DEBT LEVELS AND FISCAL FRAMEWORKS

Christian Kastrop
Director of Policy Studies Branch
Economics Department
OECD average gross government debt increased from 73% of GDP in 2007 to 111% in 2013.

The prudent debt target should be consistent with:

1. Long-term sustainability with future spending (ageing).
2. Accommodation of shocks (aut. stabilisers) and fiscal space for discretionary policies.

The analysis focuses on two questions:

– Which debt level should governments target?
– Which fiscal frameworks to achieve prudent debt targets while being robust to the economic cycle?
General government gross financial liabilities in 2007 and 2013

Outline

- **Defining debt targets**
  - Debt limits
  - Debt threshold:
    - The impact of debt on the economy: cross-country evidence
    - Vulnerabilities of countries to specific factors and risks

- **Setting a prudent debt target**

- **Designing effective fiscal frameworks**
  - Fiscal rules
  - Fiscal councils and medium-term budgeting
  - Political economy of fiscal consolidation
• Debt sustainability depends on market assessment of the probability to default. This is state contingent and debt sustainability limit can vanish quickly, if market confidence evaporates.

• A simulation taking into account market and governments’ reactions to growing debt shows:
  1. Sustainable debt limits are quite high for many countries thanks to current low interest rate.
  2. Some countries appear to have knocked their debt limit.
Limits to sustainability

The primary balance first increases with debt and then decreases when fiscal fatigue kicks in.

\[ P_b, \quad (r-g)d \]

\[ (\varepsilon-g)d \]

\[ (r^*-g)d \]

\[ d_1 \quad d \quad d^* \quad d' \]

Debt/GDP
Debt limit: government gross debt

% GDP

Gross debt in 2013
Debt limit (model based interest rate)
Debt limit (current interest rate)
The effect of debt on economic activity

- **Debt and growth**
  - Most likely, higher debt has negative impacts.
  - Negative growth effects kick in between 50% and 80% of GDP (Égert, 2013).
  - No universal threshold, large amount of cross-country heterogeneity.
  - Significant threshold effect for countries with rising debt-to-GDP (Chudik et al., 2013).
  - Reverse causality: link is controversial.
Debt and the effectiveness of fiscal policy in stabilising the economy

- **Fiscal policy effectiveness**: Private saving offset from 0.1 to 0.5 in the short run, and from about 0.3 to as much as 0.9 in the long run.

- **Debt impact on fiscal policy effectiveness**: saving offsets are stronger at a tipping point of debt at about 75% of GDP (Roehn, 2010).

- **Debt impact on fiscal policy effectiveness**: output responses to government spending shocks become negative beyond debt ratios of 65%-70% (Nickel and Tudyka, 2014).

- **Debt and interest rate**: the interest rate effect of an increase in external or government debt depends on the initial level of debt (Turner and Spinelli, 2013).
Setting a debt threshold: cross-country evidence

- Growth maximising debt between 50-80% of GDP for OECD countries.
- Estimates of non-linear effects of debt on growth show negative effects for debt-to-GDP ratios above 80 to 100%.
- Saving offsetting and limiting effects of fiscal shocks at 65-70% debt ratio.

- Holistic approach – debt threshold is the level above which negative impacts on the economy start to kick in.
  - Advanced economies debt threshold: 70-90% of GDP
  - Euro area countries debt threshold: 50-70% of GDP
  - Emerging economies debt threshold: 30-50% of GDP
An exercise: designing a prudent debt target

• An exercise to quantify the shocks affecting main macroeconomic variables and therefore debt dynamics.

• Joint simulation of six variables and public debt dynamics. The six variables are growth, inflation, the short run nominal interest rate, the long-term nominal interest rate, the primary balance and the structural primary balance.

• Three deterministic equations among which is the estimated primary balance reaction function.

• Four estimated equations with shocks for growth, inflation, short-term interest rates (monetary policy) and long-term interest rates.
Uncertainties surrounding the debt-to-GDP ratio
Example: the United States
Setting a prudent debt target

• Minimise the risk of hitting a given debt threshold
  – Debt threshold is set at:
    • 65% of GDP for euro-area countries
    • 85% of GDP for non euro area countries
  – The prudent debt target is the median debt by 2040 such that there is less than a 25% risk to go beyond the debt threshold.
  – Average prudent debt target:
    • Euro area = 50%
    • OECD without the euro area countries = 70%
Country by country prudent debt target

Prudent debt levels

Average annual fiscal effort (primary balance surplus)
Designing effective fiscal frameworks

- **Fiscal rules:**
  - **Role:** Ensure fiscal discipline and long term growth (well-being).
  - **Objectives:**
    1. anchor fiscal policy expectations by targeting a prudent debt
    2. allow for macroeconomic stabilisation.
  - **Benchmarking existing rules:** Budget balance + spending rule (hereafter rule 4) seem the best.

<table>
<thead>
<tr>
<th></th>
<th>Budget balance</th>
<th>Structural balance</th>
<th>Expenditure rule</th>
<th>Revenue rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal stabilisation</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Fiscal discipline</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>-+</td>
</tr>
<tr>
<td>Side-effects and risks</td>
<td>-</td>
<td>--</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Comparing past behaviour: primary balance and budget balance rule + spending rule; Ex.: USA

Past behaviour primary balance

Budget balance rule + spending rule
Comparing different rules

- **Rule 1**: In the baseline, the annual plan is set so that the primary balance is equal to the target in nominal terms. During the year, the government lets the automatic stabilizers play around this plan if growth differs from expectations.

- **Rule 2**: No automatic stabilisers, the actual primary balance is kept constant such that the prudent debt target is reached.

- **Rule 3**: On top of the baseline (rule 1), the government takes discretionary measures on top of automatic stabilisers to react to the output gap.

- **Rule 4**: Budget balance rule + spending rule: the primary balance follows the same path as in the baseline (rule 1); plus structural spending grows by 0.5 percentage points less than potential GDP, for countries with a structural spending level above the pre-crisis OECD average (37%).

- **Rule 5**: “Debt rule” or frontloading: if lagged debt is higher than the debt threshold, a surplus of one 20\(^{th}\) of the difference between lagged debt and the debt threshold is added on top of the effort made otherwise.

- **Rule 6**: The government’s target is set in terms of the actual balance including interest payments, instead of the primary balance.
Comparing different rules

The fiscal rules have different performance with regard to the two criteria (long term recession risks and debt uncertainties) for six groups of countries:

- **Group 1**: Countries that can rely more on fiscal policy to mitigate short-term shocks (Australia, Israel, Korea, New Zealand, Poland, Switzerland and the United States).

- **Group 2**: Countries with a low level of public spending and a moderate effectiveness of fiscal policy to damp short-term shocks (Canada, Czech and Slovak Republic).

- **Group 3**: Countries that have room for spending restraint (Denmark, Luxembourg, Sweden and the United Kingdom).

- **Group 4**: Euro area countries that need to generate primary surpluses to bring debt back to a prudent level and that should restrain spending (Austria, Belgium, Finland, France, Germany, the Netherlands and Slovenia).

- **Group 5**: Euro area countries that need to generate large primary surpluses (Greece, Ireland, Italy, Portugal and Spain).

- **Group 6**: The most indebted country (Japan) is in a class of its own. Japan needs to reduce debt, but this process should be protracted as there is no strong adverse effect of the debt level on interest rates.
Panel A. Long-term recession risks

Panel B. Debt level uncertainties
The role of fiscal institutions is to monitor ex ante that fiscal policy is likely to meet the short and long-run targets while allowing fiscal flexibility.

On average having a fiscal council as such appears only loosely related to stronger fiscal outcomes.

But, fiscal councils appear to limit spending when associated with a budget balance rule.
Successful consolidations require strategic timing and strong support from political parties. With regard to timing, governments are most successful when consolidations are introduced in the immediate aftermath of an election.

Successful consolidations are not introduced in the midst of a crisis but when the economy has emerged from recession.

Sharing sacrifices and balancing spending and revenue actions can help to cushion the view that consolidation is unfair or at the advantage of specific groups.

Political competition and consolidation: the nine OECD countries running persistent surpluses were re-elected in 63% of the 24 elections in the eight years up to the Great Recession (Posner and Sommerfeld, 2013).
THANK YOU