan's service account runs a heavy deficit, highlighting the urgency of securing a more internationally competitive service industry. The trade specialization coefficients⁶ for the trade in services of the major powers (Japan, the US, the UK, Italy, Canada, Germany and France) show that where the US and the UK have positive coefficients in many areas, Japan's coefficients are negative (Fig. 2.3.17). While Japan's coefficients have recently been rising in areas such as information, telecommunications and finance, it would still be difficult to say that

⁶ (Export value - import value) / (export value + import value)

Japan's service industry has secured international competitiveness. Elsewhere, however, internationally competitive service industries are locking in growth and contributing to greater service account receipts in the balance of payments. Examples include information in the United States, and finance and insurance in the United Kingdom.

Figure 2.3.17 Service trade specialization coefficients

	US	UK	Italy	Canada	Germany	France	Japan
Services trade	0.18	0.09	0.03	0.13	0.20	0.12	0.29
Royalties and license fees	0.58	0.05	0.49	0.40	0.31	0.10	0.19
Computer and license fee	0.74	0.52	0.40	0.26	0.24	0.23	0.39
Finance	0.50	0.70	0.18	0.19	0.43	0.01	0.27
Insurance	0.50	0.61	0.10	0.12	0.76	0.14	0.90
Communication	0.33	0.08	0.24	0.01	0.23	0.01	0.29
Travel	0.21	0.14	0.24	0.17	0.46	0.26	0.79
Transportation	0.00	0.06	0.11	0.17	0.10	0.02	0.19

Note: 1. Trade specialization coefficient=(export value-import value)/(export value+import value).

2. 1990-2000 average values.

Sources: *Balance of Payments* (Bank of Japan), *BOP* (IMF).

The United States in particular saw the rapid expansion and diversification of the service industry in the course of the 1990s revitalization of the domestic economy, and a pattern of interdependent economic development has emerged with the manufacturing industries using these services⁷. To secure technology development in new areas and the international competitiveness of high added-value products, as noted above, Japan's service industry too will need to deepen interdependence with the manufacturing industry.

The service industry can also target not only domestic manufacturers and consumers, but users all around the world, a feature which has been strongly marked in the recent development of the US and European service industries. Japan's manufacturing industry has continued to expand offshore production and other activities to reach out to the world market. Similarly, Japan's service industry too needs to expand its vision beyond the domestic market to the world and boost its international competitiveness to become the engine for the next generation, to which end it will be vital to stimulate innovation in services in order to increase productivity⁸.

(c) Sound external investment

(Japan's capital outflow)

The enormous capital outflow from Japan, which maintains a capital account deficit, is serving to enhance Japan's presence in international finance markets, particularly in terms of international securities investment.

⁷ See Section 3, Chapter 1.

⁸ See Section 2, Chapter 4 in regard to policy issues in stimulating innovation.

Figure 2.3.18 indicates the ratio of various countries' holdings of US government and corporate bonds and stocks. Japan has only the fourth largest stock holdings after the UK, Canada and the Netherlands, but the scale of Japanese capital in government and corporate bonds is strikingly large. Japan also held the equivalent of US\$332.9 billion in US government bonds as at the end of February 2002, representing more than a quarter of the value of foreign holdings.

Figure 2.3.18 Ratio of holdings by main powers of US government bonds, corporate bonds, government institution bonds and stocks

Country/region	Government bonds (%)					
	1998	1999	2000			
Japan	22.2	25.9	28.5			
UK	21.2	19.3	17.6			
Germany	7.6	7.8	7.5			
China	3.7	4.1	4.1			
Hong Kong	3.5	3.7	3.7			
Middle East(OPEC members)	2.2	2.3	2.7			
South Korea	1.4	2.0	2.6			
Belgium,Luxembourg	2.5	2.3	2.4			
Cayman Islands	3.0	2.3	2.1			
Singapore	3.4	2.5	2.0			

Country/region	Corporate bonds and government institution bonds (%)			Stocks (%)		
	1998	1999	2000	1998	1999	2000
Western Europe	65.2	63.4	61.8	61.8	63.5	67.0
UK	52.1	50.5	49.8	27.2	28.0	29.1
France	1.6	1.4	1.3	3.2	3.4	3.7
Germany	2.2	2.3	2.1	4.6	4.9	5.3
Italy	0.4	0.3	0.3	1.4	1.4	1.6
Netherlands	18.1	1.6	1.3	6.7	7.1	7.8
Canada	2.6	2.4	2.7	9.7	9.8	9.1
Japan	12.0	11.3	11.9	7.3	7.1	6.4
Latin America	2.2	2.5	2.7	1.9	1.9	1.9
Other Latin American Countries	11.7	13.7	14.1	10.3	9.6	7.2
Other Latin American Countries	6.3	6.7	6.8	8.9	8.2	8.4

Source:SCB(US Department of Commerce).

The increase in offshore securities investment can be seen in a breakdown of the assets held by Japanese institutional investors. Looking at trends in the ratio of total assets represented by the foreign securities held by Japanese institutional investors, where the ratio was around two percent on life insurance, non-life insurance and trust accounts in 1980, this has recently risen to 12 percent, indicative of the growing outflow of Japanese investment capital into world markets.

(Rate of returns on foreign assets)

The returns from foreign assets become investment income included in the income balance. Comparing the foreign asset rate of returns of the major powers, Japan has a high rate of returns in terms of foreign securities investment, but the returns rate for foreign direct investment has not risen particularly high (Fig. 2.3.19).

Figure 2.3.19 Foreign investment profit rates

Foreign direct investment profit rates					(%)
	1980-85	1986-90	1991-95	1996-2000	Average
UK	12.0	13.1	11.4	11.1	11.9
Sweden	11.2	9.9	6.1	10.2	9.4
US	12.3	8.4	7.5	6.1	8.6
Netherlands	8.4	7.6	6.9	7.2	7.5
Canada	8.0	6.1	4.8	6.5	6.3
Switzerland	5.4	5.6	4.4	9.5	6.2
Australia		6.1	4.2	5.6	5.3
Japan	6.5		3.4	4.4	4.7
Austria	4.7	7.9	0.4	5.7	4.7
Germany	2.9	5.1	3.4	4.9	4.1
Norway	6.9	3.7	1.6		3.0
France		1.5	2.3	2.1	2.0
Finland	5.2	3.7	2.9	8.8	1.1
Italy	0.6	0.4	1.0	1.3	0.8

Note: Derived from profit received on direct investment for current year

/average of outstanding direct investment for immediate year and end of previous year.

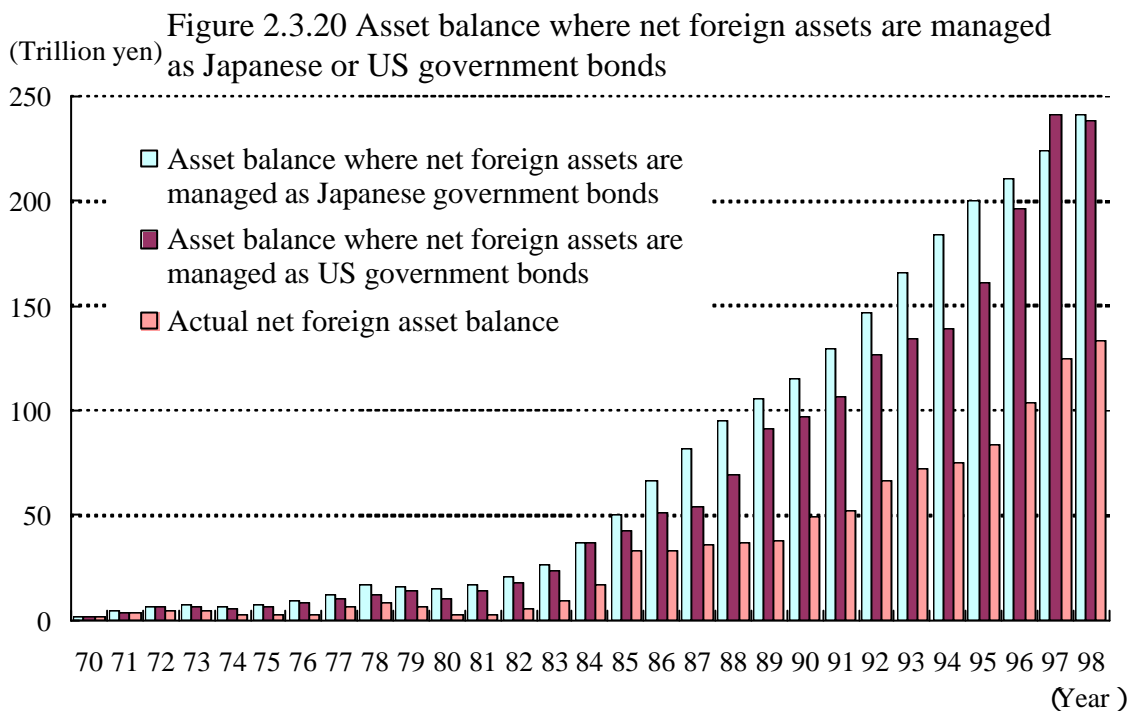
Source: *IFS, BOP* (IMF).

At the same time, recent research⁹ suggests that Japan's foreign investment is not necessarily efficiently managed. Figure 2.3.20 presents the results of calculations where Japan's net foreign assets were assumed to be managed as Japanese government bonds or US government bonds. According to these, , the resulting net foreign asset balance or US government bonds would be around 100 trillion yen less than where the same assets were managed as Japanese government bonds. This may be because (1) exchange rate or asset price fluctuations led to a capital loss, or (2) the rate of returns on foreign investment is low compared to interest on government bonds, but capital loss may also be occurring which cannot be explained by exchange losses, or a low profit which cannot be explained by interest.

To ensure continued stable income revenue, a more detailed examination must be made of

⁹ Fukao (2001).

the management of foreign assets, analyzing rates of return and changes in the income structures of the world's industries to promote sound management of foreign assets and active investment activities.



Source:Fukao(2001).

(d) Development of the required inward investment environment

Inward investment in Japan stands at a lower percentage of GDP than other countries, while outstanding inward investment as a ratio of GDP is also well under the levels of other countries. This indicates a sluggish capital inflow (Fig. 2.3.21).

Inward direct investment has increased in recent years in response to a growing number of large-scale M&As. This phenomenon is thought to reflect a concurrence between the desire of Japanese companies to improve business efficiency and raise corporate value by restructuring unprofitable areas of their operations, and the ambitions of foreign companies seeking an inroad into the Japanese market for its huge economic scale. Business environment factors such as deregulation and the decline in acquisition costs caused by falling stock prices have also played a major role. Japan will need to continue advancing domestic institutional reforms such as deregulation, elimination of restrictions, and improvement of the tax system, creating an investment environment which is attractive to not only foreign but also domestic companies and

expanding investment opportunities¹⁰.

For Japan to maintain its economic dynamism into the future and sustain the international credibility and standing of the Japanese economy, it will be vital to continue to create new sources of revenue, as noted above, in terms of export products, the service industry and inward and foreign investment. Key issues will therefore be the promotion of economic structural reform as a means of creating a favorable environment, and promotion of innovation across the economy as a whole.

Figure 2.3.21 Inward investment and inward investment balance against nominal GDP

(%)

	Inward investment balance at end of 2000		Average inward investment(flow) for 1998-2000	
	Direct Investment	Portfolio investment	Direct Investment	Portfolio investment
Sweden	33.9	99.0	14.3	1.9
Netherlands	65.3	154.2	11.5	16.3
Denmark	29.3	64.4	11.0	1.6
Finland	20.3	211.5	6.8	9.2
UK	36.8	106.4	6.6	11.1
Canada	28.2	48.0	5.6	1.7
Switzerland	35.7	171.2	5.3	3.5
Germany	22.6	55.4	4.6	5.7
Norway			4.0	4.8
New Zealand	42.9	50.0	3.8	0.4
France	54.6	67.6	2.9	7.6
Austria	15.1	81.3	2.8	11.9
US	27.7	44.2	2.7	3.9
South Korea			2.0	1.7
Australia	28.5	58.3	1.9	3.3
Italy	10.6	53.4	0.7	7.9
Japan	1.1	18.6	0.2	1.8

Source:IFS(IMF).

¹⁰ See Section 2, Chapter 4 concerning policies required in regard to inward investment.