

## OECD Sovereign Borrowing Outlook No.3

by

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*OECD governments are facing ongoing challenges in the markets for government securities as a result of continued strong borrowing amid concerns about the pace of recovery and sovereign risk.*

*The third **OECD Sovereign Borrowing Outlook**<sup>†</sup> provides revised estimates for 2010 and projections for 2011. Gross borrowing needs of OECD governments are expected to reach almost USD 17.5 trillion in 2010, up from an earlier estimate of almost USD 16 trillion. In 2011, the borrowing needs of OECD sovereigns are projected to reach almost USD 19 trillion, nearly twice that of 2007. Against this backdrop, government debt ratios are expected to further deteriorate.*

*Raising large volumes of funds at lowest cost, with acceptable roll-over risk, remains a great challenge for several countries, with most OECD debt managers continuing to rebalance the profile of debt portfolios by issuing more long-term instruments and moderating bill issuance.*

*An additional challenge for government issuers is how to deal with the complications generated by the pressures of a rapid increase in sovereign risk, whereby “the market” suddenly perceives the debt of some sovereigns as “risky”.*

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† The first OECD Sovereign Borrowing Outlook was published under the title “OECD Sovereign Borrowing Outlook 2009” in the OECD’s Financial Market Trends 2009/1, and the second OECD Sovereign Borrowing Outlook under the title “The Surge in Borrowing Needs of OECD Governments: Revised Estimates for 2009 and 2010 Outlook” in the OECD’s Financial Market Trends 2009/2.

## I. A challenging issuance environment: A slow recovery and concerns about sovereign risk

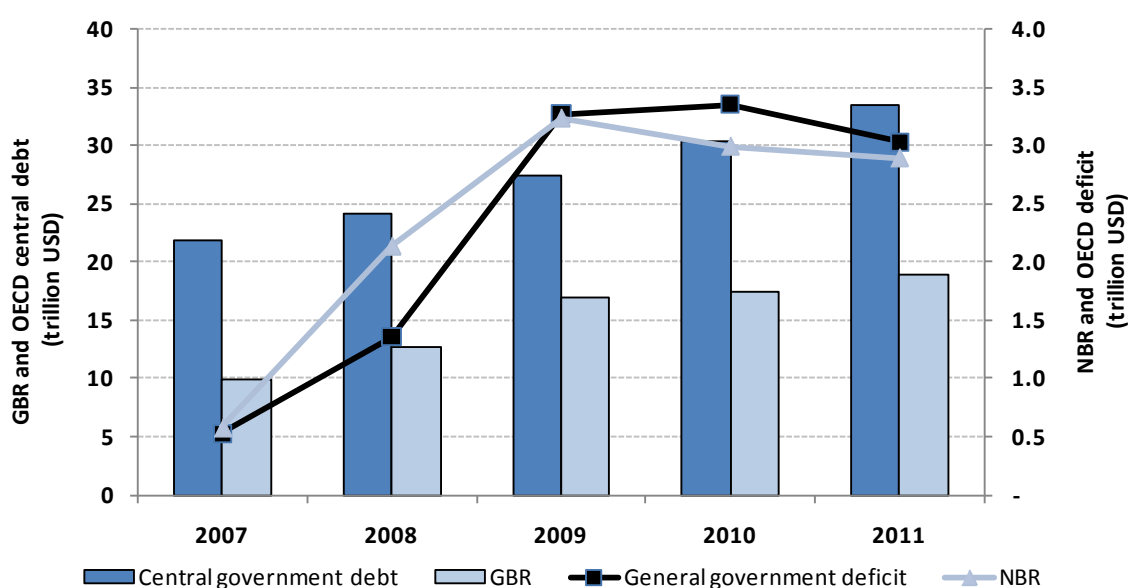
*Gross marketable borrowing by governments is expected to reach USD 17.5 trillion in 2010 and USD 19 trillion in 2011*

*Borrowing needs versus funding strategy*

Amid a still highly unsettled economic outlook, the third OECD Sovereign Borrowing Outlook expects the gross borrowing needs of OECD governments to reach USD 17.5 trillion this year,<sup>1</sup> up from an earlier estimate of just under USD 16 trillion. In 2011, the borrowing needs of OECD sovereigns are projected to hit almost USD 19 trillion,<sup>2</sup> nearly twice that of 2007 (Figure 1 and Table 1). In the Outlook, we are making a policy distinction between funding strategy and borrowing requirements. Gross borrowing needs, or requirements, are calculated on the basis of budget deficits and redemptions.<sup>3</sup> The funding strategy entails decisions on how borrowing needs are going to be financed using different instruments (e.g. long-term, short-term, nominal, indexed, etc.) and distribution channels.<sup>4</sup>

Information on methods and sources of the Sovereign Borrowing Outlook can be found in the Annex.

Figure 1. Fiscal and borrowing outlook in OECD countries for the period 2007-2011



Source: See Annex.

*Uncertainty increased due to slowdown and concerns about sovereign risk*

Uncertainty increased due to both the slowdown in the pace of recovery of the world economy, which is somewhat more pronounced than previously anticipated,<sup>5</sup> and concerns about an increase in sovereign risk in some countries. An interim OECD assessment shows that economic growth in the G7 economies could slow to an annualised rate of about 1.5% in the second half of 2010.<sup>6</sup> Some issuers had to deal with complications generated by the pressures of a rapid increase in sovereign risk, whereby “the market” suddenly perceives the debt of some sovereigns as “risky”. Bond market pressures have the potential to generate self-fulfilling debt problems by triggering higher

interest rates by way of demanding compensation for higher sovereign risk that, in turn, may affect the growth prospects of countries.<sup>7</sup>

## II. Evolution of budget deficits, sovereign borrowing and debt

*Budget deficits peaked at around 7.5% of GDP in 2010*

The budget deficit for the OECD area as a whole is estimated to have peaked at around 7.5% of GDP in 2010 (the equivalent of approximately USD 3.3 trillion), with a projected decrease to nearly 6.5% of GDP in 2011 (the equivalent of around USD 3.0 trillion) – see **Figure 1** and **Table 1**. However, in spite of these (projected) improvements, deficits are still standing at near historical record levels.<sup>8</sup> In the wake of these developments, net borrowing requirements are estimated to fall from nearly USD 3 trillion in 2010 to around USD 2.9 trillion in 2011 (**Figure 1**), a decrease from an estimated 6.7% of GDP in 2010 to little more than 6.2% in 2011 (**Table 1**).

*Net borrowing is estimated to fall to USD 2.9 tn in 2011*

*Government debt ratios are expected to increase further*

Government liabilities are being driven largely by the recessionary impact of the unprecedented 2007-2008 global liquidity and credit crisis, including government expenditures due to fiscal stimulus programmes but also the influence of recession-induced negative growth dynamics. Because of this, and despite falling interest rates during 2008-2010, the ratio of government debt-to-gross domestic product is expected to continue to increase.

*Central government debt is expected to reach 72% of GDP in 2011 and general government debt nearly 100%*

For the OECD area as a whole, the outstanding central government debt is expected to increase from USD 30.4 trillion (the equivalent of EUR 20.1 trillion, or 67.8% of GDP) in 2010, to around USD 33.4 trillion at the end of 2011 in OECD countries (EUR 22.2 trillion or 71.7% of GDP). General government debt-to-GDP is projected to reach nearly 100% in 2011 (**Figure 1** and **Table 1**).

**Table 1. Deficits, borrowing and government debt in the OECD area**

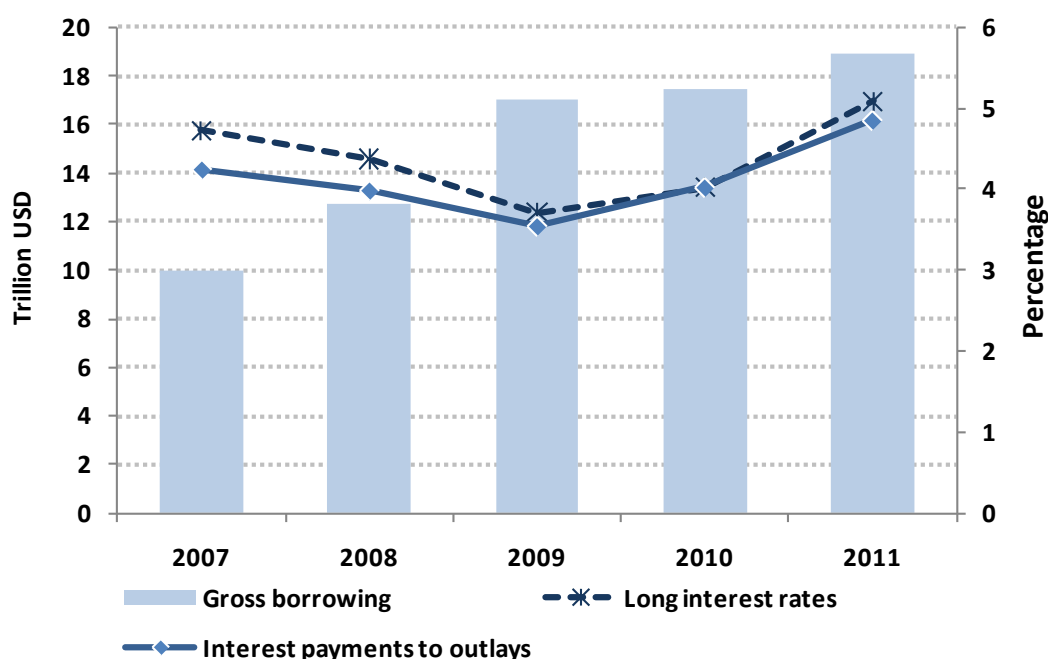
As a percentage of GDP	2007	2008	2009	2010	2011
Deficit	1.2	3.1	7.5	7.5	6.5
Net borrowing requirement	1.3	4.8	7.5	6.7	6.2
Gross borrowing requirement	23.0	28.6	39.2	38.9	40.7
Central government debt	50.6	54.4	63.2	67.8	71.7
General government debt	74.9	79.9	90.9	96.0	99.8

Source: See Annex.

*The average long-term interest rate is expected to rise to 5.1% in 2011*

Of great importance for government funding operations and the projection of future borrowing needs, is the anticipated change in the direction of longer-term interest rates (**Figure 2**). After the peak of the financial crisis in 2008, long rates dropped. The average long-term interest rate is expected to rise to around 5.1% in 2011, up from 3.7% in 2009. The projections assume that when government indebtedness passes a threshold of 75% of GDP, long-term interest rates increase by 4 basis points for every additional percentage point increase in the debt-to-GDP ratio<sup>9</sup>.

Figure 2. Gross borrowing, interest payments and long-term interest rates



Note: Interest payments as a percentage of total government outlays.

Source: See Annex.

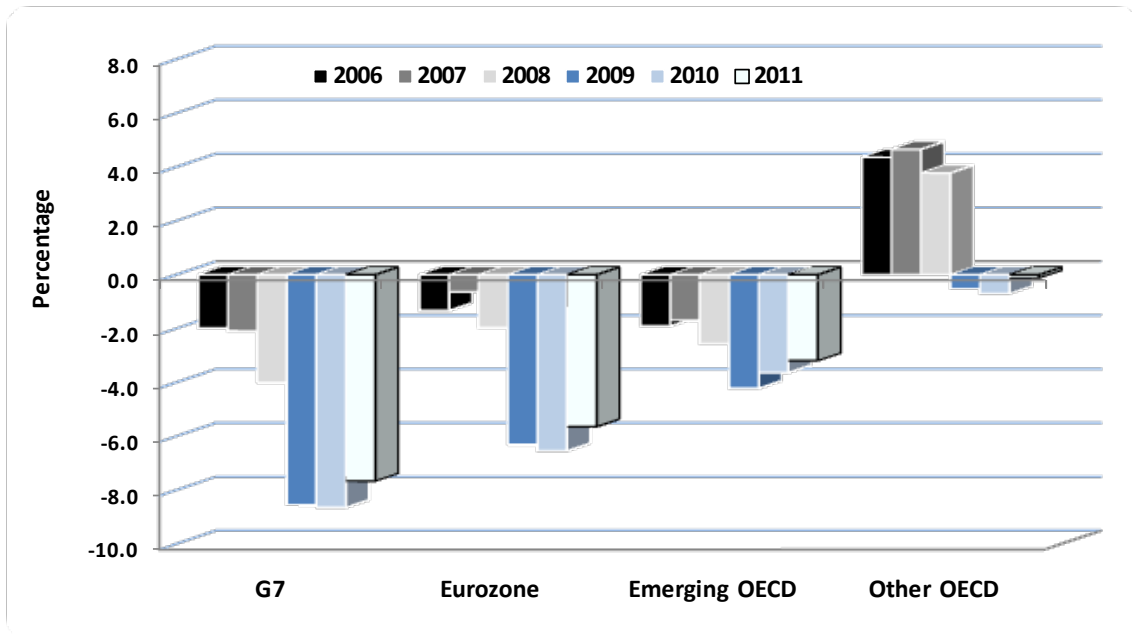
### III. Summary overview of the borrowing outlook for OECD country groupings

*All OECD country groupings show a deterioration in government balances*

*Performance of “Emerging OECD” is relatively good*

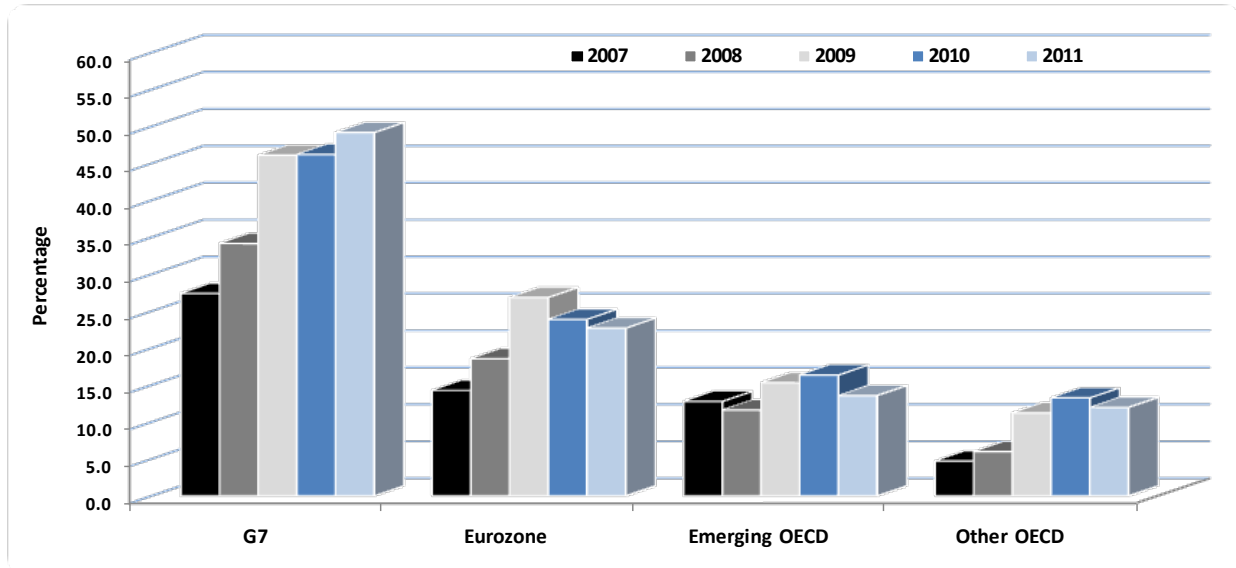
The unprecedented global liquidity and credit crisis was at first associated with dysfunctional and collapsing financial institutions. This then set the stage for the second phase: the surge in government deficits and government (contingent) liabilities, driven largely by the strong recessionary impact of the global financial crisis. In all OECD country groupings considered here, government balances deteriorated. For the OECD as a whole (**Figure 1** and **Table 1**) and the various groupings (**Figure 3a**), deficits peaked in 2009-2010. Furthermore, it can be seen that *Other OECD* included countries with a fiscal surplus in the period 2006-2008. Since 2009, the government balance of this group of countries also turned into a deficit. In comparison with total OECD, G7 and the OECD countries of the eurozone, the performance of *Emerging OECD* was (and is) relatively good.

Figure 3a. Deficit-to-GDP ratios in total OECD and selected regions



Source: See Annex.

Figure 3b. Gross borrowing ratios as a percentage of GDP in OECD countries



Source: See Annex.

*Gross borrowing ratios of the G7 are projected to continue to increase in 2011*

The mirror image of the development of budget deficits is the rapid increase in net and gross borrowing requirements. **Figure 3b** presents estimates and projections of gross borrowing requirements as a percentage of GDP for the various country groupings. For the G7 economies, gross borrowing requirements as a percentage of GDP are increasing in the period 2007-2011 (**Figure 3b**), with the 2011 borrowing ratio representing a near

*But ratios of other country groupings have begun to decline*

doubling vis-à-vis 2007. The same is true for the OECD as a whole (**Table 1**). But for the other country groupings, gross borrowing ratios are declining. The borrowing ratios for *Emerging OECD* and *Other OECD* are estimated to peak in 2010, although *Other OECD* more than tripled between 2007 and 2010. Of particular interest is that the borrowing ratio of the OECD countries in the *eurozone* already peaked in 2009 (representing a near doubling vis-à-vis 2007).

#### IV. The challenge of raising large volumes of new funds with acceptable roll-over risk

*Rising debt and deficits increased the challenges faced by sovereign issuers, compounded by concerns about sovereign risk*

For countries facing historically high spreads, issuance conditions were quite challenging this year. More generally, the backdrop of increasing debt levels and deficits added significantly to the difficulties faced by some countries in raising fresh funds. As noted, these difficulties were sometimes compounded by rapid increases in sovereign risk, whereby “the market” suddenly perceives the debt of some sovereigns as “risky”. Financial markets are at times seen as reacting in a non-linear fashion to delayed or postponed fiscal adjustments, thereby creating the risk of cliff effects where markets suddenly lose confidence in *yesterday’s* safe sovereign asset. Clearly, this is a major complicating factor for sovereign issuers as bond market pressures have the potential to trigger higher funding costs by demanding compensation for higher sovereign risks.

*Raising large volumes of funds at lowest cost with acceptable roll-over risk remains a challenge*

Recent financial market events have highlighted the importance of managing debt maturities and debt rollover risk. The results of a recent OECD questionnaire on debt portfolio management also confirmed that the financial crisis did render the funding task of most debt managers more difficult.<sup>10</sup> Overall, about a third of countries indicated that the crisis impact on funding activities did affect their ability to achieve their various risk metric targets.<sup>11</sup> In general, raising large volumes of funds at the lowest cost with acceptable roll-over risk remains a great challenge for several countries.

*Primary markets have continued to function reasonably well*

However, primary markets for government paper (largely auctions) continued to function reasonably well in most countries. The OECD questionnaire on debt portfolio management revealed that quite a few countries mentioned that they did not have to introduce *new* techniques or instruments since their strategies were flexible enough to absorb the shocks. Other debt managers indicated that changes to their auction types, increased frequency of auctions, and the introduction of new bond types (*e.g.* inflation-linked bonds) were required.<sup>12</sup>

*Risk-averse investors forced debt managers to modify their fund-raising strategies*

**Table 2** provides an overview of the major changes made in issuance procedures and/or the conditions for using existing systems and techniques, in order to respond to liquidity pressures, rising borrowing requirements and tougher issuance conditions. The risk-averse behaviour of investors forced debt managers to modify their fund raising strategies.

**Table 2. Changes in OECD issuing procedures and instruments in response to the crisis<sup>13</sup>**

Australia	More flexible auction calendars. Issuance of inflation indexed bonds recommenced in H2 of 2009 in order to broaden investor base. First issuance of inflation-indexed bonds via a syndicated offering. Subsequent issuance of inflation indexed bonds is planned to be via single-price auctions. Auctions for all nominal debt are via the multiple-price format.
Austria	More emphasis on investor relations.
Belgium	Tap for long-term debt. Increased placement of EMTN.
Canada	Re-introduction of three-year maturity. Reductions in the regular buy-back programme but maintained switch operations in the long-end to support market liquidity. Introduction of additional benchmarks for two-year and five-year sectors.
Denmark	Use of private placement in foreign markets in 2008. T-bill programme terminated in 2008. Greater use of auctions instead of tap sales.
Finland	Diversification of funding sources. More emphasis on investor relations. More coordination with PDs. Higher syndication fees. Active use of demand-supply windows.
France	Increased flexibility to better match demand. On several occasions, off-the-run bonds have been issued since the 2nd half of 2007.
Germany	Tap for long-term debt. More frequent auctions.
Greece	Beginning 2009, auctions of T-bills changed to a single price format. Syndication used for all types of bonds and re-openings.
Hungary	More flexible auction calendar (bi-weekly bond auctions with dates but without tenors in calendars). More flexibility in the amounts offered. Introduction of top-up auctions (non-competitive subscription) and auction fees. More frequent use of re-openings of off-the-run bonds and buy-back auctions. Planned introduction of exchange auctions. Introduction of direct, regular meetings with institutional investors.
Iceland	Single price auctions (for long-term bonds) are used together with multiple price auctions.
Ireland	Syndication has been added as funding tool. Auctions also in use for short-term debt.
Italy	More flexible procedures. The range of offered amounts for on-the-run bonds increased. Possibility to offer additional off-the-run bonds as response to highly volatile market conditions. Adjustment of auction pricing mechanism for nominal bonds, linkers and floaters (issuer sets discretionally the total allocated volume within the previously announced range). In BOT auctions participants are required to send their bids in terms of yield. Modification of method for calculating share in auctions. The range of the maturity of bonds sold to PDs at non-competitive prices is also extended. Introduction of re-openings of old bonds.
Korea	Since September 2009, a single-price format for auctions has been changed to a multiple price format. Introduction of conversion offers.
Mexico	Tap issues of both short- and long-term bonds.

Netherlands	Increased frequency of bond auctions (of off-the-run bonds). Extended repo - and commercial paper facilities (longer maturity, extra foreign currency issuance). Extended T-bill programmes.
New Zealand	Introduction of new long-term bond. Tap issues for short-term debt. Monitoring foreign markets for finding attractive foreign-borrowing opportunities. Introduction of a new facility of “reverse tap tender”.
Norway	Instead of both auction types, only single price auctions are now being used.
Slovak Republic	Contemplation of following (future) operations: (a) Direct selling and buy backs in secondary market; (b) Underwriting auctions (single price based on price discovery via syndication); (c) Buy backs and exchange auctions.
Turkey	“Revenue indexed bonds” have been introduced in order to broaden the investor base.
United Kingdom	Mini tenders were introduced in October 2008 as a more flexible supplementary distribution method alongside the core auctions programme. In 2009-10, the DMO is using syndicated offerings to supplement its auction programme. Introduction of a post-auction option facility.

Source: Responses to the 2009 Survey of the OECD Working Party on Public Debt Management.

*More frequent auctions, with auction schedules being more flexible and opportunistic*

*Transparency and predictability remain key for minimising borrowing costs*

*Debt managers rebalance towards long-term instruments*

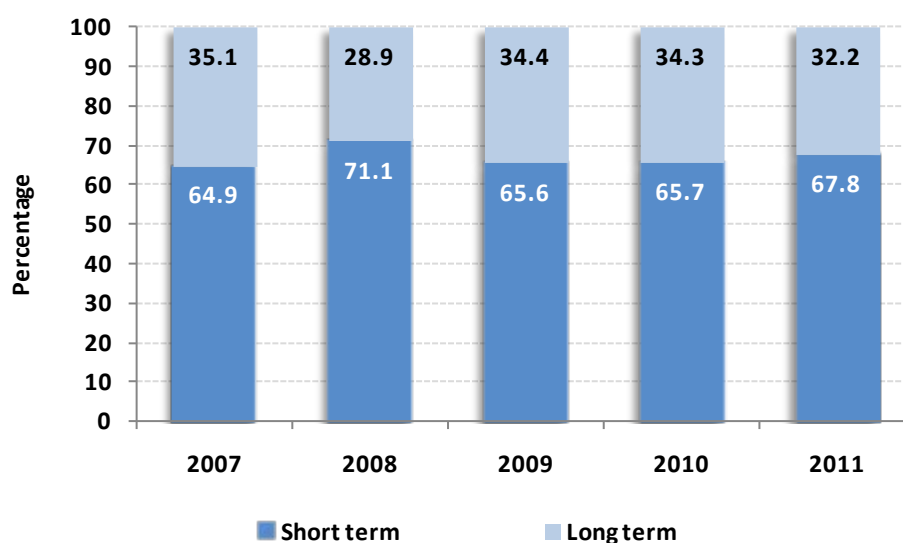
*Share of short-term issuance expected to drop to around 68% in 2011*

**Table 2** shows that many DMOs are operating more frequent auctions, with auction schedules having become more flexible and opportunistic. The maturity of debt became shorter in 2008 and 2009 (**Figure 6**), while there is a growing use of foreign-currency liabilities (**Table 3**). These changes, while understandable, create some risks. As debt managers become more opportunistic, issuance programmes are becoming less predictable. That may not be desirable in the long term. DMOs emphasise, therefore, that they will continue to operate a transparent debt-management framework supported by a strong communication policy. Transparency and predictability remain instrumental in reducing the type of market noise that can unnecessarily increase borrowing costs.

Almost all OECD debt managers continue to rebalance the profile of their debt portfolios by issuing more long-term instruments and moderating bill issuance. For the OECD area as whole, the share of short-term issuance to total gross issuance peaked at 71% during the height of the financial crisis in 2008 (**Figure 4**). The following two years, the share of short-term instruments dropped back to the same share as in 2007, *i.e.* around 65%, while for 2011 a small increase to nearly 68% is projected.



Figure 4. Maturity structure of funding gross-borrowing needs (total OECD)



Source: See Annex.

*Issuance of long-term instruments dominated by fixed rate, local currency bonds but with a slight decrease in 2010-2011*

**Table 3** reflects the funding structure in terms of types of instruments and maturity.<sup>14</sup> Issuance of long-term instruments is dominated by fixed rate, local currency bonds. Of interest also is that, in 2009 (that is in the wake of the 2008 peak of the financial crisis) somewhat more foreign currency debt was issued, while the issuance of variable rate and indexed-linked instruments declined. It is estimated very tentatively that the issuance of long-term, fixed-rate instruments will slightly decrease in 2010-11, while the use of indexed-linked may increase (perhaps returning to pre-crisis levels).

Table 3. Funding strategy based on gross borrowing needs (total OECD)

Percentage	2007	2008	2009	2010	2011
<b>TOTAL OECD</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Short Term</b>	<b>64.9</b>	<b>71.1</b>	<b>65.6</b>	<b>65.7</b>	<b>67.8</b>
T-bills	100.0	100.0	100.0	100.0	100.0
Other	0.0	0.0	0.0	0.0	0.0
<b>Long Term</b>	<b>35.1</b>	<b>28.9</b>	<b>34.4</b>	<b>34.3</b>	<b>32.2</b>
Local currency	99.3	99.0	98.6	99.1	99.0
Foreign currency	0.7	1.0	1.4	0.9	1.0
<hr/>					
Fixed rate	82.4	89.9	92.8	90.2	89.8
Index linked	6.7	5.5	3.0	4.6	5.1
Variable rate	3.8	2.5	2.2	2.6	2.3
Other	7.1	2.1	2.0	2.6	2.8

Source: See Annex.

## V. Central government debt and debt-service profile

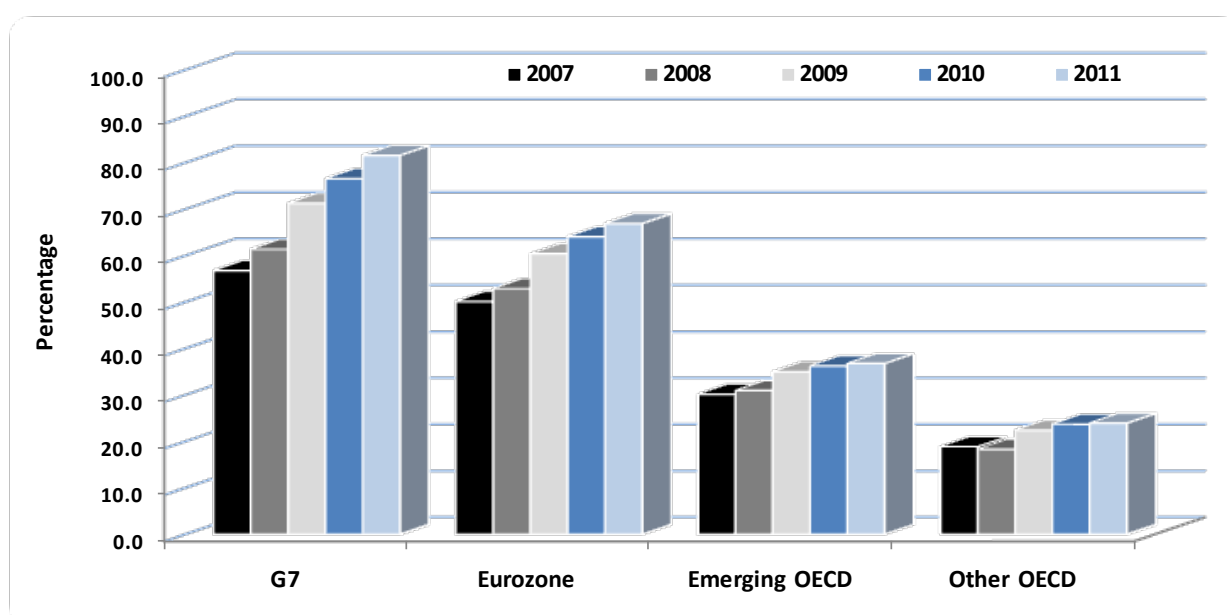
*Further increases in central government debt ratios are expected in 2011*

*In 2011, the G7 debt ratio is expected to reach 82% and 67% for the eurozone*

*“Emerging OECD” debt ratios are below those of the G7 and the eurozone*

As noted, government debt is being driven largely by the recessionary impact of the global liquidity and credit crisis. Ratios of government debt-to-gross domestic product are expected to increase further in 2011. **Figure 5** shows that the ratios of central government debt-to-gross domestic product of all country groupings considered here have increased since 2007. The G7 central government debt-to-GDP ratio is projected to reach nearly 82% in 2011. By comparison, the debt ratio of total OECD is expected to reach nearly 72% in 2011 (**Table 1**). For eurozone countries, this ratio is estimated to be slightly less than 67%. For *Other OECD* (includes a number of OECD countries with a fiscal surplus), this ratio is expected to reach nearly 24% in 2011, while for *Emerging OECD* this is expected to be around 37%. It is of interest to observe that *Emerging OECD* has far lower central government debt ratios than both the G7 and the OECD countries of the eurozone.

**Figure 5. Central government marketable debt as percentage of GDP in OECD countries**

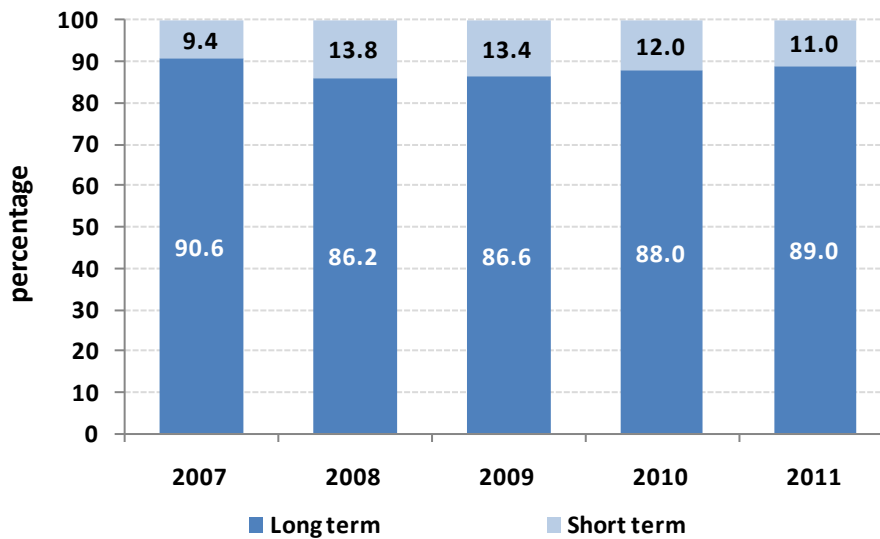


Source: See Annex.

*The share of long-term debt to total government debt is estimated to reach around 88% in 2010 and 89% in 2011*

**Figure 6** provides information about the maturity structure of the outstanding stock of central government debt. At the height of the financial crisis in 2008, there was a sharp drop of almost 5% in the share of long-term liabilities in total marketable central government debt. The share of long-term debt is estimated to reach around 88% in 2010. For 2011, the long-term share is projected to reach approximately 89% in 2011, almost the same share as before the crisis.

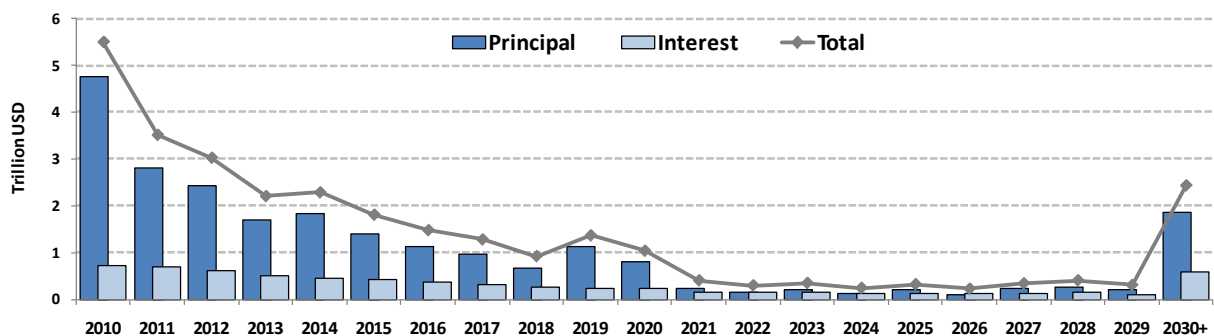
Figure 6. Maturity structure of central government marketable debt (total OECD)



Source: See Annex.

The OECD Survey among the members of the Working Party on Debt Management also included a question on the debt-service profile of the stock of central government debt outstanding at mid-2010, for total OECD (amounting to a little over USD 23 trillion). **Figure 7** shows the profile of principal and interest payments associated with this stock of debt in the period 2010-2030 (no details are given beyond 2030). The volume of the debt service is generally decreasing, with large payment flows during the first couple of years, reflecting that part of the debt portfolio (as of June 2010) that needs to be repaid in the shorter-term. **Figure 7** also shows that there are small peaks in 2014 and 2019.

Figure 7. Debt service of outstanding central government debt: 2010-2030



Source: See Annex.

## ANNEX

### METHODS & SOURCES OF THE OECD BORROWING OUTLOOK

#### 1. Regional aggregates

- *Total OECD* denotes in this Outlook the following 30 countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Earlier this year, three new members joined the organisation: Chile, Israel and Slovenia. However, these are not included in the 2010 Borrowing Survey by the OECD Working Party on Debt Management.
- The *G7* includes 7 countries: Canada, France, Germany, Italy, Japan, United Kingdom and the United States.
- The *OECD eurozone* includes 13 countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, the Slovak Republic (included after 2008), and Spain.
- The *Emerging OECD* grouping covers 6 countries: the Czech Republic, Hungary, Mexico, Poland, the Slovak Republic and Turkey.
- The *Other OECD* countries aggregation includes 8 countries: Australia, Denmark, Iceland, Korea, New Zealand, Norway, Sweden and Switzerland.

#### 2. Background on OECD Surveys used in the Outlook

- The Secretariat circulated a Borrowing Questionnaire to 30 OECD debt-management offices (DMOs) to obtain information on borrowing activities in 2009, 2010 and 2011. The Questionnaire consists of two parts:
  1. Survey on central government marketable debt and borrowing operations, covering central government marketable debt, gross borrowing needs and redemptions for the period 2007-2011.
  2. Survey on the central government marketable debt service profile.
- Part 1 was answered by all 30 DMOs. Part 2 was answered by 26 countries (out of 30). The Secretariat inserted its own estimates/projections in cases of missing information, using publicly available official information.

#### 3. Calculations, definitions and data sources

- GDP volume for total OECD and country groupings are aggregated using information from the OECD Economic Outlook 87 Database, June 2010.

- General Government Financial Balance volumes for total OECD and country groupings are aggregated using information from the OECD Economic Outlook 87 Database, June 2010.
- Gross borrowing requirements (GBR), net borrowing requirements (NBR), central government marketable debt and debt-service profile are compiled from the answers to the Borrowing Survey. The Secretariat inserted its own estimates/projections in cases of missing information for 2010 and/or 2011, using publicly available official information on redemptions and central government budget balances.
- To facilitate comparisons with previous Outlooks, figures are converted into US dollars using exchange rates from December 1, 2009. *Source:* Thomson Reuters Datastream.
- Long-term interest rates are averages of daily figures, with the exception of: Canada (averages of last-Wednesday-of-the-month rates); Japan, Australia, Denmark and Iceland (end-of-month rates); and France and Ireland (last Friday of the month). These rates measure the yield on long-term government bonds on the secondary market with residual maturities of about ten years. The total rate for overall OECD is the average of the mentioned rates, weighted with individual country GDP figures. (*Source:* OECD, Main Economic Indicators)
- Short-term interest rates are averages of daily figures except for: Canada (averages of Wednesday rates); Denmark, Iceland, Ireland and Poland (yearly averages of end-of-month rates). For the Euro area, and individual Euro area countries from 1999 onwards, and from 2001 onwards for Greece, rates are three-month EURIBOR. (*Sources:* OECD, Main Economic Indicators and European Central Bank)
- Government net debt is defined as total financial liabilities minus all financial assets of general government. Financial assets of the general government sector have a corresponding liability existing outside that sector. The exceptions are monetary gold and Special Drawing Rights, financial assets for which there is no counterpart liability. Monetary gold and Special Drawing Rights may be included as assets of the general government sector, or they may be classified as assets of the central bank, at the discretion of the government. Data refer to the general government sector, which is a consolidation of accounts for the central, state and local governments plus social security. Total outlays are defined as current outlays plus capital outlays. For more details, see OECD Economic Outlook Sources and Methods ([www.oecd.org/eco/sources-and-methods](http://www.oecd.org/eco/sources-and-methods)). For the US, the data include outlays net of operating surpluses of public enterprises.
- Government gross debt consists of all financial liabilities of general government (typically mainly in the form of government bills and bonds). *Source:* OECD Economic Outlook 87, June 2010.

### Notes

<sup>1</sup> The equivalent of EUR 11.6 trillion or 38.9% of GDP.

<sup>2</sup> This is the equivalent of EUR 12.5 trillion or 40.7% of GDP.

<sup>3</sup> Using the correct methodology is important because of complications in providing meaningful estimates of gross short-term borrowing requirements that may yield quite different (usually inflated) outcomes that cannot easily be compared across different OECD markets. For example, cash management operations need to be excluded. See for details: Olofsson *et al* (2010).

<sup>4</sup> See, for example, Blommestein (2009a).

<sup>5</sup> Gurria (2010).

<sup>6</sup> Padoan (2010).

<sup>7</sup> Intervention by H. J. Blommestein at the OECD Financial Roundtable: “*Sovereign debt challenges for banking systems and bond markets*”, 7 October 2010. Background to this intervention can be found in Blommestein *et al.* (2010).

<sup>8</sup> For example, the US federal budget deficit (accounting for roughly one third of total OECD deficits) fell to nearly USD 1.3 trillion at the end of this fiscal year (September 30), slightly lower than last year’s record of USD 1.4 trillion. The CBO (Congressional Budget Office) estimates that this budget gap is nearly 9% of GDP, the second largest US deficit on record since 1945. See *Joint Statement* of Treasury Secretary, Timothy Geithner, and Acting Director of the Office of Management and Budget, Jeffrey Zients, on Budget results for fiscal year 2010. See also *The Washington Post* (2010).

<sup>9</sup> Japan is an exception in the sense that significant increases in indebtedness did not have much impact on interest rates. For that reason, it is assumed that the responsiveness of rates to debt is only one quarter that for other countries. See OECD (2010) for more background information.

<sup>10</sup> This OECD questionnaire on debt-portfolio management was discussed at the last annual meeting of the OECD Working Party on Public Debt Management on 4-5 October 2010.

<sup>11</sup> The results of the OECD questionnaire on debt-portfolio management will be published in Volume 2010, Issue 2 of the *OECD Journal: Financial Market Trends*.

<sup>12</sup> For details see Blommestein (2009b).

<sup>13</sup> Blommestein (2009b).

<sup>14</sup> As noted, the *funding strategy* entails decisions on how gross-borrowing needs are going to be financed using different instruments (*e.g.* long-term, short-term, nominal, indexed, etc.).

### *References*

- Blommestein, Hans J. (2009a), “New Challenges in the Use of Government Debt Issuance Procedures, Techniques and Policies OECD Markets”, *OECD Journal: Financial Market Trends*, Vol. 2009/1.
- Blommestein, Hans J. (2009b), “Responding to the Crisis: Changes in OECD Primary Market Procedures and Portfolio Risk Management”, *OECD Journal: Financial Market Trends*, Vol. 2009/2.
- Blommestein, Hans J. (2010), “ ‘Animal spirits’ need to be anchored”, *The Financial Times*, October 11.
- Blommestein, Hans J. and Arzu Gok (2009), “OECD Sovereign Borrowing Outlook 2009”, *OECD Journal: Financial Market Trends*, Vol. 2009/1.
- Blommestein, Hans J. and Arzu Gok (2009), “The Surge in Borrowing Needs of OECD Governments: Revised Estimates for 2009 and 2010 Outlook”, *OECD Journal: Financial Market Trends*, Vol. 2009/2.
- Blommestein, Hans J., Vincenzo Guzzo, Allison Holland and Yibin Mu (2010), “Debt Markets: Policy Challenges in the Post-Crisis Landscape”, *OECD Journal: Financial Market Trends*, Vol. 2010/1.
- Geithner, Timothy and Jeffrey Zients (2010), *Joint Statement on Budget Results for Fiscal Year 2010*, US Treasury.
- Gurría, Angel (2010), Written Statement for the Meeting of the International Monetary and Financial Committee of the IMF, 8-11 October, OECD, available at [www.imf.org/External/AM/2010/imfc/statement/eng/oecd.pdf](http://www.imf.org/External/AM/2010/imfc/statement/eng/oecd.pdf).
- OECD (2010), *Economic Outlook*, No. 87, Vol. 2010/1, June.
- Olofsson, Thomas, Hans J. Blommestein and Ove Sten Jensen (2010), “A New Method for Measuring Short-term Gross Borrowing Needs,”, *OECD Journal: Financial Market Trends*, Vol. 2010/2.
- Padoan, Pier Carlo (2010), *What Is the Economic Outlook for OECD Countries? An Interim Assessment*, 9 September, OECD, available at <http://www.oecd.org/dataoecd/32/24/45968339.pdf>.
- The Washington Post (2010), *\$1.3 trillion Deficit a Slight Improvement*, October 8.