

# Debt sustainability and low interest rates: A word of caution

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Debates about sovereign debt sustainability have revived in light of the massive increases in debt since the 2008 economic crisis and more recently during the COVID-19 pandemic. In this context, some argue that debt sustainability risks are significantly reduced as long as the interest rate is lower than the rate of GDP growth. We offer a word of caution in our recent paper: Constraints and demands on public finances: Considerations of resilient fiscal policy (Rawdanowicz et al., 2021).

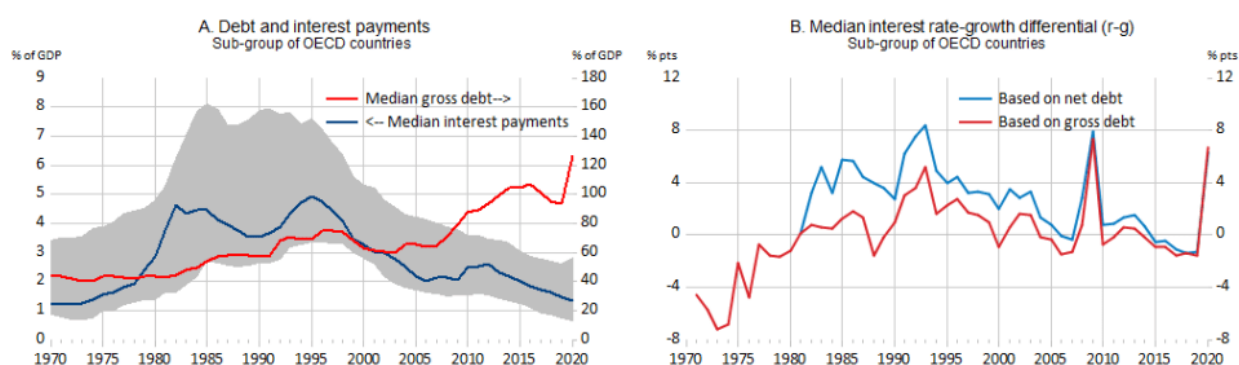
While it is true that such a negative interest rate-growth differential (the so-called  $r-g$ ) helps to stabilise debt in the very long term, debt dynamics in the near term depend also on the primary budget balance, and a continued increase in debt cannot be excluded with large primary budget deficits. Conversely, debt could fall substantially with moderate primary deficits. We should also note that maintaining high debt raises countries' vulnerability to interest rate surges and growth declines, and increases debt rollover risks. This is all the more important given the uncertainty about, and the volatility of,  $r-g$  (Orszag, Rubin and Stiglitz, 2021; Mauro and Zhou, 2020).

Negative  $r-g$  does not eliminate risks to debt sustainability and fiscal authorities should pay attention to primary budget balances, which reflect the political choices in terms of revenues and spending, thus contributing to shape the strength of the economy through various channels.

## Government interest payments declined despite rising gross debt

The fiscal response to the COVID-19 crisis prevented larger declines in employment, income and output, and is paving the way for a sustainable recovery. At the same time, government debt relative to GDP has reached the highest levels in several decades, adding to a pre-crisis upward trend in sovereign debt (Figure 1, Panel A).

**Figure 1. Government interest payments and  $r-g$  declined despite rising gross debt**



Note: In Panel A, the median and the inter-quintile range between the first and fourth quintiles (shaded area) refer to the distribution of general government interest payments as a per cent of GDP. Gross debt refers to the OECD definition of general government financial liabilities. In Panel B, the lines indicate the medians of the distribution of interest rate-growth differentials. See Annex B in Rawdanowicz et al., (2021) for the definitions of the two versions of the interest rate-growth differentials. The sub-group of OECD countries refers to countries for which long time series are available: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States. As the start of time series differs slightly within the country group, medians and the first and fourth quintiles are calculated only when data for at least 75% of the number of countries in the group are available.

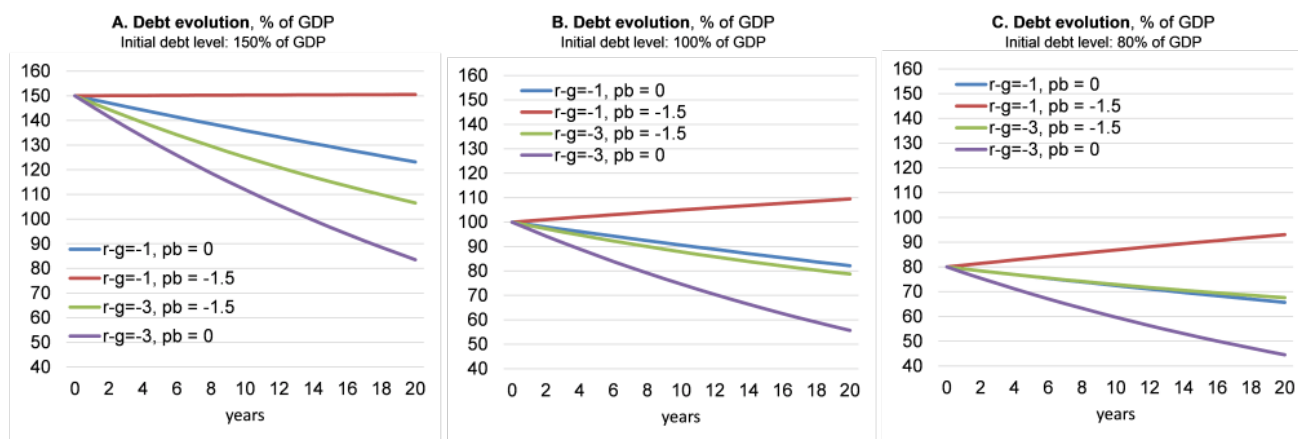
Source: OECD Economic Outlook database; and authors' calculations.

Despite rising debt, government interest payments have declined since the 1980s, reaching just above 1% of GDP in the median OECD economy (Figure 1, Panel A). This was possible due to falling nominal and real yields on longer-term government bonds that started in the late 1980s and the early 1990s. The falling interest rates helped lower the trend in the effective  $r-g$ , mitigating the impact of the increase in gross debt on public finances (Figure 1, Panel B).

## Negative $r-g$ always stabilises debt, but potentially at high levels

Persistently negative  $r-g$  helps lower debt. Together with moderate levels of primary budget deficits, debt reductions can be substantial in these circumstances, especially at high initial debt levels as shown in stylised and illustrative simulations (Figure 2).

**Figure 2. Negative  $r-g$  can reduce the debt-to-GDP ratio significantly when primary deficits are modest**



Note: Stylised simulations assume that primary balances ( $pb$ , in % of GDP) and the interest rate-growth differentials ( $r-g$ , in percentage points) remain unchanged at the indicated levels over the simulation period. Simulations assume no government financial assets (net and gross debt are identical) and no statistical discrepancy.

Source: Authors' calculations.

Actually, debt will stabilise with any constant primary budget deficit when  $r-g$  is negative. However, depending on the level

of the primary budget balance and  $r-g$ , this stabilisation may only occur after a prolonged and large increase in debt. To demonstrate this point, in our working paper we presented stylised and purely illustrative simulations for different values of initial debt, the primary budget balance, and the level of  $r-g$ . Both the size of the negative  $r-g$  and the primary budget balance are fundamental for determining the speed and the level at which the debt to GDP ratio stabilises, while initial debt is less important.

### **High debt carries risks for public finances**

As debt can stabilise at a high level and only in a distant future despite a negative  $r-g$ , two additional issues are important in assessing debt sustainability.

First, increasing and elevated debt can lead to higher interest rates and make public finances vulnerable to changes in economic conditions in general, and interest rates in particular. For instance, declines in GDP can bring about big increases in the debt-to-GDP ratio through the same mechanism through which negative  $r-g$  can help stabilise debt levels, exacerbated by cyclical deteriorations in the primary budget balance. Such debt increases may be difficult to reverse if growth is low and budget deficits remain large several years after a recession. Moreover, the longer-term evolution of government bond yields is highly uncertain (Orszag, Rubin and Stiglitz, 2021) and current low effective interest rates in relation to GDP growth do not exclude a possibility of future high sovereign yields (Mauro and Zhou, 2020). In general, high debt may limit the fiscal space to accommodate negative shocks and thus result in sub-optimal fiscal responses to future recessions (Jordà, Schularick and Taylor, 2016).

Second, at current debt levels, OECD countries will have to issue significant amounts of bonds in coming years. Some of the rollover risks could be mitigated by managing debt maturity to avoid concentration of large debt rollovers.

Central banks' purchases of government bonds could also help mitigate rollover risks, but maintaining positive confidence may require very large (gross) purchases.

## References

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