The cost of rebuilding following the earthquake and tsunami in Japan in March, and renewed concerns about the ability of Greece to repay its debt, have turned the attention of investors once again to the debt burden in Japan. Yoshi Sakakibara, Economist, and Dan Morris, Market Strategist, discuss the current fiscal situation in Japan and the potential impact of financing the reconstruction.

Dan Morris: Obviously, the Japanese government will have to issue additional debt to finance reconstruction activities for now, even if it means some tax hikes in the future. Will the government be able to place a reasonably large amount of bonds without causing much trouble for the Japanese government bond (JGB) market?

Yoshi Sakakibara: Yes, I believe so. Even a big offering should cause only a slight backup in yields if any. As we wrote in another Insights piece discussing the economic and market outlook after the latest disaster, “Restoring Japan: An early macro assessment” (April 2011), “[w]e would be much more concerned under these exceptional circumstances if policymakers were to focus on fiscal management rather than on reconstruction and economic stimulus.”

Dan: But aren’t Japan’s public finances really bad, with so much debt outstanding already?

Yoshi: Obviously the situation is not good. But I’d argue that it’s not nearly as terrible as it’s sometimes made out to be. For instance, it is particularly absurd to think that Japan is the next Greece—a country which, given its adoption of the euro, doesn’t even have independent seigniorage (i.e., the right or privilege to independently issue currency).

Dan: Could you explain in more detail?

Yoshi: First, the difference between gross debt and net debt needs to be recognised (though people are becoming more aware of this). International economists, including the IMF, generally agree that gross debt is a better measure of rollover risks, while net debt is more relevant to evaluate fiscal sustainability and the impact of debt on growth and interest rates. Japan’s case is unique, with a peculiarly large difference between the two. As such, the oft-quoted ratio of gross debt-to-GDP at more than 200% exaggerates what Japan is really faced with.

Dan: I agree that the net debt-to-GDP of roughly 100% should be used. But even this net ratio is the highest among the advanced economies, correct?

1 Net debt refers to the gross debt of the general government minus its financial assets in the form of debt instruments (IMF World Economic Outlook-FAQs, April 11, 2011).
YOSHI: True, but actually this net ratio may be lower than you think. Some experts argue that one should only include data for debt held solely by the public. In other words, that the debt data should be adjusted to reflect only the net borrowing requirement of the government from the private capital markets. Under this measurement, the ratio of JGBs held specifically by the public (excluding quasi-public institutions such as the Bank of Japan, the National Pension Fund, Japan Post and Kampo) to GDP comes down to only somewhat less than 60%.

DAN: Wow, that is remarkable.

YOSHI: In addition, the international comparison of gross external debt also gives a very different picture, and renders absurd the idea that Japan is in the exact same boat as Greece (see Exhibit 1).

EXHIBIT 1: GROSS EXTERNAL DEBT

<table>
<thead>
<tr>
<th>Country</th>
<th>As % of GDP</th>
<th>As % of GDP</th>
</tr>
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<tbody>
<tr>
<td>Greece</td>
<td>180</td>
<td>118</td>
</tr>
<tr>
<td>Italy</td>
<td>99</td>
<td>85</td>
</tr>
<tr>
<td>Japan</td>
<td>48</td>
<td>40</td>
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<tr>
<td>United States</td>
<td>39</td>
<td>37</td>
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<tr>
<td>Turkey</td>
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<tr>
<td>Germany</td>
<td>231</td>
<td>17</td>
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<tr>
<td>India</td>
<td>17</td>
<td>33</td>
</tr>
<tr>
<td>Portugal</td>
<td>400</td>
<td>400</td>
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<tr>
<td>Brazil</td>
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<tr>
<td>Russia</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Britain**</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

* As of September 30, 2010.
** As of June 30, 2010.

DAN: I see. Still, even if these facts point to a much less troubling status for Japan’s public finance than is generally perceived, wouldn’t additional debt issuance cause some significant upward pressure on JGB yields?

YOSHI: The recent history of the interaction between Japan’s public debt and the JGB market shows that in fact bond yields have continued to decline as debt has increased (see Exhibit 2). Why would this time be different?

DAN: Wouldn’t the additional debt financing for large fiscal expenditures be taken as the reason for some visible fiscal premium?

YOSHI: Let’s think about the notion of a fiscal premium. What should be the cause of fiscal premia? In other words, what are the risks for government bond holders when it comes to public finance?

DAN: How about the risk of default?

YOSHI: Certainly. But are you suggesting that the Japanese government is at greater risk of default than other major countries?

DAN: No, not really. I wouldn’t say that the default risk of the Japanese government is any higher than that of the U.S. or the U.K. governments.

YOSHI: According to This Time Is Different by Carmen Reinhart and Kenneth Rogoff (a great work of financial history), Greece has defaulted or restructured its debt five times since 1800, and amazingly, has spent more than 100 years out of the past 200 either in outright default or in the process of rescheduling. Japan has only defaulted once in the modern era, and that was in 1942 during the war. Japan’s historical record is even better than that of Germany, which has defaulted or rescheduled eight times since 1800.

DAN: The Japanese government, as well as the U.S. and the U.K. governments, is clearly different from Greece, so I see that default risk is not the main issue for Japan.

YOSHI: OK. What else? What would worry government bondholders besides default risk?

DAN: Inflation?

YOSHI: Absolutely. Fiscal expenditures are generally regarded as more inefficient than private spending, and under normal
circumstances they should be inflationary. The general assumption that inflation must be bad for bond values is the unstated assumption in many people’s minds when they think about the JGB market. However, in Japan’s case, inflationary expectations are just what is needed to improve sentiment towards the economy and, indeed, towards the sustainability of public finances.

DAN: What do you mean by that?

YOSHI: I have found quite a few people who argue that the Japanese bond “bubble” will collapse in the very near future, given the substantial amount of JGBs already outstanding, the need for additional debt issuance, and the demographic problem that should erode Japan’s savings and thus its ability to absorb JGBs.

DAN: Wouldn’t it?

YOSHI: These people argue that the “bubble” is being sustained only because JGBs are almost entirely held by the Japanese—perhaps as much as 95% of all outstanding bonds. Are Japanese investors crazy to hold onto JGBs?

DAN: It seems they must love even meager returns since they accept such a low interest rate.

YOSHI: They love JGBs because JGBs actually offer great value. Even though JGB yields are very low that is only in nominal terms. Real yields are actually high and reasonable—precisely because of deflation in the economy. That is, there is almost no inflation risk currently priced in JGBs. That’s why the term “fiscal premium” should not be applied to JGBs. Look at the comparison of real bond yields across the G3 in Exhibit 3. They are about the same for all three countries.

DAN: I see. But JGBs don’t offer great value for non-Japanese investors outside the country.

YOSHI: That’s right. At these low nominal yield levels, holding onto JGBs is a risky investment for outsiders whose returns are deflated by their own home inflation, and are also faced with exchange rate risks, without much cushion from coupons and roll-down effects. That’s why JGB holdings by non-Japanese are so limited.

DAN: So the JGB market is overwhelmingly domestic?

YOSHI: Actually, not quite. More than 60% of all JGB futures market trading (excluding inter-dealer’s transactions) is conducted by non-Japanese investors, according to data by the Tokyo Stock Exchange. Thus, non-Japanese investors are actively involved in determining the price of JGBs.

DAN: OK. I can see that the JGB market is not a bubble. But does that mean you are not worried at all about the risks of a potential yield spike?

YOSHI: I’m not terribly worried, though it cannot be ruled out. There have been a few occasions of yield spikes in the last 15 years during this deflationary period: the so-called “TFB Shock” in 1998, the “VAR Shock” in 2003, and a small jump in 2010. They occurred soon after nominal yields had fallen to extremely low levels, so low that even Japanese investors questioned how much value they were getting. But these spikes were all followed by an economic recovery phase.

DAN: Certainly, Japan is not like Greece. The perception about default risk is much different, and Greece also suffers from inflation and inflationary expectations while Japan faces deflation. Also, the immediate threats to Japan’s public finances have been greatly exaggerated, as you described earlier. Still, what if interest rates suddenly began to go up for some reason, if the economy begins to recover, maybe thanks to reconstruction activities, or because of some contagion effects from European peripheral countries’ sovereign risks pushing up fiscal premia globally? Wouldn’t that put Japan’s public finances in an even more difficult situation due to ballooning interest payments?

YOSHI: What kind of higher interest rates are you talking about?

DAN: Say 2%, compared to the current 1.2%? That would be a significant backup, a near-doubling.

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**EXHIBIT 3: REAL GOVERNMENT BOND YIELDS**


Note: To get real yields, nominal yields are deflated by the so-called adaptive approach, which takes inflation expectations as the weighted average of the past performance, namely in this case, 10-year rolling inflation rates and contemporaneous year-on-year inflation rates.
YOSHI: Do you think that Japan’s interest payments would almost double, too? Interestingly enough, the latest budget assumptions by the Ministry of Finance (MoF) include 10-year interest rates at 2%. So it wouldn’t cause any increase in deficits relative to the current forecast. In addition, it is important to note that the interest payments on existing bonds are not affected by the rise of market rates. Therefore, the negative impact of higher interest rates on public finances is much more limited than thought.

There is more. Every year recently, MoF has budgeted JPY 17-20 trillion (about 3.8% of GDP) for an item called “National Debt Service.” This may be the source of the (inaccurate) perception about the impact of a doubling of interest rates. The “National Debt Service” includes not only true interest payments, but also the amount allocated to the “Government Debt Consolidation Fund” under the so-called “60-year redemption rule,” and this assumed amount is twice as large as the actual cost. The OECD has corrected for this, calculating that net debt interest payments were only 1.2% of GDP in 2010.

DAN: Your point, in a nutshell, is that Japan’s public finances are really not that bad. But why do MoF officials seem to overstate the severity of the situation?

YOSHI: Welcome to the world of politics. As the financial watchdog, the MoF is naturally focused on the risks. And it is true that the Japanese government has issued huge amounts of bonds, which makes MoF’s debt and cash management tasks (including large refinancing activities) truly difficult in a technical sense.

DAN: So you don’t doubt that they are motivated to be conservative and to try and hold down debt issuance as much as possible?

YOSHI: No, not at all. The complication comes, however, from the limited disclosure of public finance in Japan. The budget formation is arguably the most important source of political power in any country.

DAN: I would think so.

YOSHI: And who controls the budget formation?

DAN: Politicians.

YOSHI: Sure, for most countries, but not quite for Japan. In Japan, politicians do have the final say on the budget, and without their ultimate approval the budget wouldn’t be compiled. Unlike many countries, however, there are few political appointees, if any, who are involved in budget formation at the bureaucratic level. So the accumulation of information and knowledge about the complicated budget process, and details of relevant law and legislation, is basically confined to MoF officials. While political appointees would share the information widely, especially after he/she leaves the government, the MoF officials are mainly lifetime employees who are averse to divulging the information and knowledge that are the sources of their administrative power.

DAN: So that’s why analyses of the Japanese budget seem so difficult.

YOSHI: Right. The MoF doesn’t explain public finance details in a plain and easy-to-understand format.

DAN: So they know that Japan is nowhere near going bust, but in order to encourage fiscal rectitude they give a lot of warnings.

YOSHI: Let me give you an example. The Japanese government has been issuing so-called “JGBs for retail (individual) investors,” and they have been advertising these bonds very aggressively. This is an effort, started eight years ago, to diversify the investor base in order to improve market absorption of growing issuance. But these retail investors, under the Financial Instruments and Exchange Act revised several years ago, are legally considered “amateurs” whom the government must protect. The government wouldn’t be selling these bonds without explaining the associated risks properly if they believed that Japan’s public finances were that bad.

DAN: I’ve heard about the racy magazine advertisements showing young women fawning over handsome men who have bought retail JGBs!

YOSHI: Bingo!

DAN: But I’m still confused. MoF officials may have political incentives, but a fair number of independent economists, as well as some Japanese politicians, are also highly concerned about Japan’s public debt.

YOSHI: That’s why the title of this report is “Japan’s Debt Trap: Who’s in the trap?”

DAN: Those who would believe that Japan must be the next Greece.

YOSHI: Bingo, again! There is the “Reinhart-Rogoff Rule,” which states that a gross debt-to-GDP ratio above 90% inevitably leads to weaker economic growth. Since main-
stream economics has long been advocating the notion that big government (with the connotation of fiscal deficits) is negative for economic growth, this rule appears to have been accepted easily and widely.

DAN: However, Paul Krugman has criticised this rule by showing that the causality actually goes the other way.

YOSHI: That’s right. Weak growth causes a high(er) debt-to-GDP ratio, not the other way around. Krugman’s view is that the Reinhart-Rogoff paper has been completely discredited. There is another strong empirical research paper supporting Krugman’s claim. Still, quite a few people (economists, politicians, and journalists) remain preoccupied with the “invisible bond vigilantes,” despite the empirical evidence. Nominal government bond yields are largely determined by prospects for economic growth and inflation rates (in the absence of default risk), not by the size of debt.

Japan’s experience really enlightens issues surrounding public debt and government bond markets, and runs counter to popular stereotypes and myths. It shows that, above all, a public debt problem is typically a weak GDP problem. What would you think is the core problem for Japan’s public finance, fiscal expenditures and tax revenues?

DAN: I would tend to think that Japan probably has a large government and thus the problem is on the expenditures side. But you seem to be indicating otherwise.

YOSHI: According to OECD’s Economic Outlook (November 2010), Japan’s general government total outlays as a percentage of GDP were the fourth lowest among the 31 member countries in 2010. And Japan’s social security expenditures as a percentage of GDP are among the lowest in the group, despite being the most quickly ageing society, which some experts believe is a source of social anxieties about the future.

DAN: So cutting government expenditures won’t boost people’s confidence in the economic outlook?

YOSHI: Most likely not, I believe. Actually, fiscal cuts in an attempt to improve the public finance situation would more likely backfire than succeed, given the current circumstances. Most of all, in order to improve public finances, what is needed more than anything is nominal growth.

DAN: That is, ending deflation is the prerequisite for fiscal reconstruction.

YOSHI: Without a doubt! As I said earlier, Japanese government long bond yields continued to fall even as JGBs outstanding continued to increase. If you plot the change in the (net) debt to GDP ratio against the change in Japanese government long bond yields, you actually get a negative correlation.

DAN: That’s a good piece of empirical evidence to show that the size of the debt doesn’t matter so much. Could you elaborate more on the interaction between public finance conditions and economic growth for Japan?

YOSHI: While people tend to focus on the large size of public deficits, they tend to overlook the fact that the excess savings of the private sector, especially the corporate sector, is indeed larger in absolute value. This is the crux of the problem.

DAN: Wouldn’t this cash-rich situation usually be positive for the economic outlook?

YOSHI: Only if that cash is expected to be spent. In a normal, mildly inflationary economy, it would be reasonable to expect that excess cash is going to be reduced and mostly spent. But in a deflationary economy, cash tends to be hoarded, exacerbating deflationary pressure. The corporate sector’s savings and investment (the so-called I-S balance) is tightly and negatively correlated with the rate of inflation. This is what we call a liquidity trap situation (see Exhibit 4).

DAN: I see. Under those circumstances, low(er) interest rates cannot stimulate corporate activity sufficiently, and enough jobs cannot be created by the private sector.

YOSHI: Yes. That’s why public spending becomes important.

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EXHIBIT 4: CORPORATE SAVINGS AND INFLATION


Note: For the corporate savings data, transfers of entities between the private and the public sectors due to privatisation etc. have been adjusted for comparison purposes in the continuity.

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DAN: But wouldn’t increased public spending result in even larger public deficits?

YOSHI: Interestingly, the corporate sector’s I-S balance is negatively correlated with the public finance balance (see Exhibit 5). So when deflation ends, and the private sector’s massive excess savings are put to work, the public finance balance should improve thanks to increasing tax revenues. By the way, MoF’s forecast for the budget balance in the future uses an extremely low elasticity of tax revenues to economic growth, compared to the recent actual result, in their assumptions.

EXHIBIT 5: CORPORATE SAVINGS AND GOVERNMENT DEFICITS

Note: For the corporate savings data, transfers of entities between the private and the public sectors due to privatisation etc. have been adjusted for comparison purposes in the continuity.

DAN: Indeed, interesting. And for deflation to end, the government needs to help kick-start the economy with aggressive fiscal spending.

YOSHI: That’s my view.

DAN: It appears that fears of a JGB bubble burst and a sharp sustained spike in JGB yields are much exaggerated, even assuming large additional debt issuance to finance reconstruction activities. Does this mean you are not at all worried about the future of Japan’s public finance?

YOSHI: Well, no, I am in fact very worried. It is true that Japan’s social security system is in a dire situation. With the rapidly ageing society, sound financial maintenance of the public pension and the medical systems is becoming increasingly difficult. As I said before, Japan’s social security expenditures are very small. In the face of difficult public finances, the government will have to choose between cutting benefits or raising taxes and pension insurance premiums.

While such transfers are not specifically current expenditures to finance government activities (i.e., not budgetary deficits), this issue is certainly an important socioeconomic flash point.

DAN: That is no doubt worrying.

YOSHI: But my concerns about Japan’s public finances are mainly a result of worries about the economy’s persistent deflation. Since it is so rare for an economy to be stuck in deflation for 15 years, it must be difficult for those outside Japan to comprehend this. But in my view, deflation is the root of many if not all of the evils plaguing Japan’s economy. Without ending deflation, public finances simply cannot get better.

DAN: But is there a silver lining?

YOSHI: Yes, indeed. Japan is now faced with a great opportunity to turn the recent natural disaster into a basis for a stronger economy and society by ending deflation. And some global investors appear to have become keen on this outlook. I won’t discuss that any further here as this report is about Japan’s public debt. Please look at my Insights piece in April, “Restoring Japan: An early macro assessment.”

DAN: Given that, what do you think about the markets?

YOSHI: If Japan’s long bond yields were to rise visibly within the next few years, which we hope for, that would happen not because of the debt problem, but because of the end to deflation and the return of inflationary expectations as a result of a sustained economic expansion. That would be a truly positive scenario for the Japanese financial markets, and would be reflected in a rising equity market.

Conclusion

In our view investors’ perceptions that Japan is woefully over indebted, that it will inevitably find itself in the same situation as Greece with skyrocketing bond yields and risk of default, are mistaken. Japan’s debt levels are not as high as widely believed, and there is adequate scope for the government to issue more debt in order to finance the post-quake and tsunami reconstruction. Ultimately an end to deflation is a prerequisite for a sustained economic recovery. Whether it is financed by new debt or by tax increases that shift income from the consumption-averse private sector to the shovel-ready government, stimulus from the spending package should help hasten deflation’s demise.