

INFLATION AND THE SUSTAINABILITY OF PUBLIC SECTOR DEBT

At first glance, higher inflation seems like good news for governments. After all, inflation erodes the real value of debt and lowers the public debt/GDP ratio through a higher nominal GDP. However, the impact of inflation on public finances depends on whether higher inflation was anticipated by financial markets and on its expected persistence. Both factors would influence the borrowing cost and hence the dynamics of the debt ratio through the difference between this cost and nominal GDP growth. Public finances should benefit from having a central bank that is credible in its ability to keep inflation expectations well anchored and is not afraid of tightening policy when inflation has moved well above target. In the euro area, higher Bund yields cause higher sovereign spreads, reflecting a higher risk premium, which in the longer run will worsen the dynamics of the debt ratio. It implies that fiscal policy also has a role to play by keeping the debt ratio under control.

At first glance, higher inflation seems like good news for governments. After all, inflation erodes the real value of debt. Considering that taxes are levied on nominal amounts -income, value added, profits, etc.- tax revenues increase when inflation rises so the burden of servicing the existing debt as a proportion of public revenues declines. Moreover, rising inflation -under the assumption that it is not weighing on real activity and spending- causes an increase in nominal GDP and hence a decline of the public debt/GDP ratio. In this respect, table 1 shows for various euro area countries the public debt ratio level and the inflation forecast for this year¹. If the debt/GDP ratio was stable before the increase in inflation, its decline due to a jump in prices could be considered as an increase in fiscal policy leeway.

However, the impact of inflation on public finances also depends on whether higher inflation was anticipated by financial markets and on its expected persistence. An anticipated rise in inflation would have caused an increase in nominal interest rates even before inflation and nominal growth started to pick up, thereby worsening the dynamics of the debt ratio. As a reminder, these dynamics depend on the primary balance -the budget balance excluding interest charges- and the difference between the average cost of debt (r) and nominal GDP growth (g). This implies that an unanticipated inflation shock will have a bigger impact on the path of the debt ratio. It can be argued that the extent of the jump in inflation since the second half of 2021 has to a large degree been unexpected. The persistence of inflation also plays an important role. If it is expected to remain elevated, it will cause an increase in market-based inflation expectations and hence the level of nominal bond yields. Clearly, given the long average maturity of public debt in most countries (table 1), it would take several years until these developments would be fully reflected in a higher average cost of public debt. However, there is a risk that financial markets would increasingly focus on the marginal difference between r and g -whereby 'marginal' refers to the cost of newly issued debt- rather than the difference between the average cost of outstanding debt and nominal GDP growth.

1. The table shows the more commonly used HICP measure of inflation, rather than the GDP deflator, which from a national accounts perspective, is the more appropriate one.

A key factor in the perceived persistence of inflation is the attitude of the central bank. Should the credibility of monetary policy be declining, markets would price in an inflation risk premium as a hedge against the possibility of future above-target inflation. This worsens the dynamics of the debt ratio because the market-based expected inflation -which influences the borrowing cost r - could be higher than observed inflation², which influences nominal growth g . This implies that public finances should benefit from having a central bank that is credible and is not afraid of tightening policy when inflation has moved well above target, even though this may temporarily worsen $r - g$ by lowering real growth in the short run.

Fiscal policy also has a key role to play, however, by keeping the debt ratio under control. In the euro area, the prospect of an increase in the ECB's policy rates, in combination with rising break-even inflation, has caused a significant increase in German bond yields and a widening in sovereign spreads versus Bunds (chart 1). The latter is a normal phenomenon and reflects the idea that yield-targeting investors need less exposure to higher-yielding euro area sovereigns when German yields have seen a significant increase³. It could also reflect mounting concern about debt sustainability. To explore this further, a regression has been run between the level of the spread and the 10-year Bund yield. Large positive regression residuals would reflect an abnormally high spread given where Bund yields are currently trading.

2. At present this is not the case because inflation in the euro area is exceptionally high and well above market-based inflation expectations. A measure of the latter is the break-even inflation, which corresponds to the difference between the nominal yield on a government bond and the yield on an inflation-linked government bond with the same maturity. In recent weeks, German 10-year break-even inflation has been fluctuating between 2.5 and 3.0%, which is higher than the ECB's inflation target.

3. See in this respect *Eurozone sovereign spreads: haunted by the stylized facts*, *Ecoweek*, 14 February 2022, BNP Paribas.



In order to keep the dynamics of the public debt/GDP ratio under control, both monetary and fiscal policy have a role to play, the former by making sure that inflation expectations remain well anchored, the latter by focusing on the budget deficit.



As shown in chart 2, for Italy, the regression residuals have been close to zero as of late, which suggests that the spread widening has been consistent with the rise in German yields. For Spain and in particular Portugal, the regression residuals are increasingly negative, so the increase in Spanish and Portuguese yields has been more limited than expected, considering the rise in German yields.

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GROWTH, INFLATION AND PUBLIC FINANCES

	Public consolidated debt as % of GDP	Interest expenditures as % of previous year gross public debt	Government debt securities, average maturity in years	Nominal GDP, y/y % change		HCPI, y/y % change
	2021	2021	2021	2021	2022 forecast	2023 forecast
Germany	69.3	0.82	7.1	6.0	7.0	5.7
Austria	82.8	1.43	11.1	6.3	6.7	6.6
Belgium	108.2	1.62	10.7	11.0	6.7	3.5
Spain	118.4	1.95	7.9	7.4	6.9	4.3
Finland	65.8	0.79	7.2	6.1	4.5	4.3
France	112.9	1.09	8.1	7.9	5.0	3.7
Ireland	56.0	1.48	10.7	13.1	8.6	7.5
Italy	150.8	2.36	7.0	7.2	4.0	3.9
Netherlands	52.1	0.92	7.9	7.6	5.7	4.4
Portugal	127.4	2.04	6.9	5.6	7.0	4.6
Greece	193.3	1.33	9.5	10.6	9.3	3.9

TABLE 1

SOURCE: PUBLIC CONSOLIDATED DEBT AS % OF GDP: EUROSTAT, APRIL 2022
 INTEREST EXPENDITURES AS % OF PREVIOUS YEAR GROSS PUBLIC DEBT: EUROPEAN COMMISSION-AMECO, NOVEMBER 2021
 GOVERNMENT DEBT SECURITIES, AVERAGE MATURITY IN YEARS: EUROPEAN CENTRAL BANK, APRIL 2022
 NOMINAL GDP, Y/Y % CHANGE: IMF-WEO, APRIL 2022
 HCPI, Y/Y % CHANGE: IMF-WEO, APRIL 2022

EUROZONE : SOVEREIGN SPREADS VERSUS BUND

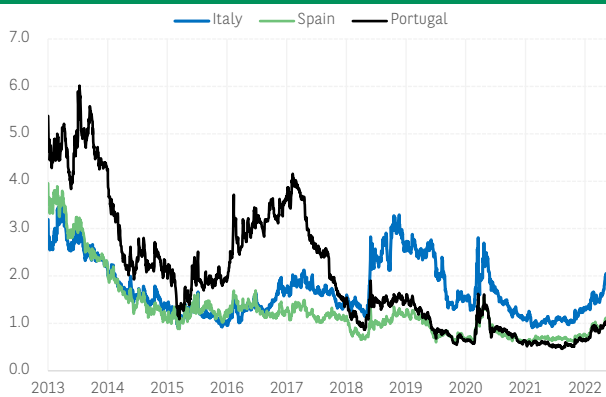


CHART 1

SOURCE: REFINITIV, BNP PARIBAS

EUROZONE : REGRESSION RESIDUAL OF SOVEREIGN SPREADS VS. BUND

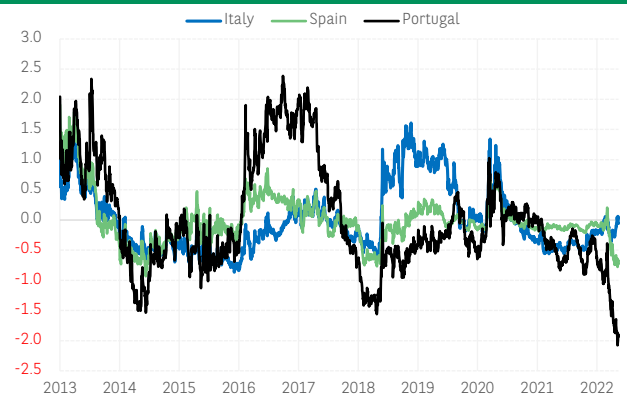


CHART 2

SOURCE: REFINITIV, BNP PARIBAS

