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Italian doom loop risk improved

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Summary

- The recent unrest in the US and European banking sector has revived fears about a possible 'doom loop': a negative spiral that can occur when banks hold government debt on their balance sheet, and governments with weak public finances bail out such banks.
- We investigate the case of Italy which, during the eurozone debt crisis, proved vulnerable to such a doom loop. Several indicators that could act as a warning signal for a future doom loop have improved since 2012. This is especially true for Italian banking sector health.
- There is, however, no reason for complacency. Italian government debt on bank balance sheets remains very high. This could act as a transmission channel for future shocks if, at some point, government bonds face a sell-off because there are doubts about debt sustainability.

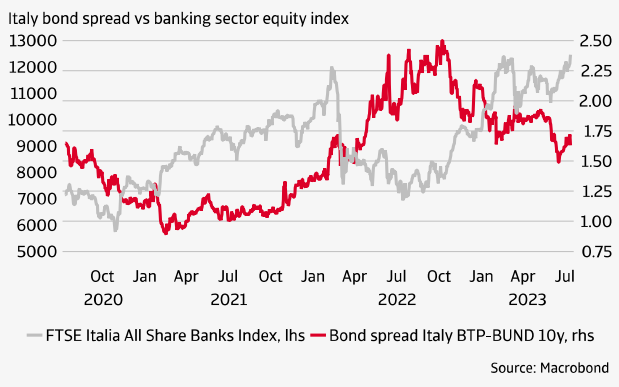
The recent unrest in the US and the European banking sectors may reignite fears about a phenomenon that has lingered and flares up incidentally: the doom loop in the eurozone, especially in relation to Italy.[1] Such fears originate in the eurozone sovereign crisis of 2010-2015 and reflect that Italian banks - troubled by banking sector turmoil- will have to be rescued by an Italian government that simply lacks the financial muscle to do so. This problem is compounded by Italian banks having large chunks of government debt on their balance sheets, further reducing the likelihood of a rescue. That may then only be possible with external help, such as from the IMF and the European rescue fund, the European Stability Mechanism (ESM). Such a scenario would be a déjà vu of the eurozone crisis, where Ireland, Greece, Spain and Cyprus had to draw on the assistance of third parties. Italy escaped that but fears about a bailout have never really disappeared. Indeed, during the recent banking turmoil Italian bank shares fell, whereas the difference between Italian and German long-term bonds rose (figure 1).[2]

In this research note, we take a closer look at the Italian doom loop, with the major question being: do we still need to worry about it? To answer this, we first describe more precisely what a doom loop is, deriving some variables that characterise it. Then, focussing on a banking sector shock, we take stock of the Italian doom loop during the eurozone crisis and compare it with the current situation. On that basis we make an assessment.

[1] Such as in June 2022 when the ECB met in an emergency meeting as spreads of eurozone interest rates on government bonds compared with the benchmark German bund widened. See The Economist (2022), "What is the "doom loop" in the eurozone? A vicious cycle in countries' has analysts worried.", June 22 2022

[2] Between March 8 and March 16 2023, the FTSE Italian All Share Banks fell by 17% whereas the yield difference of Italian 10-year government bonds with those of Germany rose by 10%. Afterwards banks shares rose and the bond yield difference fell, indeed suggesting (negative) correlation.

Figure 1 Italian government bond spreads and bank shares[3]

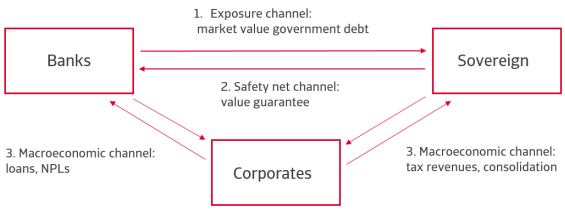


Our conclusion is that the situation, owing to large-scale interventions from the ECB and the EU following the famous Draghi statement in London of July 2012[4], has improved. But there is no reason for complacency. Italian public finances are still bothered by high, if not very high, debt levels. Its debt ratio is second highest in the eurozone, after Greece. That will have to be addressed in a for financial markets credible manner. It is something that takes time. It may therefore take some time as well before the lingering fears have gone.

Triangular shaped doom loop

Whereas the doom loop is most described in terms of a doomed link, or doomed nexus, between banks and governments, it is actually triangular (figure 2). This comes from the links with the economy as such of both banks and governments separately. The IMF (2022) distinguishes three shock transmission channels, which interact and magnify vulnerabilities in each of these sectors. With the risk of a negative shock to the banking sector arguably increasing, the doom loop offers a clear framework to understand how a vicious cycle can emerge.

Figure 2 Italian government bond spreads and bank shares



The first channel between banks and sovereigns is called the exposure channel. A rise in sovereign spreads or yields as a result of rising interest rates reduces the market value of government debt. As this is used for collateral to secure financing, loan supply to the economy may be impaired. This happens directly and indirectly if banks buy more bonds to secure financing, yield to financial repression of their government to take on more debt or gamble for resurrection by excessive risk taking.[5]

The second channel is called the safety net channel; the one in which governments provide support to banks in the form of implicit or explicit guarantees for systemically important banks. If there are doubts whether the sovereign can deliver, the value of these guarantees declines and the stability of banks may be jeopardised. That in turn may increase the need for government guarantees, putting pressure on public finances and creating sovereign distress. The problem is compounded by the rise in bank risk appetite the guarantee induces. It arises from moral hazard: benefits of risk taking fall to the shareholders, losses will be taken up by the government.[6]

Third is the macroeconomic channel that links banks and the government via the economy. Banks in jeopardy will cut back loan supply and raise lending rates. That reduces investments, weakening the private sector. In turn, this will show up in a deteriorated bank loan portfolio and higher credit provisioning. A weaker private sector will be felt in public finances, potentially resulting in higher borrowing cost for the government and private sector, fiscal consolidation (e.g. higher taxes) and policy uncertainty. That further reduces investments.

Measuring the doom loop

While this doom loop emanating from the literature illustrates the transmission channels of a shock between the banking sector, sovereign and real economy, it does not provide a handle to be able to assess the risk of an Italian doom loop. We need to take a few additional steps.

To assess the likelihood of an Italian doom loop, we zoom in on the link between banks and the sovereign in Italy – so essentially on the exposure and safety net channels of the loop. We distinguish between the health of the banking sector and the sovereign and the link, or nexus, between these. This allows to assess the doom loop risk on a two-dimensional scale: the lower the health in either of the two, or both, sectors in the economy and the stronger the nexus, the higher the doom loop risk. We take stock of the Italian doom loop at two moments, during the sovereign crisis of 2012 and now and compare

[3] This graph is about the picture of correlation. It is clear that the variables are not comparable in a strict sense. This does not change if instead of the index a return on bank shares is taken.
[4] Draghi stated on that day in a speech in London that "Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough".
[5] In case of sovereign distress banks will often silently be asked to take up some government debt, which is financial repression. Gambling for resurrection takes place if a bank buys more government bonds in order to benefit from a future lower spread, meaning a higher price.
[6] The guarantee as such already provides benefits in terms of lower bank CFD spreads, spreads on bank bonds and bank stock returns. For references see IMF (2018), The Sovereign-Bank Nexus in Emerging Markets in the Wake of the Covid-19 Pandemic, WP/22/223.

to come to our conclusion.

The heart of the matter is then, of course, the assessment of the health of the two sectors and the nexus. How do we measure these? Table 1 provides the overview. As to the health check or shock absorption capacity, for the banking sector, we look at solvency (tier 1 capital of total assets), liquidity (loan-to-deposit ratio) and non-performing loans to the private sector (% of total bank assets). The better these variables appear, the higher the shock absorption capacity of the bank sector and the lower a given shock is transmitted to the sovereign. The health of the sovereign, in turn, is assessed by considering the debt ratio and the financing need, both relative to GDP. The better these ratios are, the better the shock absorption capacity of the government.

As to the nexus or shock transmission capacity, we look at the size of the banking sector relative to GDP and the banking sector concentration. The lower these variables are, the weaker the transmission of a shock to the sovereign. This is because governments can simply not afford bankruptcies of a very large bank as that would disrupt the economy. This problem is compounded by a very large banking sector relative to the economy.[7] For the transmission of the shock to the sovereign back to the banking sector, the size of the government debt held by the banking sector matters. The lower, the weaker the shock transmission and the lower the probability of a doom loop.

Table 1 Measuring shock absorption and transmission between banks and sovereign

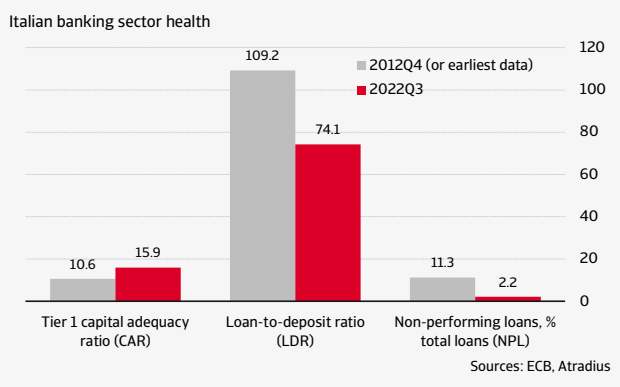
	Banking sector	Sovereign
Health (shock absorption capacity)	Tier 1 capital, loan-to-deposit ratio, non-performing loans	Debt-to-GDP, financing need (% of GDP)
Nexus (shock transmission capacity)	Size of banking sector (% of GDP)	Government debt on bank balances

Assessing the Italian doom loop

We are now ready take a closer look at the Italian doom loop since the sovereign debt crisis of 2012, looking at shock absorption and shock transmission in sequence.[8]

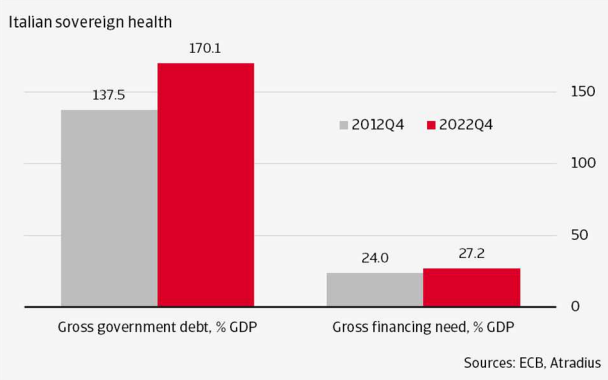
First consider shock absorption. That has clearly and significantly improved. Banking sector health has significantly improved since 2012, by all measures we employ (figure 3). The tier 1 capital has improved from 10.6% (end of 2012) to 15.9% (Q3 2022)[9], slightly lower than the peak at 17% (2020 Q4). The loan-to-deposit ratio declined from 109.2 (Q4 2014) to 74.2, slightly above the low of 72.5 (2022 Q1)[10]. The nonperforming loans ratio (NPL ratio) declined from 12.3% to 2.2%, having peaked at 16.6 % (Q3 2015).

Figure 3 Italian banking sector health significantly improved



For sovereign health the picture is much less favourable though (figure 4). Both indicators we employ have worsened markedly. The financing need of the government went up from 24% of GDP in 2012 to 27% in 2022, after a low of 20% in 2018.[11] The debt to GDP ratio has shot up from 138% to 170%, and even peaked at 185% during the pandemic.[12] [13] Based on this we conclude the shock capacity of the Italian sovereign has deteriorated.

Figure 4 Italian sovereign health has worsened since 2012



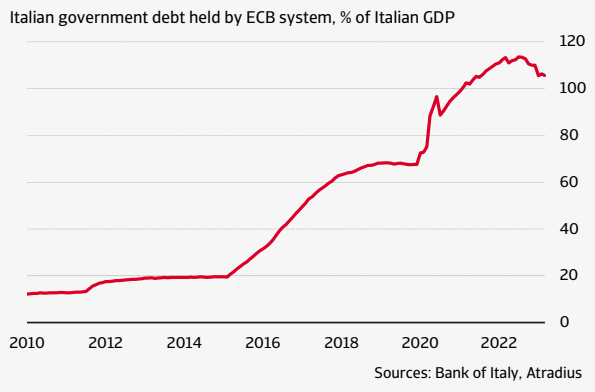
With the banking sector health improving and sovereign deteriorating, the conclusion for the shock absorption capacity seems ambiguous. But it is not. The reason is that the ECB has been willing to absorb Italian debt in an unprecedented manner.

Indeed, following up on the words of Draghi of 2012 its unconventional monetary policy has to a large extent implied purchasing Italian debt. From August 2012 the amount of Italian sovereign debt on the ECB balance sheet grew more than sevenfold from EUR 94 billion to EUR 722 billion. It implies the percentage of Italian debt

[7] Indeed, if the banking sector is small in relation to the economy, the importance of a rescue from a macro point of view is lower.
[8] This implies that we are assessing Italy's vulnerability by considering the development of the doom loop since that year, at the height of the eurozone crisis and the Draghi speech. In other words, we assess the vulnerability of Italy for an initial shock in the banking sector as compared to 2012.
[9] We take the end of 2012 observation and compare it to Q3 2022, unless otherwise indicated.
[10] We are aware that the percentage of market funding by Italian banks has declined, reflecting ample liquidity support by the ECB. In 2015 the share of market funding stood at 27%, compared to 14% in 2021. Given the relatively cheap ECB funding, this has improved bank profitability.
[11] The outlier in 2020 is due to the denominator effect: nominal GDP in that first year of the pandemic declined by 7.6%.
[12] Also due to the denominator effect of a lower GDP.
[13] The threshold values used by the IMF for advanced economies are 85% for debt to GDP and 15% of GDP for financing need.

held by the ECB grew from 5% to 45% of Italian GDP. Therefore, continuing with analogy, whereas the health of the sovereign deteriorated, the healthcare system – the ECB - has been willing to provide strong support to keep the patient alive. For the shock absorption capacity of the Italian sovereign one should therefore look at the ECB, rather than the Italian sovereign.[14] Or, as the health of the sovereign has deteriorated, its shock absorption capacity, now resting on the eurozone as a whole, has improved.[15] ECB support has to some extent been confirmed by the creation of the Transmission Protection Instrument. Through this instrument it can, in case of financial market disruption, purchase government bonds. Such intervention however, will come at the cost of economic conditions.

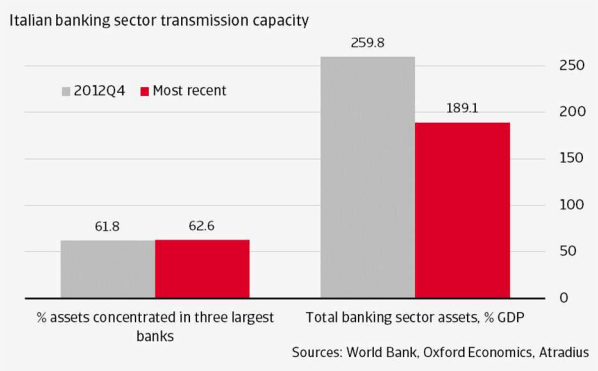
Figure 5 Italian government debt held by ECB has exploded



The other relevant channel is shock transmission. Banking sector capacity to transmit a shock has somewhat declined. The concentration index, which measures the percent of total assets held by the three largest banks (Unicredit, Intesa Sanpaolo and Monte Dei Paschi de Siena), has not changed much since 2012 (figure 6). It floats slightly above 60%. The total size of the banking sector relative to the economy has shrunk, from a peak of 260% of GDP (Q4 2012) to 191% now.[16] One can then conclude the transmission capacity of the banking sector of a shock to the government has declined.

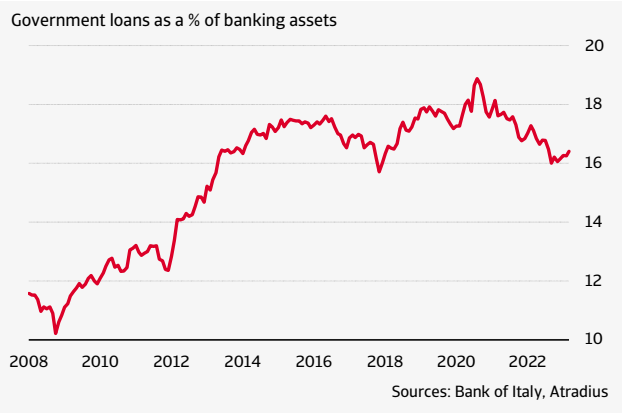
This conclusion is corroborated by the new regime for bank failures that the eurozone has adopted since the Cyprus crisis of 2014. Under this so called Single Resolution Mechanism, there is a very limited role for governments in case a bank fails. Instead of a so-called bailout by the sovereign, investors including bondholders are supposed to 'bail in' by writing down their investments to the extent needed. Such mechanism is far from perfect however.[17] Indeed, the failure of Monte dei Paschi di Siena in 2016 was prevented with a significant amount of Italian government support.[18] Whereas the transmission capacity may have declined, it has not disappeared.

Figure 6 Banking sector transmission capacity lower, on average



The weak spot in the picture for Italy is the sovereign capacity to transmit a shock to the bank sector. That is mixed, at best. After the sovereign crisis of 2012 the government debt (loans and bonds) on banks' balance sheets climbed from 12.4% of total assets in December 2011 to 18.9% in August 2020, and then set in a decline to 16.4% in March 2023 (figure 7). The recent decline is positive, but the level is still (very) high: compare it with a 6% eurozone average.

Figure 7 Sovereign transmission capacity: still too high



Fears reduced but still lingering

The overall picture that appears from the analysis of an Italian doom loop, in the context of a banking sector shock, is now as follows. Whereas the absorption

[14] Foreign commercial banks do not play a role. This can only be the case if the European Banking Union is finalised, including a guarantee system for deposits. That is still a long way off.
[15] For this conclusion, one finds support in the 10-year government bond spread with Germany, which peaked at 5.5 % in July 2012 and now hovers slightly below 2% (May 2023).
[16] In terms of size of the banking sector, Italy takes a middle position in the eurozone. The average asset to GDP % is 292%, ranging from Luxembourg (1945%) to Romania (57%): https://ec.europa.eu/eurostat/cache/digpub/european_economy/bloc-3d.html?lang=en.
[17] See Hahn, S. , Momtaz, P.P. and Wieandt, A. (2020), Implementing a European Bail-In Regime: Do BRRD and SRM-R Effectively Eliminate Implicit Government Guarantees in the European Banking Sector?, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4024553 and Beck, T., Krahnen, J-P., Martin, P., Mayer, F., Pisani-Ferry, J., Tröger, T., Weder di Mauro, B., Véron, N. and Zettelmeyer, J. Complementing Europe's banking union: economic requirements and legal conditions, Breughel Policy Contribution no 20/22, November 2022.
[18] For details, see https://en.wikipedia.org/wiki/Banca_Monte_dei_Paschi_di_Siena.

capacity of a shock for the banking sector has significantly improved since the famous Draghi London 2012 statement, the opposite is true for the Italian sovereign. But if we bring the ECB bond purchases into the mix, the latter is of lesser relevance. We therefore conclude the absorption capacity has improved. As to the transmission capacity of the Italian banking sector, that has improved somewhat as well.

This cannot be stated for the transmission capacity of the Italian sovereign. From a (very) high level only recently as decline has set in. Much more confidence in the Italian public finances should be built in order to be able to allow banks to bring the share of government assets to total assets of banks to significantly lower levels.

Such confidence building will not be a walk in the park. True, the newly created ECB Transmission Protection Instrument will provide support. But no more than that. Any ECB intervention will come with the condition that Italy will have to get its public house in order itself. It will take time to convince markets that this is really happening. Until then fears for a doom loop, though now reduced, will linger.

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