

Takehiro Sato: Quantitative and qualitative monetary easing – importance of fiscal consolidation

Speech by Mr Takehiro Sato, Member of the Policy Board of the Bank of Japan, at the Japan Society, New York, 19 March 2014.

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Accompanying charts can be found at the end of the speech.

Introduction

Thank you, Mr. Harris, for your kind introduction. Distinguished guests and members of Japan Society. It is my great honor and real pleasure to speak to you today.

As a member of the Policy Board of the Bank of Japan, I myself voted for quantitative and qualitative monetary easing (QQE) last April. It is my strong desire to ensure that it succeeds. At the same time, in the process of overcoming deflation, the Japanese government's efforts for fiscal consolidation play a vital role. It is for that reason that I will talk about fiscal consolidation today.

Today, I will first explain the current developments in Japan's economy. I will focus on the meaning of the price stability target and stress the importance of flexibility in monetary policy. I will also talk about the effects of the price stability target on financial markets. Next, I will explain the importance of fiscal consolidation from a range of perspectives, including potential changes in the balance of payments and a saving and investment balance in Japan. In my speech, I will often refer to an optimistic scenario and a pessimistic scenario. The latter is intended to highlight the importance of the government's efforts to ensure fiscal discipline. It is by no means intended to get bogged down in pessimism. I will then close my speech with some notes about the QQE and fiscal consolidation.

I. Developments in Japan's economy

It has been almost a year since the Bank introduced the QQE last April (Chart 1). Economic activity and prices have been broadly in line with the baseline scenario presented in the Outlook Reports and interim assessments (Chart 2). In short, Japan's economy is steadily pursuing its path to achieving the price stability target of 2 percent. Looking ahead, the effects of the consumption tax hike from 5 to 8 percent in April will be closely monitored. In my judgment, Japan's economy is entirely different from that in 1997, when the consumption tax was lifted from 3 to 5 percent. Japan's economy has become much more resilient against tax hikes.

On the price front, the Bank's policy board has made the following judgment. Excluding the direct effects of the consumption tax hike, the year-on-year rate of increase in the core CPI, which excludes volatile food, is likely to be around 1¼ percent for some time. Thereafter, it is expected to reach the price stability target of 2 percent from the latter half of fiscal 2014 to fiscal 2015, as the economy continues to grow at a pace above its potential growth rate. Based on such an outlook, the policy board has judged it appropriate to steadily pursue the QQE under its current guidelines of asset purchases.

II. Price stability target and QQE

A. Price stability target as a flexible framework

Next, I will explain what we mean by the price stability target, introduced in January 2013 (Chart 3).

Under the QQE, the Bank aims to achieve this target at the earliest possible time, with a time horizon of about two years.

The policy framework of the price stability target is flexible, just like that adopted by major central banks overseas. Specifically, monetary policy requires long and variable time lags before its effects permeate the economy, and thereafter prices. To achieve a sustainable growth path in the context of price stability, monetary policy needs to be flexible. In other words, we examine the current conditions and the outlook for economic activity and prices. We also analyze various risk factors including the accumulation of financial imbalances. We take account of all these developments when we decide on monetary policy. That is what I mean by being flexible. Flexibility in monetary policy has been widely shared with other countries. Particularly in the aftermath of the global financial crisis, major overseas economies have become increasingly attentive to the flexibility of monetary policymaking. From that viewpoint, the price stability target is by no means a rigid and superficial framework which calls for the inflation rate to reach 2 percent with surgical precision. It is a flexible and practical framework that accommodates the needs arising from economic developments. Put differently, what the price stability target aims to achieve is not a situation in which only prices will rise. Rather, it aims to achieve an environment in which the improvement of the overall economy results in higher wages and then higher prices. In my view, in such an environment, some degree of latitude to the price stability target – both on the upside and downside – is naturally required. Furthermore, it is necessary to make an analysis from broader perspectives when assessing the extent to which the Bank has come close to achieving the target. That includes examining the recent developments in wages as well as the core CPI, an indicator that the policy board presents in its assessments.

B. *QQE and long-term interest rate*

I will now talk about the effects of the price stability target on financial markets.

Under the QQE, the Bank puts strong downward pressure on nominal long-term interest rates through the massive purchases of JGBs. It also tries to raise people's inflation expectations via the accumulation of the monetary base. The combination of the two will lower real long-term interest rates. That is an unprecedented challenge. There are different views on the extent to which the massive supply of the monetary base can have a real impact on people's inflation expectations. Nevertheless, lifting inflation expectations is one of just a few remaining policy options under these circumstances. After nearly 15 years of deflation, the medium- to long-term inflation expectations have been around 1 percent and stayed low, compared to those in other advanced economies. Moreover, Japan has been faced with a zero boundary of nominal interest rates.

Here, let me recap on how the QQE will work on nominal long-term interest rates through its transmission mechanism. Nominal long-term interest rates combine two elements: one is the average of future short-term rates; the other is premiums (Chart 4). Based on that understanding, the Bank has specified its forward guidance in order to produce these effects. First it will continue with the QQE, aiming to achieve the price stability target, as long as it is necessary for maintaining that target in a stable manner. That in effect will exert downward pressure on the average of future short-term rates. In addition, premiums will be prevented from widening through the massive purchases of JGBs with relatively longer maturities. The QQE thus relies on the mechanism in which the combination of the forward guidance and asset purchases will maintain nominal long-term interest rates at low levels. That is not different from what happens at other central banks, such as the Federal Reserve and the Bank of England, which also depend on similar unconventional monetary policy.

Under such unconventional policy, nominal interest rates are likely to rise as the effects of the policy start to occur, preceding the improvement in the economy and prices. Referring to the elements that I have just explained, future short-term rates are likely to rise if the market judges that an exit from current easing policy is at hand. Admittedly, we need to follow a narrow path to achieve the objective under the QQE, but it is a challenge that we must meet.

As I will explain shortly, there is a limit to the extent to which a central bank can control the nominal long-term interest rates. Therefore, the government's efforts for fiscal consolidation are vital. They will become even more vital when deflation comes to an end and an eventual exit from deflation occurs.

III. Importance of fiscal consolidation

A. Overcoming deflation and change in environment surrounding fiscal policy

Let me now explain why fiscal consolidation is important in order to overcome deflation.

From an optimistic viewpoint, if the medium- to long-term growth expectations rise as a result of overcoming deflation, the fiscal structure remains solid despite a pick-up in nominal long-term rates. That is because tax revenue will increase as the nominal growth rate rises. The elasticity of tax revenue is generally high at the initial phase of economic expansion, and corporate tax is likely to contribute to a higher revenue. On the expenditure side, the pace of increase in the government's interest payment costs will remain subdued for some time. That is due to the government's debt management policy in which the average maturity has been extended, and the government has taken advantage of current easy monetary conditions. For reference, the average maturity of JGBs issued in fiscal 2014 will be eight years and five months. In light of weak credit demand under deflation, the government is now building a fiscal structure which is resilient against possible rate rises. Coupled with the effects of the QQE, the government's borrowing costs have stayed stably at around 1 percent. By extending the maturity of JGBs, the government in effect has been able to buy time on the liability side (Chart 5).

Such an optimistic view may entail a risk. The aging population will continue to put pressure on additional fiscal expenditure, such as increasing social security benefits. The aging will constrain the labor supply on the supply side, and change the demand structure of the economy as a whole. Unless the economy responds to a change in the demand structure, it will reduce the potential to grow. If growth expectations do not rise materially due to the aging, the fiscal structure will remain vulnerable. Taking account of such demographic changes, it is better to be conservative. In my judgment, the fiscal issue will remain even after we manage to overcome deflation.

B. Recent developments in balance of payments

Now, I will talk about Japan's balance of payments. The current account surplus registered 3.3 trillion yen last year. In the years for which a comparison can be made, it was the lowest figure recorded after 1985 (Chart 6). Behind that, the trade surplus in electronic appliances almost disappeared and fuel imports increased materially after the suspension of nuclear power plants. On a quarterly basis, the current account balance registered a deficit for the first time in the October–December quarter last year, and is expected to remain in deficit in the January–March quarter. Having said all that, the deficit in the quarterly current account balances fundamentally reflects solid imports thanks to resilient domestic demand due to the front-loaded increase in demand prior to the consumption tax hike this April. Therefore, I do not expect the current account deficit to persist after the consumption tax hike. The deficit we see most recently is taking place under those somewhat unique circumstances.

By contrast, according to the “balance of payments development stage theory”,¹ the current account balance changes from a surplus to a deficit in the long run as a result of the demographic change. It looks as though the recent increase in fuel imports is accelerating

¹ Crowther's “balance of payments development stage theory” explains long-term patterns of change in a country's balance of payment structure as the economy advances from a debtor to a creditor country, and eventually to the one that liquidates its overseas assets.

the change in the current account balance. The state of the economy – be it a trade surplus or deficit, or a current account surplus or deficit – is ultimately the result of people’s rational decision-making. It is irrelevant from the social welfare perspective. That leads me to conclude that it is not appropriate to say that a surplus is a good thing while a deficit is bad. Nonetheless, if the current account deficit continues, meaning that a domestic saving and investment balance will shift from a surplus to a deficit, there is a possibility that the advantage Japan has achieved by financing its deficits through ample domestic savings might change in the long run.

C. *Overcoming deflation, and saving and investment balance*

Let me now elaborate on the nexus between the saving and investment balance and the overcoming of deflation.

I will start with the saving and investment balance under deflation. In Japan, excess savings have been decreasing in the household sector, whereas they have been increasing in the corporate sector (Chart 7). Putting those trends together, excess savings in the private sector as a whole have remained intact. Behind that, companies have made it a priority to downsize their balance sheets by repaying debts in light of harmful deflationary expectations. Put differently, deflation has led to excess savings in the private sector, and that has enabled the government to finance its debts with subdued borrowing costs. Thus, “deflationary equilibrium” has prevailed. The equilibrium is subject to change once the QQE succeeds and Japan’s economy overcomes deflation.

Admittedly, it is not easy to predict what the saving and investment balance in the private sector will look like before and after deflation. In general, however, the propensity to import will rise by stimulating investment and spending. That will lead to an outflow of income overseas. Under such circumstances, domestic excess savings in the private sector are likely to shrink, if not a reversal from excess savings to excess investment.

Looking at the corporate and household sectors separately, excess savings in the corporate sector will likely show a clear decline. That is because, after overcoming deflation, it will become rational for companies to change their strategies and increase their external debts to finance their investment. As for the household sector, economic theory says that the household savings rate will go down in an aging population. I note that it may not be the case if we take account of transfers from the government and the corporate sector (Chart 8).

In my view, we should be mindful of a possible decline in domestic excess savings when the QQE succeeds and Japan moves out of the deflationary equilibrium. In light of the decline in excess savings, if the fiscal deficit does not change, the current account balance will register a deficit. We might no longer be able to finance all government debts with domestic savings. Then, overseas investors will ask for a higher premium, possibly driving the government’s borrowing costs even higher.

To avoid being trapped in such a situation, or to mitigate the shock associated with that situation, it is vital that the government will continue with its sound fiscal management. That is important in terms of preventing the problem associated with shrinking excess savings from surfacing. Put differently, the government needs to show its firm commitment to fiscal consolidation. Moreover, the government needs to implement its path toward such consolidation in order to avoid leaving an impression with the market that it is not serious about the issue. The scenario that I have laid out contains a number of assumptions. In practice, the end of deflation will generate higher tax revenue as the nominal growth rate rises. That is obviously good for fiscal consolidation. Thus, I repeat that it is best to avoid getting trapped by pessimism.

D. *Domar’s theorem*

Fiscal sustainability generally means that the future outstanding amount of the government’s debts relative to GDP will not reach an unmanageable level. In theory, it can be summarized

as the current outstanding amount of the government's debts relative to GDP being equivalent to the discounted value of the current and future primary balances. However, we cannot derive a threshold value of the outstanding amount of the government's debts relative to GDP and say that the fiscal situation is no longer sustainable beyond that value. After all, whether or not the fiscal situation is sustainable depends much on what the future primary balance looks like and how a wide range of economic entities expect such balance to change. Here, let me come back to the equation for determining fiscal sustainability. If an economy grows at rates above the interest rates, the government will be able to issue bonds forever despite the conditions specified in the equation. That is called Domar's theorem. This theorem is often referred to when doing a back-of-the-envelope calculation to assess fiscal sustainability. In practice, the interest rates are likely to stay above the growth rates, and it has become common today to assess fiscal sustainability on the condition that Domar's theorem does not hold.

In my view, when assessing fiscal sustainability, the interest rates that should be compared with the growth rates are not in terms of long-term bond yields but rather the average cost of the government's borrowing. The cost could be higher or lower than the growth rates of the economy. Indeed, the government's borrowing costs have consistently been declining since the beginning of the 1990s, when long-term bond yields began trending downward. Most recently, those costs are around 1 percent, well below the nominal growth rates (Chart 1). Under such circumstances, the government has benefitted from an "interest rate bonus".

Looking at those situations from a pessimistic viewpoint, we may face "an interest rate onus", where the government's borrowing costs remain higher than the nominal growth rates. The Japanese government has already started taking measures to extend the average maturity of its debts. We will still have some time before the interest rate onus takes place, and in the meantime the government can make its efforts for fiscal consolidation.

E. Overcoming deflation and the bank's response

The next topic concerns what policy response the Bank might take when we see the overcoming of deflation start to have an effect on long-term interest rates.

After the success of the QQE, people's medium- to long-term inflation expectations will be anchored at around 2 percent, and the Bank might possibly start moving toward an exit. Market participants will notice signs of change in economic activity and monetary policy. Under those circumstances, nominal long-term rates might start to adjust, well before the actual changes in policy.

From a purely macroeconomic perspective, a change in nominal rates can be considered as the result of a change in people's inflation expectations. Such a change may not be detrimental as long as real rates remain more or less the same. More optimistically, a higher tax revenue after the overcoming of deflation can be expected, and that will improve the fiscal situation.

From a pessimistic viewpoint, an abrupt change in nominal rates might make the fiscal situation severer and possibly have an effect on the financial system. Somewhat ironically, the success in overcoming deflation might produce unfavorable spillover effects, given the significant size of the government's debts. In an extreme case where there is a grave negative impact on financial stability, a central bank might have to choose either financial stability or price stability, no matter how strongly it is committed to price stability. Once a central bank can no longer pursue price stability in fear of fiscal sustainability, it might fall into a situation, known as "unpleasant monetarist arithmetic".²

² See Sargent and Wallace (1981) for details regarding "unpleasant monetarist arithmetic".

In my view, we must avoid such a pessimistic scenario from unfolding. To that end, the Bank has been stress-testing the robustness of Japan's financial system, taking into account possible changes in the interest rate environment. Furthermore, it has urged financial institutions to reinforce their risk management and take measures to enhance profitability.

In terms of its relationship with the government, the Bank pursues monetary policy to achieve the 2 percent price stability target. That includes the process through which it will eventually exit from the current easing policy. We simply cannot accept a situation in which a monetary policy decision is affected by the consideration of fiscal policy. There is no question about it.

Once the financial environment changes, it is possible that people will pay attention to the relationship between the government and the central bank. Expectations for the central bank's operation to support bond prices might rise. However, under free capital mobility, the central bank's involvement will not solve the problem. To be concrete, even though the central bank increases its operation in the government bond market in order to suppress the government's borrowing costs, the premiums might possibly rise according to the mechanism that I laid out today, when it is judged by market participants that the central bank's operation will weaken fiscal discipline. Furthermore, if the market thinks that the rapid increase in the central bank's balance sheet might cause inflation beyond the level judged appropriate, then the anticipated future short-term interest rates might rise. In short, it is the market judgment that matters rather than the central bank's intention. Down the road, social security spending is expected to rise due to the aging. That spending in Japan is not significantly high relative to that in other economies at this moment. However, it is vital that the government makes seamless and tireless efforts to make sure that fiscal discipline remains firmly intact and there is no doubt in the market concerning the government's intention toward fiscal discipline (Chart 9).

F. Plausibility of financial repression

Despite the government's determination to achieve fiscal consolidation, it appears that there is still a view stating that the central bank should conduct monetary policy in consideration of the fiscal situation.

Those who are obsessed with such a view claim that the central bank should continue its massive bond purchase operations in order to avoid the problem of fiscal concern. They insist that the central bank should be involved in such operations when long-term rates start to pick up around the time of an exit. Often referred to as "financial repression", the intention here is to contain a possible pick-up in nominal rates through the central bank's massive bond purchases in order to maintain fiscal sustainability.

That reminds me of the "fiscal theory of price level (FTPL)".³ The FTPL states that a fiscal stimulus is effective for price stability. However, it is implicitly based on the assumption that a central bank does financial repression. In other words, it supposes that the bond prices will be maintained despite an increase in government debts as a result of fiscal expansion. Otherwise, the private sector, which holds government bonds, will reduce its spending due to the adverse wealth effect and hence offset an increase in demand stemming from additional fiscal measures. Under such circumstances, the output gap will not improve and prices will not rise.

That said, whether or not a central bank can control bond prices depends not on its intention but on market judgment. It is for that reason too that I emphasize the importance of fiscal consolidation.

³ See Sims (1999), Christiano and Fitzgerald (2000a, b), Leeper (1991), Cochrane (2000), and Woodford (1996, 2001) for details regarding the fiscal theory of price level.

Concluding remarks

A. *Government's commitment for fiscal consolidation*

Now, let me sum up. In my speech today, I have repeatedly emphasized the importance of fiscal consolidation. Indeed, the Japanese government has already said that it will halve the deficit in the primary balance relative to GDP by fiscal 2015 from the level registered in fiscal 2010. Furthermore, it is committed to turning the primary balance from a deficit to a surplus by fiscal 2020. Those moves constitute an important part of the government's commitment to fiscal consolidation and are now widely accepted by the international community. Accordingly, the government decided to raise the consumption tax from 5 to 8 percent in April; moreover, the tax rate is scheduled to be raised to 10 percent in October 2015. Down the road, we may hear more discussion concerning whether the consumption tax of 10 percent is enough to make the fiscal structure sustainable. Whatever the discussion might be, it is important to acknowledge that the government will take a crucial first step toward fiscal consolidation, given mounting social security spending. There is no question about that, and financial markets understand the government's intention on that.

B. *QQE based on fiscal consolidation*

Recent long-term rates have been stable in light of signs of overcoming deflation. That is not just due to the effects of the Bank's JGB purchases. It also hinges on the fact that market participants and businesspeople have full confidence in the government's strong commitment to fiscal consolidation. That enables the Bank to conduct massive JGB purchases without being trapped in fiscal dominance. The Bank offers full support to the government's commitment. The commitment for fiscal consolidation by the government is imperative so that the QQE – which is designed to overcome deflation – should not be perceived as the means for “financial repression”.

At the same time, a problem will arise if the government creates a fiscal cliff, as epitomized by the enforcement of the Fiscal Structure Reform Act in the mid-1990s. In practice, a balanced approach may be required between a medium- to long-term commitment for fiscal consolidation and the short-term flexibility in policy. Even so, the government should ensure that it will not lose sight of the importance of fiscal consolidation and that it will reinforce its medium- to long-term commitment on that front.

Thank you.

Quantitative and Qualitative Monetary Easing (QQE) Introduced in April 2013

Strong and Clear Commitment

- The Bank of Japan ("the Bank") will achieve the price stability target of 2%, at the earliest possible time, with a time horizon of about 2 years.

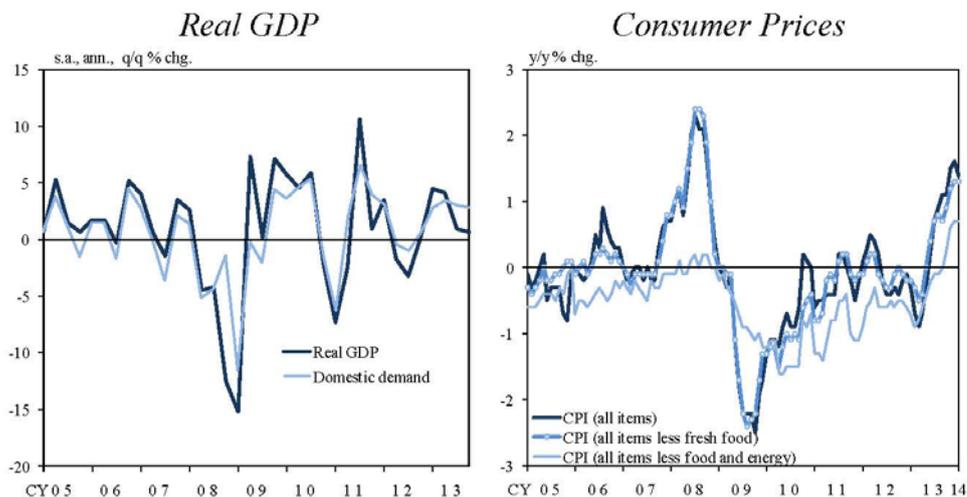
The Continuation of QQE

- The Bank will continue with the QQE, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. (The Bank will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.)

New Phase of Monetary Easing Both in Terms of Quantity and Quality to Underpin the Commitment

- Monetary base: Annual increase of about 60-70 tril. yen (x2 in 2 years).
- Amount outstanding of the Bank's JGB holdings: Annual increase of about 50 tril. yen (more than x2 in 2 years).
- Average remaining maturity of the Bank's JGB purchases: Extended to about 7 years (more than x2).
- Amount outstanding of ETF holdings: Annual increase of about 1 tril. yen (more than x2 in 2 years).

GDP and Prices



Joint Statement of the Government and the Bank of Japan *Released in January 2013*

Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth (excerpts, underline added)

The Bank of Japan conducts monetary policy based on the principle that the policy shall be aimed at achieving price stability, thereby contributing to the sound development of the national economy, and is responsible for maintaining financial system stability. The Bank aims to achieve price stability on a sustainable basis, given that there are various factors that affect prices in the short run.

The Bank recognizes that the inflation rate consistent with price stability on a sustainable basis will rise as efforts by a wide range of entities toward strengthening competitiveness and growth potential of Japan's economy make progress. Based on this recognition, the Bank sets the price stability target at 2 percent in terms of the year-on-year rate of change in the consumer price index.

Under the price stability target specified above, the Bank will pursue monetary easing and aim to achieve this target at the earliest possible time. Taking into consideration that it will take considerable time before the effects of monetary policy permeate the economy, the Bank will ascertain whether there is any significant risk to the sustainability of economic growth, including from the accumulation of financial imbalances.

Factors Affecting Long-Term Interest Rates

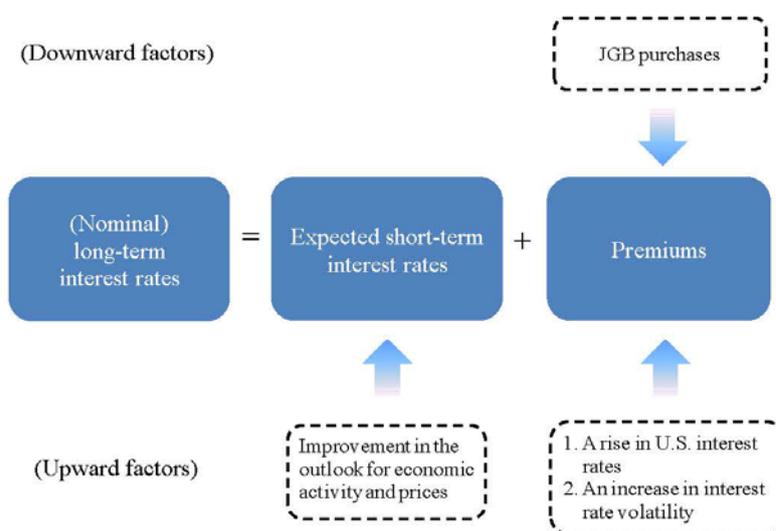
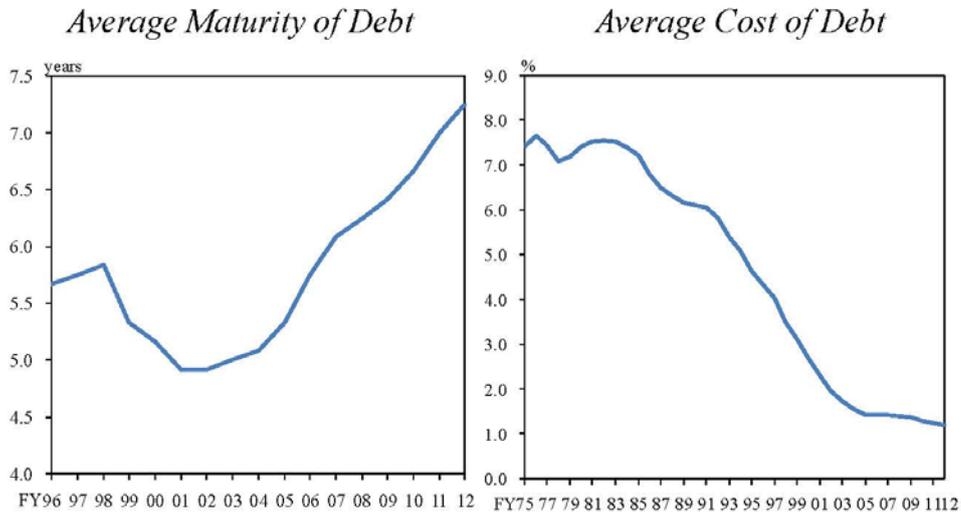


Chart 5

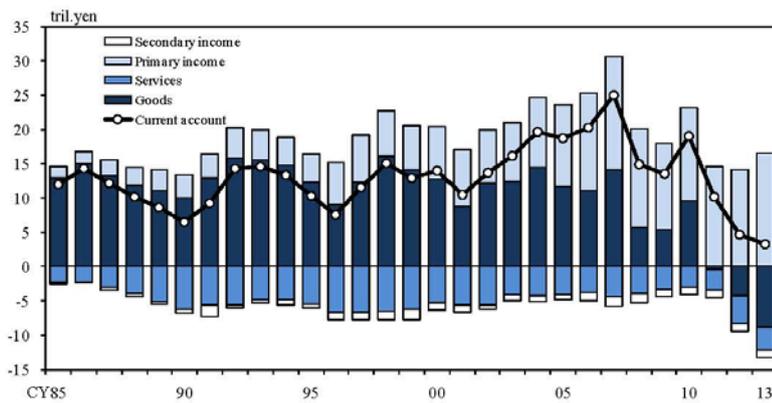
Government Debt Management



Source: Ministry of Finance.

Chart 6

Current Account Balance

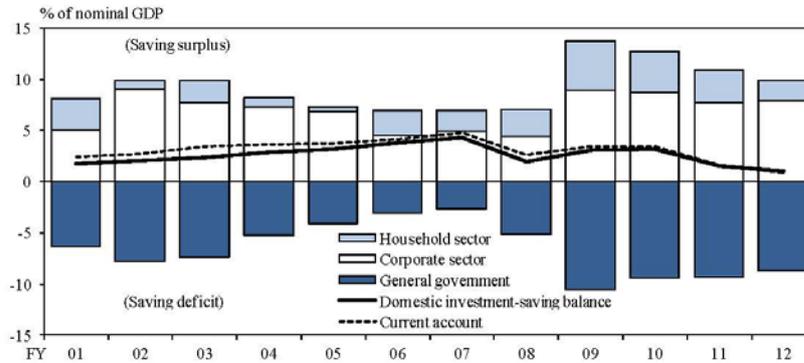


Notes: 1. "Primary income" and "secondary income" correspond to "income" and "current transfers" in the BOP before the revision in 2013 respectively.
 2. Figures for "primary income" and "secondary income" from 1985 to 1995 are based on the BOP before the revision in 2013.

Source: Ministry of Finance and Bank of Japan.

Chart 7

Investment-Saving Balance



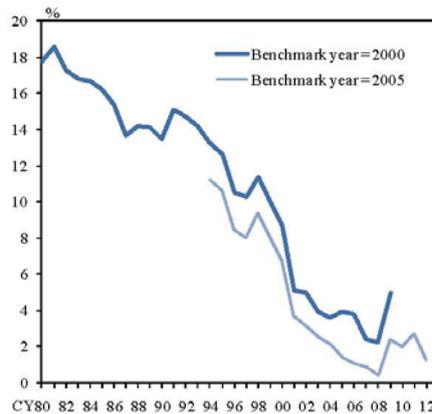
Note: The following factors are excluded from the investment-saving balance of the general government: (1) redemption of JGBs held by the Deposit Insurance Corporation of Japan (fiscal 2001 and 2002); (2) transfer of assets and liabilities of the Japan Expressway Holding and Debt Repayment Agency to the general account (fiscal 2008); (3) transfer of reserves in the special account for the Fiscal Investment and Loan Program (public financial institutions) to the special account for the government debt consolidation fund of the general government (fiscal 2006 and 2008); (4) transfer of reserves in the special account for the Fiscal Investment and Loan Program to the general account of the general government (fiscal 2008-11); and (5) transfer of assets of the Japan Railway Construction, Transport and Technology Agency to the general account of the general government (fiscal 2011).

Sources: Cabinet Office; Ministry of Finance and Bank of Japan.

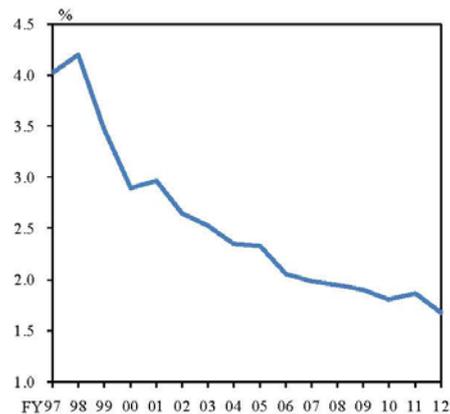
Chart 8

Household Savings Rate and Corporate Debt Ratio

*Household Savings Rate*¹

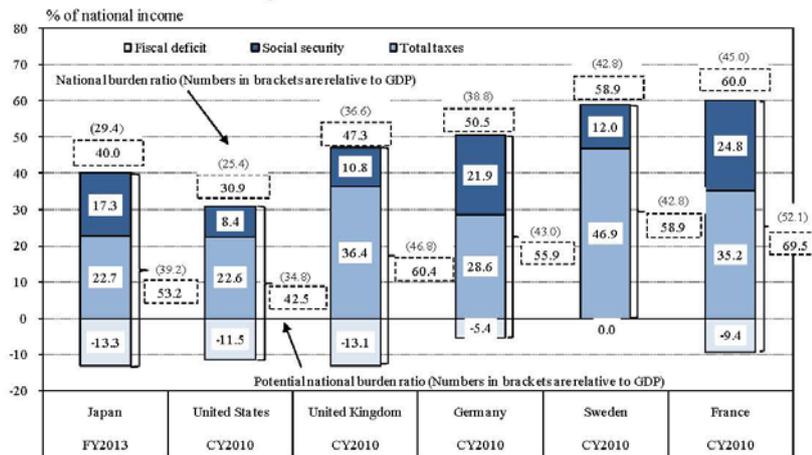


*Debt-Equity Ratio*²



Notes: 1. Figures are based on SNA.
 2. Debt-equity ratio is the ratio of total debt to own capital.
 Sources: Ministry of Finance; Cabinet Office.

International Comparison of National Burden Ratio



Notes: 1. National burden ratio is calculated by adding social security relative to national income (or GDP) and total taxes relative to national income (or GDP). Potential national burden ratio is calculated by adding national burden ratio to fiscal deficit relative to national income (or GDP).
 2. Japan in FY2013 is a preliminary figure. Other countries are actual figures in 2010.
 3. Fiscal deficit as a percentage of national income of Japan and the United States are based on general governments with social security funds excluded, and that of other countries are based on general governments.
 Source: Ministry of Finance.

References

Christiano, Lawrence J. and Terry J. Fitzgerald, "Price Stability: Is a Tough Central Bank Enough?", *Economic Commentary*, Federal Reserve Bank of Cleveland, 2000a.

Christiano, Lawrence J. and Terry J. Fitzgerald, "Understanding the Fiscal Theory of the Price Level", *Economic Review*, 36 (2), Federal Reserve Bank of Cleveland, 2000b.

Cochrane, John H., "Money as Stock: Price Level Determination with No Money Demand", *NBER Working Paper*, No. 7498, 2000.

Leeper, Eric M., "Equilibria under Active and Passive Monetary and Fiscal Policies", *Journal of Monetary Economics*, 27, 1991.

Sims, Christopher A., "The Precarious Fiscal Foundations of EMU", *The Economist*, 147 (4), 1999.

Sargent, Thomas J. and Neil Wallace, "Some Unpleasant Monetarist Arithmetic", *Federal Reserve Bank of Minneapolis Quarterly Review*, 5 (3), 1981.

Woodford, Michael, "Control of the Public Debt: A Requirement for Price Stability?", *NBER Working Paper*, No. 5684, 1996.

Woodford, Michael, "Fiscal Requirements for Price Stability", *Journal of Money, Credit and Banking*, 33, 2001.