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ITALY

FINANCIAL SYSTEM STABILITY ASSESSMENT

March 2020

This Financial System Stability Assessment paper on Italy was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed on February 28, 2020.

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KEY ISSUES

Context: Substantial progress has been made in recent years in strengthening the financial sector, but important weaknesses remain. Bank capitalization and asset quality have improved considerably but are still below the EU average and the financial sector has large exposures to the Italian sovereign.

Findings: The financial sector faces important vulnerabilities and a challenging baseline outlook. The sector is highly dependent on the European Central Bank's (ECB) Targeted Longer-Term Refinancing Operations (TLTRO). Profitability is also still low, particularly in segments of small and mid-sized banks. This reflects in part weak economic growth in Italy over the past decade, as well as high structural operating costs, unsustainable business models and corporate governance weaknesses. Solvency stress tests indicate that many banks with material aggregate total asset share continue to be vulnerable to an adverse scenario.

Policies: Efforts should focus on further enhancing banks' capitalization, operational efficiency, governance, and business models. Specifically, the authorities should consider more escalated corrective measures for weak banks, utilizing the full gamut of their toolkit, to ensure that banking sector weaknesses do not linger, and costs are contained. Building on successes to date, supervisors should continue to push for further non-performing loans' (NPLs) reduction to reach more sustainable levels. Prudential policies to moderate the sovereign-bank nexus could be considered and phased in to avoid market disruptions. If left unaddressed, banks will be vulnerable to a sovereign shock that could exacerbate the feedback effect to the real economy. Reinforcing the crisis management framework is a priority, including by: (i) increasing the loss absorbing capacity of potentially systemic banks, which would facilitate resolution and avoid contagion; (ii) strengthening the two deposit guarantee schemes (DGSs) and avoiding the use of their funds in open bank assistance given the inherent financial and moral hazard risks; and (iii) strictly limiting the use of public funds to exceptional events that could undermine system-wide financial stability.

Approved By
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This report is based on the work of the Financial Sector Assessment Program (FSAP) team that visited Rome and Frankfurt in December 2018 and March 2019. The key FSAP findings were discussed with the authorities during the Article IV consultation mission in January 2020.

- The FSAP team was led by May Khamis (Mission Chief), and included Caio Ferreira (Deputy Mission Chief), Claudio Raddatz Kiefer, Constant Verkoren, Dermot Monaghan, Irman Pardede, Maral Shamloo, Nour Tawk, Purva Khera, Rachid Awad, Xiaodan Ding (all MCM), Natalia Stetsenko, (LEG), Alvar Kangur (EUR), and Cuthbert King and Mimi Ho (both IMF external experts). The team was supported from IMF headquarters by Ke Chen (LEG) and Eva Yu (MCM), with administrative assistance from Daniela Santos, Geoffrey Khaminwa, and Breanne Rajkumar. Mr. Tobias Adrian joined the concluding meetings with the authorities.
- The mission met Governor Ignazio Visco, Banca d'Italia (BdI); Director General Alessandro Rivera, Ministry of Economy and Finance (MEF); President Salvatore Rossi, Istituto per la Vigilanza Sulle Assicurazioni (IVASS); Deputy Chairman Anna Genovese, Commissione Nazionale per le Societa e la Borsa (CONSOB); Director General Patrick Amis and Principal Adviser Jérôme Henry, European Central Bank (ECB); and other senior officials at these agencies and representatives of the private sector. The mission is grateful to all counterparts for their assistance and extensive cooperation.
- FSAPs assess the stability of the financial system as a whole and not that of individual institutions. They are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.
- Italy is deemed by the Fund to have a systemically important financial sector according to Mandatory Financial Stability Assessments Under the Financial Sector Assessment Program—Update (11/18/2013), and the stability assessment under this FSAP is part of bilateral surveillance under Article IV of the Fund's Articles of Agreement.
- This report was prepared by May Khamis and Caio Ferreira with contributions from the FSAP team.

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Glossary

AML/CFT	Anti-money laundering/combating the financing of terrorism
BCC	Credit Cooperative Bank
BdI	Banca d'Italia
bps	Basis points
BRRD	Bank Recovery and Resolution Directive
CBC	Counter-Balancing Capacity
CET1	Common Equity Tier 1
CONSOB	Commissione Nazionale per le Società e la Borsa
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
DGS	Deposit guarantee scheme
EA	Euro area
EBA	European Banking Authority
EBIT	Earnings Before Interest and Taxes
EC	European Commission
ECB	European Central Bank
ELA	Emergency Liquidity Assistance
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FSAP	Financial Sector Assessment Program
FSI	Financial Soundness Indicator
GDP	Gross Domestic Product
HQLA	High quality liquid assets
ICR	Interest Coverage Ratio
IFRS	International Financial Reporting Standards
IPS	Institutional Protection Scheme
IRB	internal ratings-based approach
IRRBB	Interest Rate Risk in the Banking Book
IVASS	Istituto per la Vigilanza Sulle Assicurazioni (insurance sector supervisor)
LCR	Liquidity Coverage Ratio
LGD	Loss given default
LSI	Less significant institution
MEF	Minister of Economy and Finance
MER	Mutual Evaluation Report
MFI	Monetary financial institution
MiFID	Markets in Financial Instruments Directive
MISE	Ministry of Economic Development
MoJ	Ministry of Justice
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
NFC	Non-financial corporation

NII	Net interest income
NJC	National Judiciary Council
NPL	Nonperforming loan
NSFR	Net Stable Funding Ratio
O-SII	Other Systemically Important Institutions
PD	Probability of default
RAM	Risk Assessment Matrix
ROA	Return on assets
ROE	Return on equity
RWA	Risk-weighted assets
SI	Significant institution
SRB	Single Resolution Board
SSM	Single Supervisory Mechanism
SyRB	Systemic Risk Buffer
TLTRO	Targeted longer-term refinancing operations
WEO	World Economic Outlook

EXECUTIVE SUMMARY

Recent prudential measures have played a key role in bolstering the financial system. Regulation has been substantially enhanced by the implementation of European Union (EU) regulations and supervision by the creation of the Single Supervisory Mechanism (SSM). The Italian supervisory agencies have experienced staff, supported by advanced information systems and broadly sound supervisory processes. The Italian authorities have implemented measures that improved governance, facilitated capitalization, raised prudential requirements, and improved asset quality. Along with the economic recovery in 2014–2018, these measures have helped banks make substantial progress in tackling legacy NPLs and improving solvency ratios.

Nonetheless, the banking sector is still vulnerable. Italian banks are the largest users of the ECB's TLTRO, which provides substantial support to banks' liquidity and profitability. Many banks still suffer from low capital levels, low profitability, and weak asset quality. The average capital ratio of Italian banks remains below the euro area and NPL ratios are still among the highest in the EU. The FSAP estimates additional loan loss provisions needs of about €5 billion based on recovery rates of internal workouts, mostly related to loans identified as unlikely to pay, and an additional €7.2 billion for banks to meet the NPL reduction targets agreed with supervisors (through market sales). In addition, some banks' high structural operating costs and corporate governance weaknesses continue to weigh on profitability, which will be further impacted by additional regulatory requirements, including the Minimum Requirement for Own Funds and Eligible Liabilities (MREL) required for the larger banks. Italian banks' exposure to the sovereign increases the potential impact of downside shocks, including through the risk of a substantial economic contraction and rising credit spreads, which would have strong negative repercussions for banks.

Solvency stress tests indicate that banks still face important challenges. Based on end-2018 data, for nine larger banks (significant institutions or SIs), the average common equity tier 1 (CET1) ratio declines by 370 bps to 8.2 percent in the adverse scenario. While the resulting capital shortfall against the capital thresholds is small (0.2 percent of GDP), capital needs to bring back the CET1 ratio of the nine SIs back to the starting level of 12 percent is about 2.2 percent of the GDP. For the smaller banks (less significant institutions or LSIs), using Q3 2018 data, sensitivity analysis using single-factor shocks indicates important vulnerabilities. An increase in yields similar to the one observed in 2011 would cause the capital of almost a quarter of the sample of LSIs by assets to fall below the 7 percent CET1 ratio threshold. Under an NPL shock, 35 percent of the LSI sample's assets would see their CET1 ratio fall below 7 percent. Liquidity stress tests suggest relatively comfortable positions, albeit boosted by the significant use of TLTRO and with a high concentration of liquid assets in Italian government securities, increasing vulnerability to sovereign risk.

Against this background, the authorities should adopt measures to further improve banks' capital levels and operational efficiency. The authorities should be guided by the results of the stress tests and a thorough review of banks' business models and governance for additional supervisory action. In tackling weak banks, the efforts of the Italian authorities have focused on market solutions. Escalation of corrective measure has generally taken time as consideration has

been given to systemic implications and contagion risk. Going forward, with the bolstering of the banking system in recent years, consideration should be given to more timely escalation of corrective measures for weak banks to effect improvement (e.g., in capital levels, operational efficiency, governance) or achieve consolidation or orderly winddowns when needed so that weaknesses do not persist or even become exacerbated if not dealt with in a timely manner.

Banks have made remarkable progress in reducing NPL ratios, but more effort is needed. The BdI could consider extending the SSM's approach that sets expectations for the gradual path to full provisioning of the existing NPL stock to LSIs with high NPLs. The authorities should continue to scrutinize banks' credit risk and loan loss provisioning practices and challenge the progress and extent of banks' NPL reduction plans. Special attention should be given to "unlikely to pay" (UTP) credits given the potential for under-estimation of risks. The recent reforms to the insolvency regime to strengthen NPL resolution requires further adjustments and a considerable implementation effort. Greater legal certainty and increased flexibility of the out-of-court foreclosure mechanism and enhancing the recently created online platform for the advertisement of judicial auctions would be useful to this end. Enhancing the effectiveness of the judicial system is necessary, including by ensuring that courts have enough resources and expertise.

The authorities should consider using prudential policies to moderate the sovereign-bank nexus, with gradual phasing-in to minimize potential disruptions to markets. Also, the authorities should establish a national macroprudential policy authority and enhance the macroprudential tool kit. Some aspects of the supervisory agencies' regulatory powers should be upgraded. Also, more effort is needed to address banks' governance weaknesses by quickly adopting the amendments to the fit and proper rules for banks' management.

Reinforcing the bank crisis management framework is a priority. The authorities have enhanced the early intervention framework; aligned legislation underpinning the two deposit guarantee schemes (DGSs) with EU standards; introduced a new resolution regime; and intervened various weak banks—albeit with part of the costs absorbed by taxpayers and the banking sector at large. Further enhancements remain important: (i) a formal crisis management committee, including all safety net participants, is warranted to periodically review preparedness efforts and coordinate policy responses at times of stress; (ii) additional loss absorbing capacity—notably for LSIs for which a resolution strategy is foreseen; (iii) the use of public funds in resolution should be strictly limited to exceptional events that could undermine system-wide financial stability; (iv) DGSs' funding targets should be assessed to ensure their adequacy, stronger backstops should be established, and active bankers should be removed from their boards; (v) when dealing with distressed banks, preventive measures outside of resolution or liquidation (i.e., "open bank assistance") should only be used in exceptional cases with strong prospects for successful rehabilitation and restoring long-term viability; and (vi) a review of certain aspects of the policy framework for emergency liquidity assistance (ELA), in conjunction with the Eurosystem, is advisable. Enhancements of the EU's crisis management framework, including the potential introduction of an orderly liquidation regime for non-systemic banks and pared-back procedures for state aid oversight under certain conditions, would further facilitate resolution and liquidation.

Table 1. Italy: FSAP Key Recommendations		
Recommendations	**Agency**	**Time***
Bank supervision and regulation and NPL resolution		
Enhance banks' capital levels, as appropriate, to ensure all banks maintain adequate capital ratios under stress scenarios. (¶ 27)	BdI, SSM	ST
Consider more timely escalation of corrective measures for weak banks to effect improvement (e.g., in capital levels, operational efficiency, governance) or achieve consolidation or orderly winddowns when needed. (¶ 38)	BdI	I
Perform more periodic deep dives and thematic and targeted inspections on key LSI weaknesses such as bank governance, credit risk, and business models. (¶ 37; 39)	BdI	ST
Continue scrutinizing banks' credit risk and loan classification and provisioning practices, particularly of UTP portfolios, and challenging progress and ambition of banks' NPL reduction plans. (¶ 45)	BdI, SSM	C
Consider extending the SSM approach that sets bank-specific expectations for the gradual path to full provisioning on existing NPL stocks to LSIs with high NPLs with an adequate phase-in period; and update the LSIs' NPL management guidance. (¶ 46; 47)	BdI	I
Amend relevant laws to confer BdI and IVASS authority on removal of authorization and winding-up of banks and insurers, respectively. (¶ 35; 53)	MEF, MISE	ST
Address gaps in governance regulations of banks and insurance companies by issuing the draft MEF and MISE decrees. (¶51; 53)	MEF, MISE	I
Macroprudential policies and framework		
Establish a national macroprudential policy authority with a leading role for BdI. (¶ 29)	MEF, IVASS, BdI, CONSOB	ST
Incorporate the Systemic Risk Buffer (SyRB) and borrower-based tools into the macroprudential toolkit. (¶ 30)	MEF, BdI	ST
Consider implementing prudential policies to moderate the sovereign-bank nexus with an appropriate phase-in period to avoid possible market disruptions. (¶ 32)	BdI	MT
Insolvency framework		
Enhance the enforcement and insolvency framework and ensure that courts have sufficient resources and specialization to timely handle insolvency cases. (¶ 49; 50)	MoJ, NJC	ST
Reinforcing crisis management and safety nets		
Establish additional loss absorbing capacity to enable greater loss allocation to unsecured and uninsured creditors in resolution and liquidation, notably for LSIs for which a resolution strategy is foreseen; and strictly limit the use of public funds to exceptional events that could undermine system-wide financial stability. (¶ 62)	BdI, MEF	ST
Reinforce the DGS by removing active bankers from their boards; assessing the adequacy of funding targets; strengthening backstops; and avoiding the use of DGS resources for failure prevention outside of resolution or liquidation as much as possible, only using it in exceptional cases with strong prospects for successful rehabilitation and restoring long-term viability. (¶ 64)	DGS, BdI, MEF	ST

* C= continuous; I = immediate (within one year); ST = Short Term (within 1–2 years); MT = Medium Term (within 3–5 years).

BACKGROUND

A. Financial System Structure

1. Banks continue to dominate the Italian financial system despite the significant growth of insurance firms and investment funds in recent years. While the banking sector has consolidated in recent years, the number of small mutual, cooperative, and regional banks remains relatively high. In January 2019, about 227 of the 266 mutual banks were merged into two new banking groups, which have been classified as SIs; the remaining mutual banks will enter into an institutional protection scheme (IPS). These consolidations reduced the number of banks in the financial system to about 156 (as of June 2019). The insurance sector is the fourth largest in Europe and the eighth largest in the world by premium income. The industry has consolidated significantly in the past decade through mergers and takeovers, reducing the number of insurers from 162 in 2007 to 100 as of June 2018. While relatively small, the share of assets of investment funds and other financial intermediaries in the financial system has grown since 2011 from 15 percent to 18 percent (Figures 1–3).

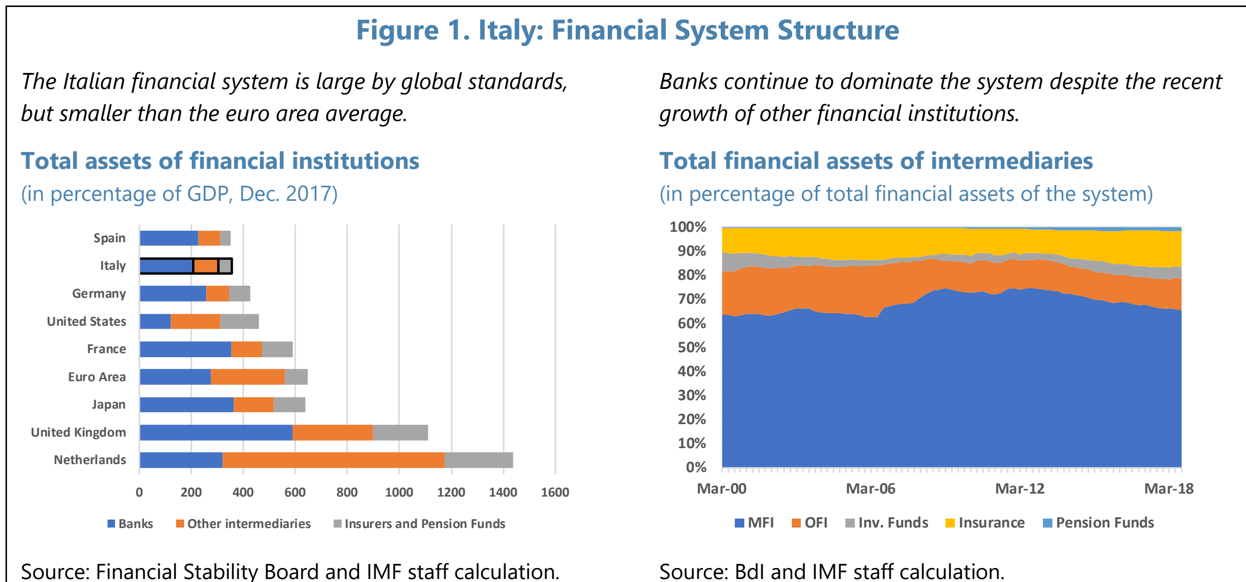


Figure 1. Italy: Financial System Structure

The Italian financial system is large by global standards, but smaller than the euro area average.

Total assets of financial institutions
(in percentage of GDP, Dec. 2017)

Source: Financial Stability Board and IMF staff calculation.

Banks continue to dominate the system despite the recent growth of other financial institutions.

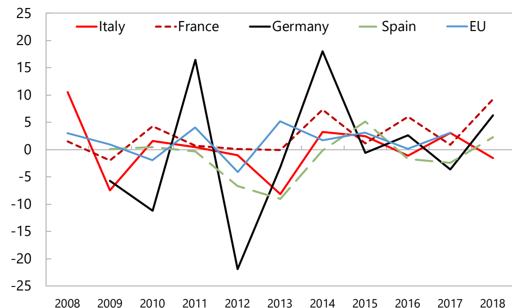
Total financial assets of intermediaries
(in percentage of total financial assets of the system)

Source: BdI and IMF staff calculation.

Figure 2. Italy: Banking Sector Developments

Lending growth has been weak.

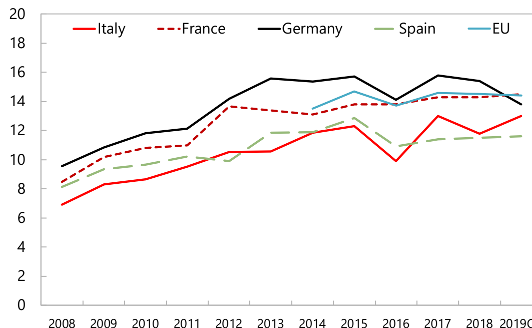
All Banks: Total Loan Growth
(In percent)



Source: ECB and IMF staff calculation.

Capital ratio has shown meaningful improvement but is still below the EU average.

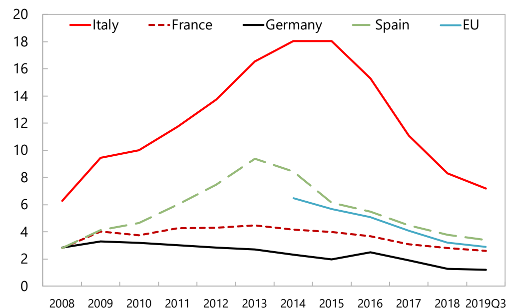
All Banks: Tier 1 Capital to Risk Weighted assets
(In percent)



Sources: FSI database, EBA risk dashboard.

Non-performing loan ratio has declined notably but is still high.

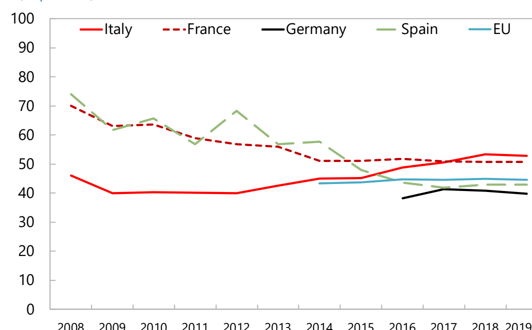
All Banks: NPL to Total Loan
(In percent)



Source: FSI database and EBA risk dashboard.

Provision coverage ratio has improved gradually and is above EU average.

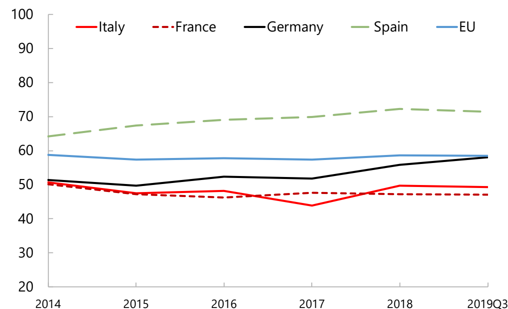
All Banks: Total Provision to NPL
(In percent)



Source: FSI database, EBA risk dashboard, and IMF staff calculation.

Low interest margin challenges banks profitability….

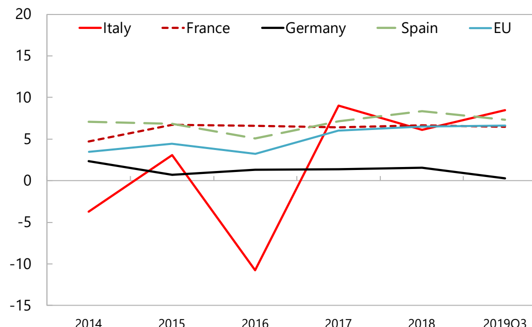
Interest Margin to Total Operating Income
(In percent)



Source: EBA risk dashboard.

…and, combined with provisioning needs, dampened the return on equity for banks.

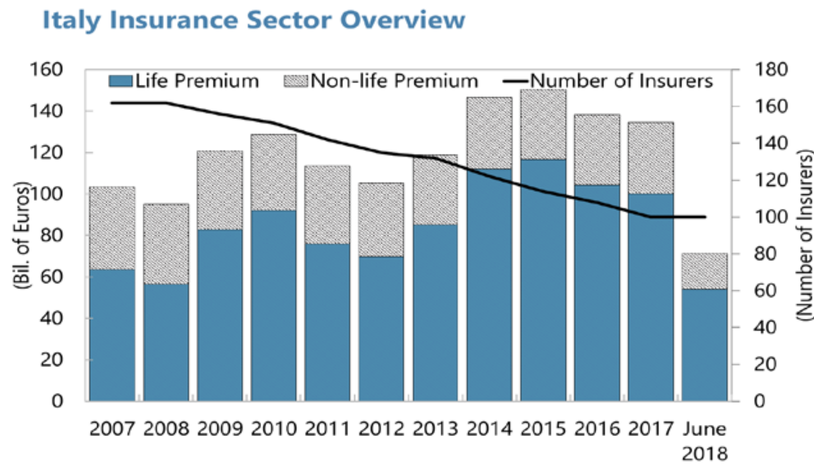
All Banks: Return on Equity
(In percent)



Source: EBA risk dashboard.

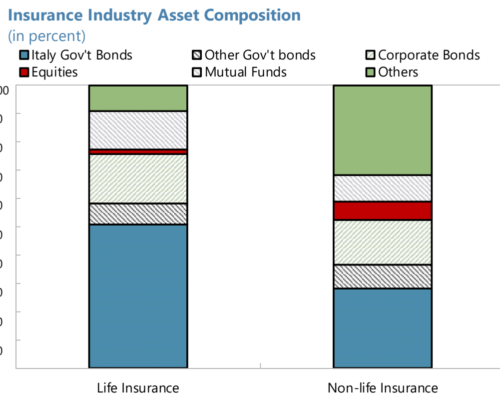
Figure 3. Italy: Insurance Sector Developments

The insurance industry has consolidated significantly in the past decade, while total industry premium income has been stagnant after a surge in life insurance premiums in 2014 and 2015.

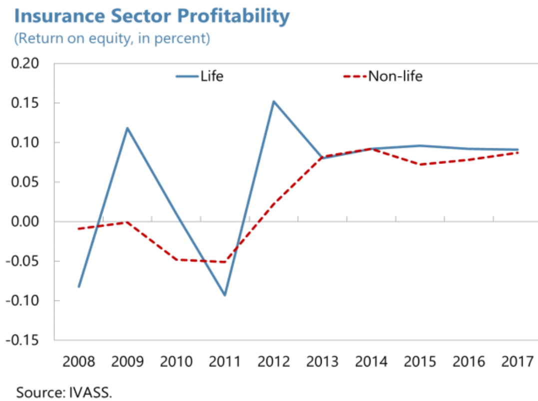


Source: IVASS.

Life insurance assets are heavily concentrated in Italian sovereign bonds.



The insurance sector has returned to profitability in 2012 after a tremulous period during the fiscal crisis.



Source: IVASS.

2. **Regulatory and supervisory measures taken since the 2013 FSAP have played a key role in supporting the recovery of the banking system (Appendix V).** Financial system oversight has been substantially enhanced by the implementation of European Union regulations and the creation of the SSM and the SRB in the euro area. Several initiatives were also launched to improve asset quality, such as the publication of supervisory guidance on non-performing exposures and the EU Council's 2017 Action plan to tackle NPLs. The Italian authorities have also adopted important measures to strengthen banks' capital buffers, improve banking sector governance and consolidate the financial sector through the reforms of the cooperative banks (popolari and mutual institutions), and enhance asset quality and facilitate NPL disposal, particularly through the introduction of Garanzia Cartolarizzazione Sofferenze (non-performing loans' securitization guarantee or GACS). As a result, NPL reductions in recent years were significant, capital levels have improved, and various weak banks were intervened, albeit with more limited burden-sharing than envisaged in the euro area's unitary regime for bank resolution. However,

restoring the banking sector to healthy profitability still requires difficult restructuring decisions, particularly among small and medium banks.

B. Macroeconomic Developments and Outlook

3. **Growth is projected to be modest going forward.** Monetary and fiscal accommodation, favorable commodity terms of trade, and robust euro area growth contributed to the economic recovery during 2014–17, which was instrumental in improving the health of the banking sector. However, amid a weakening external environment and domestic policy uncertainty, the real GDP growth declined from a 10-year high of 1.7 percent in 2017 to 0.8 percent in 2018 and 0.2 percent in 2019. It is projected at about ½ percent in 2020 and 0.6–0.7 percent through the medium term reflecting weak potential growth (Figure 4).

4. **Financial strains have reduced recently, but risks to the economic outlook remain tilted to the downside.** Pressures on Italian sovereign yields have eased significantly with the formation of a pro-European government in early September 2019, alongside ECB accommodation and a better than expected fiscal policy implementation in 2019. This has supported a decline in the cost of market funding for banks. However, the COVID-19 outbreak has significantly increased uncertainty in the near term, while the economy remains vulnerable to adverse shocks, such as escalating trade tensions, a slowdown in key trading partners or geopolitical events (Appendix II). The materialization of modest adverse shocks would increase government debt further, raising the risk that Italy eventually could be forced by renewed market pressure into a sharp fiscal consolidation at a time when the economy is weakening, leading to much weaker outcomes. Such developments would entail significant repercussions for the banking sector, affecting its funding cost and asset quality.

C. Key Risks and Vulnerabilities

Banking Sector

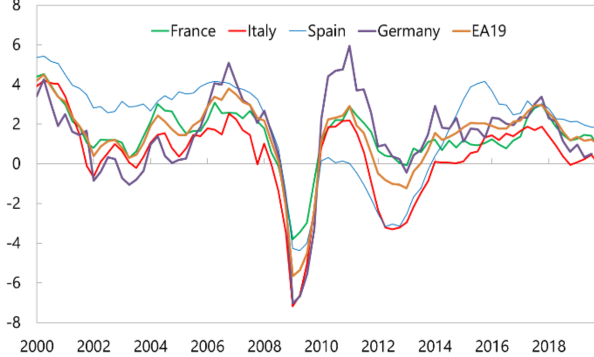
5. **Notwithstanding the significant improvements in recent years, vulnerabilities remain, and the baseline outlook is challenging.** The banking sector continues to receive notable support from the ECB. At close to €250 billion, Italian banks are the largest users of TLTRO, which substantially boosts banks' liquidity and profitability. The recent NPL reductions have been facilitated by IFRS 9 transitional arrangements, which allowed banks to increase NPL provisions while deferring the impact on capital. These transitional arrangements, which will be gradually phased out by 2022, have dampened the impact of IFRS 9 implementation on banks' capital ratios, with the total impact estimated at around 104 basis points for SIs and 138 basis points for LSIs. At the same time, the average capital ratio of Italian banks remains below the euro area and NPL ratios are still among the highest in the EU. In addition, relatively high operating costs and corporate governance weaknesses in some segments of the banking system continue to weigh on profitability, which might be further impacted by the eventual monetary policy normalization and the phase-in of MREL requirements. Italian banks' exposure to the sovereign and the high leverage in the corporate sector increase the vulnerability of banks to downside shocks.

Figure 4. Italy: Macrofinancial Developments

Weak domestic and external demand are slowing Italy's economy.

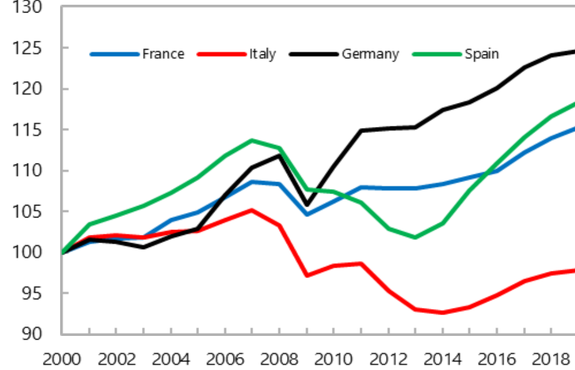
Real income per capita has lagged.

Real GDP
(Percent change)



Sources: Eurostat.

Real GDP per Capita
(2000=100)

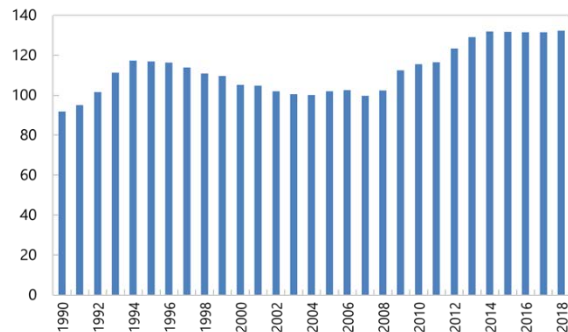


Source: WEO

Fiscal policy has not been able to put debt on a downward trajectory after 2008.

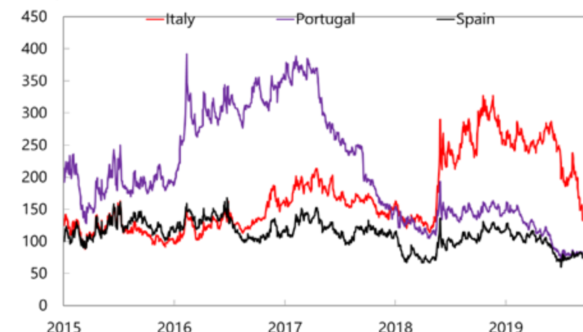
Sovereign spreads have closed substantially in 2019 but remain above peers.

General Government Debt and Structural Balance
(In percent of GDP)



Source: Bank of Italy, IMF staff calculation.

Ten-Year Sovereign Spreads to German Government Bonds
(Basis points)



Source: Bloomberg.

Bank Capitalization and Asset Quality

6. Banks' capital and asset quality remain below European peers. In September 2019, Italian banks reported a fully loaded CET1 ratio of 13 percent; which is 1.5 percentage point below the average of their EU peers. NPLs fell from 16.5 percent in 2015 to about 7.3 percent at end-September 2019, achieved mainly through circa €145 billion of private NPL sales. This is a substantial reduction by any standard, though NPLs remain well above the 3 percent average of the main EU banks. New NPL formation has fallen to pre-crisis levels. Provisioning coverage increased to 52.5 percent at end-June 2019, placing Italy 7.6 percentage points above the average of the main EU banks.

7. Further disposals of NPLs will require additional costs and could impact banks' capital level. Staff estimates that banks (SIs and LSIs) included in the FSAP stress tests need to book an additional €4.9 billion (0.3 percent of GDP) of loan loss provisions to facilitate NPL resolution through internal workout

(Table 2).[1] However, banks' plans to reduce NPLs are heavily reliant on market disposals and write-offs due to limited internal workout capacity. As observed loss rates from market-based NPL disposals are, on average, 13 percentage points higher than loss rates from internal workouts, staff estimate that these banks could require €7.2 billion (0.4 percent of GDP) of additional provisions to meet the NPL reduction targets agreed with supervisors.

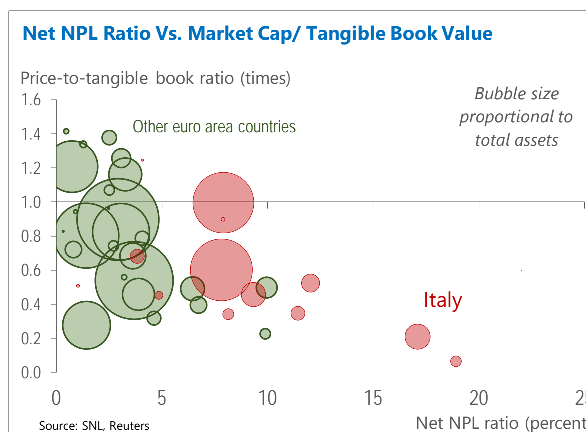
Table 2. Italy: Estimates of Additional Loan Loss Provisions Needs

	LSI (€bn)	SIs (€bn)	Total (€bn)
CET1	21	124	145
Gross Customer NPEs (€bn)	18	128	146
Provisions on NPEs (€bn)	9	68	77
NPE Additional Provisioning Needs - Internal Workout	0.6	4.3	4.9
of which, Bad Loans	0.0	0.5	0.5
of which, UTP and Past Due	0.6	3.8	4.4
NPE Aditional Provisioning Needs - Disposal	2.7	17.3	20.0
of which, Bad Loans	0.8	6.4	7.2
of which, UTP and Past Due	1.9	10.9	12.7

Source: IMF Staff estimation.

8. Market-based measures of bank capitalization show a sizeable discount relative to book value. In the euro area, and in Italy in particular, bank aggregate price-to-book ratios are mostly below one. In Italy, this seems to reflect to some extent the uncertainty related to asset quality and broad profitability concerns.

Net NPL Ratio Vs. Market Cap/ Tangible Book Value



Source: SNL, Reuters

Bank Profitability

9. Bank profitability has been challenging. Following large fluctuations during the past years, the banking sector's profitability rebounded in 2017–18, which was mostly driven by the largest banks, whose profitability surpassed the EU median, which has also been lackluster, in 2017 (Figures 10 and 11). Profitability for medium banks has been consistently low in recent years, although it has significantly improved since the euro area debt crisis. The profitability of small banks entered positive territory in 2018 after having been negative for the past few years. Challenges from fintech and additional provisioning needs for further NPLs disposals will continue to negatively impact profitability.

[1] See paragraph 15. The sample included in the stress testing exercise comprises 78 percent of banking sector assets (69 percent SIs and 9 percent LSIs). The SIs' sample excludes two banks that were under restructuring as of March 2019.

Sovereign-Bank Nexus

10. The large holdings of Italian sovereign debt by banks increase their vulnerability to a sovereign shock. At over 10.5 percent of total assets, banks' exposures to domestic sovereign bonds is high and introduces linkages via the capital and liquidity channels. While the relationship between sovereign spreads and bank regulatory capital has been tempered by banks' accounting strategies—in the second half of 2018, banks moved a large share of sovereign bond holdings from the fair-value to amortized-cost accounting category—the link is still high. Notwithstanding the accounting treatment, the high concentration of sovereign debt renders banks' capital and liquidity vulnerable to adverse market valuations of these securities and impacts banks' equity prices and funding costs (Figure 5).

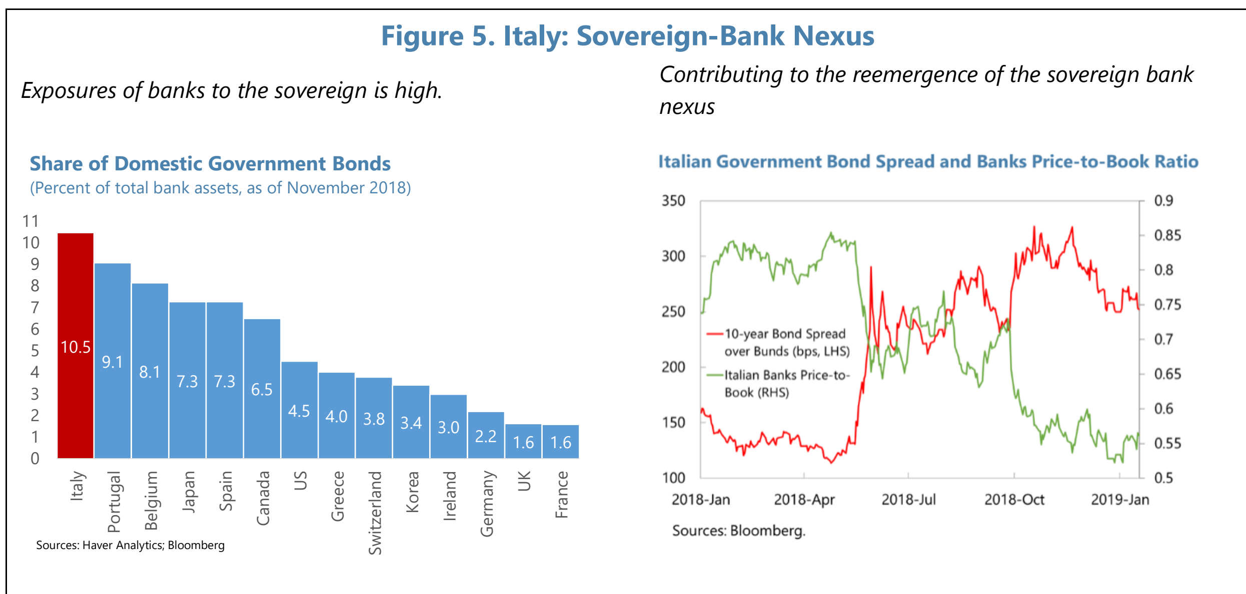


Figure 5. Italy: Sovereign-Bank Nexus

Corporate Debt Overhang

11. The corporate sector remains vulnerable to adverse shocks. The corporate sector has been the primary source of banks' NPLs and faces highly differentiated lending rates. The corporate sector is still relatively vulnerable despite improvements in recent years in the rate of new bad loan formation. With net financial assets at -112 percent of GDP, the corporate sector is slightly more indebted than the euro area average. Corporate indebtedness continues to impose a significant drag on total factor productivity growth, which has been persistently weak in Italy. Gross national income of NFCs—a national accounts measure of profitability—has declined throughout the past decade and remains about 7 percentage points below the euro area average as a share of gross value added. By contrast, households are by far the wealthiest institutional sector in Italy with overall household debt well below European peers. Households in Italy are therefore not likely to be a major source of macro-financial risks to banks.

Insurance Sector

12. The key risk to Italy's insurance sector is sovereign risk arising from a concentration of investments in government bonds. Life insurers hold about 55 percent of their investment portfolio in sovereign debt. While the insurance sector seems broadly resilient to shocks, supported by adequate buffers, IVASS estimates point to the sensitivity of the sector to increases in the yield of Italian sovereign

debt: an upward shift of 100 bps in the government yield curve would reduce the value of insurance companies' own funds by 28 percent.

SYSTEMIC RISK ANALYSIS

13. Domestic and external risks can expose banks' vulnerabilities and jeopardize the banking system's recovery. The key risks facing Italy are the following (Appendix II):

- Structurally weak growth relative to the baseline and low productivity growth because of a failure to undertake reforms or fully address crisis legacies, or external factors such as escalated and sustained trade tensions that affects global growth;
- An increase in Italy-specific risk premia and a widening of spreads relative to other Euro-area sovereigns, due to re-emergence of political uncertainty harming confidence and reducing investor appetite; and
- Significant and rapid increase in interest rates due to a global reassessment of policy fundamentals and decompression of term premia.

A. Bank Solvency

14. The solvency stress test focused on domestic risks that can stem from a sudden increase in Italy-specific risk premia and a significant decline in growth. The tests used bank data as of end-2018 and covered 9 of the 11 SIs, accounting for about 69 percent of the banking sector's assets. Two SIs (one under restructuring and the other under special administration as of March 2019) were excluded from the stress tests (see Box 1). The adverse scenario features an increase in sovereign spreads of 180 basis points above the baseline on an annual average basis (with yields reaching up to 550 basis points, as they reflected spreads around the time the stress tests were conducted) as well as a shock to GDP growth that reaches a severity of two standard deviations in the second year of a three-year horizon (Appendix III). In addition, sensitivity analysis was used to evaluate the solvency position of 62 LSIs, comprising an additional 9 percent of the system's assets.

15. The solvency tests reveal important vulnerabilities in the banking system. The results indicate that the system still faces challenges as many banks with a material aggregate asset share continue to be vulnerable to an adverse scenario and should be further strengthened.

- **The baseline scenario is challenging for a number of banks.** The aggregate CET1 ratio of the sample SI banks would decline by 56 basis points to 11.4 percent, with two banks failing to meet the minimum capital requirements.[2] These results were driven by the weak macroeconomic outlook and the FSAP assumptions on loss-given-default (LGD).[3] The FSAP used credit registry and industry data

[2] Thresholds considered are: (i) CET1: 4.5 percent plus O-SII buffer; (ii) Tier 1: 6.0 percent plus O-SII buffers; and (iii) CAR: 8 percent plus O-SII buffer. One bank falls short of the CAR threshold and another bank falls short of the Tier 1 threshold.

[3] See Technical Note on Tackling non-performing assets for additional details.

on the recovery rate of NPLs for the calculation of LGD for the internal ratings-based approach (IRB) portfolios and provisioning rate for the standardized exposure of the new and the existing NPLs. Assumptions on the UTP portfolio included the transition of 50 percent of the portfolio to bad loans and 20 percent to performing loans. The estimated additional provisions based on the above assumptions were incorporated both in the baseline and stress scenarios and were phased in equally over the 3-year scenarios' horizon. Although Italy's average coverage ratio is about 8 percentage points higher than the EU's average, recovery rates on Italian assets are adversely affected by the low speed of judicial processes. When banks' NPLs disposal targets disclosed in their annual reports are considered, which results in higher provisioning costs, the aggregate CET1 ratio declines by 102 basis points to 10.9 percent. The resulting shortfall in capital vis-à-vis minimum standards is about 0.05 percent of GDP.

- **The adverse scenario has a significant impact on banks' capital ratios.** The average CET1 capital ratio declines by 370 basis points to 8.2 percent. Credit risk provisioning is the largest contributor to the decline in capital ratios, amounting to about 5.3 percentage points. This highlights the importance, above all, of the risks emanating from growth shocks in a low potential growth environment. The increase in the sovereign yields (which have come down sharply since the stress tests were conducted) also has an important impact through valuation losses (1.2 percentage points) and higher funding costs (0.9 percentage points). Three banks representing 8.5 percent of the banking system's assets would see their capital ratios drop below minimum capital thresholds.[4] While the resulting capital shortfall against the capital thresholds is small at about 0.2 percent of GDP, capital needs to bring the CET1 ratio of the 9 SIs in the stress scenario back to the end-2018 level of 12 percent is about 2.2 percent of the GDP (Figure 6). The results do not change materially when banks' NPL disposal targets are considered.

- **Stress test results are slightly more adverse if alternative assumptions and thresholds are used.** To assess the impact of potentially higher loan loss rates under the stress scenario, the FSAP calculated banks' CET1 ratios if loss rates were further increased by 20 percent.[5] Furthermore, CET1 ratios were evaluated against a higher threshold of 7 percent, which incorporates the capital conservation buffer. Combining the two new assumptions (CET1 threshold of 7 percent and a 20 percent increase in LGD), an additional bank will fall slightly below the 7 percent CET1 threshold.

- **The sensitivity analysis using single-factor shocks indicates important vulnerabilities among the LSIs.** Results using Q3 2018 data show that LSIs are vulnerable to NPL shocks and mark-to-market losses arising from an increase in the yield of Italian government bonds. An increase in yields similar to the one observed in 2011 would cause the capital of almost a quarter of the sample of LSIs by assets (10 banks) to fall below the 7 percent CET1 ratio threshold. Under an NPL shock,[6] 35 percent of the sample's assets (14 LSIs) would see their CET1 ratio fall below 7 percent (Figures 7 and 8).

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[4] Two banks fall short of the three capital thresholds and an additional bank falls short of the Tier 1 and CAR thresholds.

[5] The "no NPL disposal" adverse scenario was used for this exercise.

[6] The LSIs were subjected to a flow of new NPLs in line with the historically worst observed NPL flows, at the end of the twin peak crisis in 2013. See Technical Note on Systemic Risk Analysis and Stress Testing for details.

Box 1. Banks Under Restructuring—Background and Recent Developments

Monti Dei Paschi di Siena (MPS)

MPS is the fifth-largest Italian bank with €134 billion assets, a loan market share of circa 5 percent and a fully loaded CET1 ratio of 12.6 percent as of September 2019. The bank benefited from State recapitalizations in 2009 (€1.9 billion "Tremonti bonds") and 2013 (€2.2 billion "Monti bonds"), which were both repaid. Consistent with the framework provided in the BRRD, the Italian authorities effected a €8.1 billion precautionary recapitalization of MPS in July 2017 (involving the conversion of junior bondholders for €4.3 billion and a capital injection of €3.8 billion). An amount of €1.5 billion was provided by the State to compensate retail investors who were victims of mis-selling. Following the operation, which was found compatible with state aid provisions by the European Commission (EC), MPS' gross NPL ratio improved from 35 percent at end-2016 to 14.6percent at end-September 2019, mainly due to disposals. MPS' restructuring plan agreement with the EU aims to substantially reduce cost/income ratio from 61.2 percent in 2016 to 50.6 percent in 2021, including through reducing its branch network from 1,529 in June 2019 to 1,432 by end-2021. The bank is currently in discussions with the MEF and the EU to further dispose around €10 billion NPLs to AMCO, the state-owned bad loan manager. The MEF is due to submit a disposal plan to the EC that sets out how the state ownership in the bank will be divested by end-2021.

Banca Carige

Carige is a medium-sized regional Italian bank with assets of circa €23 billion. It is supervised by the ECB, who requested the bank to submit a plan to restore compliance with its applicable capital requirements by end-2018. In order to immediately secure the bank's solvency position, in November 2018 a €320 million Tier 2 subordinated bonds was subscribed by the voluntary intervention scheme (VIS) of the Italian Interbank Deposit Guarantee Fund (FITD). This was intended to be a temporary solution, ahead of a subsequent recapitalization. However, the bank's major shareholder withdrew support for a €400 million capital increase in December 2018, seeking more clarity on the bank's strategy. The majority of the Board of Directors subsequently resigned, and the ECB appointed three administrators in January 2019. Following the announcement (and EC approval for state aid purposes) of a state guarantee for new bond issuances in January 2019 to support the bank's liquidity position, its shareholders approved a €700 million share capital increase in September 2019. The recapitalization was completed in December 2019 with existing shareholders subscribing €23 million; VIS converting €313 million of subordinated debt into shares; FITD subscribing an additional €301 million; and Credito Cooperativo Italiano subscribing €63 million. The administrators' term ended in January 2020 as a new Board was appointed. The bank's Strategic Plan foresees reducing NPLs to below 5 percent by 2023, achieving the breakeven point by 2021 and returning to profit by 2022.

Banca Popolare di Bari (BPB)

BPB is the largest bank headquartered in Southern Italy with assets of circa €13 billion. It is one of two popolari banks that did not convert to a joint stock company as part of recent reforms of the sector and has a history of governance issues. It is supervised by the BdI, who conducted a full-scope on-site inspection between June and December 2019. Based on preliminary findings of the on-site inspection, stemming from the credit file review, capital ratios fell below CRR minimum capital requirements. In mid-December 2019, BdI, in its supervisory capacity, decided to remove the management of BPB and appointed two special administrators. Later that month BPB, FITD and Mediocredito Centrale (a State-owned bank) agreed a recapitalization scheme that seeks to rehabilitate the bank; in this context, and to ensure compliance with minimum capital requirements, a capital injection of €310 million was effected by the FITD at the end of 2019. According to the agreement, it is expected that the new business plan and the vote of the bank's circa 70 thousand shareholders on its recapitalization and transformation into joint stock company would be finalized end-June 2020. Discussions with the European Commission about the consistency of the bank's rescue plan with the state aid framework are ongoing.

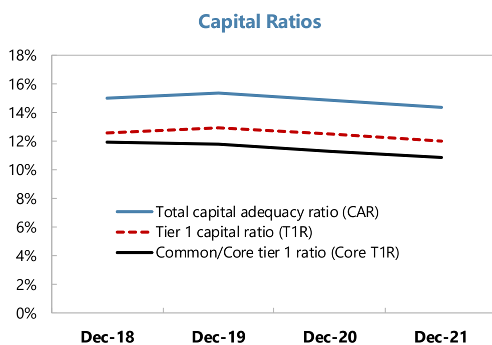
Figure 6. Italy: SIs Solvency Stress Test

Top-down solvency stress tests covered 9 out of 11 SIs and considered an Italy specific stress scenario.[1]

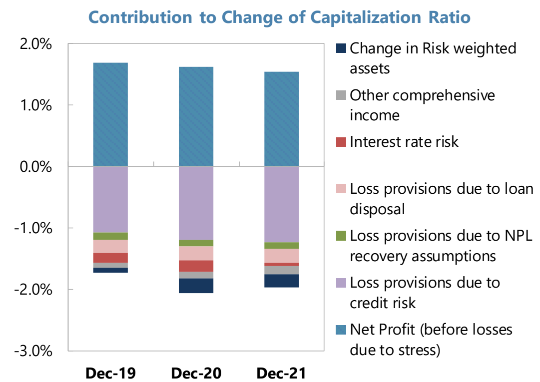
Scenario	Average CET1 ratio (percent)	Number of banks with CET1 ratio<4.5%+OSII	Number of banks with T1 ratio <6%+OSII	Number of banks with CAR<8%+OSII	Asset share of undercapitalized banks (CAR<hurdle) (percent)	Max capital shortfall vis-à-vis capital thresholds (percent of GDP)	Average leverage ratio[6] (percent)
	All 9 banks						All 9 banks
Baseline - end-2018[2]	11.9	0	0	0	0	0	5.6
Baseline - end-2021							
Without NPL disposal plan[3]	11.4	0	1	1	…	0.01	5.5
With NPL disposal plan[4]	10.9	1	1	2	…	0.05	5.3
Adverse end of 2021							
Without NPL disposal plan[5]	8.2	2	3	3	8.5	0.21	4.4
With NPL disposal plan[5]	8.1	2	3	3	8.5	0.25	4.3

Notes:
[1] Adjustments to provisions based on the FSAP's use of estimated LGD rates based on market data were applied to all baseline and stress scenarios. Adjustments were phased-in equally over 3 years in each of the scenarios.
[2] The capital ratio is fully loaded IFRS9 implementation (post phase-in of initial IFRS 9 impact).
[3] In total, two banks breach the capital thresholds: one bank breaches the Tier 1 target and another the CAR target.
[4] In total, two banks breach the capital thresholds: one bank breaches the three capital thresholds and another bank the CAR target.
[5] In total, three banks breach the capital thresholds: two banks breach the three capital thresholds and another bank breaches the Tier1 and CAR thresholds.
[6] Leverage ratio is proxied by Tier1 capital divided by Total assets (non-risk weighted).

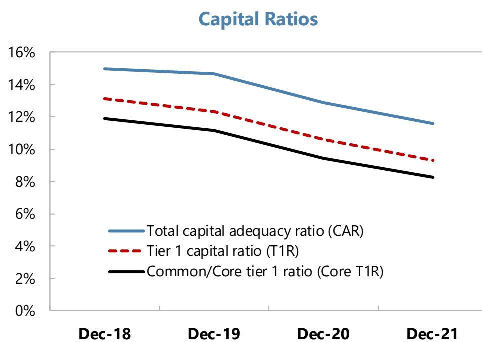
Under the baseline, with NPL disposal plan, average CET1 ratio falls by 100 bps



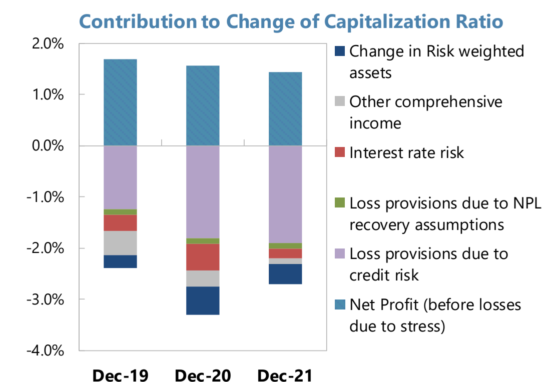
Credit risk is the main source of losses followed by the increase in interest rates.



Average CET1 ratio falls by 370 bps in the adverse scenario.



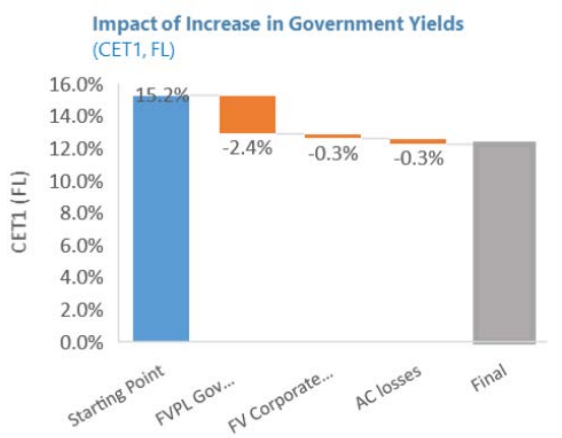
Main losses arise from the flow of new NPLs, but losses associated with higher yields are also significant.[1]



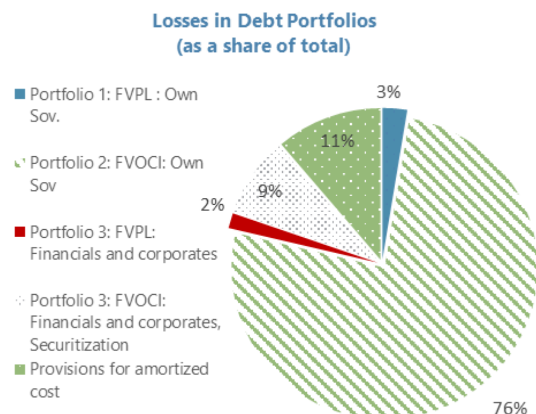
Source: IMF Staff.
[1] The adverse scenario in this graph reflects the "without NPL disposal plan", which assumes that banks will not be required to undertake further disposal of their NPLs under crisis conditions.

Figure 7. Italy: LSIs: Debt Portfolio Sensitivity Test Results

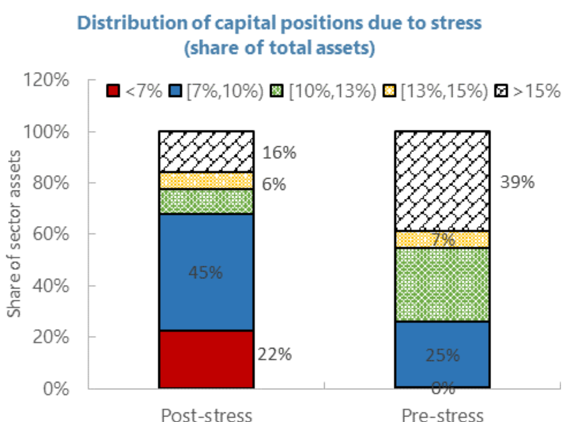
Italian debt held at fair value can cause large losses if yields go up.



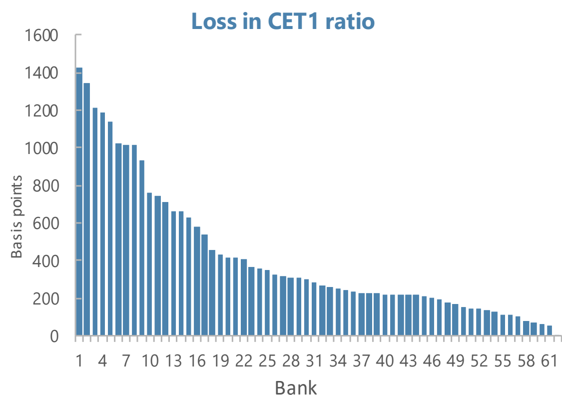
Most losses originated in positions kept at fair value.



Debt portfolio shocks can let a meaningful share of the LSI segment undercapitalized.



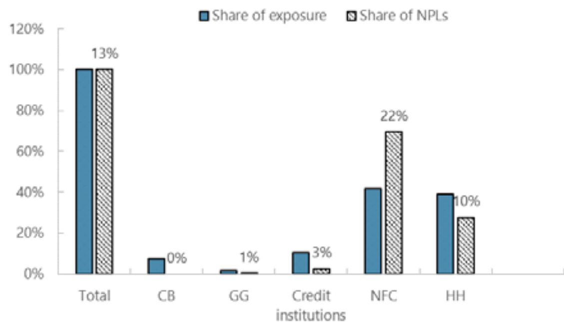
Distribution of losses show that a few LSIs, including a relatively large one, are more exposed to yield shocks, leading to a large impact on their CET1 ratio.



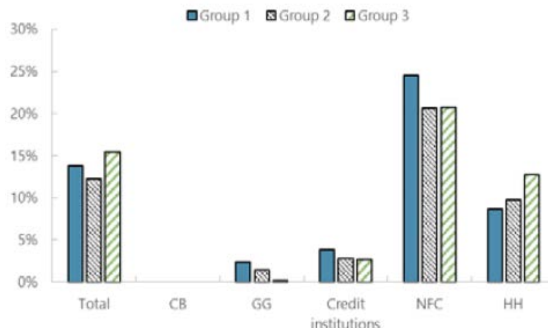
Sources: BdI and IMF staff estimates.

Figure 8. Italy: LSIs: Asset Quality, Loan Portfolios, Loan Loss Impact

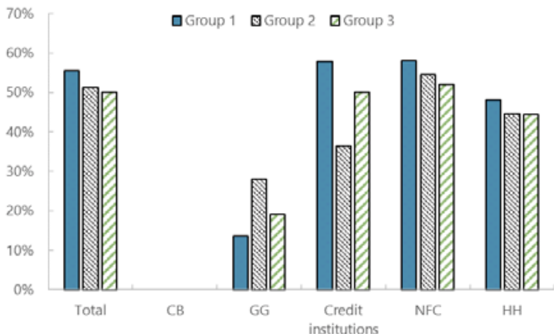
The largest share of NPLs are formed by loans to non-financial corporates (NFC)



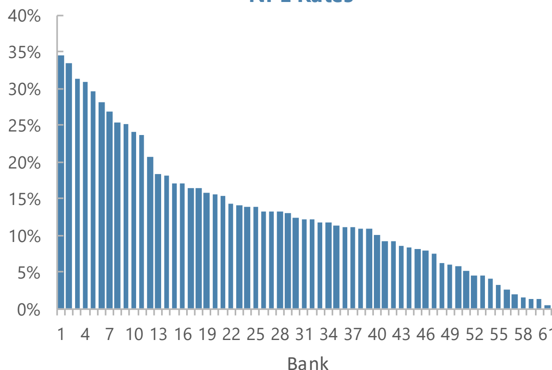
Smaller LSIs (group 3) have higher NPL ratios.



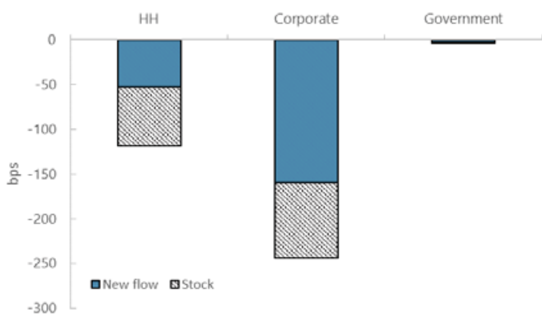
Coverage ratio are also slightly smaller among small LSIs



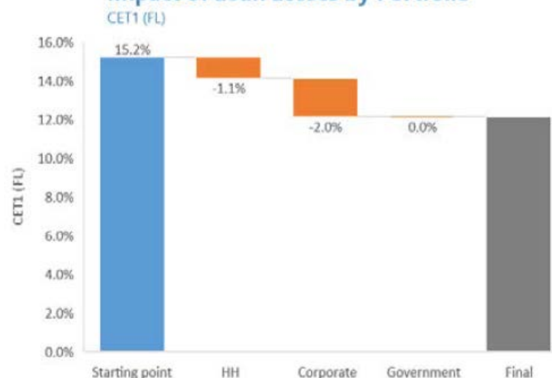
NPL rates vary widely among LSIs.



NPL shocks have meaningful impact on LSIs' capital ratio



Most losses in case of NPLs shock are likely to originate in the corporate portfolio.



Sources: BdI and IMF staff estimates.

B. Bank Profitability

16. Banks' profitability has been dampened by a mix of structural and cyclical factors. Low interest rates and growth levels have acted as significant headwinds to banks' profitability throughout this decade. Overall, the contribution of net interest income (NII) to banks' operating income declined significantly for all bank segments, and banks turned to other sources of income to compensate (Figures 9–10).

17. Additional reductions in banks' operating costs, particularly in small- and medium-sized banks, could support needed enhancements to their profitability. While most banks reduced their operating expenses to boost profitability since the twin crisis, small- and mid-sized banks continue to retain high operating costs compared to large banks and to the EU median more generally. As for large banks, provisioning needs declined in 2017 compared to 2010; while provisioning expenses significantly increased between 2012 and 2014, they have been on a declining trend since.

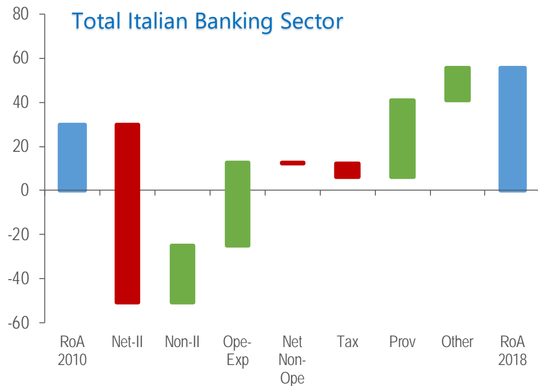
18. The ECB's TLTRO has been providing substantial support to banks' profitability. Italy's banks are the main users of these operations and benefit from a negative interest rate of -0.4 percent on TLTRO II borrowings. In September 2019, the ECB launched a new series of long-term funding operations (TLTRO III) ending in March 2021, each with a maturity of two years. TLTRO III will continue to support the banking system, reducing the need for banks to tap more expensive funding sources in the near term.

19. The market cost of an equivalent amount to TLTRO financing depends significantly on the funding mix and market conditions.[7] To the extent that comfortable liquidity profiles allow banks to use short-term funding (e.g., ECB's main refinancing operations or short-term retail deposits), they will incur relatively low funding costs. However, longer term market funding would reflect banks' CDS spreads and could be much costlier. CDS spreads of Italian banks increased substantially in 2018, negatively impacting the price of bonds issued by banks. Despite the significant improvement in 2019, the spread remains substantially above other European banks. Based on reported market prices for bond issuance in the second half of 2018, retail deposit rates, and the ECB's main refinancing window, Table 3 and Figure 11 present an illustrative range of estimates of the market-based cost of an equivalent amount to TLTRO financing at end-2018. If banks were to use funding mixtures, replacement costs could vary from 1–3 percent of banks' equity on aggregate, but the impact varies significantly by bank. The cost from TLTRO refinancing could also be passed-through to lending rates or mitigated by deleveraging, which are not considered in this analysis.

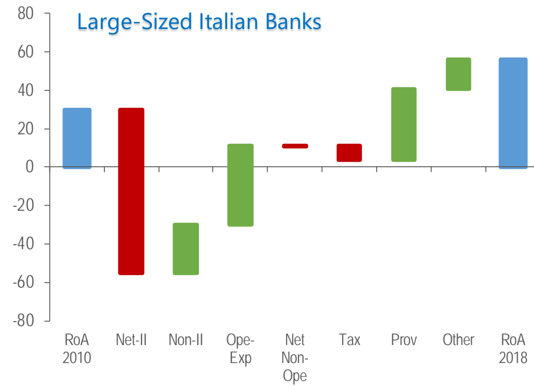
[7] The analysis does not consider potential repricing of assets or deleveraging.

Figure 9. Italy: Drivers of Profitability, 2010–2018

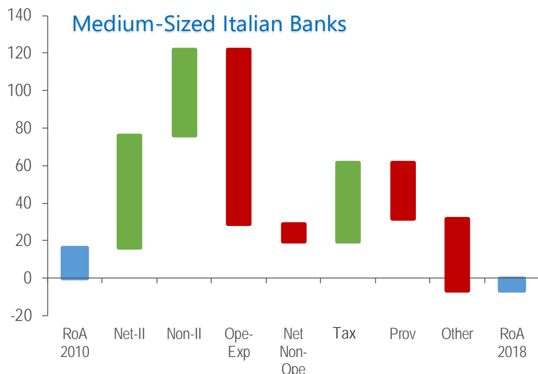
On average, profitability in the Italian banking sector has improved...



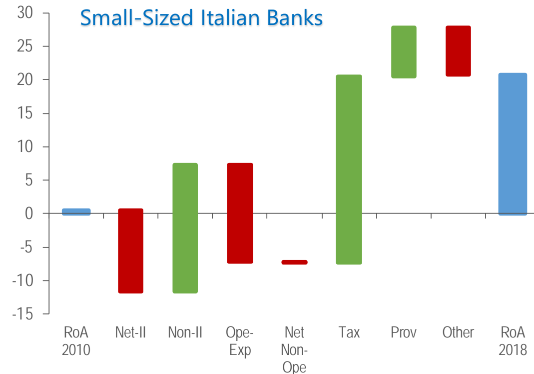
...Driven mainly by an improvement in large banks' profitability.



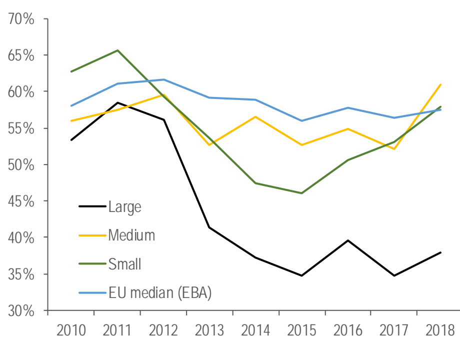
Despite improvement in net interest income, medium-sized banks' profitability in 2018 has declined compared to 2010 because of higher operating expenses.

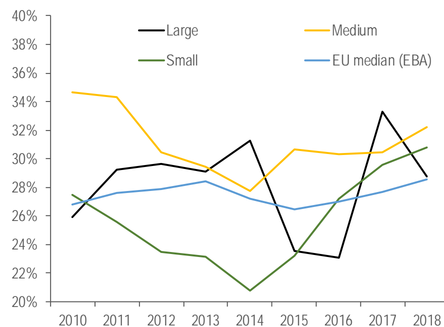


Small-sized banks' profitability have also improved compared to 2010, with declines in net interest income and operating expenses compensated by improvements in, taxes, non-interest income and provisions.



Overall, banks have increasingly relied on fee income in recent years as low interest rates depressed their profitability

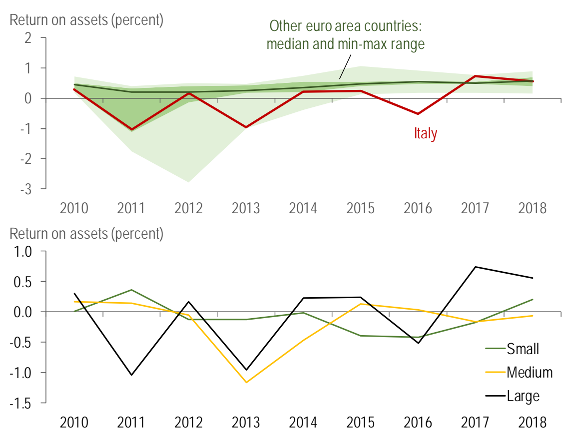




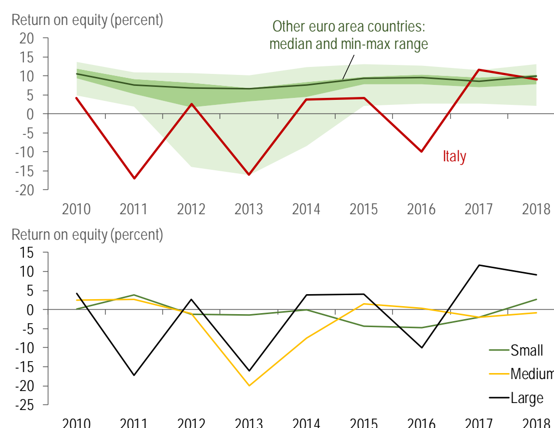
Sources: SNL data and IMF staff estimates.

Figure 10. Italy: Banks' Profitability

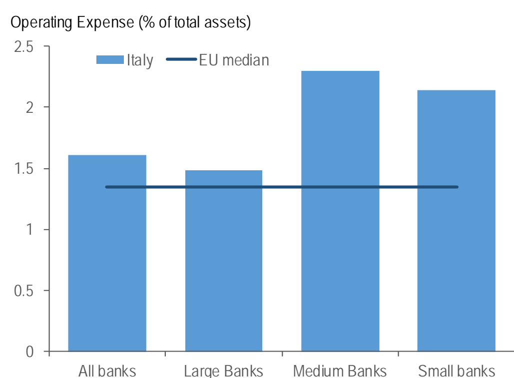
Banks' ROA has rebounded in 2017 but has remained under the EU median for medium and small banks.



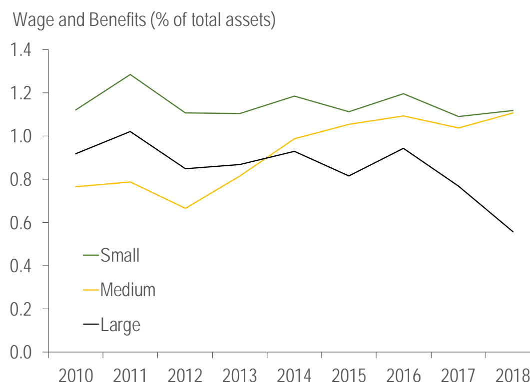
Similarly, ROE has improved for large banks, but falls below the median for the remaining banks.



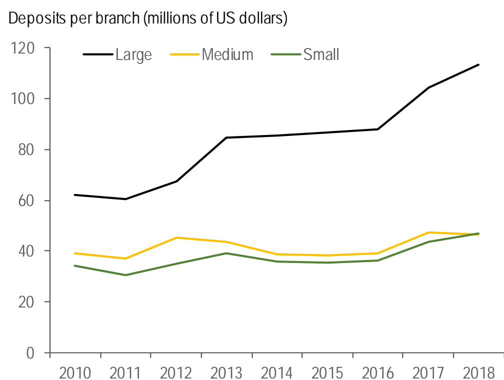
Medium and small-sized banks retain high operating expenses...

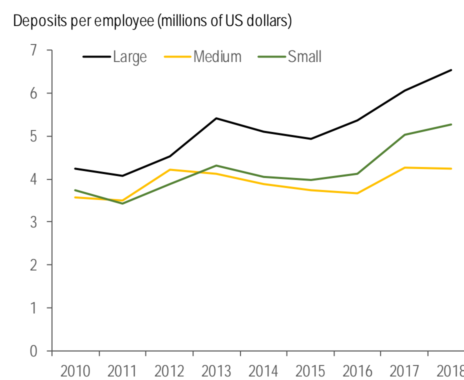


...and have not significantly reduced their personnel expenses, in contrast to large-sized banks.



Large banks made the most significant improvements in both ratios of deposits to branches and deposits-to-employees.





Source: SNL and IMF staff calculations.

Table 3. Italy: Illustrative Estimates of Annual Market-Based Cost of an Equivalent TLTRO Funding

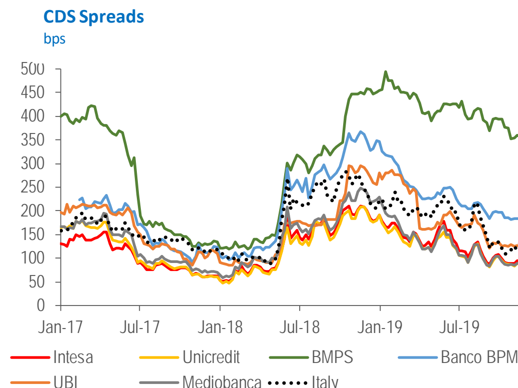
(As of end-2018)

Types of Funding	Prices of Funding (percent)	Gross TLTRO	TLTRO, Net of 50% of Banks' Excess Reserves[1]
		Impact of Gross TLTRO Replacement (Percent of banks' equity)	Impact of Net TLTRO Replacement (Percent of banks' equity)
Retail funding	0.4	0.5	0.4
ECB's MRO	0.0	0.0	0.0
Bond issuance (Long term bond) – low volatility period	1.8	2.2	1.8
Bond issuance (Long term bond) – high volatility period	4.2	5.2	4.2
Funding Mix: 30 percent Retail, 30 percent MRO,40 percent Bonds (low volatility)		1.3	1.0
Funding Mix: 30 percent Retail, 30 percent MRO,40 percent Bonds (high volatility)		2.7	2.2
Funding Mix: 50 percent MRO, 50 percent Bonds (low volatility)		1.1	0.9
Funding Mix: 50 percent MRO, 50 percent Bonds (high volatility)		2.6	2.1

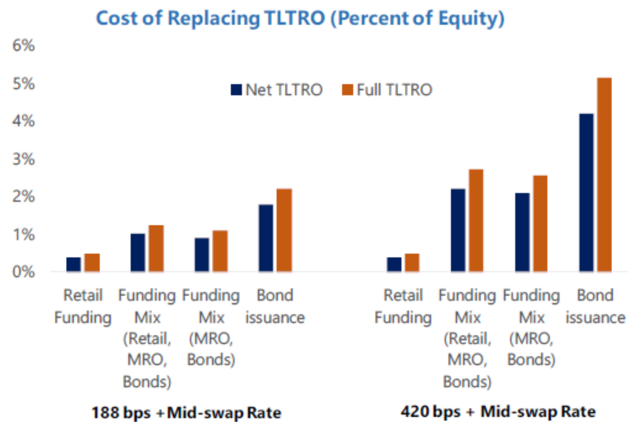
Sources: Bloomberg, ECB, BdI, and IMF staff estimates.
[1]This estimate assumes banks will replace TLTRO liquidity by using half of their excess reserves and financing the rest.

Figure 11. Italy: TLTRO Support to Bank Profitability

Banks' CDS spreads increased substantially in 2018, which drove up their funding costs.



Cost of replacing TLTRO will depend on the funding mix banks choose and is costliest if banks choose Long-term bond issuance.



Source: Bloomberg and IMF Staff.

C. Bank Liquidity

20. The funding profile of the banking system shows a strong reliance on retail deposits. Retail deposits are the largest source of stable funding for LSIs and SIs (59 percent and 45 percent), but SIs' funding is more diverse and includes central bank funding (13 percent) and unsecured funding from financial institutions (17 percent).

21. Liquidity stress tests suggest relatively comfortable positions, albeit boosted by the significant use of TLTRO. The FSAP conducted Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR), and cashflow-based analyses for the full list of SIs (11 banks) and 61 LSIs (Figure 12 and Table 4).[8] While the results indicate relatively comfortable positions, aggregate liquidity is boosted by the extensive reliance on TLTRO which represents on average about 10 percent of banks' total liabilities. Furthermore, the tests highlight valuation risk related to the concentration of liquid assets in the Italian government securities.[9] Diversification of the liquid assets by issuers, maturity and type of asset would help increase banks' resilience to adverse shocks. Finally, high asset encumbrance ratios among some of the LSIs in the sample could hinder their ability to further tap wholesale funding markets, subjecting them to heightened funding shocks.

Table 4. Italy: LCR Stress Test Results

	SIs			LSIs		
	LCR	Retail Scenario[2]	Wholesale Scenario[3]	LCR	Retail Scenario[2]	Wholesale Scenario[3]
System-wide LCR	156%	92%	110%	229%	157%	189%
Number of Banks w/ LCR<100%	0	9	1	1	10	7
Share of Group Assets	0%	91%	7%	0.5%	26%	16%
Liquidity shortfall (millions of euros)[1]	0	16,768	1,494	10	1,341	433
Liquidity shortfall (share of liabilities of failed banks)	0.0%	0.9%	1.0%	1.0%	2.3%	1.2%

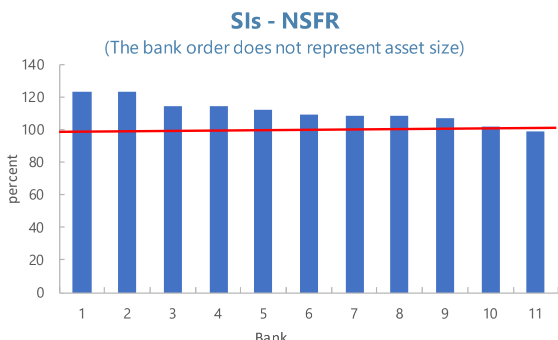
Source: IMF and BdI staff calculations.
[1] Liquidity shortfall is the amount of liquid asset needed to restore LCR to 100 percent.
[2] Retail scenario simulates a (retail) deposit run. The key assumptions are: (i) 10 percent run-off rates for stable retail deposits and 15–20 percent for less stable retail deposits; (ii) 75 percent (40 percent) run-off rates for operational (non-operational) deposits not covered by Deposit Guarantee Scheme; and (iii) 10 percent haircut on government securities for the calculation of high-quality liquid assets (HQLA).
[3] Wholesale scenario simulates a wholesale deposit and wholesale market funding withdrawal. The key assumptions are: (i) 100 percent run-off rates for wholesale funding from other financial institutions; (ii) 50 percent run-off rates for operational and non-operational deposits not covered by Deposit Guarantee Scheme; and; (iii) 10 percent haircut on government securities for the calculation of HQLA.

[8] Please see Technical Note on Risk Analysis and Stress Testing for the methodology and detailed results of the tests.

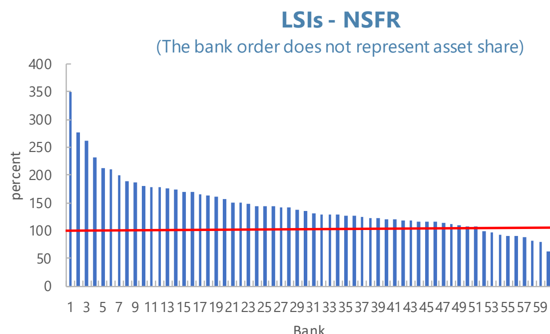
[9] General government items comprise 82 percent of the buffer of liquid assets of the LSIs and 67 percent of the SIs.

Figure 12. Italy: Liquidity Profile of Banks (End-September 2018)

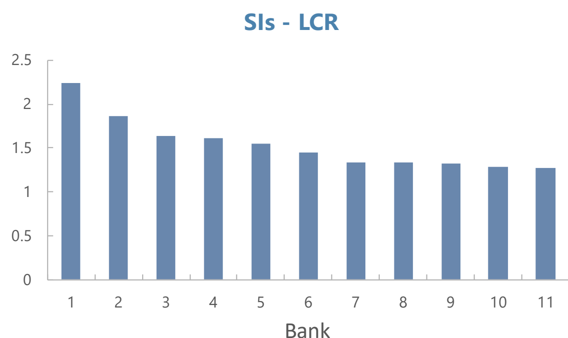
Most SIs…



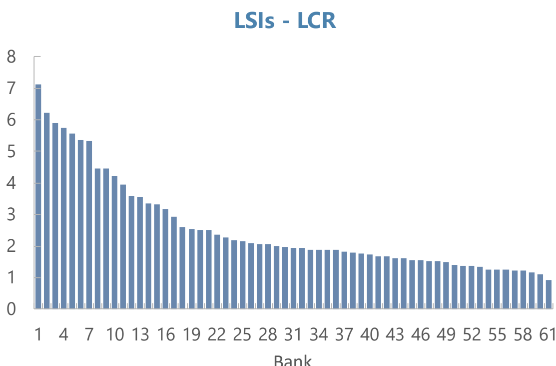
…and LSIs already comply with the NSFR.



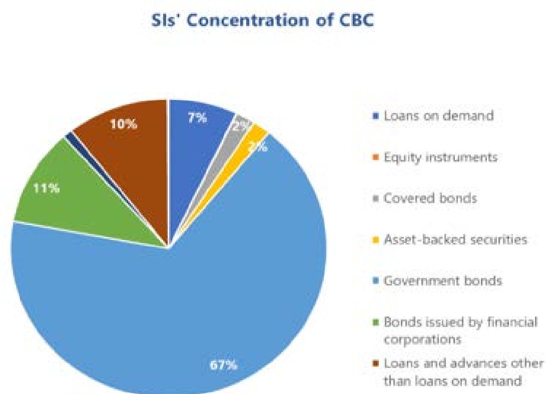
LCR ratios are also comfortable among SIs…



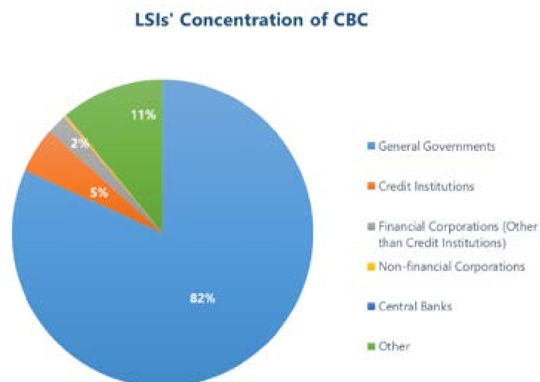
…and LSIs, despite the large variation.



However, the composition of the buffer of liquid assets is heavily concentrated in government bonds…



…particularly for LSIs.



Sources: SSM, BdI, and IMF staff estimates.

D. Corporate Sector

22. Favorable monetary conditions in the aftermath of the global and euro area crises have supported corporate balance sheet recovery, but vulnerabilities remain. While the corporate sector has been deleveraging, profitability and investment have not yet recovered. Construction and real estate are the most vulnerable sectors as indicated by high shares of debt-at-risk and relatively low interest coverage ratios (ICRs). In this context, weak growth and elevated sovereign spreads that could raise the cost of borrowing for corporates can result in adverse feedback loops between the sovereign, the corporate sector, and banks.

23. The non-financial corporate stress test indicates that the sector remains sensitive to macroeconomic shocks. In the adverse macroeconomic scenario, combined profit and interest rate shocks would move the median interest coverage ratio and the share of firms (and debt)-at-risk close to the levels of the 2008–09 and 2012 crises. The results indicate that the bulk of the improvement in corporates' debt servicing capacity has been driven by the historically low interest rates and structural improvements in profitability have been insufficient. These results are consistent with the outcome of the banking sector solvency stress tests, where most losses emanate from corporate credit risk (Figure 13).

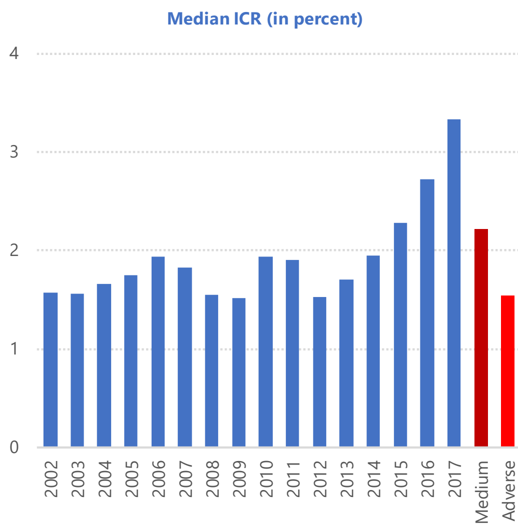
E. Insurance Sector

24. The insurance sector fared well in the 2018 EIOPA stress test. Assets and liabilities of the Italian insurance sector have different characteristics compared to other European countries. On the assets side, 39 percent[10] of assets held by 12 Italian entities in the scope of the EU-wide stress test are invested in Government bonds (mostly Italian), as compared to an average of 24 percent for Europe. Thus, Italian insurers are more susceptible to sovereign risk. On the liabilities side, the duration at 7 years is much shorter than the EU average and is well matched with asset duration. Thus, a lower interest rate would have a limited impact on Italian insurers. The EIOPA stress test confirmed that Italian insurance sector is more vulnerable to the "upward shift in the yield curve" scenario mainly due to the exposure to sovereign bonds and the lapse risk associated with the life business. The results suggest that the Italian insurers included in the test are sufficiently capitalized. However, sensitivity analysis conducted by IVASS indicate that solvency ratios of several insurers (on solo basis) would fall below the 100 percent threshold under a more severe interest rate shock that involves an increase in Italian sovereign spreads to above 399 basis points, although the sector as a whole remains adequately capitalized, with an average solvency ratio around 150 percent. Based on these results, IVASS asked the vulnerable insurers to mitigate the risk of their portfolios and repeat the stress test at the end of 2018. While the 2018 year-end stress test results were not yet available at the time of the FSAP visit, the solvency position of the affected insurers had improved at the end of 2018.

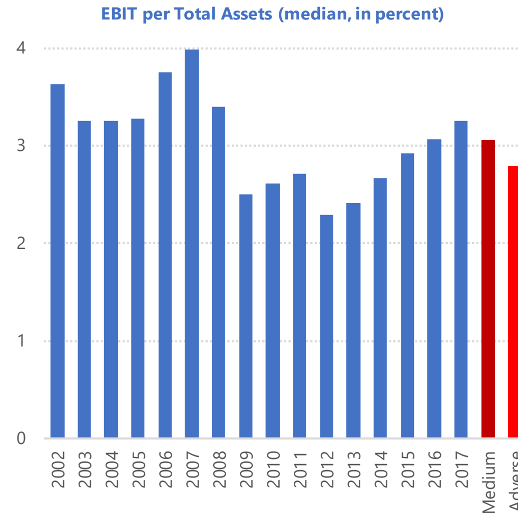
[10] Considering the whole Italian insurance sector, investments in sovereign bonds constitute 48 percent of total assets.

Figure 13. Italy: Corporate Sector Stress Test[1]

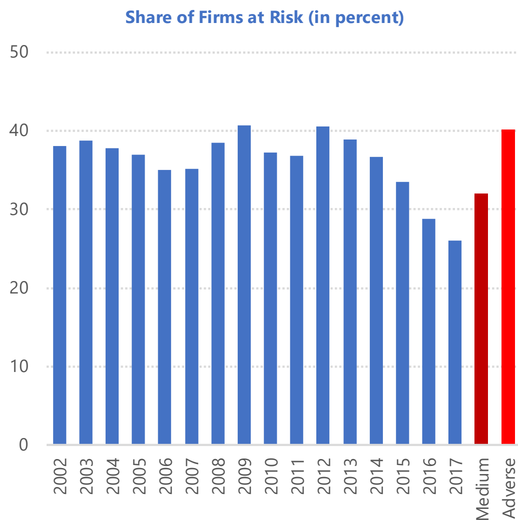
Debt service capacity of corporates improved markedly in recent years of exceptional monetary accommodation.



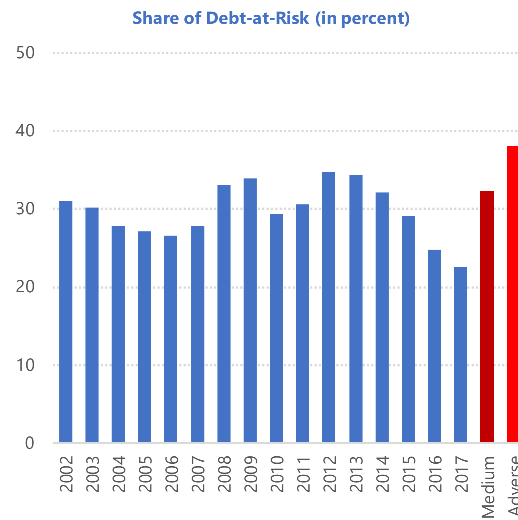
Profits have gradually risen, but they are still below their pre-crisis average, leaving firms exposed to interest shocks.



Combined profit and interest rate shocks take median ICRs and the share of firms-at-risk to crisis years….



…potentially raising the share of debt-at-risk to just below 40 percent.[2]



Sources: CERVED; and IMF staff estimates.

[1] "Adverse" reflects the FSAP adverse macroeconomic scenario. The shocks are calibrated to the 3-year cumulative difference in nominal GDP between the adverse scenario and the baseline used for the banking sector stress tests; sovereign spread shock is calibrated to the mean difference between Italian and German 10-year government bond yields over the three-year horizon. The scenario is driven by Italy-specific shocks and does not assume any monetary accommodation. The "Medium" scenario assumes half the value of the shocks under the severe scenario. For details, please see the Technical Note on Systemic Risk Analysis and Stress Testing.

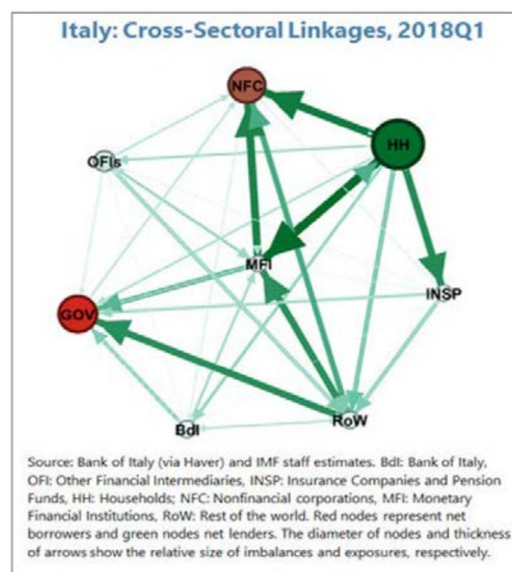
[2] "Debt-at-risk" is defined as the debt of firms with ICR lower than 1.

F. Interconnectedness Analysis

25. Domestic interbank contagion is limited, but the exposure of Italy's financial sector to the government and nonfinancial corporates produces high cross-sectoral contagion risk. The network analysis of interbank interconnectedness suggests very limited risk of contagion within the banking system owing to small interbank exposures. However, the flow-of-funds analysis indicates significant cross-sectoral contagion risk owing to: (i) growing cross-sectoral exposures; (ii) the significant exposure of banks, nonbanks (particularly insurance firms) and foreign investors to the government bond market; (iii) indirect links of households to sovereign risk intermediated through the financial system; and (iv) important direct links of banks, households and nonresidents to corporate debt.

26. Cross-border linkages, especially with Europe, are high, and external shocks are becoming increasingly relevant to the Italian financial system. Italy's banking system affects and is affected by financial conditions in other countries, particularly European ones. While Italian stock markets, bank returns, and sovereign CDS spreads have historically been net shock transmitters of stress to other countries, their importance as net shock originators declined since May 2018. In the meantime, they have become more sensitive to external shocks. This is a result of the fact that, in recent years, foreign investors have been selling Italian securities while domestic residents have continued to build their net foreign asset position, thus exposing Italy relatively more to external shocks.

Italy: Cross-Sectoral Linkages, 2018Q1



Source: Bank of Italy (via Haver) and IMF staff estimates. BdI: Bank of Italy, OFI: Other Financial Intermediaries, INSP: Insurance Companies and Pension Funds, HH: Households; NFC: Nonfinancial corporations, MFI: Monetary Financial Institutions, RoW: Rest of the world. Red nodes represent net borrowers and green nodes net lenders. The diameter of nodes and thickness of arrows show the relative size of imbalances and exposures, respectively.

FINANCIAL SECTOR OVERSIGHT

27. Notwithstanding significant progress in recent years, further action is needed to ensure a resilient and viable banking sector.

- **In view of the vulnerabilities identified in the previous section, efforts should focus on further enhancing capital levels, taking into consideration the results of the stress tests**. Furthermore, despite the substantial NPL reductions in recent years, the overall levels remain high and continue to weigh on banks' profitability, market valuation, and ability to raise capital. Therefore, it is important to further reduce banks' NPLs to average EA levels and ensure that banks' loan loss rates adequately reflect NPL recovery rates. Finally, enhancing operational efficiency and banks' governance and business models should be a priority. As the vulnerability analysis indicates, there are several banks that suffer from low profitability and asset quality and are vulnerable to adverse shocks. Intensified supervisory activities over banks' governance and business models can provide the basis for further

supervisory action to address these weaknesses. These measures, once completed, should help banks support credit growth and banks' market access.

- **Some other areas in the financial sector oversight framework also require further attention.** The authorities could consider using prudential policies to moderate the sovereign bank nexus with an adequate phase-in period to avoid disruptions to markets, establish a macroprudential authority and enhance the macroprudential toolkit. They are also encouraged to upgrade some aspects of the supervisory agencies regulatory powers and expand supervisory activities related to credit risk and problem assets.

A. Macroprudential Policy

28. Macroprudential oversight in Italy combines local elements with the European framework. At a local level, financial stability is a shared responsibility between BdI, CONSOB, IVASS, and the pension funds supervisor, Commissione di Vigilanza sui Fondi Pensione. Each authority exercises its responsibility within a combination of sectoral and activity boundaries and the BdI plays a leading role in surveillance and coordination. Within the European framework, the BdI is both the national competent authority and the designated authority for the macroprudential tools considered under the CRR and CRD IV.

29. Italy should formalize its framework by establishing a national macroprudential policy authority. While the existing coordination arrangements seem to have worked so far, they do not provide ways to resolve eventual differences across agencies. The designation of a national macroprudential policy authority, either a single institution or board, would address this issue and could also help fill potential data gaps. As recommended by the ESRB, such an authority would make recommendations to members under a "comply or explain" mechanism. Given the breadth of the BdI's mandate, its role as national designated authority and its extensive experience in systemic risk surveillance, the BdI should play a leading role.

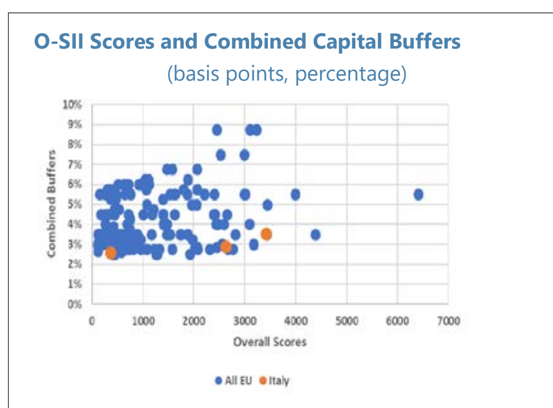
30. The macroprudential toolkit should be enhanced by incorporating the Systemic Risk Buffer (SyRB) and borrower-based measures to ensure quick deployment when needed. The SyRB is a flexible tool that can be used to mitigate systemic risks unaddressed by other tools. Furthermore, while household- and housing-related risks are currently low in Italy, borrower-based tools, such loan-to-value (LTV) and debt service-to-income (DSTI) ratios could become valuable as the cycle turns.

31. Financial stability surveillance and assessment is strong, but some enhancements could be useful. Surveillance and assessment at the BdI are based on state-of-the-art quantitative techniques and expert judgement and covers many sectors of the Italian financial system. IVASS conducts macroprudential surveillance to identify, assess, and report risks to insurance sector. Nonetheless, the analysis of the FSR, the main vehicle for communicating authorities' views on financial stability risks, could be usefully complemented by regular discussions of systemic risk that take into consideration the interconnections between sectors arising, for instance, from their large sovereign exposures. The regular incorporation of tests that could provide a view of the resilience of the Italian banking sector to Italy-specific risks and complement the EBA stress tests would also help assessing prospective risks faced by this key part of the Italian financial system.

32. The authorities could consider implementing prudential policies to moderate the sovereign-bank nexus, with an adequate phase-in period to avoid market disruptions. Banks need to hold sovereign debt to support liquidity management and the operation of payment and settlement systems. However, as shown by the stress tests results, the large sovereign debt holdings of Italian banks make them vulnerable to a sovereign shock and could exacerbate the feedback effect to the real economy. Against this backdrop, the authorities should implement prudential policies that encourage banks to diversify their sovereign holdings and build capital buffers that incorporate the risk posed by their holdings of sovereign debt. These policies can take several, non-mutually exclusive approaches, such as a carefully calibrated SyRB that considers the concentration of the exposures or Pillar II supervisory measures. A SyRB has the benefit of being potentially more countercyclical than risk weights on exposures, and more transparent than Pillar 2 measures. The establishment of positive risk weights for banks' sovereign exposures and capital surcharges reflecting the concentration of these exposures could be another option but would require an agreement within the EU. The authorities should also closely monitor non-banks' exposures to the sovereign and explore options for non-banks, particularly the insurance sector, if concentration of exposures grow further. If implemented, policies should be gradually phased-in to minimize potential disruptions to financial markets.

33. The BdI should evaluate the adequacy of current O-SII buffers and consider the case for raising them with an adequate phase-in period. Both fully-loaded and transitional buffers of Italian O-SIIs are at the lower end of their European peers. The authorities should review the adequacy of these buffers, and if the conclusion of this review indicates the need for an increase of current levels, consider raising them with an adequate phase-in period that allows for their organic accumulation through internal resources and avoids procyclicality.

O-SII Scores and Combined Capital Buffers
(basis points, percentage)



B. Banking Regulation and Supervision

34. The overall banking and legal regulatory framework has been significantly enhanced. As part of the transposition of the CRD IV in the national legal framework, the banking law (TUB) has enhanced BdI regulatory powers, particularly in sanctioning supervised entities, removing banks' board and senior management members, and increasing pecuniary sanctions. These powers enable the BdI to better address weaknesses and problems in the banking system.

35. Nevertheless, further improvements should be made to upgrade the powers of the BdI in some areas. The banking law gives the Ministry of Economy and Finance (MEF) the power to put banks under compulsory administrative liquidation and to set a decree on the fit and proper requirements of banks' shareholders, board members and management. Given the prudential nature of these topics, it is advised that they be under the purview of the BdI.

36. The BdI has a risk-based proportional approach to the supervision of LSIs. SIs are supervised by the ECB. The risk assessment framework applied by the BdI for LSIs is compliant with the EBA guidelines on SREP and already broadly aligned with the SSM SREP approach. Therefore, the completion of the transition into the application of the SSM LSI SREP methodology should be smooth. In addition, the BdI has a structured process for planning supervisory activities and determining priorities that are focused on the main weaknesses in the LSI sector. The offsite assessment of LSIs is based on a thorough set of prudential reports and indicators that consider the banks' main risk areas. In addition, onsite reviews thoroughly assess banks' policies and risks and are well coordinated with the findings of the offsite process.

37. Some supervisory processes, particularly in onsite inspections, can be usefully enhanced. The BdI should streamline its inspection processes to ensure more timely communication of supervisory findings and remedial actions. In addition, a review of supervisory processes across BdI's branches should be made to increase the harmonization of supervisory processes, building on the recent reform of supervision at the branch level. The BdI should also consider doing more periodic deep dives and targeted and thematic inspections to review key common weaknesses in banks, particularly in banks' governance and business models. In addition, the BdI should continue to enhance its interaction with banks' external auditors and its cooperation with CONSOB to discuss bank-specific operational issues and incorporate the takeaways from these activities in its assessment of banks' risk profiles, leveraging on the recent revision of the MoU and the ongoing work on other agreements with CONSOB.

38. More timely escalation of corrective actions for problem LSIs with persistent weaknesses is needed. The enhancements in the BdI's corrective and sanctioning powers have provided a better platform to address weaknesses in the banking sector in a more decisive way. However, in a context of low growth of the Italian economy, several LSIs have weaknesses related to their profitability, governance, and high level of NPLs. In tackling weak banks, efforts by the Italian authorities have focused on finding market solutions and escalation of corrective measures has generally taken time as consideration has been given to systemic implications and contagion risk. Going forward, with the bolstering of the banking system in recent years, consideration should be given to more timely escalation of corrective measures for weak banks to effect improvement (e.g., in capital levels, operational efficiency, governance) or achieve consolidation or orderly winddowns when needed so that weaknesses do not persist or even become exacerbated if not dealt with in a timely manner.

39. The authorities should further expand supervisory activities related to credit risk and problem assets. BdI's supervisory activities have been rightly focused on monitoring banks' credit risk and problem assets and the 2018 BdI's guidelines on NPL management established a more structured process to reduce LSIs' NPL portfolio. In view of the importance of credit risk and still high NPL levels, the authorities are encouraged to enhance supervisory activities, including in the form of targeted reviews and deep dives, and to take adequate corrective measures in case of imprudent credit risk management practices, insufficient provisioning, or undue forbearance practices.

40. While Italian LSIs are subject to the EU-wide capital framework, some improvements to the Pillar 2 requirements (P2R) approach could be adopted. Given that some deviations in the EU capital framework from Basel requirements could be very relevant for Italian LSIs, the BdI should regularly monitor the effect of these deviations on LSIs' capital ratios and positions. The BdI supervisors have a

detailed process for reviewing banks' internal capital adequacy assessment process and comparing them with their own supervisory tools and proxies to determine P2R. Given the extensive use of supervisory judgment and proxies, the choice of the proper add-on should be subject to additional criteria and ex-ante checks to ensure better consistency and horizontal benchmarking in applying P2R across LSIs.

41. The BdI has enhanced its requirements and regulations for related party transactions but the overall prudential limit for related party lending should be further tightened. The new regulation establishes extensive definitions for banks' related parties and requires banks to establish internal procedures to oversee related party transactions and ensure that they are free from conflict of interest. The regulation sets individual limits on lending to related parties and their respective connected persons. In addition to these limits, the BdI is advised to set an aggregate limit on all related party lending that is as strict as the large exposure limit established by the Basel Committee standards.

42. The BdI should also enhance its regulations and practices in other risk areas. The regulations on operational risk management should be improved and the BdI resources and activities on IT and cyber risk should be increased. Given that many of the LSIs outsource their IT systems and services to few firms, it would be useful if the BdI performs inspections over these firms to confirm they are subject to minimum IT security requirements, in line with the recently adopted inspection plans. The BdI has enhanced its regulations and supervisory practices on AML/CFT, but further efforts are needed to ensure a better risk-based allocation of its supervisory resources and to incorporate AML/CFT findings in banks' risk assessment.

C. NPL Resolution

43. Intensive supervisory oversight in recent years has led to banks developing meaningful NPL management plans that include NPL reduction targets. The significant changes in the regulatory and supervisory landscape has led to intense focus on banks' NPL management and reduction plans. Bank supervisors set up dedicated task forces to review and challenge the banks' strategies for credibility and ambition as well as intensifying reporting for NPL portfolios and monitoring of banks' progress against targets. However, plans to reduce NPL ratios vary across banks, with the more profitable and better capitalized ones planning more aggressive reductions. Supervisors should continue with robust challenge of banks' strategies and the ambition of their NPL reduction targets.

44. Banks' plans to reduce NPLs are heavily reliant on disposals and write-offs. On aggregate, banks' projected volumes of NPL cures and internal workouts is almost matched by the new inflow of NPLs. This is reflective of the long delays with insolvency and enforcement procedures and of banks' internal capacity constraints. It means that banks expect to reduce NPL levels mainly through sales and write-offs. Banks' NPL disposal targets have been achieved or exceeded to date and disposals currently planned appear achievable in the current liquid market environment.

45. Some complex features of the legacy NPL portfolio merits further supervisory investigation. Over 40 percent of banks' current NPL gross stock is categorized as 'unlikely to pay' (UTP), reflecting banks' continuing efforts to rehabilitate a large volume of distressed enterprises. Successful rehabilitation is challenging due to multi-creditor issues and can involve a mix of financial and operational restructuring, a change of business model and supply of fresh credit. Considering the

complex nature of these assets, bank supervisors are recommended to conduct targeted diagnostics using a representative sample of enterprises to ensure unviable firms are not being granted unsustainable forbearance. Given that assessing firm's viability involves industry and sector-specific expertise together with detailed data, it is recommended that banking supervisors consider partnering with one or more specialist firms for a one-off, limited-term project aimed at identifying existing balance sheet vulnerabilities and building the methodological approach for future on-site challenge. Furthermore, eventual findings of the SSM's asset quality review of the two new banking groups (formed by cooperative banks) should inform the supervision of the rest of the LSIs, particularly regarding the classification and provisioning of NPLs.

46. Measures aimed at recognizing losses on deeply delinquent loans using a calendar-based approach are welcome. The ECB and EU initiatives to introduce calendar-based provisioning will ensure banks are incentivized to quickly restructure cases that can realistically be rehabilitated and recognize the costs associated with the recovery process for those borrowers that cannot. Calendar provisions will also help incentivize banks that have so far been slow in reducing their NPLs to do so more quickly. The BdI should consider extending the SSM's approach that sets expectations for the gradual path to full provisioning on existing NPL stocks to LSIs with high NPLs.

47. The BdI should consider more prescriptive guidance to LSIs on NPL management. The NPL guidance issued to LSIs in 2018 sets out expectations that banks should adopt formal policies for asset classification, forbearance, and valuation of assets. The guidance could usefully include additional elements such as practical examples of when forbearance is appropriate; expectations on forbearance decisions and controls when applying multiple forbearance measures; application of time constraints on any forbearance granted; examples of when loans should be valued using a going versus gone-concern valuation approach and constraints on the collateral valuation methodology. In this regard, elements of the recently-issued EBA guidelines on the management of nonperforming and forborne exposures could be used as a starting point.

Legal Aspects of NPL Resolution

48. The slow speed of judicial processes significantly contributes to the low recovery rates on NPLs and has a direct impact on the pricing of the NPL loans portfolios. The average time for the judicial enforcement of secured claims is 5 years while insolvency takes around 7 years. There is a high heterogeneity in the duration of processes from court to court. The long delays are due to lengthy in-court processes which are often due to the courts' lack of resources and accumulated case backlogs.

49. While recent reforms to the enforcement and insolvency framework have been positive, further efforts are needed. The 2019 insolvency law will require significant implementation efforts, including strengthening of the regulation of the insolvency administrators. Additional fine-tuning of the early warning mechanism and improving the efficiency of liquidation processes are important. Further considerations are warranted regarding the consolidation of the current framework of creditor priorities and the reform of special regime for large enterprises. Legislative changes to provide greater legal certainty and flexibility for the out-of-court foreclosure mechanism are also warranted.

50. Significant changes are necessary in the institutional framework. Enhancing the effectiveness of the judicial system would significantly benefit asset recovery in debt enforcement and insolvency cases. Improvements are necessary at the structural level of the Italian justice system in combination with further enhancements of internal court administration. Judicial reform should focus on ensuring adequate resources and expertise across the court system. The specialization of judges in commercial and insolvency matters should be strengthened. The competence of the enterprise courts could be expanded to include most of the commercial and insolvency cases.

D. Bank Governance

51. The authorities have recently passed a series of significant reforms to enhance banks' governance, but critical actions and effective implementation are still needed. The move to reduce the foundations' role in the banking sector,[11] the reform of the popolari banks, and the consolidation of most mutual banks into mutual banking groups represent strong measures to address some longstanding governance weaknesses in the sector. The reform of popolari banks has been implemented for eight out of the ten banks affected, and the reform of the banking cooperatives put into effect in early 2019. Going forward, it is key to complete these reforms and ensure successful outcomes, including reducing operating and funding costs and enhancing governance. Most immediately, the Ministry of Economy and Finance should quickly issue the draft decree on the fitness and propriety of banks' corporate officers and revise the decree on the suitability of major shareholders. As outlined earlier, more targeted and thematic supervisory activities should be performed on bank governance and further actions should be explored with regards to the smaller popolari banks. These actions could range from adopting a similar approach to the legal reforms enacted for the large popolari banks to the creation of some joint arrangements in the form of IPS or groups, coupled with stronger supervisory measures for popolari banks with persistent and structural weaknesses.

E. Insurance Regulation and Supervision

52. The framework for insurance supervision has been strengthened with the implementation of Solvency II. IVASS has fully incorporated Solvency II requirements into laws and regulations. The new framework has addressed most of the regulatory weaknesses identified in the 2013 FSAP and has improved corporate governance and risk management by bringing more transparent group structure, higher quality in governance, greater awareness of risk management processes, and more responsible investment strategy. The risk-based capital framework also incentivized life insurers to move away from guaranteed rates of return and towards capital-light products like unit-linked products.

53. There remains a need to address the independence and resource adequacy of IVASS. The staff strength of IVASS is capped by legislation. It is timely for IVASS to review and justify its staffing

[11] In April 2015 the Association of Banking Foundations and Savings Banks committed to diversify their portfolio and improve their asset management strategy. In particular, the protocol signed with the MEF requires that foundations should reduce their assets in direct or indirect exposure to a single person or entity to 33 percent of their assets by 2020.

requirements and amend the legislation if necessary. IVASS should also review the powers that currently rest upon the Minister for Economic Development in the areas of: (a) establishing the fit-and-proper assessment criteria; (b) having the power to withdraw licenses directly; and (c) approving winding-up of insurers.

F. Investors Protection in Securities Markets

54. Allegations of mis-selling of subordinated bank bonds in recent episodes of bank resolution has hindered crisis management. Combined with the authorities' hesitation to impose losses on households, these allegations, in practice, have limited the loss-absorbing capacity of subordinated instruments, highlighting the importance of a sound investor protection framework for financial stability.

55. The regulatory response to enhancing investor protection has been strong, particularly through the measures introduced by MiFID II. In response to regulatory action, changes in tax rules, and increased risk aversion among investors, the holdings of subordinated debt instruments have declined significantly in recent years, reducing the scope for allegations of mis-selling. Notwithstanding the substantial progress, considering the consequences of potential mis-selling episodes, supervisors should continue to closely monitor the sales of instruments subject to burden sharing or bail-in to retail investors and proactively assess the adequacy of post-issuance procedures. Investor compensation should be used only in cases where there is clear evidence of mis-selling.

56. Notwithstanding the broad alignment of the Italian regulatory framework with international standards, the supervisory framework can be improved by more frequent on-site inspections. On-site work remains a key tool to identify weaknesses in conduct practices, which cannot be easily detected via reporting. Considering the current low number of on-site inspections, instituting a reasonable supervisory cycle in which all regulated entities should be subjected to an on-site inspection would reinforce the process.

G. Financial Integrity

57. Italy has a well-developed legal and institutional AML/CFT framework, but improvements are still needed. The legal framework has been upgraded notably by the enactment in May 2017 of a legislative decree. Progress have been made with respect to technical compliance with the standard on, *inter alia*, requirements for the application of a risk-based approach and other preventive measures by financial institutions, AML/CFT supervision of financial institutions, and the sanctions regime. In particular, the BdI's AML/CFT supervision is now informed by a risk rating process that covers the inherent ML/TF risk and the mitigating measures.[12] The authorities should continue their efforts to improve the effectiveness of the system, including by continuing to enhance the tools for risk-based AML/CFT supervision, especially on non-banking institutions, ensuring the application of dissuasive and proportionate sanctions on financial institutions as well as individuals in a timely manner, and promoting robust and consistent due diligence on beneficial owners.

[12] See FATF report: http://www.fatf-gafi.org/media/fatf/content/images/Follow-Up-Report-Italy-2019.pdf

CRISIS MANAGEMENT AND SAFETY NETS

58. **Reinforcing the crisis management framework is a priority.** The Italian financial safety net and crisis-management framework has been substantially strengthened since the 2013 FSAP. In line with EU Directives, the authorities have enhanced the early intervention framework, introduced a new resolution regime, and introduced reforms of the two Italian deposit guarantee schemes (DGS). However, further steps are needed to enhance the institutional framework, refine resolution planning for LSIs whose failure could present systemic risks, with greater focus on loss allocation to unsecured and uninsured creditors, and further strengthen the two DGSs. Additionally, in the medium-term, as discussed in the Euro Area FSAP,[13] reforms at the Banking Union level are needed in order to reduce the dichotomy between resolution and liquidation, and between the treatment of large and small banks in resolution, and enable all failing banks to be handled pursuant to a unified regime under the purview of the SRB.

59. **Institutional responsibilities are clearly assigned, but the framework for contingency planning should be further strengthened**. As the banking supervisor and the national resolution authority, the BdI is the central node in the financial safety net, engaging effectively with other agencies, including at the supranational level. However, a formal crisis management committee is needed to periodically review preparedness efforts and coordinate policy responses and communications at times of stress. Limiting the role of the Minister of Economy and Finance in resolution and liquidation to cases that have direct fiscal impact or may have adverse implications for financial stability at large would strengthen operational independence of the BdI (in its capacity of national resolution authority) and enhance alignment with international standards.

60. **Care needs to be taken that reliance on special administration in addressing distressed banks does not delay the initiation of decisive action when needed.** Transposition of the Bank Recovery and Resolution Directive (BRRD) has expanded the BdI's range of early intervention powers, and triggers for their deployment have been aligned with guidelines from the EBA. Special administration has been used on various occasions to rehabilitate distressed banks, help facilitate mergers and acquisitions and effect transfers of assets and liabilities in liquidation. However, diminishing market interest in bank branches may reduce effectiveness of the instrument going forward. Given that the appointment of special administrators can easily generate adverse market responses (as the appointment of an administrator could be perceived as a sign of non-viability), the instrument should only be used in exceptional circumstances and the BdI should stand ready to initiate more decisive actions if rehabilitation prospects remain elusive—thus ensuring that banking sector weaknesses do not linger and costs can be contained.

61. **Ongoing efforts to strengthen operational capacity for bank resolution should continue.** The BdI's Resolution and Crisis Management Unit is well positioned to discharge its mandate as national resolution authority, thanks to a direct reporting line to the Governing Board; a strong contingent of competent staff; adequate budgetary resources; and real-time access to supervisory information. The simultaneous resolution of four small banks in 2015 helped establish operational capacity for planning

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[13] IMF Country Report no. 18/266, https://www.imf.org/en/Publications/CR/Issues/2018/07/19/Euro-Area-Policies-Financial-System-Stability-Assessment-46100.

and executing resolution actions. Informed by these experiences, as well as ongoing efforts at the Euro Area-level, internal policies and manuals should be finalized to ensure that operational aspects of the various resolution tools are adequately documented. Periodic crisis simulations can help test the adequacy of policies and procedures.

62. A key priority is to establish additional loss absorbing capacity, so as to allow losses to be allocated to unsecured and uninsured creditors. Recent episodes of bank resolution and liquidation have avoided the allocation of losses to unsecured and uninsured creditors due to concerns of systemic implications. But while precautionary recapitalizations, liquidity guarantees, liquidation aid, and private sector initiatives have helped alleviate financial stability concerns, they have generated costs for taxpayers and the banking system at large. To enable greater loss allocation in resolution and liquidation, efforts to build up loss absorbing capacity should continue, with consideration being given to LSIs for which a resolution strategy is foreseen in view of the systemic risks that they may present under stressed market conditions. At the same time, the use of public funds should be limited to exceptional events that could undermine system-wide financial stability.

63. While past experiences have confirmed operational readiness for providing emergency liquidity assistance (ELA) on short notice, there is scope to strengthen the framework. The policy framework for ELA has been aligned with practices in the Eurosystem, and places strong emphasis on liquidity monitoring and effective collateral management. However, it is advisable to promote a review of policies and procedures for (re)confirming bank solvency and viability at the time of an ELA request, keeping in mind that the latest supervisory assessments of the bank may no longer be accurate or available information may not fully reflect additional uncertainties that may have arisen since the last assessment. In addition, a review of disclosure practices by the Eurosystem would be beneficial to minimize the risk of premature signaling of ELA operations. The availability of central bank liquidity support during resolution, together with the associated risk mitigants (e.g., government indemnities), also warrants further consideration.[14]

64. Further changes should be made to the two DGSs to enhance effectiveness and increase consistency with international standards. The removal of 'active' bankers from their Boards would help strengthen operational independence, while eventually shifting the DGSs into the public sector would help create conditions for greater alignment with the IADI Core Principles (e.g., exchange of supervisory information, full participation in the framework for contingency planning, public sector backstop, legal protection for staff and management). The introduction of an *ex ante* funding mechanism is welcome but current funding targets—while in line with minimum EU requirements—may not provide sufficient resources for dealing with the potential failure of a large LSI or a series of smaller, simultaneous failures; which in turn underscores the importance of backstop arrangements. Using the DGSs for preventive measures outside of resolution or liquidation proceedings should be avoided as much as possible, given associated moral hazard and inherent risks. While such operations, subject to certain conditions, are

[14] Also see IMF Country Report no. 18/229, https://www.imf.org/en/Publications/CR/Issues/2018/07/19/Euro-Area-Policies-Financial-Sector-Assessment-Program-Technical-Note-Systemic-Liquidity-46103.

compatible with the DGS Directive[15] and have been used repeatedly by the Italian DGS to address weaknesses in smaller banks,[16] cross-country experiences indicate that they are seldom the least costly form of resolution—with business plans from problem banks often being overly optimistic and long-term losses typically exceeding those identified during the initial due diligence phrase. Instead, transfers of deposits and good assets, supported by DGS resources on a 'least cost' basis in lieu of payouts, typically provide a more efficacious (and generally less risky) option for dealing with distressed banks. Pared-back state aid procedures for 'least cost' deposit and asset transfers, when conducted according to fair and open bidding procedures, would facilitate DGS involvement. In view of the above, DGSs' preventive measures should only be used in exceptional cases with strong prospects for successful rehabilitation and long-term viability.

[15] Article 11, para. 3, "Member States may allow a DGS to use the available financial means for alternative measures in order to prevent the failure of a credit institution, provided that the following conditions are met…".

[16] Between 1997 and 2014, the FGD conducted 52 'preventive interventions', while the FITD has conducted five of such interventions (including three in 2019 that are still in train, i.e., Banca del Fucino, Banca Carige and Banca Populare di Bari). Ten banks that benefited from preventive interventions by the FGD received two rounds of support, while nine (including two from the afore-mentioned group of ten) could not be recovered and were eventually placed into liquidation.

Appendix I. Key Figures

Table A1.1. Italy Selected Economic Indicators

(In percent year-on-year or as stated)

	2015	2016	2017	2018	2019	2020	2021
						Projections	
Output							
Real GDP Growth	0.8	1.3	1.7	0.8	0.2	0.4	0.7
Potential Output Growth	0.1	0.3	0.4	0.3	0.3	0.4	0.4
Output Gap	-3.4	-2.5	-1.2	-0.7	-0.8	-0.8	-0.5
Employment							
Unemployment	11.9	11.7	11.3	10.6	10.0	10.1	10.0
Prices							
CPI Inflation (end)	0.1	-0.1	1.3	1.2	0.6	0.9	1.1
General Government Finances (percent of GDP)							
Revenue	47.8	46.6	46.2	46.2	46.6	46.6	46.5
Expenditure	50.3	49.0	48.7	48.4	48.7	49.0	48.8
Fiscal Balance	-2.6	-2.4	-2.4	-2.2	-2.1	-2.4	-2.3
Public Debt	135.3	134.8	134.1	134.8	135.7	136.1	135.7
Money and Credit							
Credit to the Private Sector (percent of GDP)	24.9	24.1	22.8				
Household Debt (percent of GDP)	56.1	55.5	54.0				
Household Saving Ratio	11.2	12.1	11.8	12.6	12.9	12.8	12.8
Non-financial Sector Debt (percent of GDP)	270.6	264.9	259.8				
Balance of Payments (percent of GDP)							
Current Account (percent of GDP in USD)	1.4	2.6	2.7	2.6	2.9	3.0	2.9
Gross Official Reserves (percent of GDP)	7.3	7.6	7.3	7.6			
Gross External Debt (percent of GDP in USD)	125.5	122.9	122.1	120.9	121.8	120.8	120.3
Exchange Rate							
Real Effective Exchange Rate Index (avg of period)	95.0	95.4	95.5	97.9			
Memorandum Items							
Nominal GDP (billions of Euros)	1655.4	1695.6	1736.6	1765.4	1779.0	1805.7	1837.3
Average Exchange Rate (per US dollar)	0.9	0.9	0.9	0.8	0.9	0.9	0.9
House Price Index	100.0	100.3	99.2				
Population (millions)	60.8	60.7	60.6	60.5	60.7	60.7	60.7

Source: Haver, IMF FSI database, WEO database, and IMF staff estimates.

Table A1.2. Italy: Financial Soundness Indicators for the Banking Sector

	2012	2013	2014	2015	2016	2017	2018	2019Q2
Capital adequacy								
Regulatory Capital to Risk-Weighted Assets	13.4	13.7	14.3	14.8	13.8	16.7	16.1	16.5
Regulatory Tier 1 Capital to Risk-Weighted Assets	10.5	10.6	11.9	12.3	11.3	14.3	13.8	14.4
Asset quality								
Non-performing Loans Net of Provisions to Capital	79.7	89.9	93.4	89.0	85.2	58.0	40.1	37.3
Non-performing Loans to Total Gross Loans	13.7	16.5	18.0	18.1	17.1	14.4	8.4	8.1
Sectoral Composition of Loans								
Sectoral Distribution of Total Loans: Residents	75.5	75.7	75.3	74.3	76.9	75.5	75.5	74.6
Sectoral Distribution of Total Loans: Deposit-takers	2.6	2.7	2.5	2.5	2.3	2.5	2.9	2.3
Sectoral Distribution of Total Loans: Central bank	1.1	0.8	0.6	0.8	2.8	4.3	3.6	3.9
Sectoral Distribution of Total Loans: Other financial corporations	6.0	6.1	6.6	7.4	7.7	7.6	8.1	7.7
Sectoral Distribution of Total Loans: General government	2.6	2.5	2.4	2.0	1.9	1.5	1.5	1.4
Sectoral Distribution of Total Loans: Nonfinancial corporations	37.2	36.8	36.8	35.4	34.6	32.3	31.3	30.7
Sectoral Distribution of Total Loans: Other domestic sectors	25.9	26.9	26.5	26.2	27.6	27.3	28.0	28.5
Sectoral Distribution of Total Loans: Nonresidents	24.5	24.3	24.7	25.7	23.1	24.5	24.5	25.4
Profitability								
Return on Assets (ROA)	-0.1	-0.8	-0.2	0.3	-0.5	0.6	0.5	0.3
Return on Equity (ROE)	-0.9	-11.5	-2.8	3.4	-7.7	7.5	6.1	3.9
Interest Margin to Gross Income	53.8	49.1	50.4	47.7	48.4	48.2	49.6	49.5
Non-interest Expenses to Gross Income	62.6	59.1	63.5	64.2	73.9	69.3	65.7	66.2
Liquidity								
Liquidity Assets to Total Assets	14.6	16.6		16.6	16.0	17.3	16.1	15.7
Liquidity Assets to Short-term Liabilities	89.7	105.5		93.1	84.4	83.9	76.1	77.1
Exchange Rate Exposure								
Foreign-Currency-Denominated Liabilities to Total Liabilities			7.1	7.9	7.9	7.3	7.5	7.3
Other								
Large Exposures to Capital			210.3	205.6	249.6	211.9	225.0	

Source: IMF FSI database

Appendix II. Risk Assessment Matrix

Table A2.1. Italy: Risk Assessment Matrix

Risk	Overall Level of Concern	
	Relative Likelihood	**Expected Impact if Materialized**
Sharp rise in risk premia that exposes financial vulnerabilities. An abrupt reassessment of market fundamentals triggers widespread risk-off events that expose financial vulnerabilities that have been building in a period of low interest rates and search for yield. Risk assets prices fall sharply, leading to significant losses in major financial institutions. Higher risk premia generate debt service and refinancing difficulties; stress on leveraged firms, households and vulnerable sovereigns; and capital outflows.	Medium	**High** • Tighter financial conditions, higher debt service and financial risks. • Weakening of bank balance sheets and solvency positions. • Potential loss of market confidence, concerns over fiscal sustainability. • Recovery cannot be supported by financial sector.
Weak domestic demand due to low productivity and a failure to fully address crisis legacies and undertake structural reforms.	High	**High** • Slower output growth, slow-down in potential output. • Lower growth weakening public debt sustainability • Weaker investment and persistent long-term employment further damaging private balance sheets, leading to further formation of NPLs.
Weaker-than-expected global growth. Idiosyncratic factors in the U.S. (low), Europe (high), China (high), and other large emerging markets feed off each other to result in a synchronized and prolonged growth slowdown.	Low/High	
Rising protectionism and retreat from multilateralism. In the near term, escalating and unpredictable protectionist actions and an inoperative WTO dispute resolution framework imperil the global trade system. In the medium term, geopolitical competition, protracted tensions, and frying consensus about the benefits of globalization leads to further fragmentation, with adverse effects on investment, productivity and growth.	High	
An increase in Italy-specific risk premia and a widening of spreads relative to other Euro-area sovereigns, due to continued political uncertainty harming confidence and reducing investor appetite.	Medium	**High** • Higher borrowing costs for the government, with little support from the ECB as the rest of the Euro Area emerges from the crisis. • Large losses on bank balance sheets due to their sovereign exposures, leading to deleveraging and exacerbating the downturn. • Higher borrowing costs for the private sector, as banks shift higher costs to customers.

Table A2.1. Italy: Risk Assessment Matrix (concluded)

Risk	Overall Level of Concern	
	Relative Likelihood	Expected Impact if Materialized
Coronavirus outbreak causes widespread and prolonged disruptions to economic activity and global spillovers through tourism, supply chains, containment costs and confidence effects on financial markets.	Medium	High • Weaker sentiment triggering volatility in financial markets. • Risks for investment, productivity, and long-term growth.

Appendix III. Stress Tests Scenario and Matrix

Table A3.1. Italy: Adverse Scenario Calibration

Italy: FSAP ST Adverse Scenario
Deviation from the baseline (in percentage points; unless specified otherwise)

	Adverse Scenario		
	2019	2020	2021
Real GDP	-3.4	-6.9	-7.2
Policy interest rates	0.1	0.1	0.0
Short-term money market rate	0.8	1.1	0.9
Spread of short-term money market rate	0.7	1.0	0.9
Long-term government bond yield	1.3	1.8	1.5
Real effective exchange rate appreciation (-)/depreciation (+)	8.0	12.7	12.3
Nominal exchange rate appreciation (-)/depreciation (+)	7.7	11.5	10.4
Inflation rate (CPI)	-0.3	-1.2	-0.9
Unemployment rate	1.1	3.4	4.5
Memo:			
Baseline Real GDP growth (in percent)	0.0	0.9	0.7
(Adverse) Real GDP growth (in percent)	-3.4	-2.7	0.3
Cumulative real GDP growth (from 2018)	-3.4	-6.0	-5.7
Severity: deviation of growth from baseline in multiples of standard deviation of historical growth volatility	**1.8**	**2.1**	**1.6**

Table A3.2. Italy: Adverse and Baseline Scenario Calibration

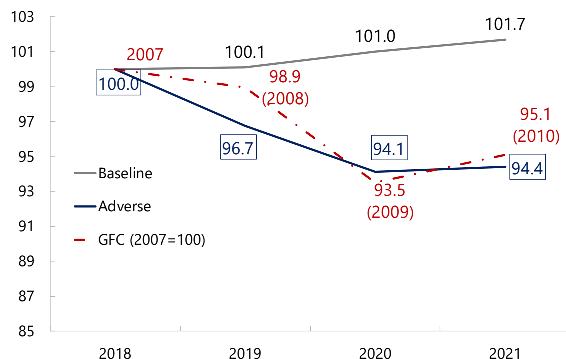
Italy: FSAP ST Baseline and Adverse Scenarios
(in percent; unless specified otherwise)

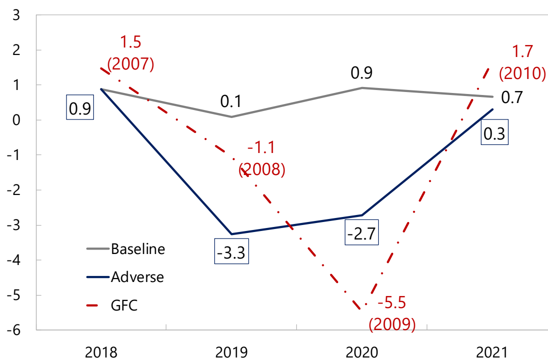
	Baseline			Adverse		
	2019	2020	2021	2019	2020	2021
Real GDP Growth	0.0	0.9	0.7	-3.4	-2.7	0.3
Policy interest rate	0.0	0.2	0.3	0.1	0.3	0.3
Short-term money market spread	0.0	0.0	0.0	0.8	1.1	0.9
Long-term government bond yield	3.5	3.8	4.0	4.8	5.5	5.5
Nominal exchange rate app(-)/dep(+)	0.0	0.0	0.0	7.7	5	0.4
Inflation rate (CPI)	0.8	1.4	1.6	0.5	0.2	0.7
Unemployment rate	10.8	10.6	10.4	11.9	14.0	14.9

Figure A3.1. Italy: Adverse and Baseline Scenario

The overall loss of output is similar to what was experienced during the GFC…

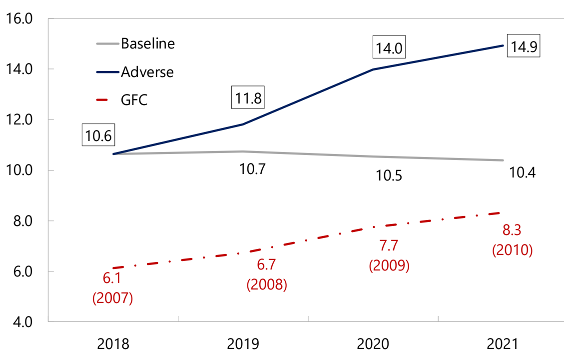
…however, the adverse scenario is less V-shaped.

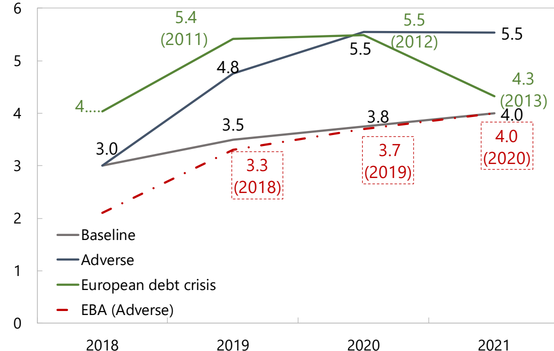




Unemployment starting point higher than prior to the GFC

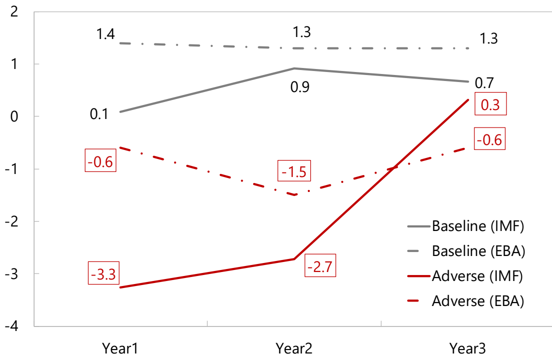
Increase in LT bond yields partly due to the baseline.

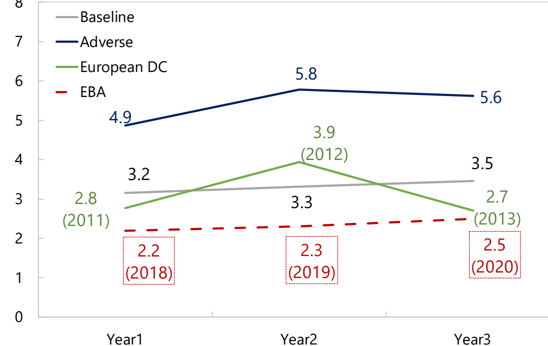




IMF adverse scenario more U-shaped than EBA.

The adverse scenario includes a sharp increase in bond spreads relative to bunds.

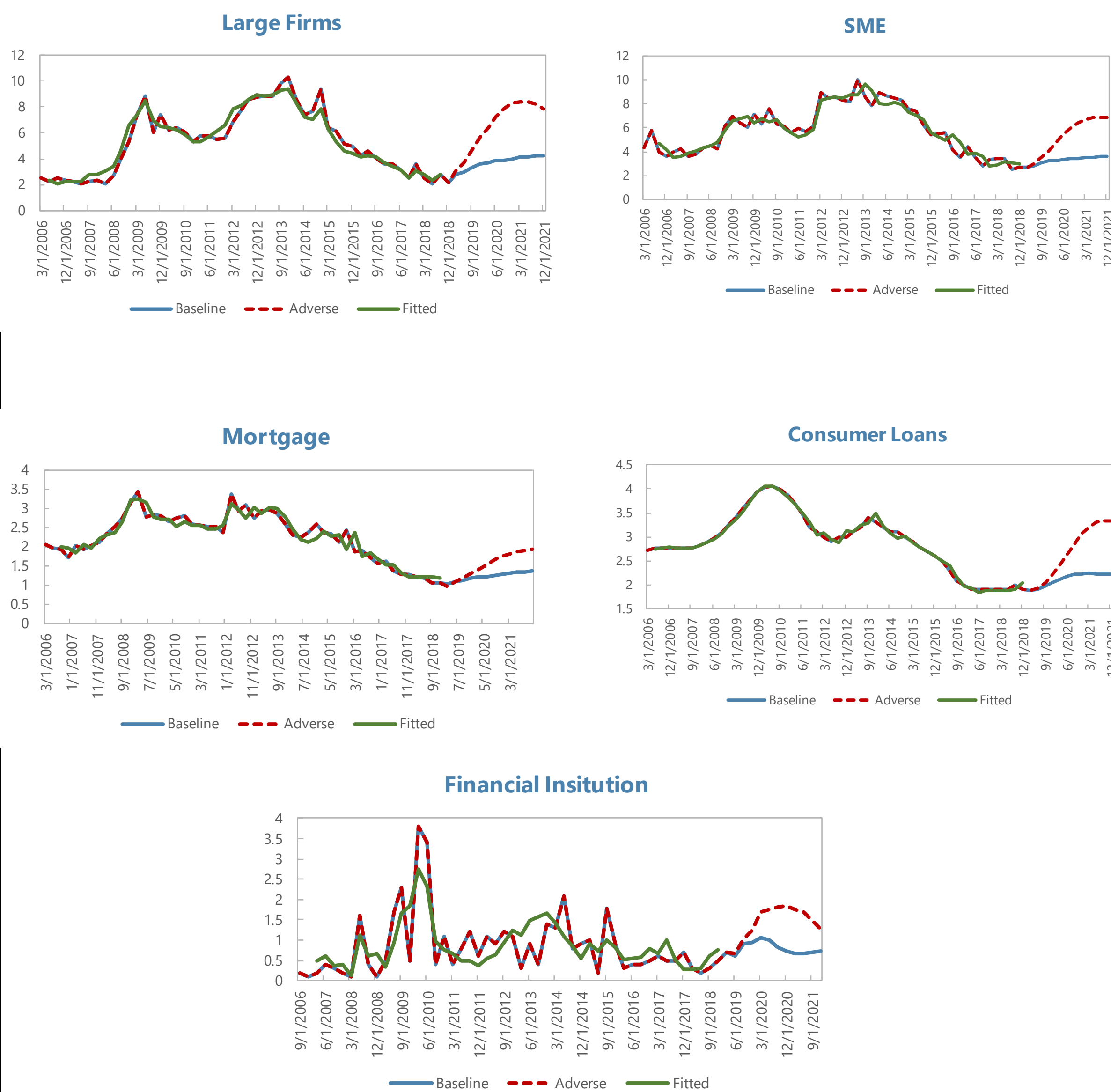




Source: IMF staff calculations.
Note: The EBA stress test scenario covers the period 2017–2020.

Figure A3.2. Italy: Projected Default Rates

Default rates rise as growth slows down and unemployment and interest rates increase.



Sources: Banca d'Italia; and IMF staff calculations.

Table A3.3. Italy: Stress Testing Matrix (STeM) (continued)		
Banking sector: Solvency Stress Test		
Domain	Assumption	
1. Institutional Perimeter	Exercise	• Top-Down by FSAP team.
	Institutions included	• Nine SIs in the sample and select LSIs (62 institutions). The latter are only subject to sensitivity analysis.
	Market share	• Total coverage is around 78 percent, with 69 percent for SIs and 9 percent for LSIs.
	Data and baseline date	• Latest data: December 2018 for SIs and June 2018 for LSIs. • Supervisory data: balance sheet information, COREP and FINREP, Short Term Exercise (STE), Expected Default Frequency sourced from Moody's Analytics and large exposure (LE) templates provided by the authorities. Also provided was further supervisory information, among others, non-performing loans by portfolio, PDs by portfolio (excluding consumer loans) from credit register, PDs for consumer loans from CRIF (an Italian private company specializes in provision, management and operation of credit bureau) and details of funding and lending rate by type of asset and funding portfolios. The data also includes transparency templates for banks in the 2018 EBA stress test sample and the equivalent data for banks not in the EBA sample but which underwent a similar stress test by ECB. • Market and publicly-available data. • Scope of consolidation: banking activities of the consolidated banking group for banks having their headquarters in Italy. • Coverage of sovereign and non-sovereign securities exposures: fair value accounts (FVTPL and FVTOCI) and valued respectively at amortized cost (AC).
2. Channels of Risk Propagation	Methodology	• FSAP team satellite models and methodologies. • Balance-sheet regulatory approach. • Baseline and adverse scenario use fully load IFRS 9 capital ratios, i.e., the capital ratios used for the stress tests reflect banks capital ratios as if transitional arrangement for IFRS 9 had not been applied. • Market risk is treated as an add-on component, with a separate calibration. The market risk stress scenario has an impact on both capital resources (either via profit and loss or via Other Comprehensive Income (OCI)) and capital

Table A3.3. Italy: Stress Testing Matrix (STeM) (continued)		
		requirements (RWA). The impact on capital resources comprise of positions in the trading book as well as other fair valued items in the banking book. The impact on RWA for market risk evolve with balance sheet assumptions. • The losses for securities portfolios are based on duration approach. For equities and associated hedges, we utilize the floor as set by the EBA methodology: ΔEq=1.5*(-0.20%(〖Eq〗^Long+〖Eq〗^Short)) • For the IRB portfolios, provisions are calculated for all major asset classes. These include mortgage, financial institution, corporate large firms, corporate SMEs, and consumer loans. Expected losses are equal to the product of projected point-in-time PDs and LGDs, and projected exposure at defaults. Point-in-time PDs are projected using regression models with macro variables as independent variables. The PDs used for provisioning (impairment charges) are PiT whereas PDs used to project RWAs are TTC. The credit risk for standardized exposures is estimated by projecting new flows of NPL using PD projection. The PiT LGD is based on historical recovery rates of NPLs, both from internal workout and disposal. The provisioning rates for standardized exposures are also calculated based on the LGD estimation from this analysis. The same PiT LGD is used for baseline and adverse scenario, which represented a conservative assumption during the baseline. • For credit risk associated with fixed-income instruments, we differentiate between amortized cost (AC) and fair value holdings. The credit risk associated with fair value holdings are embedded in the market risk methodology: The change in a security's price (and the resulting capital impact) reflects changes due to risk-free rate movement or changes in credit risk premia. For AC securities, provision is calculated for any increase in credit risk associated with a security.
	Stress test horizon	• 2018Q4–2021Q4 (3 years)
3. Tail Shocks	Scenario	• A baseline scenario based on the April 2019 WEO macroeconomic projections;

Table A3.3. Italy: Stress Testing Matrix (STeM) (continued)		
		• An adverse scenario that captures the key risks in the RAM. This scenario is designed using staff's Global Macrofinancial Model (GFM) and feature the risks discussed in the text.
	Sensitivity analysis	• Single-factor sensitivity tests further assess the resilience of the banking sector to shocks. These include concentrations risk for SIs, where the banks' top 3 to 5 exposures are assumed to fail, and three factors shocks for LSIs: interest rate risks (IRRBB), a decrease in the prices of sovereign bonds, as well as credit losses associated with asset quality deterioration. • Sensitivity analysis on the increase in the RWA of SME loans (SIs only).
4. Risks and Buffers	Risk covered	• Risks covered include credit, market (equity, exchange rate and interest rate risks), sovereign (repricing and spread risks) and funding risks, and interest rate risk on the banking book. • Concentration risks by sensitivity analysis.
	Behavioral Adjustment	• For the growth of the banks' balance sheet over the stress-test horizon, a quasi-static approach is used. Asset allocation and the composition of funding remain the same, whereas the balance sheet, which is based on total assets amount net of provision, grew in line with the nominal GDP path specified in the stress test scenario. However, to prevent the banks from deleveraging, the rate of change of balance sheets was set at a floor of zero percent. This constraint is binding in the adverse scenario. • In projecting RWAs, standardized and IRB portfolios were differentiated. For the standardized portfolios, RWAs changed due to the balance sheet growth, new provisions for credit losses, exchange rate movements, and the conversion of a portion of off-balance sheet items (undisbursed credit lines and guarantees) to on-balance sheet items. For the IRB portfolios, the projected through-the-cycle-PDs for each asset class/industry was used to calculate new average risk weights. • Interest income from non-performing loan is not accrued. • We assume that banks do not issue new shares or make repurchases during the stress test horizon. Dividends are assumed to be paid out at 30 percent of current period net income after taxes (i.e., only if net income is positive) by banks that were in compliance with supervisory capital requirements.

Table A3.3. Italy: Stress Testing Matrix (STeM) (continued)		
5. Regulatory and Market-Based Standards and Parameters	Calibration of risk parameters	• Based on credit models estimated by IMF staff. • The stress test made use of satellite models to project credit risk by portfolio for exposures in Italy. PiT PDs of each assets classes are projected using the PDs series from credit register at system wide level (except PD for consumer loans which is sourced from CRIF, a private company specializes in provision, management and operation of credit bureau). The PDs are the flow of new nonperforming loan from outstanding performing loan in the previous position. Therefore, they do not consider the flow of loans from stage 1 to stage 2 of the IFRS 9 standard. The projected PDs are attached to each bank using the last point PDs as starting point. TTC PDs was estimated using the average PDs over 8 quarters. For standardized banks, the projected PDs are used to estimate the projected NPLs of each bank. • For exposure outside Italy, the stress test made use of satellite models to project credit risk for corporate (including SME and specialized lending), mortgage, and consumer loans portfolios for certain countries where Italian banks have significant exposures. The Moody's EDF data was used to project the PDs.
	Regulatory/ Accounting and Market-Based Standards	• National regulatory framework. • Basel III regulatory minima on CET1 (4.5 percent) and include any requirements due to systemic buffers for three other systemically important institution (O-SII). • In addition to the CET1, we evaluated the banks' total capital adequacy ratio against the 8 percent level, their Tier 1 capital ratio against the 6 percent benchmark and the leverage ratio during the stress test horizon against the 3 percent Basel III minimum requirement. • The same hurdle rate was used for baseline and adverse scenario. The hurdle rate for CET1, T1 and total capital adequacy do not include capital conservation and capital countercyclical buffers as well as pillar 2 requirement. • For sensitivity test of LSIs, the established hurdle rate is 7 percent CET1 ratio. • Banks that end the stress test horizon with a capital level or a leverage ratio below the relevant hurdle rates, are considered to have failed the test.

Table A3.3. Italy: Stress Testing Matrix (STeM) (continued)		
6. Reporting Form for Results	Output presentation	• The results of the stress tests are reported using a variety of charts and tables. These potentially include: Evolution of capital ratios for the system as a whole. • For LSIs, the results are reported based on regional groups. • Outputs also include information on impact of different result drivers, including profit components, losses due to realization of different risk factors; capital shortfall as sum of individual shortfalls; in euros and in percent of nominal annual GDP; number of banks and corresponding percentage of assets below the regulatory minimum (or below the minimum leverage ratio).
Banking sector: Liquidity Stress Test		
1. Institutional Perimeter	Exercise	• Top-Down by FSAP team.
	Institutions included	• All SIs (11) and select LSIs (62 institutions). The latter are only subject to sensitivity analysis.
	Market share	• Total coverage is around 82 percent, with 74.1 percent for SIs and 8 percent for LSIs.
	Data and baseline date	• Latest data: October 2018 for SIs and end-June 2018 for LSIs • Source: supervisory data (LCR, NSFR and ALMM Maturity Ladder template) • Scope of consolidation: banking activities of the consolidated banking group for banks having their headquarters in Italy.
2. Channels of Risk Propagation	Methodology	• Basel III LCR and NSFR, cash-flow based liquidity stress test using maturity buckets by banks, incorporating both contractual and behavioral (where available) with assumption about combined interaction of funding and market liquidity and difference level of the central bank support. • Liquidity test in total currency. • Liquidity test for large depositors' withdrawals.
3. Risks and Buffers	Risks	• Funding liquidity. • Market liquidity. • Counterparty/depositor concentration risk, i.e., withdrawal of top 1, 3 and 5 depositors.
	Buffers	• The counterbalancing capacity, including liquidity obtained from markets and/or the central bank's facilities. • Expected cash inflows are also included in the cash-flow based and LCR-based analysis.
4. Tail shocks	Size of the shock	• The run-off rates are calibrated to reflect scenarios of system-wide deposit runs and dry-up unsecured wholesale

Table A3.3. Italy: Stress Testing Matrix (STeM) (continued)		
		and retail funding, with additional run-off for non-resident deposits on top of the retail and wholesale run-off, which is calibrated following historical events, recent international experience in liquidity crisis and IMF expert judgment. • Retail scenario key assumptions are: (i) 10 percent run-off rates for stable retail deposits and 15–20 percent for less stable retail; (ii) 75 percent (40 percent) run-off rates for non-operational (operational) deposits not covered by Deposit Guarantee Scheme; and (iii) 10 percent haircut on government securities for the calculation of high-quality liquid assets (HQLA). • Wholesale scenario key assumptions are: (i) 100 percent run-off rates for wholesale funding from other financial institutions; (ii) 50 percent run-off rates for operational deposits not covered by Deposit Guarantee Scheme; and (iii) 50 percent run-off by non-operational deposits not covered by Deposit Guarantee Scheme; (iv) 10 percent haircut on government securities for the calculation of HQLA • The liquidity shocks will be simulated for 1–month for both LCR and cash-flow based approaches, and 5–day and 3–months for cash-flow based approach. • The haircut of high-quality liquid assets (HQLA) are calibrated consistent with market shock for investment securities and money market instruments in solvency stress test.
5. Regulatory and Market-Based Standards and Parameters	Regulatory standards	• Consistent with Basel III regulatory framework (LCR and NSFR). • Liquidity shortfall by bank.
6. Reporting Format for Results	Output presentation	• Liquidity ratio or shortfall by groups of banks and aggregated (system wide). • Number of banks that still can meet or fail their obligations.
Bank and non-bank sector: Contagion Analysis		
1. Institutional Perimeter	Institutions included	• All SIs (11) and select LSIs (62 institutions)
	Market share	• Total coverage is around 82 percent, with 74.1 percent for SIs and 8 percent for LSIs.
	Data and baseline date	• Supervisory as of end-June 2018; and market data • BIS consolidated banking statistics • Flow-of-funds quarterly data (2008Q1–2018Q1), for analysis of cross-sectoral linkages.

Table A3.3. Italy: Stress Testing Matrix (STeM) (concluded)		
2. Channels of Risk Propagation	Methodology	• Balance-sheet model: Interbank and cross-border network model by Espinosa-Vega and Solé (2010). • Market-based model: Diebold-Yilmaz (2014) generalized forecast variance decomposition approach.
3. Tail shocks	Size of the shock	• Pure contagion: hypothetical default of institutions. • Default threshold: banks would default if their CET1 capital ratios fall below 4.5 percent (regulatory minimum)
4. Reporting Format for Results	Output presentation	• Number of undercapitalized institutions in distress; • Capital shortfall systemwide, by bank and by group: contagion and vulnerability scores; • Amplification and cascade effects, direction and size of spillovers within the network. • Net spillovers due to interconnectivity (market-based). • Market-based analysis: Varian Decomposition (spillover contribution to equity prices).

Appendix IV. Status of Key Recommendations of the 2013 FSAP

Recommendation	Implementation status	Comment
Banking		
Issue prudential guidance to ensure a minimum level of harmonization in loan loss provisions and write-off practices [*BI*]	Partially Implemented	As part of the European Council's package of proposals on NPLs put forward in March 2018, the EC has proposed a Regulation amending the CRR, introducing common minimum coverage levels for newly originated loans that become non-performing. If a bank does not meet the applicable minimum level, deductions from its own funds would apply. The proposal is currently under discussion in the Council and the European Parliament.
Amend law to ensure effective oversight of banking foundations by the MEF, require the largest foundations to publish audited financial statements, have an asset allocation policy aimed at diversification, and impose leverage limits [*MEF/Parliament*]	Partially Implemented	In April 2015, the MEF, ACRI and Foundations, signed a MOU forbidding foundations from investing more than 33 percent of their equity in any single asset class. Since then, foundations reduced their stakes in Italian banks substantially, mostly to due to capital dilution, resulting in most foundations now being minority shareholders.
Amend regulation to require that related-party transactions do not carry more favorable terms relative to those with unrelated parties, and that board members with conflicts of interest are excluded from the decision [*BI/MEF*]	Implemented	Article 53 of the consolidated law on banking (TUB) now provides that bank shareholders and board members must abstain from decisions in which they have a conflicting interest. In addition, the BdI regulation provides for rules and principles aimed at ensuring that related party transactions occur at fair terms and do not affect the company interests.

Recommendation	Implementation status	Comment
Gradually increase the tax deductibility of bank provisions in the same tax year [*MEF/Parliament*]	Implemented	The tax deductibility of loan losses has gone from 18 years before 2013 to 5 years since 2013 to 1 year since 2015, in order to allow for the complete write-off of current stock of deferred tax assets (DTAs) However, the impact of this measure has mostly been superseded by the switch to IFRS9, which has resulted in substantial increases in banks' provisioning coverage ratios—from 50 percent in Dec 2017 to 55 percent in Jun 2018, compared to 48 percent for SSM banks on average.
Monitor closely the implementation of the restructuring plan for *Monte dei Paschi di Siena* and prepare contingency measures if plan targets are not reached [*MEF/BI*]	Partial Implementation	The Bank is a significant institution directly supervised by the SSM. After a series of events, the bank requested, at the end of 2016, a precautionary recapitalization by the Italian Government to bail out the bank by excising Article 32(4) of EU Bank Recovery and Resolution Directive. In July 2017, the Ministry of Economy and Finance became MPS's majority shareholder. At the same time, the bank began a restructuring process to transform its activities and performance.
Financial Sector Oversight		
Expand the definition of fit and proper for bank and investment service providers (ISP) directors so that adverse regulatory judgments can be taken into consideration [MEF/Parliament]	Not Implemented	Some features of the fit and proper criteria for bank directors have been relatively strengthened in the TUB. However, these criteria are still based on an old MEF decree that is currently being revised.
Clarify in supervisory guidance for licensing that the assessment of financial suitability of major shareholders should include the capacity to provide additional capital [*BI*]	Implemented	Based on the SSM framework regulation, the ECB is now the competent authority for licensing of credit institutions. The BdI Circular No. 285 provides that the ECB and the

Recommendation	Implementation status	Comment
		BdI, with the aim of protecting the bank sound and prudent management, also assess the quality and financial soundness of significant shareholders. In this context, the ECB and the BdI assess the capacity of significant shareholders to provide additional capital resources in the first years of operation or in stressful situations.
Adopt a dedicated group supervisory approach for the nationally significant insurers [*IVASS*]	Implemented	In its role as the group supervisor, IVASS coordinates the activities of the supervisory colleges. In consultation with the other supervisors involved, IVASS establishes a coordination arrangement on the organization of the work and procedures on cooperation and exchange of information during ongoing supervision and during crises.
Increase use of onsite inspections of ISPs, including assets managers [*CONSOB, BI*]	Not Implemented	Frequency of inspections continue low. Instituting a supervisory cycle of between 2–3 years, in which all regulated entities should be subjected to an on-site inspection would reinforce the process. Additional resources dedicated to supervision are necessary.
Amend law to empower BdI and CONSOB to impose fines not only on individuals but also on financial sector entities and raise the ceiling for sanctions [*MEF*]	Implemented	Legislative Decree No. 72 of 2015, transposing the CRD IV, revised the overall sanctioning framework to grant the supervisor a wide set of sanctioning powers as well as to increase the amounts of pecuniary sanctions. The TUB (namely Article 144) now provides that pecuniary administrative sanctions can be applied also to banks, as corporate entities.

Recommendation	Implementation status	Comment
Amend law to enable supervisors to remove individual board members, officers, and auditors of financial institutions [*MEF/Parliament*]	Partially Implemented	The Legislative Decree No. 72 of 2015, transposing the CRD IV, amended the TUB that now provides that the supervisor has the power to remove board members and officers of credit institutions. BdI has no powers vis-vis banks' external auditors who are subject to the oversight of CONSOB.
Introduce risk sensitivity in the current solvency framework for insurers in anticipation of the EU implementation of Solvency II [*IVASS*]	Implemented	With the EU-wide implementation of Solvency II, the solvency framework for Italian insurance sector has been improved to introduce elements of risk sensitivity.
Financial Safety Nets		
Provide a statutory basis and detailed guidelines for RRPs to be prepared by all systemically important banks [*MEF, BI*]	Implemented	Recovery and resolution planning requirements have been introduced via the adoption of the two regulatory decrees (Legislative Decrees 180 and 181) that transposed the EU Bank Recovery and Resolution Directive into Italian legislation (effective as of November 16 2015, with the exception of the bail-in tool, which was implemented as of January 1, 2016).
Adopt depositor preference, expand the resolution tools to include bail-in, bridge bank powers and to recapitalize and transfer ownership, selectively transfer assets and liabilities, and be able to trigger these at an early juncture when the firm is no longer viable [*MEF, BI*]	Implemented	Addressed via the transposition of the EU Bank Recovery and Resolution Directive (as per Legislative Decrees 180 and 181). Note that as of January 1, 2019, all deposits (including those not covered by depositor preference in the BRRD) rank senior to other unsecured debt.
Amend the deposit guarantee framework to provide for ex ante funding, with a back-up credit line from the MEF, and remove active bankers from the board and executive committees of deposit guarantee schemes [*MEF, BI*]	Partially Implemented	Ex ante funding requirements were introduced in 2016 via the transposition of the EU DGS Directive (through Legislative Decree 30). The two schemes (continue to) operate as private sector consortia with boards that are comprised of senior executives of the affiliated banks.

Appendix V. Main Measures to Strengthen the Banking System

- **Initiatives to strengthen governance, facilitate capitalization and NPL disposals and create the conditions for increasing the efficiency of the sector, including:**
  - The *popolari banks reform*, converted eight of the ten largest cooperative banks into joint stock companies, improving corporate governance and facilitating banking capitalization.
  - The *BCC banks reform* merged the majority of the 280 small cooperatives into two new banking groups, while some remaining cooperatives are in the process to form one institutional protection scheme.
  - The foundations' role in banks whereby the MEF signed in 2015 an MoU with the association of banking foundations and Savings banks setting concentration limits on foundations' investments in single entities in addition to some governance aspects. As a result, the foundations' role in banks was significantly reduced; and
  - The introduction of Garanzia Cartolarizzazione Sofferenze (GACS), a state guarantee of the senior tranches of banks' securitization operations to facilitate the removal of NPLs from banks' balance sheets. This time-bound scheme has been extended multiple times since its introduction in early 2016.

- **Regulatory and supervisory initiatives to raise prudential standards and improve asset quality, including:**
  - The 2014 EBA definition of Non-performing Exposures and forbearance (NPEs) and the 2018 EBA guidelines on disclosure of non-performing and forborne exposures;
  - The 2014 ECB *Comprehensive Assessment*, a combination of asset quality review and solvency stress test applied to the largest Italian banks that became under direct supervision by the then newly established SSM;
  - The adoption of EU 2016/867, the AnaCredit Regulation on the collection of granular credit and credit risk data and the related amending decision on the organization of preparatory measures for the collection of granular credit data by the European System of Central Banks;
  - The SSM guidance to banks on the management of non-performing exposures provides qualitative guidance and specifies supervisory expectations for the provisioning of NPLs (2017/2018);
  - The EU Council's 2017 *Action Plan* includes several new measures including a prudential backstop to ensure minimum levels of loan loss provisioning; EBA guidance (2018) on NPL management; enhanced disclosure requirements on asset quality and non-performing loans; guidelines for banks on loan tapes monitoring; standardized data for NPLs and NPL transaction platforms; and an approach to foster the development of secondary markets for NPLs.
  - The *Guidance on the management of non-performing exposures for Italy's LSI* published by BdI explains supervisory expectations for the management of NPLs by LSIs (2018).

- The *Guidance on nonperforming and forborne exposures* published by the European Banking Authority (EBA) requires institutions with a gross NPL ratio above 5 percent to establish NPL reduction strategies and governance and operational requirements to support them (2018).

- **Actions to address weak banks, including:**
  - In November 2015, four small banks[1] were simultaneously resolved by transferring their "healthy parts" to bridge banks and moving troubled assets to a bad bank.
  - In June 2017, two SI[2] were liquidated according to Italian procedures (compulsory administrative liquidation). Liquidation aid provided by the Italian government was approved by the European Commission.
  - In July 2017, the European Commission approved the precautionary recapitalization of Monti dei Paschi di Siena following negative results under the adverse scenario of the stress test. As part of its restructuring plan, the bank disposed its NPL portfolio via a securitization transaction involving the Atlante II fund in July 2018.
  - In April 2018, the Italian government notified a scheme for the liquidation of small banks (assets below EUR 3 billion) to the European Commission. The scheme provides for the transfer of (part of) failing banks' assets and liabilities to an assuming bank under national insolvency proceedings, with financial support on a least cost basis (as needed) from the responsible deposit protection scheme. Banca di Sviluppo Economico (Banca Base) was subsequently liquidated under the provisions of the scheme.
  - In January 2019, the ECB put Banca Carige under special administration after the majority of Board members resigned. A decree law was issued to provide a state guarantee for future bond issuances and capital raising efforts are in train.

- **Enhancements to the legal framework for distressed corporate debt recovery:**
  - Reforms to the judicial foreclosure process (2015–2016) aiming at reduction of foreclosure time and improvement of auction processes and introduction of the out-of-court mechanism of enforcement on real estate collateral (i.e., "patto Marciano" 2016).
  - New Insolvency Law adopted in January 2018 harmonized the insolvency framework and provided additional incentives to early restructuring.

[1]Banca delle Marche, Banca Populare dell'Etruria e del Lazio, Cassa de Risparmio di Ferrara and Cassa di Risparmio della Provincia di Chieti.

[2]Veneto Banca and Banca Populare di Vincenza.