

# **Exit Strategy for Achieving Japan's Fiscal Reconstruction**

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Since the outbreak of the Greek sovereign debt crisis, many countries around the world, including Japan, have been strengthening their own measures to achieve fiscal restructuring. However, when Japan is compared to Greece from a macroeconomic perspective or from the viewpoint of the flow of funds, the situations facing the two countries are entirely different. Simply applying the Greek case to Japan might result in making a wrong decision in addressing Japan's fiscal problems.

From the perspective of the flow of funds, the root cause of Japan's dramatically swollen budget deficit after the bursting of the bubble economy is decreased demand for funds from companies to adjust their balance sheets and the resulting massive savings in Japan's private sector (businesses and households).

Conversely, as long as the issue of excess savings in the private sector, in particular, weak corporate demand for funds, remains unsolved, it would be difficult to pave a way to Japan's fiscal reconstruction. Even if Japan were to tackle fiscal problems with such a macroeconomic issue left unaddressed, any attempt to do so is highly likely to result in failure.

The first thing that the Japanese government must do before anything else is not to rush into fiscal reconstruction by means of reforming the social security system and increasing the consumption tax rate. Rather, the government must stimulate corporate demand for funds through measures such as increasing tax credits for capital investments and for spending on research and development activities, as well as in the shape of regulatory reform.

Given increasingly intense global competition, regardless of whether support by government policy is available, businesses must make their own efforts to survive, such as carving out new markets by strengthening research and development activities. Such efforts will eventually lead to the creation of an environment that helps Japan achieve fiscal reconstruction.

## I Is Japan the Same as Greece?

### 1 What the differences between Japan's and Greece's government bond yields suggest

Since the Greek debt crisis broke in 2009, there have been increasing calls for fiscal restructuring in countries around the world so as to not follow in the wake of Greece. In Japan, for more than ten years, strong concerns have been raised over fiscal conditions. Recently, in view of the Greek crisis, the Japanese government has strengthened its efforts towards fiscal reconstruction with priority on the integrated reform of the social security and tax systems.

Without any doubt, if Japan is compared with Greece in terms of fiscal conditions alone, an assortment of figures indicates a more serious situation in Japan than in Greece. For example, the ratio of outstanding central government debt to nominal GDP (gross domestic product) as of the end of 2011 was 171 percent in Greece, while in Japan this ratio was approaching a level of 205 percent. <sup>Note 1</sup>

Various news reports have covered frequent protests against austerity measures and the living conditions of the Greek people, clearly depicting an extremely serious confusion in Greece. Looking at such turmoil, one might consider that it will be too late to embark on fiscal reforms after the problem becomes truly serious. It is no wonder that the Japanese government plans to proceed with fiscal reconstruction efforts before the nation's fiscal issues reach such a critical stage.

However, in looking at the figures related to the government bonds of Greece and Japan, we find a completely different situation. These figures are those concerning government bond yields. Actually, yields on 10-year Greek bonds were largely above 30 percent until a debt restructuring deal in March. In contrast, yields on 10-year Japanese bonds have hovered at a level of less than 2 percent for more than ten years and, as we entered 2012, they dropped to less than 1 percent.

This is because many people want to sell Greek bonds, but few people want to buy them. Despite the fact that Japan's fiscal crisis has been talked about a great deal, strong demand still exists for Japanese government bonds. Even though the figures indicate that Japan's fiscal conditions are more serious than are those of Greece, from the perspective of bond markets, Japan is not currently positioned in the same direction as Greece, but is in a completely opposite position.

### 2 Importance of projecting the future of public finance from a country's economy as a whole

Generally, discussions about fiscal reconstruction often look at only figures related to public finance. These dis-

cussions are not at all incorrect because we ultimately need to examine the balance between revenue and expenditure to attain a balanced budget.

However, if we take a comprehensive view, that is, if we view a country's economy from a macroeconomic perspective, the government is no more than one of the sectors that make up the country's overall economy. Accordingly, the ultimate fate of budget deficits largely depends on the macroeconomic situation facing the country.

Furthermore, government bonds, which are considered to be one of the safest financial products in a country's economy, are extensively traded within domestic and overseas financial markets. Therefore, to examine and analyze trends of supply and demand for government bonds, it is extremely important to see the flow of money in the overall economy rather than looking only at the government's movements.

In any case, vital to any attempts to consider the way to fiscal reconstruction in view of the current situation facing Japan as well as to identify why the strength of the demand for government bonds largely differs between Japan and Greece is a comparison of the flow of money in both countries.

In Chapter II, the author will use "flow of funds accounts" that enables us to take a bird's eye view of the flow of money in any given country such as savings and debt to examine to what extent the situations in Japan and Greece are different.

## II Comparison of Japan's Flow of Funds with That of Greece

### 1 Causes of Japan's budget deficits as seen from the flow of funds perspective

#### (1) What are the flow of funds accounts statistics?

The flow of funds accounts (FFA) statistics are a matrix showing the exchange of money (financial transactions) among various economic entities by classifying the national economy into five economic entities (sectors), i.e., general government, households, nonfinancial corporations, financial institutions and overseas. Because the FFA is compiled based on double entry bookkeeping, these statistics show detailed data as to the methods whereby each entity procures money and the financial products on which each entity spends procured money.

Because extremely detailed data are available, a quantitative method using such an enormous amount of data is sometimes used for the FFA analysis. <sup>Note 2</sup> However, in this paper, focus is given to the trends in financial surplus or deficit, which show the difference between the financial investment amount (savings) and the fund-raising amount (liabilities) during a certain period for each economic entity.

When we look at the trends in financial surplus or deficit, the most important point is the fact that if transactions in the overseas sector are included, the monetary amount saved during a certain period (= surplus) always equals the monetary amount borrowed and spent during the same period (= deficit) in any given country. In other words, if we combine the surplus or deficit generated or incurred by five economic sectors, namely, general government, households, nonfinancial corporations, financial institutions and overseas (rest of the world), the result always equals zero with no overall surplus or deficit. <sup>Note 3</sup> This “financial surplus/deficit” concept basically corresponds to the savings-investment balance, which is one of the basic theories of macroeconomics. This theory also implies the notion that savings equals investment during a certain period in any given country.

In Section (2), Figure 1 which shows Japan’s flow of funds is used to look at the trends in financial surpluses or deficits in specific terms.

**(2) Trends in financial surpluses or deficits in Japan**

Japan’s flow of funds is characterized by moves of the corporate sector (nonfinancial corporations + financial institutions). Because companies generally pursue profit maximization, companies usually allocate the profits gained through business activities and funds borrowed from banks for investment in new businesses.

Accordingly, companies are usually positioned in the “financial deficit” segment (the lower part of Figure 1) rather than in the “financial surplus” segment where entities that are engaged in savings are positioned. Actually, until the early 1990s when the bubble economy collapsed, Japanese companies were entities that were incurring substantial financial deficits. This fact indi-

cates that Japanese companies were active in procuring funds to primarily make capital investments.

When we look at the source of these funds, we find that they came from household savings. While Japan is notable for a high household savings rate, the rate was actually high until the 1980s. As shown in the upper left of Figure 1, household savings was the major source of financial surpluses. As such, until the bursting of Japan’s economic bubble, money saved by households flowed through banks and security markets to companies, which in turn invested such money in plants, equipment and other material for business activities.

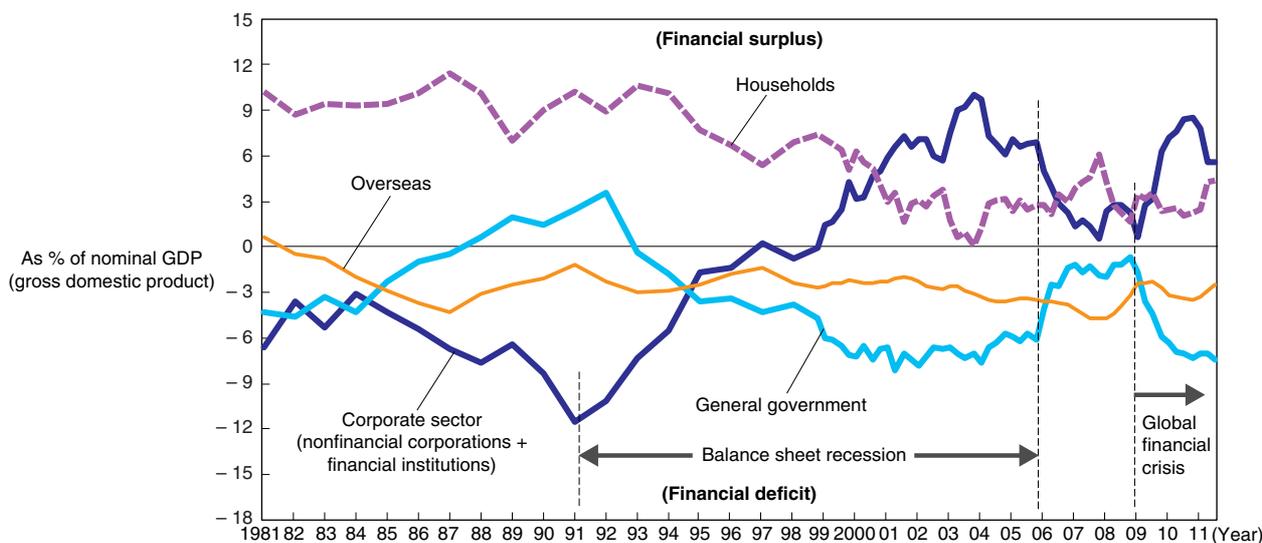
However, after the bursting of the bubble, we began to see a change in the flow of funds. As we entered the 1990s, the prices of assets such as equities and land, which had been soaring, shifted into a decline. This fall in asset prices had a substantial impact on companies, causing an imbalance between the value of assets, which were the investment targets as well as the collateral for borrowing money, and the liabilities incurred to purchase assets.

Because the fall in asset prices was beyond the control of individual companies, companies used free cash flows to pay down debts in an effort to repair their balance sheets. In this way, a “balance sheet recession” began and plagued Japan for over 15 years.

Unlike before the 1980s, in the balance sheet recession, companies were no longer willing to borrow money. Rather, companies gave debt repayment priority over investment. As such, the balance sheet recession caused Japanese companies to move away from being entities that spent money to those that saved money.

As shown in Figure 1, because companies’ demand to borrow money waned with priority being given to debt

**Figure 1. Japan’s flow of funds**



Note: For the FY 1998 figures, an adjustment was made for the impact of taking on liabilities related to the Japanese National Railway Settlement Corporation and the national forest service; for the FY 2005 figures, an adjustment was made for the impact brought about by the privatization of four highway public corporations; and for the FY 2007 figures, an adjustment was made for the impact brought about by postal service privatization. Figures after the end of 1998 are the four-quarter moving average. The most recent figures are for the July to September quarter of 2011.  
Sources: The Bank of Japan, “Japan’s Flow of Funds Accounts,” Cabinet Office, Government of Japan, “National Accounts of Japan.”

repayment, the financial deficits of the corporate sector started to shrink in the early 1990s. In 1998 and thereafter, companies moved to the “financial surplus” segment where the household sector is positioned.

In the mid-2000s, when the fall in asset prices came to an end and the Japanese economy recorded an export-led recovery, the corporate balance sheet adjustment was generally achieved. With debts being paid down, as is clear from Figure 1, the ratio of the financial surplus of the corporate sector to nominal GDP temporarily approached nearly 0 percent. However, after the collapse of Lehman Brothers in September 2008, uncertainty about the future of the economy prompted companies to trim debts and accumulate funds on hand. As such, the financial surplus of the corporate sector again started to expand. According to Bank of Japan’s flow of funds accounts statistics, the cash and deposits of private non-financial corporations, in particular, which stood at 172 trillion yen at the end of March 1991 and 183 trillion yen at the end of September 2008, reached 205 trillion yen at the end of September 2011, showing an increase of 22 trillion yen over the three years after the fall of Lehman Brothers.

Figure 2 shows to what extent the financial assets and liabilities of Japan’s nonfinancial corporations increased or decreased every year after fiscal 1980. The following paragraphs explain how to read the bar chart.

When the bars indicating financial assets are above the zero line, the nonfinancial corporations increased their financial assets during the given period; when the bars are below the zero line, they drew down their finan-

cial assets. On the other hand, the bars indicating financial liabilities are on an inverse scale. The bars below the zero line indicate an increase in liabilities, while those above the zero line indicate a decrease in liabilities.

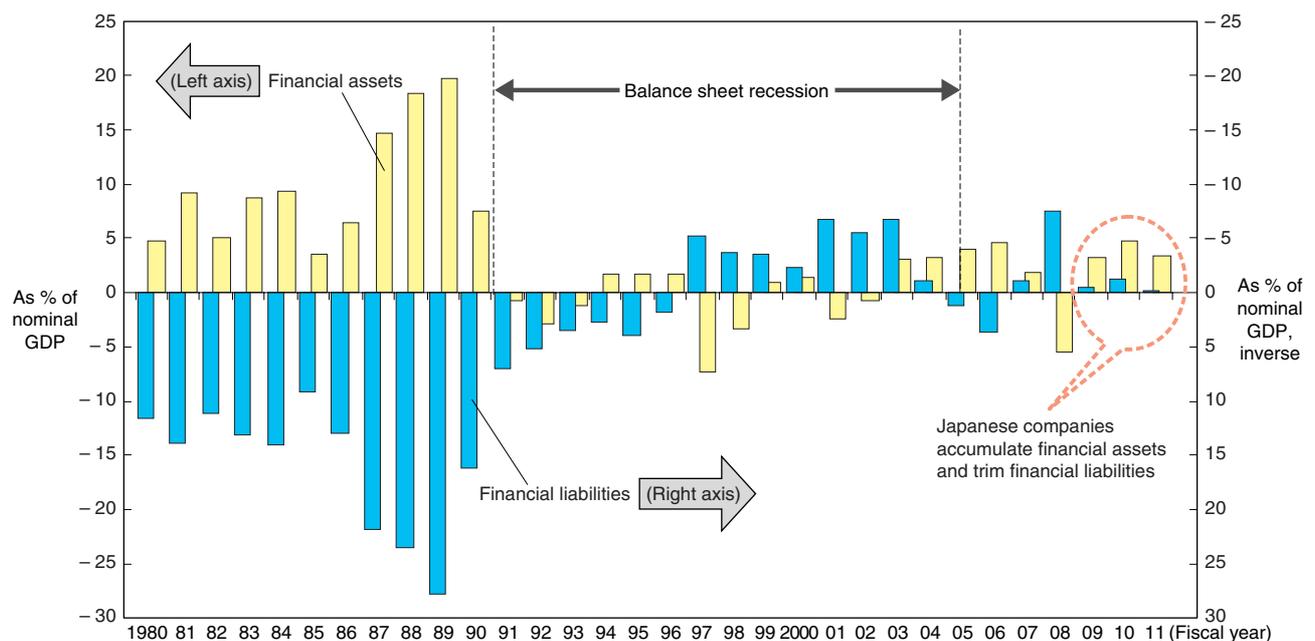
In other words, when the bars indicating financial assets and liabilities are above the zero line, they represent increased savings and repaid debts, leading to financial surpluses. When the bars are below the zero line, they signify decreased assets and increased liabilities, causing financial deficits.

While we have so far looked at changes in Japanese companies from the perspective of the flow of funds, Figure 2 plainly shows that Japanese companies were active in taking on liabilities up through the 1980s. After the 1990s, however, this trend completely changed and they concentrated on debt minimization.

In this way, as we entered the 1990s, Japanese companies have no longer been entities that “borrow money,” but have become those that “save money.” Therefore, even if the Bank of Japan drastically eased its monetary policy, its impact on the overall economy has naturally been weak. Even in a situation where the official interest rate has stayed as low as 0.5 percent or even lower since 1995, companies’ liabilities did not grow, as shown in Figure 2.

On the other hand, the household sector can no longer maintain a high savings rate as that seen in the 1980s because of a deteriorated work and income environment due to worsened corporate performance. As shown in Figure 1, this has caused the financial surplus of the household sector to continue to shrink after the 1990s. In

**Figure 2. Flow of financial assets and liabilities at nonfinancial corporations in Japan**



Note: For the FY 1998 figures, an adjustment was made for the impact of taking on liabilities related to the Japanese National Railway Settlement Corporation and the national forest service; for the FY 2005 figures, an adjustment was made for the impact brought about by the privatization of four highway public corporations; and for the FY 2007 figures, an adjustment was made for the impact brought about by postal service privatization. The FY 2011 figures are the quarter moving average through July – September 2011.  
Sources: The Bank of Japan, “Japan’s Flow of Funds Accounts,” Cabinet Office, Government of Japan, “National Accounts of Japan.”

the 2000s, the ratio of the financial surplus of the household sector to nominal GDP hovered around 2 to 3 percent. Although the figure shrank, the structure in which the household sector is positioned on the side of saving money remains unchanged.

### **(3) The primary cause of budget deficits as seen from the flow of funds is companies' excess savings**

As described in Section (2), Japan's flow of funds experienced a transformation from the form of "money saved by households is borrowed and spent by companies," which was prevalent until the 1980s, to the distorted form of "both households and companies save money," which still remains commonplace.

Let me reiterate that from a countrywide perspective, the monetary amount saved during a certain period equals the investment amount during that period. Until the 1980s, money circulated within the private sector, that is, households and companies, which supported well-balanced economic growth. However, after the 1990s when both companies and households became entities that save money, no entities borrow money within the private sector. As a result, as of the end of September 2011 (the latest data available), the ratio of the financial surplus of the private sector as a whole including the corporate and household sectors to nominal GDP reached 10.0 percent.

Faced with this situation, in order to strike a balance between savings and investments, it has become necessary for the remaining two economic entities (general government and overseas) to expand their financial deficits. To increase deficits, either of the following is necessary: expanding current account surplus by increasing overseas exports<sup>Note 4</sup> or expanding government budget deficits.

However, if we were to make up for the financial surplus in the private sector not by budget deficits but by a current account surplus, the current account surplus must be 10 percent of GDP based on the latest data, which is not practicable. Japan's current account balance shows a tendency to stay in the black because Japan recorded the world's largest trade surpluses until very recently and earnings on foreign investments have recently been growing. Nevertheless, even in 2007 when the largest surplus was recorded after 1985, the ratio of the surplus to nominal GDP was 4.8 percent.

If it is unrealistic to rely on the current account surplus, we have no choice other than to expand budget deficits by means of fiscal policy in order to strike a balance between savings and investment. As shown in Figure 1, since the 1990s, the government budget deficits (financial deficits) have swollen in parallel with the expansion of the financial surpluses of the corporate sector.<sup>Note 5</sup> The widening of budget deficits was unavoidable in order to maintain the vitality of the Japanese economy.

From a different point of view, at the present stage, the financial surplus in the private sector can become the source money to take on newly issued government bonds even if the government continues to issue bonds at the current pace. Actually, for financial institutions where private-sector money is deposited and managed, the first option they have is to invest such money in government bonds under circumstances where companies are unwilling to borrow money. The strong demand for government bonds is the biggest cause for low bond yields, which was explained in Chapter I.

As such, if we rethink the current situation from a macroeconomic perspective, in Japan, a primary cause behind the sharp increase in budget deficits is attributable to the fact that companies held back their demand for funds in order to adjust their balance sheets.

Conversely, as long as corporate demand for funds remains low, it would be difficult to eliminate budget deficits. In other words, stimulating such demand is the top priority issue for Japan to deal with in order to achieve fiscal reconstruction.

## **2 Greece's flow of funds and causes of its financial crisis**

### **(1) Greece's flow of funds is completely different from that of Japan**

The fiscal crisis in Greece is often compared to the fiscal issues in Japan, but the macroeconomic conditions between these two countries are completely different as is clearly seen in Figure 3, which describes the Greek flow of funds. The following fact highlights the difference. In Greece, even before the country's fiscal crisis was provoked, a situation was prevalent where the financial deficit of the corporate sector and general government could not be compensated for by household savings alone and where the overseas sector was the fund provider (generating the financial surplus). In contrast, in Japan, budget deficits were made up for by domestic savings. Simply comparing Figures 1 and 3 makes it clear that it is unrealistic to apply the Greek situation to Japan.

Moreover, because of austerity measures in Greece, both the household and corporate sectors have recently been showing a stronger tendency to draw down their financial assets. This tendency has further increased the government's dependence on the overseas sector for fund raising, undoubtedly being trapped in a vicious circle. This situation also constitutes a major difference from Japan where the private sector, principally companies, continues to accumulate financial assets.

### **(2) The flow of funds inherent in the Eurozone amplified the financial crisis**

In addition, after Greece joined the Eurozone in 2002, the country lost its ability to adjust its economy through means such as monetary policy and exchange rate fluctuations, which appears to have caused the country to

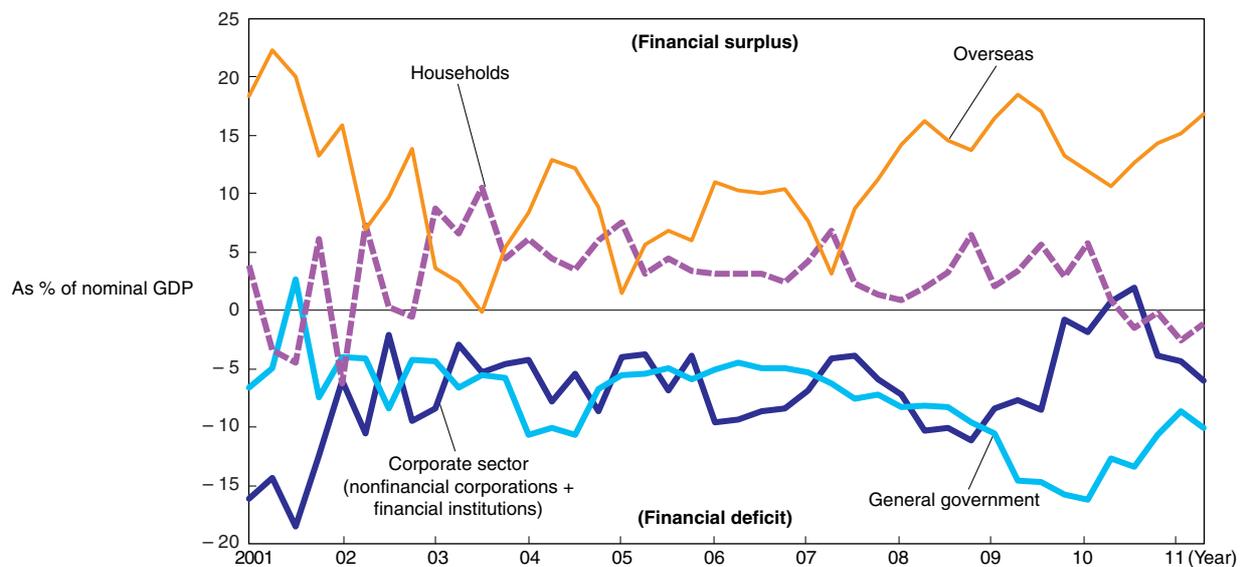
face its current economic difficulties. This is another factor that makes the situation in Japan very different from that in Greece because such inability is not at all applicable to Japan.

The economies of countries such as Greece that rely on overseas funds can generally be adjusted through currency depreciation or a rise in interest rates. <sup>Note 6</sup> However, because Greece uses the common currency that is shared by other European Union member countries, it was no longer able to adjust its economy through fluctuations in the exchange rates of the currencies of neigh-

boring countries. In addition, the adoption of the euro made it possible for funds to freely flow into Greece from other Eurozone countries or vice versa without incurring any foreign exchange risk.

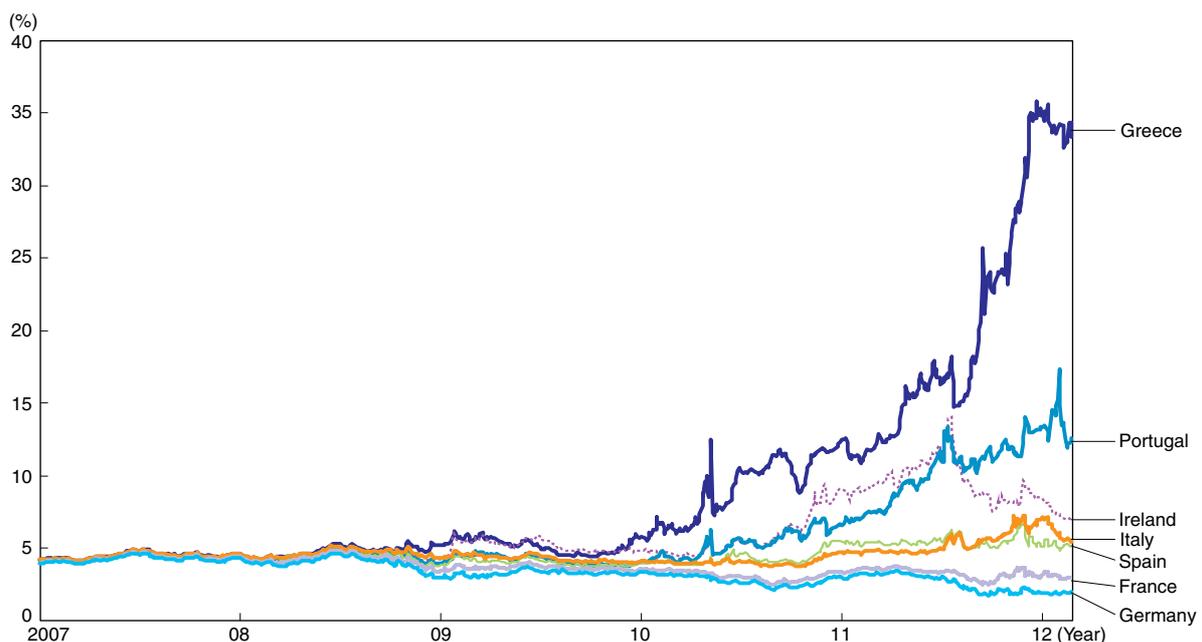
As a result, until 2008 when Lehman Brothers collapsed, funds flowed into peripheral countries such as Greece, Ireland, Spain and Portugal from core countries such as Germany. As shown in Figure 4, Greek government bonds were traded at almost the same yields as those of Germany, which is the largest economy in the Eurozone.

**Figure 3. Greece's flow of funds**



Note: The sum for the four last quarters is used; the latest data are through April – June 2011.  
Sources: Bank of Greece and Eurostat.

**Figure 4. Trends in 10-year bond yields in Eurozone countries**



Note: As of February 23, 2012; for Ireland, the figures are for 9-year bond yields from October 12, 2011.  
Source: Bloomberg.

If the actual situation was correctly reflected, peripheral countries must have paid a higher interest rate to raise funds than did Germany. An abnormal environment where these countries could procure funds at a lower interest rate that was equivalent to that applied to Germany brought about the Spanish housing bubble and caused the Greek government to profligately loosen its fiscal discipline.

However, in 2009, the new Greek government revealed the hidden deficits and announced that the budget deficit was much greater than that reported by the previous government. Because investors started to have concerns over Greece's solvency, a situation that was completely opposite from before began to occur: the funds that flowed into Greece from other Eurozone countries started to flee from Greece. Such an outflow was possible simply because it was within the Eurozone where capital flow involves no currency exchange risk. In 2010, in addition to the yields of Greek bonds, the yields of Irish, Portuguese and Spanish government bonds began to rise sharply because financial markets started to be skeptical about the creditworthiness of these countries because of their massive budget deficits.

Money that flowed unrestrictedly within the Eurozone without being affected by any foreign exchange risk eventually headed towards Germany, which is the most powerful economy in the Eurozone. This money flow was clearly reflected in bond yield trends. As shown on the right-hand side of Figure 4, while the government bond yields of peripheral Eurozone countries surged, as represented by Greece, only the German bond yields continued to decline.

In any case, it is fairly unreasonable to simply apply the case of Greece to Japan. It is because Greece expanded its budget deficits with heavy dependence on foreign funds and it was at the mercy of the flow of funds inherent in the Eurozone. On the other hand, excess savings within the domestic market have been causing budget deficits in Japan.

### III Exit Strategy for Achieving Japan's Fiscal Reconstruction

#### 1 The environment surrounding household incomes is in no way ready for a consumption tax hike

As is widely known and as stressed by the government in its effort to achieve integrated reform of the social security and tax systems, social security expenditures such as pension benefits and medical care costs have been rapidly increasing in Japan. Because it is quite natural to assume that the budget deficit owing to such a

structural factor will further increase as the population continues to age, these rising expenditures undoubtedly present us with an issue that must be dealt with as soon as possible.

Partly because of such necessity, some experts believe that "because anxiety about the future such as regarding a future pension scheme inhibits people's consumption, if the consumption tax is increased and reform of the social security system is achieved, such anxiety among people will be brushed aside and personal consumption will recover." However, as far as a flow-of-funds perspective is concerned, we must question this thinking.

As shown in Figure 1, the financial surplus of Japan's household sector that was at a high level of 10 percent of GDP in the past has now hovered around a low level of 2 – 3 percent. If we consider that saving comes from revenue minus expenses, it is reasonable to assume that the current slump in personal consumption is not attributable to factors such as concerns about the future, but is attributable to the fact that most income is disbursed. In this sense, Japan's household sector is doing its best to spend its earnings. Because in spite of these efforts, personal consumption remains sluggish, the major cause is considered to lie in incomes that ceased to grow.

The primary cause for a decline in savings rates is generally considered to be "aging." However, again, this thought leaves room for further consideration.

According to the Public Opinion Survey on Household Financial Assets and Liabilities conducted by the Central Council for Financial Services Information in 2011, 38.7 percent of single-person household respondents and 28.6 percent of family respondents answered that they "do not hold financial assets." Households that hold financial assets were asked whether the current amount of financial assets decreased or increased during the past year. To this question, the percentage of households (both single and family) in which the head is aged 40 or above that answered "decreased" was greater than the percentage that answered "increased." This survey result suggests the possibility that many people not only among the elderly but also among middle-aged working people are living their daily lives by drawing on their assets.

Under such circumstances, if a household burden is simply increased, households will have no option other than further withholding their consumption in the face of already tight budget restrictions. This will lead to further suppressed consumption, which is completely contrary to the intended purpose behind increasing the consumption tax, that is, eliminating concerns about the future and expanding consumption. If we follow this line of thinking, any attempt to eliminate structural budget deficits just by increasing the consumption tax without taking any measures to address the macroeconomic factor of budget deficits, which is weak corporate demand for funds, is highly likely to end in failure.

## 2 Exit strategy for achieving fiscal reconstruction

### (1) Importance of bold incentives to recover and stimulate corporate demand for funds

What Japan must do now in terms of policy before anything else is not to increase the consumption tax to implement reform of the social security system and achieve fiscal reconstruction, but to eliminate the macroeconomic factor that causes budget deficits to continue for a long time.

Most required is a policy that recovers and stimulates the demand of Japanese companies for funds, which has substantially declined, as discussed so far. For example, bold incentives will be vital to increasing private sector investments such as substantially increasing tax credits for capital investments and spending on research and development (R&D), as well as implementing regulatory reform.

If companies were to respond to this policy, and expand capital investments and create new businesses, both of which require the procurement of funds, the financial surplus of the corporate sector would shrink. If Japanese companies were to return to their original position as financial-deficit entities, which is a place where they should be positioned in a normal economic situation, then the work and income environment would be improved to some extent. It is never too late for the government to embark on tax hikes and reform of the social security system after such improvements are confirmed. Rather, pursuing fiscal reconstruction after mapping out such an exit strategy would bring far less pain to the Japanese economy.

Furthermore, in addition to its plan for reform of the social security system, the Japanese government has also presented its strategy of economic growth with the aim of increasing the growth rate. However, as far as the perspective of this paper is concerned, this goal of increasing the growth rate appears to be somewhat irrelevant. The primary reason for the Japanese economy remaining sluggish to date is that corporate demand for funds that decreased owing to the balance sheet adjustment continues to remain low, as is clear from Figures 1 and 2.

Conversely, even if the growth rate of the Japanese economy were to rise above its current level, it would be impossible to substantially curtail the budget deficit unless the corporate demand for funds recovers at the same time. If one of the intended purposes behind the government's current growth strategy is the achievement of fiscal reconstruction, this strategy must focus on how to stimulate corporate demand for funds, rather than aiming to increase the growth rate.

### (2) Limited-time tax benefit for capital investments and its outcome in the United States

In the following paragraphs, recent events in the United States are discussed in relation to capital investment tax

credit, which must be provided as the first step of an exit strategy in Japan.

In December 2010, the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 was passed by the United States Congress. This bill allows the extension of some provisions that were enacted during the administration of George W. Bush, such as those related to income tax cuts and unemployment benefits. The overall impact of this bill is expected to amount to 857.8 billion dollars over 10 years. In order to encourage companies to spend money on plant and/or equipment, this bill contains provisions allowing a 100-percent first-year depreciation deduction for capital investments made in 2011.

Since 2008, the U.S. has already been providing capital investment tax credit, allowing an additional first-year 50-percent deduction. [Note 7](#) In order to further enhance its effectiveness, the bill allows a first-year 100-percent deduction for qualified property acquired and placed in service after September 8, 2010, and through December 31, 2011. For qualified property placed in service in 2012, a 50-percent first-year deduction is allowed in the same way as for the years 2008 through 2010.

According to estimates made by the United States Congress Joint Committee on Taxation, this investment stimulus package alone is expected to result in a reduction in tax revenue of 55.4 billion dollars in fiscal 2011 and of 54.4 billion dollars in fiscal 2012. [Note 8](#)

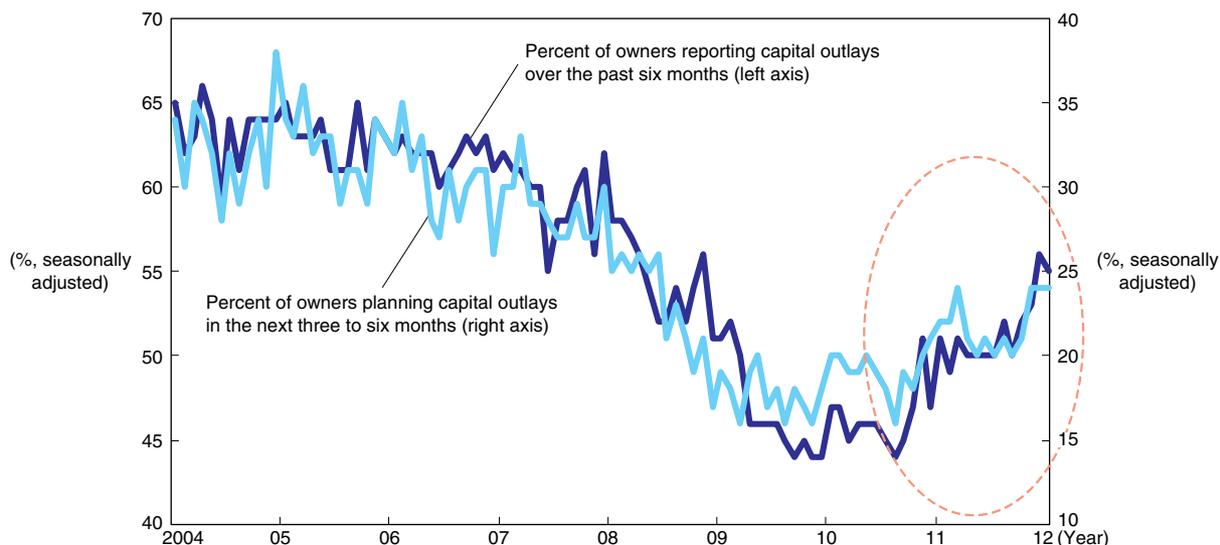
What effect has this stimulus measure had on companies in terms of their motivation to invest in capital equipment? According to a questionnaire survey conducted by the National Federation of Independent Businesses (NFIB) and aimed at small- and medium-scale businesses (NFIB Small Business Economic Trends), the number of such businesses that responded with "made capital outlays over the past six months" or "plan capital outlays in the next three to six months" has been growing steadily since this bill was announced in the fall of 2010 (see the portion enclosed in dashed lines in Figure 5).

Furthermore, if we look at the trends in the lending levels at commercial banks in the United States, we find that total lending has been falling as affected by the collapse of the housing bubble that started in 2007. From the fall of 2010 onward, as we can assume because of the above-mentioned incentives, commercial and industrial loans have started to recover at a faster pace than other major loan areas (Figure 6).

In fact, the Senior Loan Officer Opinion Survey on Bank Lending Practices, which is a questionnaire survey aimed at commercial banks and conducted quarterly by the Federal Reserve Board (FRB), which is the central bank of the United States, points to "recovery of capital investments" as one reason for the growing demand for funds.

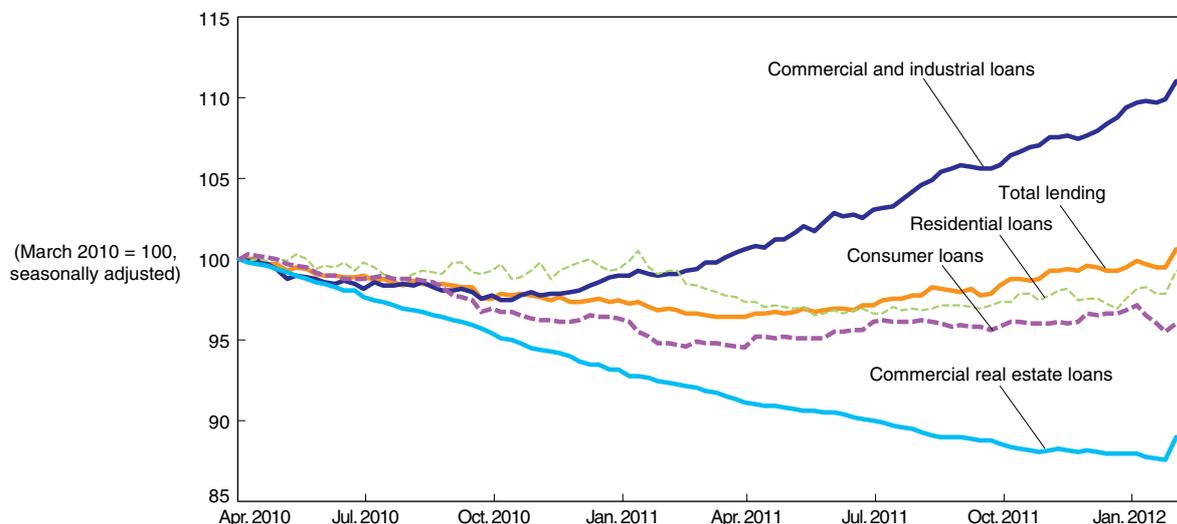
According to the results of the latest FRB survey (January 2012), the percentage of responding banks that

**Figure 5. Trends in the motivation of capital expenditures by small businesses in the U.S.**



Source: The National Federation of Independent Businesses (NFIB), "NFIB Small Business Economic Trends."

**Figure 6. Trends in loans outstanding at commercial banks in the United States**



Note: Residential loans include home equity loans; non-consecutive data on consumer loans were adjusted.  
Source: The Federal Reserve Board (FRB), "Assets and Liabilities of Commercial Banks in the United States."

selected "stronger demand" over the past three months was greater than that of responding banks that selected "weaker demand." Specifically, with respect to demand for loans from large and middle-market firms, 30.4 percent selected either "substantially stronger" or "moderately stronger." Regarding demand for loans from small firms, 26.4 percent selected "moderately stronger." The percentage of responding banks that selected "moderately weaker" was 10.7 percent regarding demand from large and middle-market firms and 11.3 percent regarding demand from small firms.

This survey also asked banks about the importance of possible reasons for the change in demand for funds. With respect to "customer investment in plant or equipment increased," which is one possible reason for the

change, ten out of twenty banks selected "somewhat important" and one bank selected "very important."

On the other hand, with respect to the reason for "customer investment in plant or equipment decreased," six out of seven banks selected "somewhat important" or "very important." These results correspond to a slow recovery of the motivation for capital investments by companies, as shown in Figure 5.

Such a slow pace of the U.S. economic recovery is assumed to reflect the seriousness of the country's balance sheet recession as affected by the bursting of the housing bubble. Nevertheless, the strengthening of investment incentives on a limited-time basis appears to have proven effective to some extent in stimulating corporate demand for funds and its motivation to invest

in plant and/or equipment. These measures could serve as good reference for Japan, which is under pressure to take some sort of action to stimulate demand for funds from companies.

### **(3) Japan's tax credits for capital investments and research and development should be substantially increased**

Japan's tax code already provides for some preferential systems for investments and research and development. Companies can deduct a certain amount of expenses for research and development from corporate taxes. Special depreciation and tax deduction systems are applicable to small and medium-sized enterprises to promote their capital investments. For example, starting in the early 2000s, tax credits for spending on research and development were enhanced compared to previous years, allowing a deduction of 8 to 12 percent of total spending on research (although the limit of this tax credit is 30 percent of the total amount of corporate taxes).<sup>Note 9</sup> Small and medium-sized enterprises are also allowed to apply either special 30-percent depreciation or a 7-percent tax deduction (with a limit of 20 percent of the total amount of corporate taxes) for the price at which equipment is acquired.

However, even if the effects of both of the above measures were totaled, the reduction in the amount of corporate taxes was less than 500 billion yen in fiscal 2010. Other incentive schemes are limited to specific regions or qualified property.

In the United States, a report presented by the Obama administration for business tax reform in February 2012 (The President's Framework for Business Tax Reform) proposes to broaden the tax base and lower the corporate tax rate to 28 percent (to 25 percent for manufacturing). At the same time, this report proposes to increase the research and development tax credit to 17 percent in order to make the credit more attractive and simplify tax filing for businesses, while aiming to make the credit permanent to increase certainty and effectiveness.<sup>Note 10</sup>

Given congressional gridlock and in view of the presidential election in November 2012, it is unlikely that the bill for this sort of tax reform will be passed anytime soon. Nevertheless, this proposal explicitly reflects the posture of the Obama administration that "the pace of innovation is a key determinant of economic growth." In comparison, Japan's tax incentives for both research and development and capital investments lack boldness in terms of scale and mechanism.

In Japan, since the Great East Japan Earthquake of 2011, exports have stagnated because of the yen's appreciation and the slowing of overseas economies. Coupled with increased imports of fuel to make up for the shutdown of all the country's nuclear reactors following the accident at Tokyo Electric Power Company's Fukushima Daiichi nuclear power plant, Japan continues to run a trade deficit. As such, some experts have been raising

concerns over the hollowing out of domestic industries due to difficulties facing Japan's manufacturing environment. Some of them also worry that such factors might lead to Japan becoming a country with current account deficits in the not too distant future.

Moreover, in recent years, Japan has had to contend with the growth of Chinese and Korean businesses. The background factors that lie behind such stiff competition include the decline in price competitiveness due to the appreciation of the yen. In addition, these competitors are moving closer to Japanese businesses in terms of non-price competitiveness because of the narrowing gap in technology and product development ability. To respond to such anxiety about the weakening of the competitiveness of Japanese businesses, the enhancement of tax credits for capital investments and research and development as well as regulatory reform will become vital.

As such, the enhancement of tax incentives for corporate spending on plant and/or equipment as well as on research and development is essential both for addressing the issue of Japan's budget deficit and for strengthening the competitiveness of the country's companies.

On the other hand, for private sector companies, given the severity of the current business environment, conventional "defensive" measures alone, such as restructuring operations to cut operating expenditures, can no longer be considered sufficient. In particular, to address the issue of non-price competitiveness, greater efforts must be directed to R&D and marketing research than has been customary in the past. In so doing, companies need to have the attitude of carving out new markets by themselves.

In short, for businesses to survive, regardless of whether they are backed by government policy, a positive attitude will become absolutely indispensable in the future, such as strengthening their capital investments and R&D. In adopting a positive attitude, companies need to recognize that the revitalization of corporate activities in this way will ultimately lead to the creation of an environment that facilitates Japan's fiscal reconstruction through changes in the flow of funds.

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#### Notes:

- 1 According to Greece's Ministry of Finance, the outstanding central government debt as of the end of 2011 was 367,978 million euro. The country aims to reduce its debt level to 120 percent of GDP by 2020 through debt restructuring and austerity measures that constituted a key condition of the second bailout package for Greece agreed upon in February 2012.
- 2 Publications explaining the details on demonstrative analyses in Japanese include: *Shikin junkan bunseki—kimon gihou to seisaku hyoka* (Flow-of-Funds Analysis: Fundamental Technique and Policy Evaluation), Kazusuke Tsujimura and Masako Mizoshita, Keio University Press, 2002, and *Shikin junkan bunseki no*

*kiseki to tenbou* (Flow-of-Funds Analysis), Kazusuke Tsujimura, Keio University Press, 2004.

- 3 However, in the U.S. flow of funds accounts, even if financial surpluses and deficits of all economic units are totaled, the result does not equal zero with some surpluses or deficits generated or incurred in overall terms.
- 4 When Japan has a current account surplus, the overseas sector (the sum of other countries) records a current account deficit if viewed from Japan, requiring the borrowing of funds from Japan. Accordingly, in terms of the flow of funds accounts, when Japan has a current account surplus, the rest of the world becomes the entity incurring deficits.
- 5 A strong inverse correlation is seen between the corporate sector and general government. Actually, between fiscal 1980 and fiscal 2010, the correlation coefficient between the ratio of the financial surplus or deficit of the corporate sector to nominal GDP and the ratio of the financial surplus or deficit of general government to nominal GDP was  $-0.846$ .
- 6 Nevertheless, even if an adjustment was made through an increase in interest rates or a decrease in the exchange rate, currency depreciation could often have a profound impact on the country's economy, not to mention the lessons learned from the Asian financial crisis.
- 7 This does not mean that only half the amount spent to purchase the property can be deducted in the first year. According to the explanation of the U.S. Congress Joint Committee on Taxation, if a taxpayer purchases a depreciable five-year property whose cost is 1,000 dollars, the amount of additional first-year depreciation allowed is 500 dollars. At the same time, the remaining 500-dollar cost is also depreciable under the rules applicable to a five-year property. Thus, 20 percent, or 100 dollars, is also allowed as a depreciation deduction in the first year. Therefore, the total depreciation deduction in the first year is 600 dollars.
- 8 Because this additional deduction no longer applies in and after fiscal 2013, which practically means a tax increase, the tax revenue is expected to increase. Therefore, if this tax credit measure is seen from the perspective of the five-year period between fiscal 2011 and fiscal 2015, the reduction is projected to be 61.9 billion dollars; from the perspective of the 10-year period between fiscal 2011 and fiscal 2020, it is expected to be 20.9 billion dollars.
- 9 Besides the incentive schemes introduced in Chapter III, either of the following tax credits can be additionally applied for spending on research and development:
  - (1) If spending on research and development is increased as compared to the average spending over the past three fiscal years, the tax credit is 5 percent of the increment.
  - (2) If spending on research and development in the current fiscal year is greater than 10 percent of the average sales amount over four fiscal years including the current fiscal year, the tax credit is the amount calcu-

lated by multiplying the excess amount by the deduction rate.

- 10 Currently, businesses must choose between using a complex formula for calculating their research and development tax credit that provides a 20 percent credit rate for investments over a certain base and a much simpler one that provides a 14 percent credit in excess of a base amount.

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