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MANAGING GOVERNMENT DEBT AND ASSETS AFTER THE CRISIS

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MANAGING GOVERNMENT DEBT AND ASSETS AFTER THE CRISIS[1]

- The crisis has inflated the size of the government balance sheet. The maturity structure of balance sheets usually involves a trade-off between risk and cost. Higher debt levels increase the long-term fiscal costs of longer debt maturities but also the magnitude of potential re-financing problems and costs associated with shorter maturities.
- The crisis has led governments to accept more risk on the asset side of their balance sheet, which might suggest matching this by more prudent policies on the debt side.
- While foreign-currency issues might broaden the investor base, they can raise the volatility of demand for government bonds.
- Liquid government bond markets aid in the pricing of private sector credit and derivatives, and in providing liquidity buffers, regulatory capital and hedging assets to financial institutions. Demand for these services and thereby for government bonds may have been increased by the crisis.
- Unconventional monetary policies interact with government debt management, as they drive down longer-term yields and increase the fiscal incentives to extend debt maturities.
- Financial assets held at the same time as debt are effectively debt financed and might increase government balance sheet risk. However, financial reserves might be built for purposes such as prefunding future temporary spending, tax smoothing, avoiding short-term volatility in funding costs, or transferring wealth to future generations.
- Privatisation of government assets should be based on cost-benefit analysis and, except in extreme cases, not solely on revenue-raising objectives. In this regard, the current context may not be optimal for selling assets by governments that are not forced to.
- In the absence of financial repression, and given present maturity structures of debt, there is limited scope to significantly reduce the real value of government liabilities through higher inflation. Moreover, the costs of high inflation would likely outweigh the potential fiscal benefits.

1. In the wake of the financial crisis, government debt in the OECD area has increased massively on top of already high debt-GDP ratios prior to the crisis, by some 30% of GDP between 2007 and 2011 on average, rendering fiscal positions in many countries unsustainable. Management of government debt and assets can contribute to limiting future risks to fiscal positions and supporting fiscal consolidation strategies. This note highlights important issues and some associated trade-offs.

Managing debt cost and risks

Term structure of debt

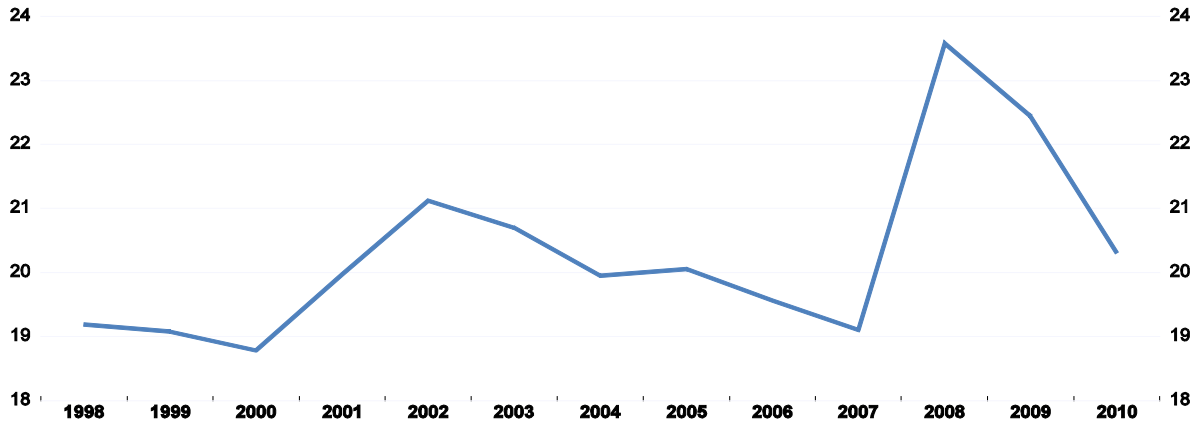
2. In many OECD countries the share of short-term in total public sector debt rose at the onset of the financial crisis, reflecting attempts to quickly raise additional funds at the lowest borrowing cost, but average maturity has been recovering since (Figure 1).[2] At the same time, debt levels have deteriorated substantially in most OECD countries on account of rising deficits and cumulating debt servicing obligations. This increases the vulnerability of the government balance sheet and warrants a more careful choice between costs and risks in benchmark portfolios.

1. For more detail, see Rawdanowicz, Wurzel and Ollivaud (2011).

2. See Blommestein (2010). In countries with high market turbulence, the issuance of new debt was for some time confined to treasury bills.

Figure 1. Share of short-term debt in selected countries

% of marketable central government debt



Note: The lines depict the simple average among the G10 countries (Belgium, Canada, France, Germany, Italy, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States). Short-term debt includes the debt instruments with a maturity up to one year.

Source: OECD, Central Government Debt database.

3. On the one hand, there is an incentive to exploit relatively low short-term interest rates by issuing short-term debt. On the other hand, heightened debt rollover risks associated with short-term financing could lead to sudden significant deteriorations in fiscal positions. This, in turn, would increase the risk of a backlash in economic growth. Also, the crisis has led governments into taking more risk on the asset side (see below). On balance, this may imply attaching a larger weight to avoiding risk than prior to the crisis, suggesting to extend further maturities, possibly above pre-crisis levels.

4. Such a strategy might also lock in long-term interest rates that are still very low in most countries, with the notable exception of countries affected by the European debt crisis. In most countries, long-term rates are likely to rise over the medium term once an economic upswing firms and monetary policies will move towards a neutral stance. An illustrative example shows (Table 1) that at present debt levels (about 100% of GDP on average in the OECD area) a one percentage-point increase in interest rates across the yield curve could raise debt by up to several percentage points of GDP within five years, with a bigger effect for shorter debt maturity.

Table 1. Impact of a 1 percentage point increase in interest rates on the debt ratio

Accumulated additional debt over the baselline in percentage points of GDP

After	Low debt turnover (average maturity of around 10 years[1] with an initial debt ratio of:			High debt turnover (average maturity of around 2 years)[2] with an initial debt ratio of:		
	80%	100%	120%	80%	100%	120%
2 years	0.1	0.1	0.2	0.3	0.4	0.5
5 years	0.8	1.0	1.2	2.3	2.9	3.5
10 years	3.0	3.8	4.6	6.3	7.9	9.5

Notes: For details of the assumptions employed for the calculations see Rawdanowicz, Wurzel and Ollivaud (2011).

1. Low debt turnover scenario assumes the share of initial debt maturing in the 1st year of 10% and from the 2nd year onwards of 5%.
2. High debt turnover scenario assumes the share of initial debt maturing in the 1st year of 40%, in the 2nd and 3rd year of 25% and in the 4th year of 10%.

Source: OECD.

Indexed debt instruments

5. The composition of government debt (and assets) is sometimes thought as offering some opportunities to hedge government revenue and spending against macroeconomic shocks. In particular, a hedge would be obtained if the government's debt servicing obligations were positively correlated with its tax receipts. Under this perspective, the optimal funding strategy would depend on the shocks affecting the economy and the structure of the economy itself. However, assessing the types of shocks hitting the economy, and the sensitivity of the economy with respect to such shocks can be very difficult. Alternatively, governments could obtain some protection of fiscal balances by issuing bonds that are indexed to certain economic indicators such as oil prices or GDP. In practice, issuance of indexed bonds of this type has so far been very limited, with GDP indexation having largely been confined to the context of debt restructuring of emerging markets.[3] Such markets are unlikely to emerge unless they were introduced on a significant scale by several countries at the same time.

Foreign currency debt

6. Foreign currency issuance increased somewhat across the OECD area during the financial crisis, reflecting attempts by debt managers to widen the circle of financial investors. Nonetheless, the available information indicates that in most OECD countries securities issued in foreign currencies account for only a small part of marketable government debt (Table 2). However, effective foreign currency obligations are generally higher than apparent from the statistics due to foreign currency swaps, which are often used to exploit interest rate differentials between different currencies.

Table 2. Structure of central government debt

Per cent of marketable debt, end-2010

per cent of marketable debt, end-2010

	Total money market instruments	Total bonds	Fixed-rate income instruments[1]			Index-linked bonds	Other bonds	Variable-rate notes	Debt held by non-residents	Debt in foreign currency
			Short-term bonds	Medium-term bonds	Long-term bonds					
Belgium	13.6	86.4	8.0	36.6	40.8	0.0	1.0	0.0	..	0.0
Canada	30.5	69.5	25.8	13.3	25.1	5.3	0.0	0.0	21.1	1.0
France	15.4	84.6	0.0	18.6	54.1	11.8	0.0	0.0	68.1	0.0
Germany	7.9	92.1	0.0	29.9	58.6	3.5	0.0	0.0	59.2[2]	0.3
Italy	8.5	91.5	0.0	18.4	46.7	6.8	10.3	9.4	..	0.1
Japan[3]	18.8	81.2	9.2	34.0	32.2	0.7	5.1	0.0	..	0.0
Netherlands	19.1	80.9	9.4	33.8	37.8	0.0	0.0	0.0	..	1.8
Sweden	16.2	83.8	0.0	64.4	0.0	19.4	0.0	0.0	45.7	18.2
Switzerland	10.1	89.9	0.0	0.0	89.9	0.0	0.0	0.0	..	0.0
United Kingdom	4.7	95.3	4.0	21.5	47.8	22.0	0.0	0.0	26.1	..
United States	21.1	78.9	8.7	36.5	26.7	7.0	0.0	0.0	50.9	0.0

Note : 1. In general, the maturity of fixed-rate bonds is: up to 1 year for short-term, 1 to 5 years for medium-term, and above 5 years for long-term.

2. Securities of the federal government, states and municipalities combined.

3. End-2009 data.

Source: OECD, Central Government Debt database.

7. The share of domestic currency government debt held by non-residents is much larger than the share of foreign exchange denominated issues (Table 2). Thus, for the larger OECD countries, foreign currency issuance does not appear crucial for attracting non-resident financial investors, but exchange rate risk is a relevant factor in determining the demand for bonds, as indicated by the marked gap between non-resident holdings for countries within and outside the euro area. With debt levels having reached

3. For example, some countries such as Bulgaria, Costa Rica and Bosnia and Herzegovina, issued bonds as part of their Brady restructurings that included clauses or warrants which increased their payments, if GDP reached a certain level (Griffith-Jones and Sharma, 2006).

unprecedented levels, sizeable bond holdings by non-residents reinforce the need to have credible medium-term fiscal programmes so as to reduce the risk that unsustainable fiscal positions trigger abrupt reductions in foreign demand for domestic government bonds.

Committing to price stability

8. With mushrooming debt, there is a temptation to reduce debt through inflation. For example, at a gross debt level of 100% of GDP, annual debt turn-over of 20% and stylised assumptions about growth and interest rates that correspond to projected characteristics of many OECD countries, a permanent inflation increase of 1 percentage point which is immediately and fully translated into nominal interest rates would lower the debt ratio after ten years by about 6 percentage points. The effect would be more pronounced if debt turn-over were lower and financial repression hampered interest rates moving up. However, the macro-economic costs of inflation (and financial repression) would likely outweigh the potential fiscal benefits and conflict with policies that aim at improving market confidence. Also, well-anchored inflation expectations, beyond their impact on investment and growth, lower *ceteris paribus* overall debt servicing costs.

Keeping government bond markets liquid

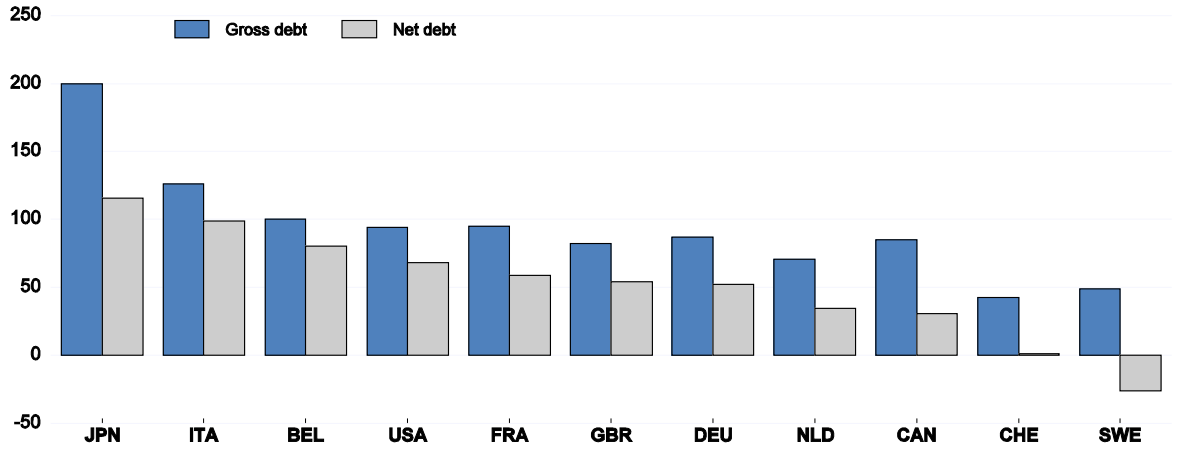
9. The supply of government bonds to the capital market is important in several respects. First, liquid markets for government securities are needed to contain or reduce liquidity premia demanded by financial investors and thus debt servicing costs. Second, government securities act as "risk-free" benchmarks for the pricing of private sector credit and derivatives. Third, they act as regulatory liquidity buffers for banks, the more so in the light of new regulatory initiatives of Basel III. Fourth, government securities act as regulatory capital for banks and pension funds. Fifth, over and above their regulatory function, they are attractive investment instruments for financial institutions, notably pension funds, with long-term contractual obligations *vis-à-vis* their clients. Indeed, the demand for funded private sector pensions as a supplement to social security pensions has increased. Managing the supply of benchmark instruments, taking into consideration market developments and new regulatory initiatives, may thus be part of the government debt managers' objectives. The perspective of supplying the market with instruments that are suitable to hedge long-term obligations provides an additional argument in favour of issuing bonds with long durations.

Managing public sector assets

10. Financial and non-financial assets, together with liabilities, influence the costs, yields and risks of the public sector balance sheet. For example, asset yields might be correlated with the business cycle and fall pro-cyclically along with tax receipts, and asset prices might fall in the presence of adverse economic shocks. For almost all OECD countries gross debt exceeds financial assets by a significant margin (Figure 2). Among the G10 countries, shares and other equity account for about 40% of total financial assets on average. By function, the largest single asset-holding entities are social security funds, which account for more than 30% of general government financial assets in France, Japan and Sweden. Comprehensive and detailed information on non-financial assets is lacking in most countries.

Figure 2. Gross and net debt

2010, % of GDP



Note: Net debt is defined as gross debt minus financial assets.

Source: OECD Economic Outlook 90 database.

Building reserves

11. If assets are held together with debt, they are effectively debt financed. To some extent it might be possible to use assets so as to hedge risks on the liability side of the government balance sheet or budgetary spending or revenue risks more generally. It is not clear though that a combination of debt and debt-financed financial assets would allow for more efficient management of yields and risks of the government's balance sheet than holding no assets at correspondingly reduced gross debt. However, there are some arguments in favour of holding reserves. Prefunding of future liabilities can be efficient for the purpose of tax smoothing, if future spending hikes are temporary and would otherwise need to be financed by temporary tax increases causing dead-weight losses. This might be the case to a limited extent for ageing-related outlays, such as for example the additional spending associated with particularly large cohorts in retirement. Moreover, building reserves can contribute to making the fiscal implications of future spending visible in current fiscal positions, in particular for social security benefits. Keeping contingency reserves might be effective in rapidly providing the financial means necessary to cushion adverse unforeseen events, such as to help funding financial aid for the purpose of financial crisis resolution.[4] Reserves may also help cushion budgets against short-term volatility in funding costs. Also, some governments in countries that are producers of non-renewable raw materials have established funds to save revenues from the sale of commodities, helping to transmit wealth to future generations and buffer fluctuations in revenues due to terms of trade shocks. Reserves involve some risk, however, that political pressure would at some point force them being spent for tax reductions, current spending or government programmes that yield below-market returns.

Reducing gross debt via asset sales

12. Privatisation of government assets not only reduces gross debt but may also boost economic growth provided that certain conditions are met. In particular, privatisation should be accompanied by appropriate regulatory provisions addressing market failures that may exist in areas operated by public firms.

4. For example, Sweden and Germany have installed funds to aid future crisis resolution if needed. Proposals along these lines have been made by European Commission and the IMF. See also Schich and Kim (2010).

13. Portfolio risks are also relevant. In particular, stakes in banks increase the exposure of government balance sheets to macroeconomic shocks. Bank profits are pro-cyclical, putting an additional burden on general government finances at times when tax bases shrink and unemployment-related outlays rise. This suggests unwinding equity participations in banks once macroeconomic conditions permit. In many countries gross debt levels could be reduced substantially by unwinding equity participations and credit positions that were acquired in response to the financial crisis.

14. Beyond unwinding equity participations in banks, the scope for sales of financial assets may be limited in practice in most OECD countries and likely to be insufficient to return debt ratios to pre-crisis levels. Privatisation programmes should be primarily based on cost-benefit analysis and, except in extreme cases, should not be driven solely by revenue raising or debt-reduction objectives.

Interactions with monetary policy

15. Central bank operations affect general government finances, in part because some share of the central bank profits accrue to the government. In an extreme case, it is conceivable that central bank losses might even require capital injections by the government. Liquidity-support measures for banks proved to be a major policy tool in coping with the crisis, but came along with relaxed conditions for admissible collateral. Quantitative easing (QE) policies, conducted in the first place by the US Federal Reserve and the Bank of England, aim at stimulating private sector activity via lowering credit cost, generating positive wealth effects and raising the returns on investment. Asset purchases effectively shift risky financial assets from the private sector onto the balance sheet of the central bank or a special QE fund in exchange for risk-free central bank reserves. Thus, both types of measures come at the expense of risks accumulating on central banks' balance sheets and thus, indirectly, on the general government balance sheet.

16. Debt management might also affect the effectiveness of monetary policy. In general, government debt management should act as yield taker. However, unconventional monetary policies that aim at reducing yields of longer term maturities (for example by buying longer term bonds in exchange for shorter term bonds) increase the fiscal incentives to extend debt maturities. Governments should be aware that this could counteract central banks' actions.

Comprehensive and transparent accounting of liabilities and assets

17. Information exchange between the relevant agencies, including the debt management office, public sector entities managing assets and the central bank, is important for an effective management of all public assets and liabilities. A proper assessment of fiscal positions requires a comprehensive and transparent reporting of all public liabilities and assets. Also, fiscal transparency facilitates consolidation by lowering risk premia, minimising refinancing risks and limiting fiscal gimmickry. It is thus desirable that standard – often less comprehensive – balance-sheet measures be accompanied by broader measures of public sector balance sheets.

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