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Long-Term Strategies to Reduce Public Debt from a Historical Perspective

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Abstract: Public debt can be reduced in three ways: (1) repayment; (2) default; and (3) indirect default through monetary financing accompanied by debasement or followed by currency reform. In the course of history, repayment was more the exception than the rule, default often the only available way when a government had no control over the currency in which it borrowed, and indirect default more the rule than the exception. In this paper we review the three ways of debt reduction with exemplary references to historical events. We conclude that financial repression supplemented with debt repayment is likely to be the preferred way for public debt reduction today. The alternative would be currency reform.

Keywords: debt reduction, government spending, public debt

JEL classification: E0, E, H, H3, H6

1 Introduction

Public debt can be reduced in three ways: (1) repayment; (2) default; and (3) indirect default through monetary financing accompanied by debasement or followed by currency reform. In the course of history, repayment was more the exception than the rule, default often the only available way when a government had no control over the currency in which it borrowed, and indirect default more the rule than the exception. In the following we review the three ways of debt reduction with exemplary references to historical events and give an outlook for the future.[1]

1 See also Mayer and Schnabl (2023) on this topic.

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2 Debt Reduction Through Repayment

Italy has gained the reputation of a notoriously highly indebted country. But this reputation is justified only for the time since 1970. Before that public debt remained well contained. It is often overlooked that, since the foundation of the Italian state, the country has neither experienced a public debt restructuring nor a currency reform. Run-ups of debt during the two world wars in the first half of the 20th century were followed by periods of debt reduction. An interesting episode is the debt reduction after World War I.

In the early 1920s Italy had accumulated debt amounting to around 180 % of its gross domestic product (GDP) (Figure 1). The lira's exchange rate plummeted, and inflation rose. In October 1922, Benito Mussolini, who had founded the fascist movement in 1919, took over the government. He decreed a change of course in economic policy to what today would probably be called "austerity policies" but was labelled then "liberal orthodoxy". Government spending was reduced, social spending was cut, and real wages diminished by 20 per cent between 1921 and 1929. The fascist trade unions made it possible. Taxes on consumption were increased, while taxes on corporate profits were reduced. State-owned enterprises were privatized. The results of Mussolini's policies were continuous surpluses of the state budget from 1923 to 1934 and a halving of the national debt ratio to around 76 % of GDP by 1940. A similarly impressive reduction of debt occurred after WWII.

Germany has gained the reputation of a notoriously fiscally austere country. But this reputation applies only to the post-WWII period. In the first half of the 20th century, the German state defaulted twice, accompanied by hyperinflation and currency reform after WWI and repressed inflation and currency reform after

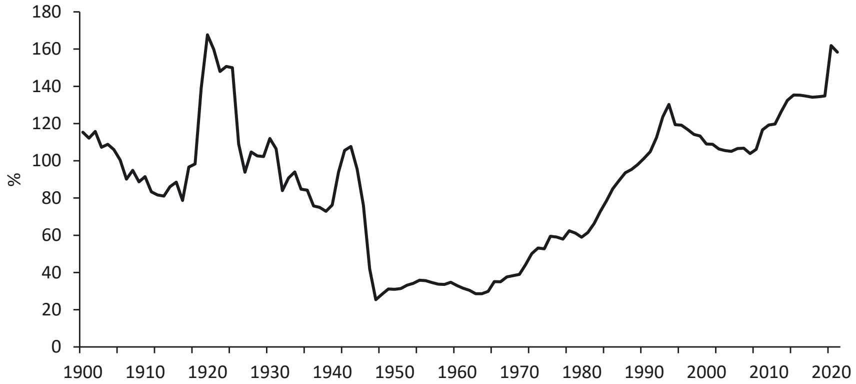

Figure 1: Public debt in Italy 1900–2020 (% of GDP). Source: Abbas, Belhocine, and Ganainy 2010 (2021).

WWII. More recently, however, Germany was the only G7 country that succeeded in repaying the debt incurred during the financial crisis of 2007/08 (Figure 2).

The main reason for Germany's public debt reduction was a fiscal rule dubbed "debt brake" (*Schuldenbremse*), which was enacted in 2009 and enshrined in Germany's constitution (*Grundgesetz*). The law forbids structural deficits for the federal states and limits the structural deficit of the federal government to 0.35 percent of GDP. Cyclical deficits are allowed in general, structural deficits only in emergencies. The general government debt ratio fell between 2010 and 2019, as there was neither a recession nor an emergency. But it has increased again since then on the back of the Corona-Pandemic and Ukrainian war.

Following its suspension in 2020–2022 due to the Corona-Pandemic, the German government is applying the debt brake again as of 2023. However, to cope with additional spending needs for defense and subsidies for energy consumption, the government has also created extra-budgetary accounts allowing additional spending of up to EUR 300 billion. A similarly watered-down approach to debt reduction has been proposed by the European Commission for all EU countries in the context of a reform of the Stability and Growth Pact, in which previously binding limits for budget deficits and commitments for debt reduction are replaced by negotiable, tailor-made targets for each country.[2]

3 Debt Reduction Through Direct Default

Default is commonplace when public debt is denominated in a foreign currency that the government with payment difficulties cannot control. Famous defaulters in

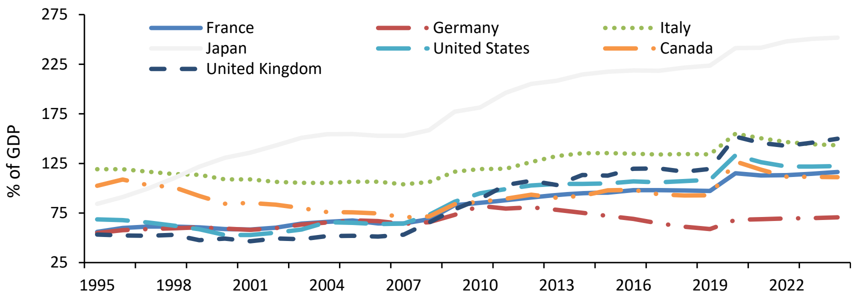

Figure 2: Public debt ratios in G7-Countries. Source: OECD, Economic Outlook.

2 See European Commission (2022).

the early 20th century were Russia after the 1917 revolution on all debt of the Tsarist Empire and Germany on reparation payments in gold imposed on it after WWI. Later in the 20th century, a major wave of defaults occurred in the early 1980s on the back of a surge in US-interest rates. In August 1982 the Mexican finance minister indicated that the country could no longer meet interest payments. By year-end 1982, approximately 40 nations were in arrears in their interest payments, and a year later 27 countries, including the four major Latin American countries of Mexico, Brazil, Venezuela, and Argentina, were in negotiations to restructure their debt. Official creditors organized debt reduction in the so-called Paris Club, which was founded in 1956 in response to one of Argentine's nine defaults since its foundation. In parallel to this, commercial banks dealt with the restructuring of debt in the so-called London club, which was created 1976 in response to the default of the African country Zaire. The struggle with the reduction of debt to private creditors continued until the US government orchestrated an exchange of existing but uncollectable credits against safe but reduced claims in the so-called Brady-Plan.[3]

4 Debt Reduction Through Indirect Default

An indirect sovereign default occurs when debt is funded with new money created by the central bank, followed by the debasement of the currency. An early example of an indirect default was set by the Roman Empire during the first few centuries after Christ's birth. Under the rule of several emperors the precious metal content of newly issued coins was reduced to increase seigniorage for the funding of government expenses. The invention of paper money in China at the beginning of the second millennium greatly facilitated the debasement of the currency through excessive paper money issuance. Hyperinflation was the result and prompted a return to metallic money towards the middle of the second millennium.

After paper money had come to Europe in the 17th century, the link between the metallic monetary base and paper money, which was supposed to represent it, was generally weakened through fractional reserve banking and frequently broken when governments needed additional funding in times of war or financial crises. Spectacular indirect defaults of the sovereign through the debasement of money occurred in Germany after WWI and WWII. In the first instance, debt was erased by hyperinflation, in the second by currency reform (i.e. the replacement of the old by a new currency at a fraction of the former's numerical value).

3 Vásquez (1996).

Default through hyperinflation or currency reform is more likely after a political regime change, like in Germany after WWI and WWII. In the absence of political regime change, a sovereign default is more likely by a gradual debasement of the currency through elevated inflation. An early example of gradual debasement is the dilution of Roman coins, modern examples are policies of engineering a positive difference between inflation and interest rates. In the early 1970s the term “financial repression” was introduced by the US economists Edward Shaw and Ronald McKinnon to describe policies of this kind in developing countries.[4] Rather than expropriated, lenders to government are taxed when interest rates are kept below inflation. When real government revenues rise with real GDP at a rate higher than the real interest rate on government debt, the ratio of debt relative to GDP declines.[5] Reinhart and Sbrancia have argued that negative real interest rates contributed significantly to debt reduction after WWII in the US (Figure 3).[6]

5 Where Do We Go from Here?

The long down cycle in interest rates that began in the early 1980s and probably ended towards the end of 2021 has induced many countries to accumulate a lot of

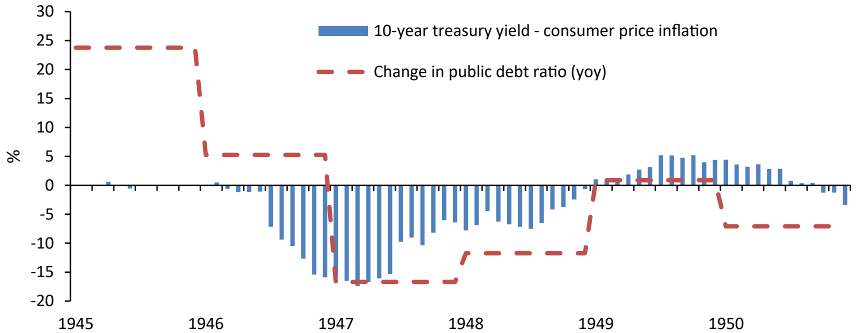

Figure 3: Real interest rates and public debt in the US (1945–1950). Source: Macrobond.

4 McKinnon and Shaw (1973), McKinnon (1973).
5 The dynamics of the debt ratio are captured by the following relationship: $d_t = \left(\frac{r_t - g_t}{1+g_t}\right) d_{t-1} - pb_t$, where d denotes debt relative to GDP, pb the primary balance relative to GDP, r the real interest rate, and g the real growth rate of GDP (Escolano 2010). Assuming that $pb_t = 0$, d declines over time, if $r < g$. Thus, depressing r into negative territory by capping the nominal interest rate and raising inflation can create significant negative debt dynamics.
6 Reinhart and Sbrancia (2011).

debt. According to the IMF's Fiscal Monitor, the ratio of public debt to GDP in 2020 reached its highest level globally since the early 1990s and has declined only little since then. Debt in the emerging market countries reached its highest level since the beginning of the time series in 1998 while debt in the developing world roughly doubled between 2008 and 2020 (Figure 4).

Many developing and emerging market countries have accumulated large amounts of debt, mostly in foreign currencies as international investors tend to doubt the stability of their domestic currencies. If these countries are unable to pay when debt is due, direct default is the "outcome by default". According to the IMF, about 15 percent of low-income countries were in debt distress and an additional 45 percent were at high risk of debt distress in 2022. Among emerging markets, about 25 percent were at high risk and facing default-like borrowing spreads (Figure 5).[7]

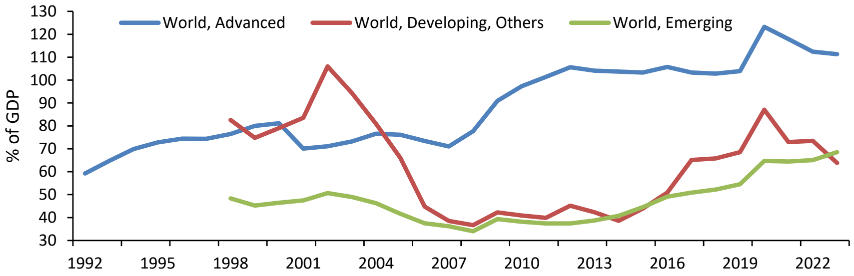

Figure 4: Gross debt. Source: IMF, Fiscal Monitor.

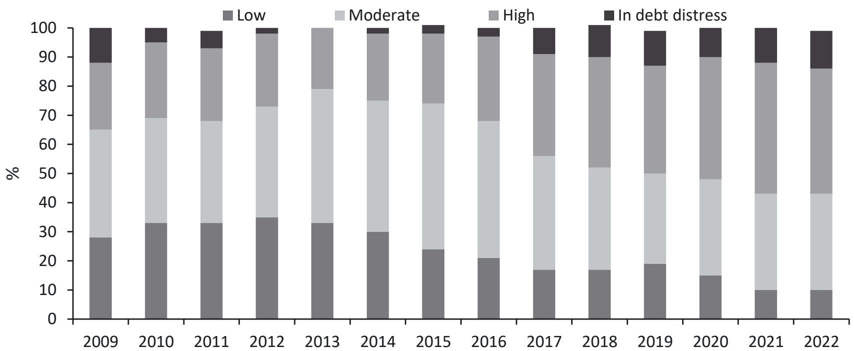

Figure 5: Low income countries at risk of default. Source: Georgieva (2023) and IMF (2022).

7 Georgieva (2023).

At the same time, the creditor base of these countries has become more diverse. The share of bank credit and official credit from western members of the Paris Club has declined while the shares of capital market debt and debt to China has increased. As a result, debt restructuring has become more difficult to organize.

Countries in the advanced world have accumulated debt primarily in their domestic currency. Direct default in their home currency makes no sense as they can order their central banks to supply them with money in any amount needed to service their debt. Even in the European Monetary Union, where member countries officially have no access to central bank financing, compliant central bankers have bowed to the wishes of governments and accepted the transformation of the European Central Bank to a lender of last resort to state treasuries. For advanced countries the high road to debt reduction is financial repression.

In the euro area the ECB has succeeded in keeping 10-year government bond yields below inflation since 2016. In the US, the Federal Reserve has pushed real interest rates into negative territory since 2019 (Figure 6). However, it takes a relatively large gap between interest rate and inflation over a long time to reduce debt ratios through financial repression. For instance, if real GDP growth averaged 2 percent, inflation 5 percent, and interest rates 3 percent, the debt ratios in the US and the euro area would decline from presently 120 percent and 93 percent to 80 percent and 62 percent, respectively, over 10 years.[8] Faster debt reduction without currency reform would only be possible through the generation of primary budget surpluses for debt repayment.

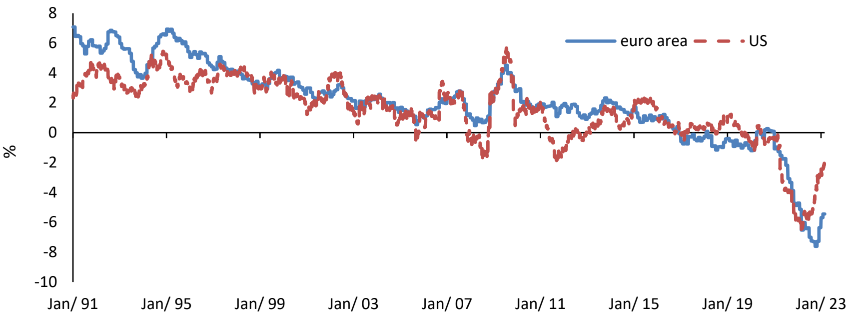

Figure 6: Real interest rates (10-year government bond yields minus inflation). Source: Macrobond.

8 Abstracting from the primary balance (pb = 0), we have $\frac{d_t}{d_{t-1}} = \left(\frac{r_t - g_t}{1+g_t}\right) = \left(\frac{-2\%-2\%}{1+2\%}\right) = -3,92\%$. For $\Delta d = 10$ we get $(1 - 0,0392)^{10} \times 120\% = 80,4\%$ for the US, and $(1 - 0,0392)^{10} \times 93\% = 62,3\%$ for the euro area.

6 Conclusion

Historical experience would suggest that debt reduction in less developed countries, where a significant part of sovereign debt has been incurred in foreign currency, is to a significant extent likely to involve default and debt forgiveness. The alternative would be fiscal austerity and repayment. In the advanced countries, where sovereign debt is generally denominated in domestic currency, financial repression may help. But it is unlikely to be powerful enough to allow large debt reductions over a relatively short time. Hence, financial repression needs to be supplemented with debt repayment. The alternative would be currency reform.

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