



FRANCE

FINANCIAL SYSTEM STABILITY ASSESSMENT

July 2019

This Financial System Stability Assessment paper on France 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 July 9, 2019.

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International Monetary Fund
Washington, D.C.



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KEY ISSUES

Context: Dominated by internationally active financial conglomerates, the French financial system has made important progress since the last FSAP. It is prudentially in a stronger position. At the same time, the system confronts several downside risks, including relatively high and rising private nonfinancial and public sector debt, and an uncertain earnings outlook for the banking business. The reliance on wholesale funding is better managed but remains sizable. To address a buildup of systemic risks, the authorities have proactively used macroprudential measures and public communication. The government is pursuing a strategy to prepare Paris as a key financial hub, including by promoting crypto-assets, fintech, green finance, and market entry.

Findings: Banks have adequate capital and liquidity buffers to withstand a sizable shock, though any rise in cross-border liquidity fragmentation and wholesale funding costs would pose risks to profitability and solvency. The insurance business is broadly resilient against market shocks, but some vulnerabilities stem from concentrated exposures, mostly to their parent banks. While risks from corporate and household exposures appear manageable, some banks' exposures to large indebted corporates and less creditworthy household borrowers may increase notably under stress. Given the systemic interconnections, a rise in systemic risk cannot be ruled out if several of the above vulnerabilities were to materialize at the same time.

Policies: The FSAP thus has recommended augmenting policy tools to contain vulnerabilities and continue to act pre-emptively if systemic risks intensify. To mitigate intensification of corporate—and potentially household—vulnerabilities, the FSAP proposed: (i) active engagement with the ECB on the possible use of bank-specific (Pillar II) measures; (ii) considering fiscal measures to incentivize corporates to finance through equity rather than debt; and (iii) a sectoral systemic risk buffer. Additional liquidity buffers in all major currencies including in U.S. dollars, and intensified monitoring of insurers' exposures to parent banks, are desirable. A high priority should be placed on enhancing oversight of financial conglomerates, including through augmented conglomerate-level reporting and stress testing, and improving the resolution framework for insurers by including the bail-in tool. Stronger and formal coordination between the French Prudential Supervision and Resolution Authority (ACPR), French Financial Markets Authority (AMF), and the European Central Bank (ECB), alongside adequate skilled supervisory resources are also essential.

- The team was led by Udaibir Das (Mission Chief) and Naomi Griffin (Deputy Chief), and included Vassili Bazinas, Yingyuan Chen, Mindaugas Leika, Fabian Lipinski, Mario Mansilla, Umang Rawat, Katharine Seal, Richard Stobo, Thierry Tressel, Peter Windsor, Ke Chen, Kathleen Kao, and Maike B. Luedersen (IMF Staff); and Timo Broszeit, John Laker, Alfonso Ventoso, and Spyridon Zarkos (experts). The team was supported from IMF headquarters by Shiyuan Chen and Anna Konopatskaya.
- The mission met with Governor François Villeroy de Galhau of the Banque de France (BdF), Chief of Staff Emmanuel Moulin and Deputy Chief of Staff Thomas Revial of the Ministry for the Economy and Finance (MoF), President Robert Ophèle of the AMF, Charles-Henri Weymuller, Economic Advisor, Presidency of the Republic, and other senior officials of these agencies, as well as the ACPR, industry associations, academics, and select representatives of the private sector. The mission interacted closely with the ECB on banking supervision and bank stress testing, and with the European Systemic Risk Board (ESRB) on emerging macroprudential issues.
- FSAPs assess the stability of the financial system and not that of individual institutions. They are intended to help countries identify key potential 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.
- France is deemed by the IMF 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 IMF’s Articles of Agreement.
- This report was prepared by Udaibir Das and Naomi Griffin with Thierry Tressel, Umang Rawat, and Yingyuan Chen, and contributions from the FSAP team.

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This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited Paris and Frankfurt in June and December 2018 and March-April 2019. The key FSAP findings were discussed with the authorities during the Article IV consultation mission in May-June 2019.

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Glossary

ACPR	French Prudential Supervision and Resolution Authority
AMF	French Financial Markets Authority
AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
AMLD	Anti-Money Laundering Directive
BdF	Banque de France
BIS	Bank for International Settlements
BRRD	Bank Recovery and Resolution Directive
BU	Banking Union
CAR	Capital Adequacy Ratio
CBC	Counterbalancing capacity
CCP	Central Counter Party
CCyB	Counter-Cyclical Capital Buffer
CDC	Caisse des Dépôts et Consignations
CET1	Common Equity Tier 1
CIT	Corporate Income Tax
CMU	Capital Markets Union
CRE	Commercial Real Estate
CRR/CRD	Capital Requirements Regulation/Capital Requirements Directive
DSTI	Debt-Service-to-Income
EA	Euro Area
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority
ELA	Emergency Liquidity Assistance
EP	European Parliament
ESA	European Supervisory Authority
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FC	Financial Conglomerate
FGAO	Fonds de Garantie des Assurances Obligatoires de dommages
FGAP	Fonds de Garantie des Assurances de Personnes
FGDR	Fonds de Garantie des Dépôts et de Résolution
FSAP	Financial System Stability Assessment
GaR	Growth-at-Risk
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GFSR	Global Financial Stability Report
GMM	Global Macrofinancial Model
G-SIB	Global Systemically Important Bank

G-SII	Global Systemically Important Insurer
HCSF	High Council for Financial Stability
HQLA	High-quality liquid assets
ICO	Initial Coin Offering
ICR	Interest Coverage Ratio
IMF	International Monetary Fund
LCR	Liquidity Coverage Ratio
LGD	Loss given default
Loi PACTE	Action Plan for Business Growth and Transformation
LSI	Less Significant Institution
LTI	Loan-to-income
LTG	Long-term guarantee
LTV	Loan-to-Value
ML/TF	Money Laundering/Terrorist Financing
MFI	Monetary Financial Institution
MMF	Money Market Fund
MoF	Ministry for the Economy and Finance
NFC	Nonfinancial corporation
NPL	Nonperforming Loan
NSFR	Net Stable Funding Ratio
OECD	Organization for Economic Co-Operation and Development
O-SII	Other Systemically Important Institution
ORSA	Own Risk and Solvency Assessment
PD	Probability of Default
PPS	Policyholder Protection Scheme
QRT	Quantitative Reporting Template
RRP	Recovery and Resolution Planning
RWA	Risk-Weighted Assets
SCR	Solvency Capital Requirement
SFCR	Solvency and Financial Condition Report
SI	Significant Institution
SME	Small and Medium Enterprise
SNCF	French National Railways
SRB	Systemic Risk Buffer
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
WEO	World Economic Outlook
VA	Volatility Adjustment

EXECUTIVE SUMMARY

Important institutional and policy changes have taken place since the 2012 FSAP. At the national level, the authorities have strengthened the macroprudential framework by establishing the High Council for Financial Stability (HCSF), enhanced monitoring of financial stability risks, prepared to manage the Brexit fall-out, introduced macroprudential measures, and taken various financial reform measures included in Loi PACTE—Action Plan for Business Growth and Transformation—and initiatives on digital finance, crypto-assets, green finance, and combating cyber risk. At the European level, significant changes include the Banking Union (BU), Capital Requirements Regulation/Capital Requirements Directive (CRR/CRD), Solvency II, and efforts towards a Capital Markets Union (CMU).

The financial system is more resilient than it was in 2012. Capital positions and asset quality have improved. Banking business is better placed to handle cross-border contagion, including from exposures to high-yield EA economies. Insurers' solvency ratios have been stable and have been bolstered by the effective implementation of Solvency II. Household savings and balance sheets are relatively sound and house prices presently appear broadly aligned with fundamentals.

But there are several challenges. Private nonfinancial sector and public debt has continued to rise. Consolidated corporate debt is, on average, not higher than in many peer countries, but there is some concentration of vulnerable corporate debt. Bank credit to nonfinancial firms and households has expanded relatively fast. Profitability is subdued, and margins remain under pressure due to the interest rate environment, lower revenue from market-related business, and stronger market competition. The reliance of banks on wholesale funding is better managed but is still sizable. Nonbanks—insurers and investment funds—are playing a larger role given the growing cross-border and non-EU exposures. Finally, the incomplete BU and the slow progress towards CMU are creating uncertainty and constraining faster shifts in business models.

Banking and insurance business lines, and the corporate sector, carry important financial vulnerabilities that need close attention. Banks have adequate capital and liquidity buffers to withstand a sizable shock, though an increase in wholesale funding costs could pose further risks to profitability and solvency. Similarly, banks could face liquidity challenges from large outflows of wholesale funding, including in U.S. dollars, and from any acceleration of fragmentation of international liquidity. Insurers are broadly resilient against market shocks, but vulnerabilities stem from the concentrated exposures, mostly to their parent banks. Risks from a tail of highly indebted corporates appear manageable, though stress tests show that some banks' large exposures to highly indebted corporates may increase notably under stress.

The French financial conglomerate (FC) and bancassurance models thus far have worked well, and the authorities' view is that they have imparted stability. A hallmark of the financial system, the FCs offer a range of services including banking, insurance, and asset management; the diversity of their revenue streams has helped sustain the FCs. But, by its nature, the model is complex to manage and exposed to contagion and unexpected reputational risks. Banks and insurers hold large common exposures through marketable securities creating susceptibility to similar type of market

shocks. In the context of continued weak profitability of the banking business, insurers and investment funds are beginning to play a larger role in supporting the performance of their groups, including via well-established risk transfer arrangements, and conglomerate-level prudential optimization. Insurers' concentrated exposures to their parent banks also indicate vulnerabilities to unexpected large funding withdrawals affecting all business lines within the FC.

The FSAP identified the following key policy priorities (Table 1):

- **Continue pre-emptive management of systemic risks.** To address a buildup of systemic risk including private nonfinancial sector debt, the authorities have proactively used macroprudential measures. Looking forward, they should evaluate the effectiveness of these measures, intensify monitoring of risks, and stand ready to act if needed. The authorities should engage with the ECB and other EU agencies on the possible use of bank-specific Pillar II measures to address bank-specific residual risks from the concentration of exposures to large indebted corporates; consider the use of a sectoral systemic risk buffer (SRB); expand the macroprudential toolkit for corporates and nonbanks; and further incentivize financing through equity fiscal measures. Some of these actions will require interagency consultations.
- **Ensuring adequate liquidity management and buffers.** While aggregate bank liquidity buffers appear adequate, the supervisory authorities are encouraged to consider imposing additional liquidity buffers in all major currencies to minimize risks related to potential disruptions in wholesale funding in case of severe shocks.
- **Further integration of conglomerate-level monitoring and oversight.** To allow the FC model to continue to operate on a safe and secure basis, stronger systemic risk monitoring and cross-sectoral oversight practices of liquidity and solvency conditions are crucial. The rising importance of nonbank financial intermediation requires enhanced supervisory coordination to monitor and limit risks from direct and indirect exposures between entities within the FC. Common guidance, reporting, integrated liquidity risk management requirements, and stress testing at the conglomerate level can help ensure that risks are promptly identified and addressed. Several of the gaps are universal in nature and would benefit from a broader international effort.
- **Enhancing governance, financial sector policies, and financial integrity.** In line with international best practices, and critical for achieving their technical mandates in an accountable manner, governance and operational independence reforms are required to ensure that the oversight authorities are properly positioned and resourced to deliver their mandates effectively. The authorities should aggressively pursue the implementation of financial sector reforms as envisaged in Loi PACTE, review the Regulated Savings framework, and enhance financial integrity (AML/CFT framework).
- **Reinforcing crisis management, safety nets, and resolution arrangements.** Continued implementation of crisis management instruments created under the EU Bank Recovery and Resolution Directive is essential. Recovery and resolution planning for nonbanks needs attention.

The insurer resolution framework has been strengthened, though the assessment against the Financial Stability Board's Key Attributes suggests that further enhancements are needed, such as powers to mandate the bail-in of liabilities and privately financed resolution funding.

Table 1. France: 2019 Key FSAP Recommendations		
Recommendation	Agency	Timing*
Preemptive Management of Systemic Vulnerabilities		
Engage with ECB and other EU agencies on use of Pillar II measures to address bank-specific residual risk from concentration of exposures to large indebted corporates. (¶146)	ACPR	I
Develop analytical framework for borrower-based measures for corporates. Consider a sectoral Systemic Risk Buffer (SRB) if risks intensify. (¶146)	HCSF	NT
Evaluate options to further incentivize corporates to finance through equity rather than debt. (¶147)	MoF	NT
Ensuring Adequate Liquidity Management and Buffers		
Develop with the ECB options to manage any disruptions in wholesale funding markets. Consider, as appropriate, liquidity buffers to cover at least 50 percent of wholesale funding outflows over/up to five days horizon for all major currencies. (¶125, 26)	ACPR, ECB	NT
Actively engage with the ESRB and others for a speedy development of liquidity and leverage related tools for insurers and investment funds. (¶148)	BdF, HCSF, ACPR, AMF	NT
Further Integration of Financial Conglomerate Oversight		
Report intragroup exposures and transactions within conglomerates on a flow and stock basis at quarterly or regular frequency. Develop guidance to address direct and indirect, and common exposures of entities in the conglomerate. (¶131, 49)	ACPR, AMF	NT
Develop with the ECB and other EU agencies liquidity risk management requirements and stress testing at the conglomerate level. (¶152)	ACPR, AMF	NT
Strengthen conglomerate oversight and work with the Joint Committee of the ESAs to finalize common reporting templates, and with the ECB on common supervisory guidance for conglomerates. (¶151–54)	ACPR, AMF	NT
Enhancing Governance, Financial Policies and Financial Integrity		
The ACPR and AMF should have autonomy to determine their resource levels based on a forward-looking review of supervisory and monitoring needs (¶141)	ACPR, AMF, MoF	I
To avoid any perception of a potential conflict of interest and facilitate operationally independent functioning, the government should recuse itself from all supervisory decision-making committees at the ACPR and the AMF. (¶142)	MoF	I
Reduce further the spread between market interest rates and the return on regulated savings products. Ensure timely and effective implementation of CDC governance reform under the Loi PACTE and undertake a full review of regulated savings framework at the appropriate time. (¶157)	MoF	NT
Enhance AML/CFT supervision of smaller banks rated as high-risk. (¶167) Explore ways to provide systematic guidance on detection of potential terrorist financing activities (¶168)	ACPR, Tracfin	I
Reinforcing Crisis Management, Safety Nets, Resolution Arrangement		
Work toward an enhanced resolution framework for insurers by including wider powers to restructure liabilities (bail-in), and enhanced safeguards and funding. (¶171)	ACPR	MT
The eligibility of the FGDR's Supervisory Board membership, which is formed by bank executives in activity, should be changed to independent members only. (¶173)	FGDR	MT
Develop modalities for providing ELA in currencies other than euros and establish general rules that may assist banks in identifying assets, which might be proposed as ELA collateral and buttress their operational readiness to pledge them. (¶174)	BdF, ACPR	MT
* I= immediate (within one year), NT= near term (1–3 years), MT= medium term (3–5 years).		

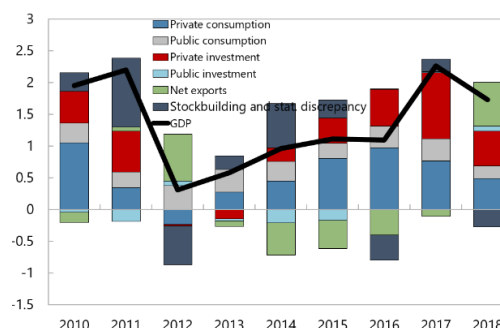
MACROFINANCIAL CONTEXT

A. Macrofinancial Conditions and Trends

1. Growth declined in 2018 but remained relatively resilient (Figure 1 and Table 4). Real GDP growth reached a peak of 2.3 percent in 2017, benefiting from the global environment, while unemployment has started to decline. Since then, real GDP growth has slowed down to 1.7 percent in 2018 and is expected to reach 1.3 percent in 2019, which is still above the EA average. Growth has been primarily supported by private consumption as well as investment.

2. Financial conditions have remained accommodative, and the credit growth is relatively robust (Figures 2 and 12). The credit-to-GDP gap is estimated at 2.7 percent at end-2018 (slightly below the 3.2 percent level in 2017).¹ Supported by accommodative monetary policy, bank credit growth has remained broad and dynamic, at around 5 ½ percent in 2018 and in the first four months of 2019 (Figure 2). Low borrowing costs have supported an acceleration of the financial cycle over the last few years, as evidenced by a pickup in bank credit, leverage, financial asset prices, and real estate. Fierce price competition among banks to maintain domestic market shares has compressed margins, especially on housing loans, while their large cash reserves at the ECB deposit facility have earned negative returns.

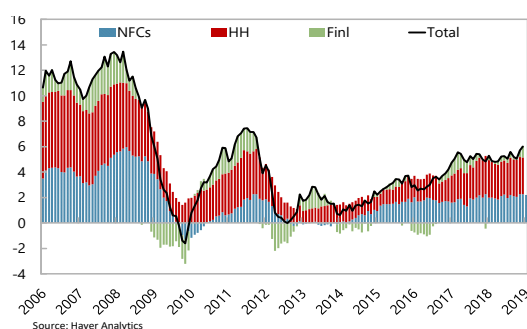
Figure 1. France: Contribution to Annual Real GDP Growth
(Percent; YoY growth)



Source: INSEE (Haver Analytics) and IMF staff calculations.

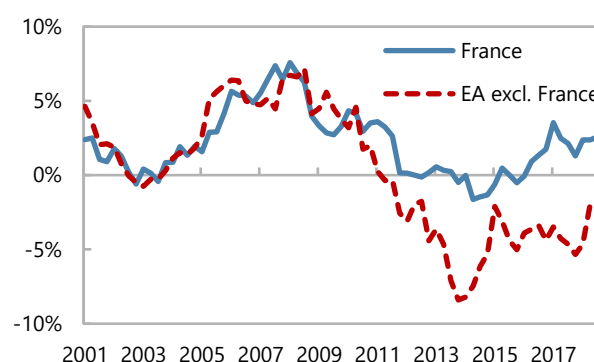
Figure 2. France: Financial Cycle

Credit to the Private Sector (Percent; YoY growth)



Source: Haver Analytics

Credit to GDP Gap (Percentage)



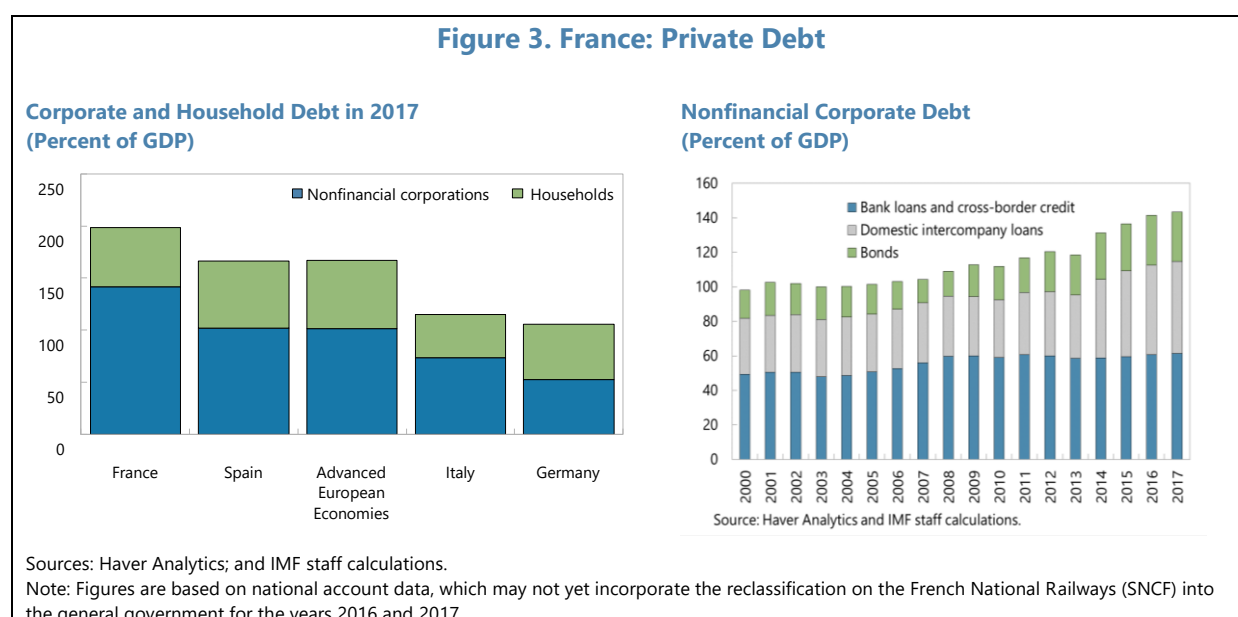
Sources: Haver Analytics; Banque de France (BdF); European Central Bank (ECB); EuroStat; and IMF staff calculations based on the Global Financial Stability Report (GFSR) methodology.

Note: The credit-to-GDP gap is constructed as the deviation from a moving average of the credit-to-GDP ratio over the previous eight quarters.

¹ The credit-to-GDP gap is constructed as the deviation from a moving average of the credit-to-GDP ratio over previous eight quarters. The BIS/ECB credit gaps (based on HP-filtered measures) are estimated at 3.2 and 1.2 percent of GDP in mid-2018, respectively, significantly below their estimated peak of 12 percent at end-2009.

3. Private and public leverage is high compared to the EA, leaving balance sheets with reduced space to accommodate shocks (Figure 3).²

- *Nonfinancial corporate borrowing* has significantly contributed to the rise in private debt. Unconsolidated nonfinancial corporate debt increased from 110 percent of GDP in 2010 to 141 percent of GDP at end-2017, driven mainly by loans among nonfinancial corporates and bond issuances. Netting out loans among nonfinancial corporates, consolidated corporate debt-to-GDP is lower at 89 percent of GDP and is close to the EA average.
- *Household debt* has risen, but from a relatively low base, from 53 percent of GDP in 2010 to 58 percent of GDP in 2017.
- *General government debt* rose to almost 100 percent of GDP in 2018 from 83 percent of GDP in 2009.



B. Structure and Performance

Financial Conglomerate Structure

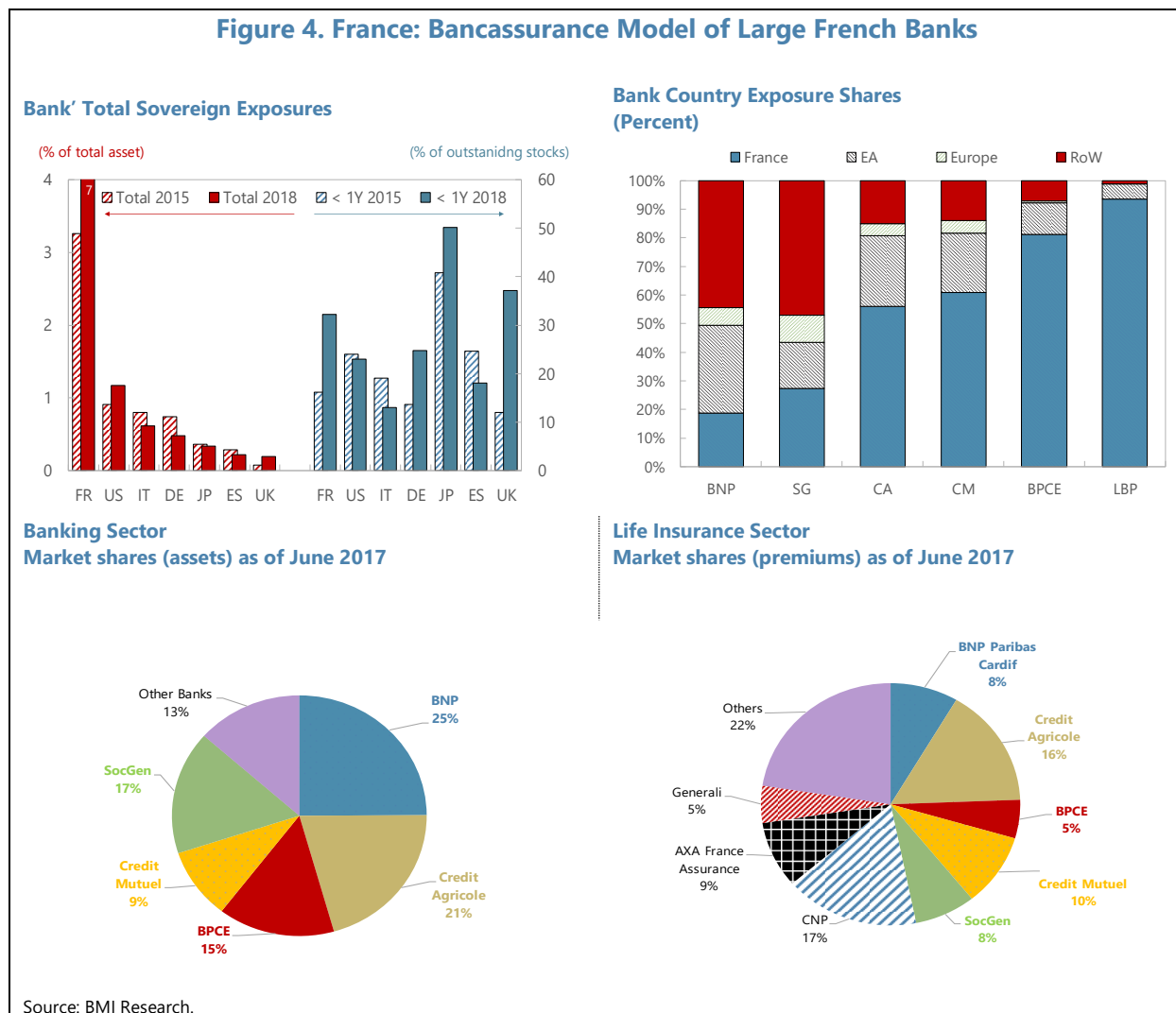
4. Within the FCs, there are four global systemically important banks (G-SIBs) and one large global asset manager. There is also a global systemically important insurer and a large global reinsurer. Total financial system assets are about 600 percent of GDP. Combined assets of the four G-SIBs stood at EUR 6.3 trillion as of end-2017 (about 80 percent of total banking assets), or about 270 percent of France's GDP. The FCs are active in about 80 countries, with important exposures in other EA countries, notably Belgium, Germany, and Italy, as well as in the United States, the United Kingdom, Japan, and several emerging markets (Figure 13). The share of nonbank in total financial

² See also "France: Staff Report for the 2018 Article IV Consultation" and the associated Selected Issues Paper.

assets has risen to 40 percent in 2017 (Figure 14). The insurance sector is one of the largest in the EU with more than 700 firms. Insurers combine life and non-life business, while some groups have significant operations abroad. Investment funds assets reached 60 percent of GDP at end-2018, one of the largest shares among EA countries. The investor base of investment funds is mainly domestic, including insurers (36 percent) and households (18 percent); about half of funds are invested domestically and the rest in the EA, and globally.

5. The FCs combine business lines across banking, insurance, and asset management, including through partnerships and subsidiaries (Figures 4 and 15). Successive phases of bank restructuring and consolidations in past decades have resulted in large and diversified FCs. Two of the FCs have large foreign operations, which account for almost 80 percent of their assets, and important investment banking activities, while the other two are more retail-oriented and domestically focused, with core regional businesses. The business model has allowed conglomerates to integrate and optimize products, client services, liquidity management, and income flows across banking, insurance, and asset management companies.

Figure 4. France: Bancassurance Model of Large French Banks



6. Business models are adapting to changing market conditions and digitalization. As response to market conditions and low earnings, two of the four G-SIBs have either already closed their proprietary trading subsidiary or have announced closing it. Several banks have announced reorganizations of retail networks. Newly minted small fintech businesses and nonbanks are impacting the ways domestic retail financial services are offered, with active participations of financial groups, which are also developing green finance products. Banks and insurers are proactively adopting climate risk management practices.³

7. The state plays a consequential role in the intermediation of savings. The nearly 200-year old “regulated savings,” for instance, used largely to finance social projects, are popular due to favorable tax treatment, government guarantees, and fixed returns. A part of this pool of savings, amounting to some 11 percent of GDP at end-2017, is centralized at and managed by the Caisse des Dépôts et Consignations (CDC). Life insurance products also have a built-in savings component. This particularity of savings accounts and products may impact the funding profile of banks, the prudential treatment of such savings, and profitability.⁴

Performance

8. Despite improving capital and asset quality, profitability remains challenged for French banks (Table 5, Figures 5 and 16). Interest margins have improved since the global financial crisis (GFC) but are still among the lowest in the EA. The lending spreads for the domestic market are especially low, due to low interest rate, fixed rate mortgages, and low margins on corporate lending. In addition, retail funding cost is higher for French banks, likely due to regulated savings scheme and competition from both bank and nonbank institutions. French banks can tap wholesale funding at a relatively low rate due to their strong credit rating, but their high reliance on wholesale funding could leave them vulnerable to changing market conditions, especially for the short-term market. Operational margins are squeezed by the low-cost efficiency. More flexible labor market and further consolidation in the branch networks could reduce the rigidity of the cost structure.

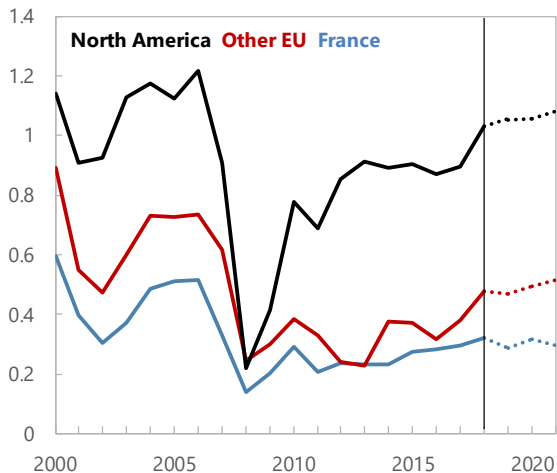
9. The earnings outlook is pointing to a continued weakness in profitability. In response to margin pressures, banks have tried to increase their business volumes and fee generating activities. Some banks have aggressively increased their market shares in mortgage markets and/or increased their revenues by expanding the distribution of insurance and asset management products. However, the impact on profitability from the business transformation is likely to take time to materialize. The need to improve IT infrastructure and competition from fintech and nonbanks are additional factors weighing on earnings outlook. The incomplete BU and the slow progress towards CMU are further constraining opportunities for risk taking and balance sheet growth in the EA.

³ The ACPR has recently issued its second report on climate risk and French financial firms and a survey of how financial digitalization is becoming a part of the marketplace. On climate risks, a progress has been made in terms of governance of climate risks and in terms of transition risk awareness among banks. The twenty most carbon intensive sectors represented 12.2 percent of net bank exposures to credit risk in 2017. Understanding and integrating physical risk has however, been more modest.

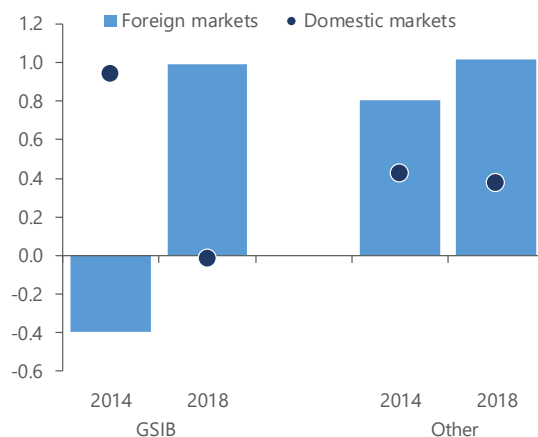
⁴ The Livret A rate is set periodically by the Minister of Finance based on a formula and could act as a reference for some other products, such as the annual return on life insurance.

Figure 5. France: Financial Performance of French Banks

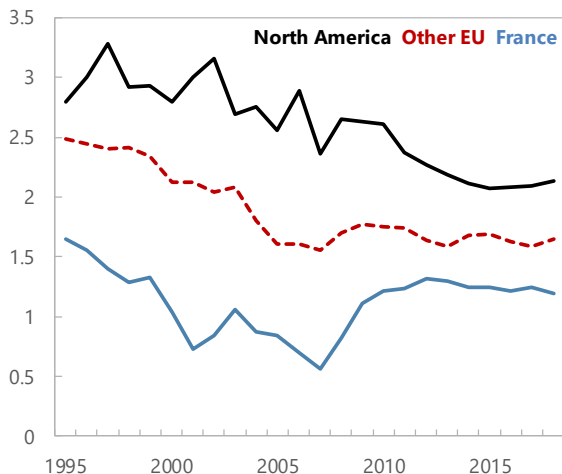
1. Return on Assets (Percent)



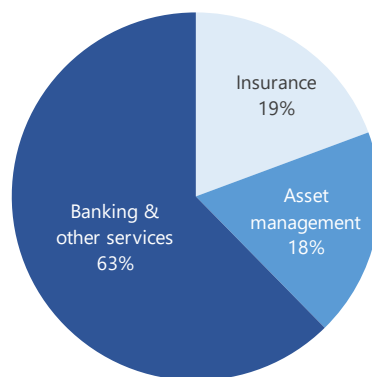
2. Return on Assets by Markets (Percent)



3. Net Interest Margin (Percent)



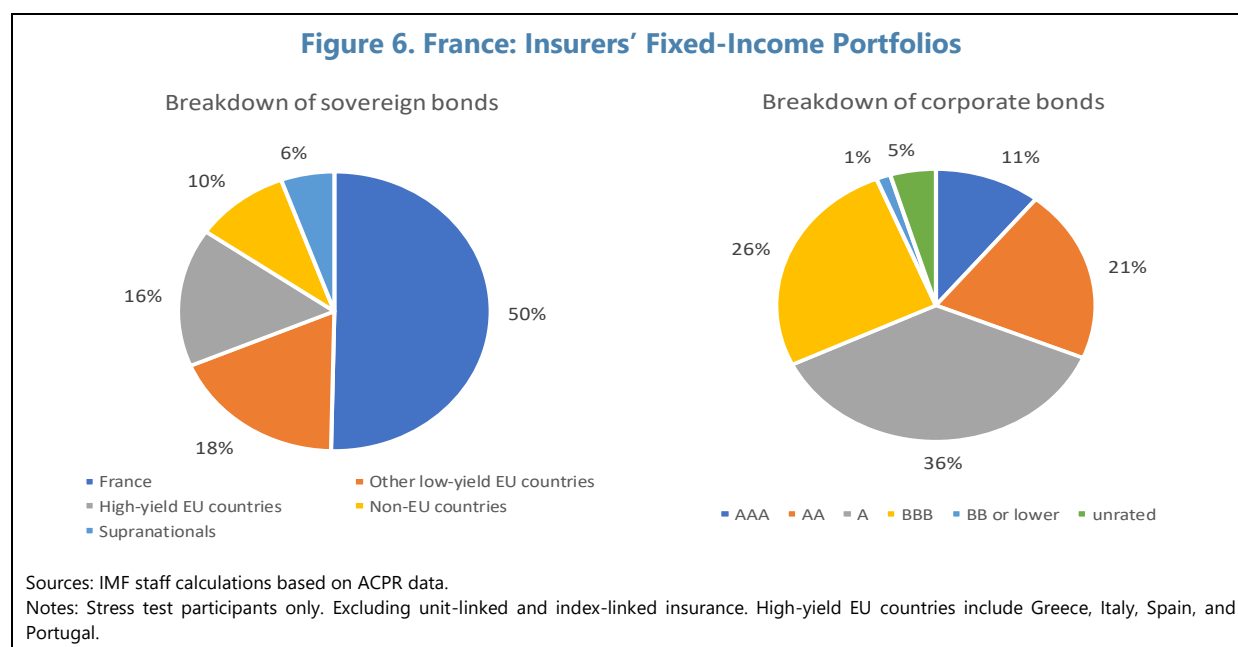
4. Fees and Commissions by Business Lines



Sources: FINREP; SNL financials; and Bloomberg Finance L.P.

Note: In panel 1, the dotted lines are weighted averages of analyst forecasts of RoA for each sample bank.

10. French insurer’s solvency ratios have been stable since the introduction of Solvency II (Figures 17 and 18). In recent years, the insurance sector has recorded an aggregate return on equity between 6 and 8 percent. Most French insurers can comfortably meet the Solvency Capital Requirement (SCR) ratio without recourse to transitional measures. Life insurers have expanded further into unit-linked business to reduce capital requirements. The nonlife insurance lines of business have shown a combined ratio below 100 percent in the last five years, indicating that the industry is consistently making an underwriting profit. Insurers’ investment holdings are characterized by a high share in fixed-income securities. Half of sovereign bond exposures are domestic, and 70 percent of corporate bonds are being rated A or better (Figure 6).



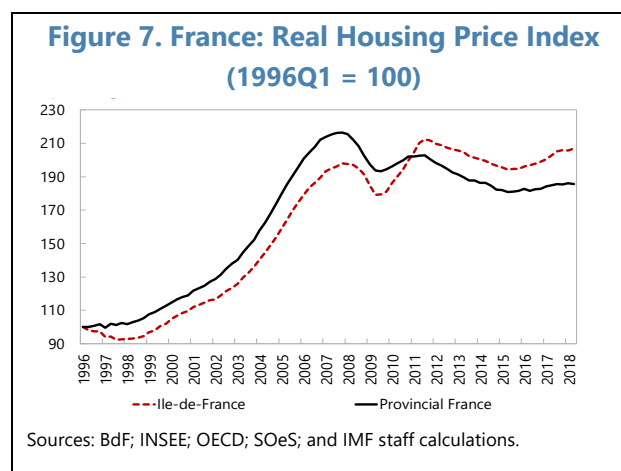
C. Nonfinancial Firms and Households Balance Sheets

11. Nonfinancial corporations' debt has been rising in percent of GDP, unlike some other European countries (Figure 19). Bond issuances supported by the low interest rate environment and loans among the nonfinancial corporates (NFC) account for the bulk of the debt increase in recent years, while bank credit has also grown broadly across various sectors and firm sizes, albeit at a slower pace. The debt increase has been accompanied by an increase in cash holdings at the macro level, while low interest rates helped contain debt service ratios.

12. At the consolidated level, firm-level debt ratios and interest coverage ratios (ICRs) are broadly in line with peer countries, though a tail of weak firms exists. There has been a moderate decline in debt ratios on average, with an uptick for large firms in recent years. The stock in debt and its recent increase are concentrated in several sectors, as in other countries, while cash buffers have not increased commensurately among firms with weak debt-servicing capacity.

13. Household savings and balance sheets remain relatively sound. Households' debt has risen since the GFC but is not high in international comparisons (Figure 20). Aggregate households' balance sheets seem strong as they have accumulated financial assets faster than debt, including through investments in life insurance and saving accounts. However, some households' balance sheets could be turning weak (see the risk analysis section). French households' financial savings rate net of the increase in debt is healthy at about 4.5 percent of disposable income, above that of many peer countries. It is necessary though to monitor it closely, in some segments of the population where vulnerabilities may emerge.

14. House prices presently appear broadly aligned with fundamentals. The recent price inflation seems to largely reflect developments in specific markets, including Paris and a few other cities (Figure 7). The price-to-income ratio of residential real estate has been stable. Furthermore, in recent years, many households have re-negotiated housing loans at low fixed interest rates and are protected from future rises in market interest rates.



D. Interconnectedness

15. Complexities arise from the intertwined and international sub-sectors of the financial system (Table 2). The banking business is global with a third of its claims and liabilities, at around 135 percent of GDP, being cross-border. Insurance liabilities are mostly with households and one-third of their assets are held abroad. Foreign investors hold 50-55 percent of debt securities issued by the sovereign, banks, and NFCs. NFCs have large intra-sectoral linkages and are strongly interconnected with the financial sector and the rest of the world through equity claims, loans, and debt securities. Insurers have the largest exposures to the French government and to domestic NFCs. While banks' holdings of French government bonds dominate, their exposures to nonbanks have been increasing. Higher holdings of NFC marketable securities by insurers and funds account for the bulk of the increase observed in marketable securities of NFCs since 2011 (Figure 8).

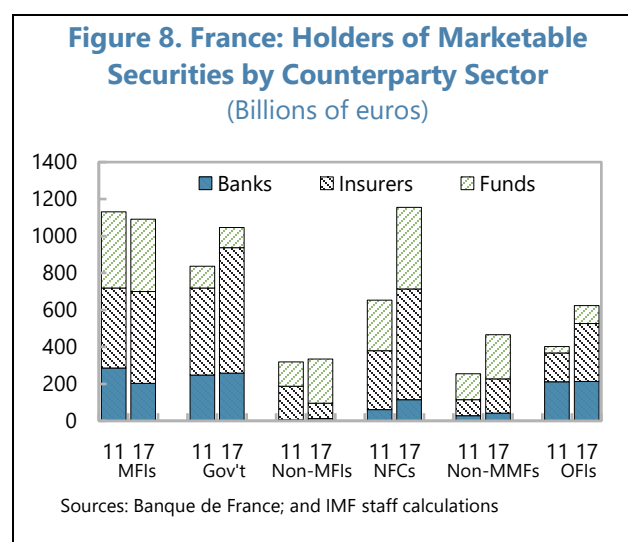


Table 2. France: Interlinkages Among Institutional Sectors in France, 2018: Q2

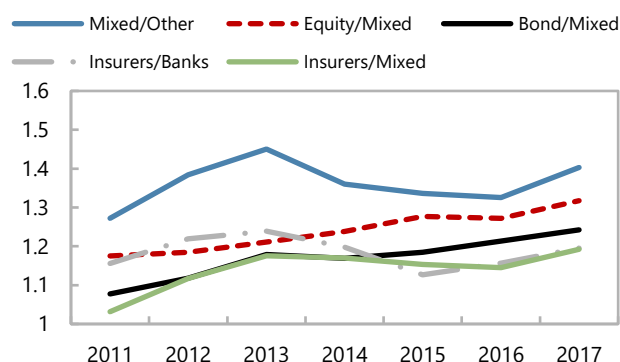
(All instruments, in billions of euros)		Liabilities of:									
		Domestic sectors								Rest of World	Total
		Non-financial corps.	MFIs (excl. MMFs)	MMFs	Non-MMF IFs	OFIs	Insurance & pension funds	General government	Households ^{1/}		
Assets of:	Domestic sectors	5,346	957	51	53	159	77	214	109	2,075	9,041
	Non-financial corporations	1,426	2,693	26	57	411	85	787	1,256	3,175.3	9,917
	MFIs (excl. MMFs)	28	139	33	0	4	-	0	0	152.1	355
	MMFs	241	122	69	174	15	2	35	5	748.1	1,410
	Non-MMF investment funds	271	263	6	8	22	0	1	120	190.9	882
	Other financial institutions	293	226	99	538	31	163	455	1	916.2	2,722
	Insurance and pension funds	344	246	16	101	1	29	356	145	151.3	1,391
	General government	992	1,784	8	228	40	2,140	139	10	165.9	5,506
Households ^{1/}	2,404	3,225	48	311	265	55	1,282	-	-	7,589	
Rest of World	11,344	9,654.9	355.0	1,468.9	948.8	2,550.8	3,269.4	1,646.9	7,574.9	38,814	
Total											

Sources: Sectoral Financial Accounts, Banque de France, and IMF staff.
^{1/} Also includes Non-profit institutions serving households

16. The characteristics of cross-border exposures of marketable securities are evolving, with more activities by insurers and investment funds (Figure 21–23).

Cross-border positions of marketable securities have decreased for banks but gone up for insurers and investment funds. At the same time, common cross-border exposures—which measure the similarity in portfolio compositions—are relatively high (Figure 9). Banks have reduced cross-border positions by 39 percent between 2011 and 2017 and increased domestic holdings. In contrast, insurers and investment funds have increased cross-border exposures by 25 percent and 47 percent, respectively, 2011 to €1.15 trillion and €784 billion between 2011 and 2017.

Figure 9. Significant Trends in Cross-Border Common Exposures (Index)



Sources: Banque de France; and IMF staff calculations.

Note: Common exposure indicates the extent to which portfolios overlap. It is a function of the distance between vectors, which in turn is a non-linear function of correlation; this is used in data analysis to group more similar clusters of data together. High common exposure between two entities means that there is a significant portfolio overlap (significant positive correlation between vectors), indicating that entities are susceptible to similar types of shocks.

SYSTEMIC RISK ANALYSIS

A. Key Vulnerabilities

17. The FSAP risk analysis considered the following vulnerabilities: (i) continued pressures on bank earnings and dependence on wholesale funding in major currencies for some international activities; (ii) high leverage and low debt-servicing capacity among a tail of the nonfinancial corporations despite low interest rates; and (iii) significant exposures to EA countries with high debt levels. It examined the resilience of banks, insurers, and corporates from a systemic risk perspective (Appendix III and IV).

B. Key Risks

18. The key risks considered are (Table 6):

- An abrupt tightening of financial conditions and distress in U.S. dollar funding market arising from shifts in market expectation of tighter U.S. monetary policy;
- A sustained rise in risk premia for banks and sovereigns from a disorderly Brexit and/or from concerns about debt levels in some EA countries; and
- A weaker than expected European economic growth from global protectionism and retreat from multilateralism, adverse market reactions to debt burdens and Brexit, and weakening of reform implementation in France.

C. Bank Solvency

19. The simulated adverse stress scenario combines lower growth and tighter financial conditions while ECB monetary policy remains accommodative and policy rates constant (Figure 24).⁵

Using the *Global Macrofinancial Model (GMM)*, the scenario targets the severity benchmark under the 5 percent probability predicted by the Growth-at-Risk (GaR) model over a three-year horizon. The GDP falls 7.1 percent below baseline by 2021 before gradually rebounding. Inflation and asset prices are expected to undershoot the baseline by 2.3 and 25 percentage points, respectively, and French sovereign risk premia increase by 150 basis points. Corporates and sovereigns in the low- and high-spread EA countries are expected to face higher risk premia of different magnitude, following a decompression of term premia by 120 and 240 basis points, respectively, calibrated on shocks experienced during the GFC and EA crisis. Results are reported for: (i) baseline; (ii) adverse dynamic;⁶ (iii) adverse static; and (iv) adverse static with funding cost loop projections scenarios.

20. Banks have adequate capital buffers, but adverse shocks to wholesale funding costs would deteriorate capital positions.

Capital buffers include those provided through Pillar 2 Requirement (P2R) and Pillar 2 Guidance (P2G) imposed by the Single Supervisory Mechanism (SSM). Banks are primarily exposed to risks related to losses from lending to the corporate sector and a rise in wholesale funding costs associated with higher risk premia. Credit risks stemming from housing loans remain contained given: (i) relatively strong aggregate households' balance sheets; (ii) no evidence of significant misalignment in house prices; (iii) strong social safety nets; (iv) fixed rate housing loans, and (v) interest rate risks on these exposures being hedged. Shocks to wholesale funding costs would have higher impact on banks with higher wholesale dependence and lower earnings.

21. In line with the severity of the shock, capital depletions under adverse scenario are relatively high; however, no bank would face a capital ratio below the minimum 8 percent of Common Equity Tier 1 (CET1) over the five-year horizon (Figure 25).⁷ In the baseline, the system wide CET1 capital adequacy ratio (CAR) would decline very modestly due to deteriorating macro conditions over the three-year horizon, while in the adverse dynamic scenario, total CET1 capital ratio declines by 270 basis points. In the adverse static scenario and adverse static with funding cost

⁵ The seven largest banks (accounting for over 95 percent of total system assets) were stressed against the systemic risks outlined above. Given the high share of international activity, stress tests included exposures to France (domestic), Belgium, Italy, the United Kingdom, and the United States.

⁶ In the adverse dynamic scenario, banks can increase fees and commission income, deleverage portfolios, and write off loans.

⁷ In setting the hurdle rate, the team considered the Pillar 1 requirement (4.5 percent), fully loaded level of CCB applicable in 2019 (2.5 percent), phased-in bank-specific G/D-SIB buffers, and the additional buffer provided through P2R and P2G.

loop tests, CET1 capital ratio would fall by 430 basis points and 540 basis points, respectively.⁸ Shocks to real estate prices, valuation of Level 3 assets, or loss given defaults (LGDs) on mortgage portfolios do not, individually, lead to an additional significant fall in CET1 capital.

22. Going forward, some of the banks would benefit from increasing the share of stable longer-term funding. Reducing reliance on short-term wholesale funding would increase resilience to funding risks in times of stress.⁹ Similarly, banks with a high share of domestic retail loans are more resilient to shocks. Results are broadly in line with the EBA stress tests, except that the dynamic version of the stress test shows lower CET1 capital depletion due to loans transitioning back to performing status and counter-cyclical increase in non-interest income. Going forward, it would be important to test risks stemming from intragroup activities (e.g., insurance, asset management), considering the dynamic income and balance sheet adjustments.

D. Liquidity Stress

23. The ECB's accommodative monetary policy and collateral framework provide banks with abundant liquidity. Liquidity buffers in EUR are high, including central bank, which reserves up to 10 percent of assets. Counterbalancing capacity—the stock of unencumbered assets or other funding sources which are available to cover potential funding gaps—is well diversified under a variety of instruments with strong credit ratings.

24. The overall liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) are adequate for all banks, even though some volatility of the LCR in U.S. dollars has been observed (Figure 26). The structural liquidity ratios—NSFR and LCR—of the banks suggest aggregate liquidity buffers are enough. The LCR is well above 100 percent, although the LCR in U.S. dollars is lower for some banks with volatile flows. Some banks use collateral swaps to improve liquidity positions in U.S. dollars. Similarly, maintaining the NSFR in U.S. dollars appears challenging.

25. Cash flow analysis implies that liquidity buffers are adequate to absorb shocks over five-day and one-month time horizons, but there are challenges if wholesale funding outflows are large (Figure 27). Banks come out strong under severe liquidity outflow scenarios despite the high share of overnight retail and wholesale funding. However, significant withdrawals of wholesale funding from institutions and corporates do pose vulnerabilities over a short run, including in U.S. dollars. While the liquidity gap in U.S. dollars appears to be manageable (only up to 1 percent of total assets), it could result in contagion risks in case of stress in the U.S. dollar market. The U.S. dollar liquidity/collateral transfer across jurisdictions could also become an issue in times of stress.

⁸ Some banks would fall below the current Pillar II buffer (Requirement and Guidance combined) and additional buffer requirements (such as CCyB); however, the stress tests assume that these requirements would be relaxed during stress episodes.

⁹ Nevertheless, increasing the share of longer-term funding may decrease profitability due to lower maturity transformation.

26. The authorities are encouraged to consider policies to minimize the impact of potential disruptions in wholesale funding markets including in U.S. dollars. They could consider requirements to hold buffers to cover at least 50 percent of outflows over a horizon of up to five working days from wholesale funding providers in all relevant currencies. These requirements may be linked with monitoring of banks' use of collateral swaps to improve their liquidity ratios.

E. Insurance Solvency

27. Top-down stress tests focused on market risks. The stress test built on the EU Solvency II framework, covering nine insurance groups on a consolidated basis (accounting for 70 and 40 percent in the domestic life and nonlife gross written premiums respectively). The scenarios were broadly aligned with the banking stress test shocks, but with a greater focus on market risks, including concentrated exposures to domestic banks. Complementary single factor shocks simulating the default of the parent bank shed light on spillover effects.

28. Solvency positions prove resilient under the adverse scenario (Figure 28). The median SCR ratio drops 38 percentage points to 166 percent because of higher bond credit spreads, with SCR ratio at all firms remaining above the 100 percent regulatory threshold. The steepening of the yield curve benefits insurers as the resulting decline in liability valuations exceeds the valuation effect on assets. In general, the impact is more pronounced for insurers with more activities in life business and savings products. Due to a relatively low proportion of guaranteed rates, French life insurers have a relatively high capacity to pass on some of the losses to policyholders.

29. Insurance groups are less vulnerable to a low-for-long scenario than to a combination of higher interest rates and a mass lapse event. The implementation of Solvency II has lengthened investment horizons among French life insurers, so that a low-for-long scenario could be weathered better than in other advanced economies, a finding confirmed by the 2018 European Insurance and Occupational Pensions Authority (EIOPA) stress test. In contrast, French insurance groups face higher solvency and liquidity risks in a scenario of higher interest rates when policy holders have incentives to lapse their policies.

30. Insurers being a part of a conglomerate typically hold very large exposures toward their parent bank, which presents a major channel for the spillover of systemic risks. The market value of on-balance sheet exposures toward the parent bank can reach more than 50 percent of the insurer's eligible capital. The concentration in deposits held with the parent bank can be very substantial for some insurers. In addition, further financial interlinkages exist, e.g., via derivatives or securities financing transactions.

31. The authorities are encouraged to further monitor insurers' exposures toward parent banks based on eligible capital, consider the possibility of setting concentration limits, enhance macro stress tests of insurers, and enforce high-quality supervisory reporting. Stress test results should be used to challenge companies' Own Risk and Solvency Assessments (ORSA) and underlying projections for premium growth and investment returns.

F. Corporate and Households Risks

32. Debt-at-risk would rise under stress scenarios but would be manageable, given the cash buffers available (Table 3).¹⁰ Stress

test scenarios considered include:

(i) a tightening of financial conditions, and

(ii) lower real GDP growth consistent with the severity of the bank solvency stress

test scenario derived from the 5 percent

probability predicted GaR. Under this

scenario, the amount of debt-at-risk

(ICR<2) would rise to above 11 percent of

GDP, because of lower earnings before

interest payments and higher cost of debt,

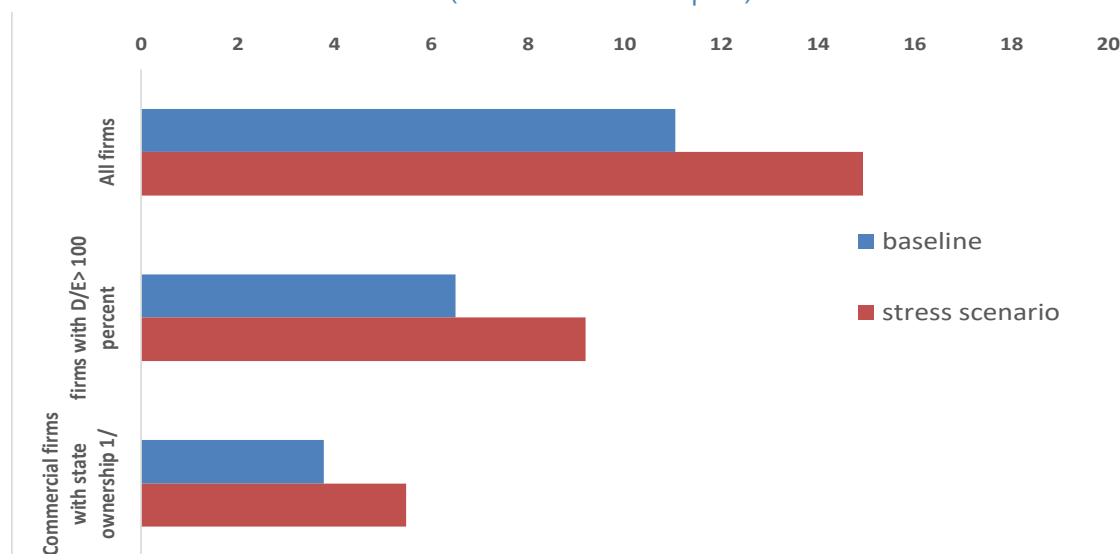
but cash buffers appear sufficient to offset the impact of the shock, with debt-at-risk (ICR<2) falling to 7.2 percent.

Table 3. France: Stress Scenarios for Corporates

(percent of GDP)	ICR < 100 percent			ICR < 200 percent		
	Baseline	Stress scenario	With use of cash buffers	Baseline	Stress scenario	With use of cash buffers
Large firms	4.4	5.6	3.6	6.9	8.9	5.2
SMEs	1.3	2.3	1.7	2.0	2.7	1.9
Total	5.7	8.3	5.2	8.9	11.5	7.2

Source: ORBIS and IMF staff estimates

Figure 10. France: Total Large Exposures of Banks to Corporate Debt-at-Risk, ICR < 2 (Percent of CET1 Capital)



Source: ECB; Worldscope; World Economic Outlook (WEO); and IMF staff estimates.

¹ SNCF not included; Stress scenario estimates the expected debt at risk.

Note: Sample includes five banks.

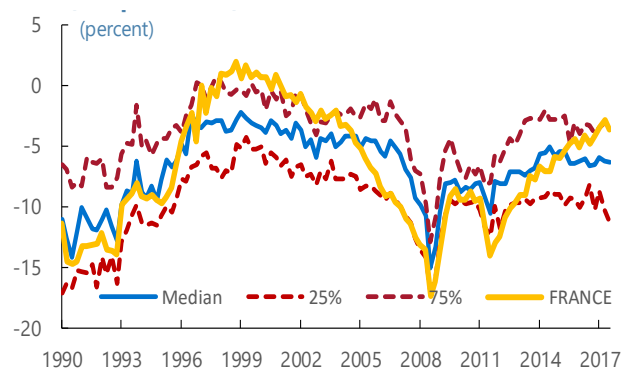
¹⁰ The ICR is defined as the ratio of earnings before interest and taxes to interest expenses.

33. Banks' large exposures to individual corporates with debt-at-risk would increase significantly under the adverse scenario (Figure 10).^{11/12} The total banks' large exposures to corporate debt-at-risk (ICR<2) are on average 11 percent of CET1 capital at end-2017 among six banks. Restricting the sample to corporate with debt-to-equity ratio above 100 percent, the total large exposures remain significant at an average of 6.5 percent of CET1 capital. The total large banks' exposures to corporate debt-at-risk would rise to about 15 percent of CET1 capital under the cross-country stress test scenario. All exposures of large French banks to individual corporates with debt-at-risk are assessed to be currently below the large exposure limit of 5 percent, but some exposures would rise closer to the current limit under a stress scenario. A joint macrofinancial feedback analysis points to the need to strengthen corporate balance sheets (Box 1).

34. Households' balance sheet vulnerabilities seem contained in aggregate, though some households may be vulnerable (Figure 29). A closer look at micro data suggests that lower income and younger households with housing loans have experienced some deterioration in their balance sheets; debt service has increased as a share of income while financial buffers have declined.¹³ Furthermore, younger households appear to have increased their leverage (Figure 28).

35. Residential house prices seem aligned with fundamentals, and risks are currently low (Figure 30). Price dynamics are not excessive at the national level, and inflation seems limited to markets such as Paris. The price-to-income and the price-to-rent ratios are above their long-term averages, though deviations are not high compared to peers, and they seem to have improved in recent years. A model of house price at risk adapted from the Spring 2019 Global Financial Stability Report shows that the left tail of the house price distribution has shifted up in recent years, in absolute terms and relative to other countries (Figure 11). Hence, the severity of near-term tail risks in

Figure 11. France: House Price Growth-at-Risk One Year Ahead (5th percentile)



Source: IMF staff estimates.

¹¹ The results of corporate stress test were not directly used to estimate the probability of default in the bank solvency stress test due to practical difficulties associated with matching data, though the consistency of the estimates across exercises was checked. The results of the corporate stress test were essential in assessing credit concentration risks and potential size of corporate losses in the bank solvency stress test.

¹² The analysis matched banks' large exposures to publicly listed corporates in Belgium, France, Germany, Italy, the Netherlands, Spain, the United States, and the United Kingdom. Among the matched large exposures, French corporates accounted for about 60 percent of the total banking exposures, and foreign corporates accounted for the rest.

¹³ These stylized facts established from the 2015 ECB survey will need updating at the time the 2019 survey is released.

the residential market have declined. However, adverse macrofinancial shocks would significantly shift the distribution of house prices to the left and increase the severity of adverse shocks.

G. Contagion Risks

36. The French banking system remains among the most interconnected in the world, but more diversified since the last FSAP (Figure 31). French banks have become less vulnerable to contagion risks arising from cross-border interbank exposures. French banks have reduced and diversified cross-border exposures in marketable securities, thereby increasing their presence in relatively smaller (less capitalized) banking systems.

37. Outward spillovers from France have the greatest impact within the EA, while inward spillovers emanate principally from outside the EA. Within the EA, the Netherlands, Ireland, Belgium, and Italy are susceptible to shocks from France; outside the EA, the United Kingdom is similarly susceptible. France is susceptible primarily to shocks from the United Kingdom, the United States, and Japan. Within the EA, Germany is the primary source of inward spillovers.

38. Inward spillover risks to France have declined since the last FSAP. While the French banking system is susceptible to credit and to credit-and-funding shocks from outside the EA, these have notably declined since 2012 Q4, particularly with respect to the United States. This has translated into an overall lower vulnerability index.

39. It must be noted though that exposures in marketable securities between banks and insurers are not readily accessible. Also missing are exposures in instruments other than marketable securities for *all* types of financial entities. The partial completeness of the data means that interconnectedness and contagion may be understated. A closer examination of trends within and across financial conglomerates would have necessitated information on which entity-level banks, insurers, and funds (or asset managers) form part of a specific financial group. Nonetheless, the French authorities are making all possible efforts to monitor a broader coverage of exposures and a more complete understanding of cross-sector and intragroup holdings for contagion analysis.

FINANCIAL SECTOR OVERSIGHT

A. Cross-cutting Issues

40. Oversight practices maintain their high standards and adaptability to change. Such high quality is essential to mitigate systemic risks given that France is home to so many global systemically important banks and insurers, as well as a large and dynamic asset management sector, implying that realization of risks could have high costs. In recent years, the ACPR and AMF have faced the welcome advent of the SSM and European Supervisory Authorities (ESAs) (Table 7). This has brought some operational challenges including greater demands upon staff, while macroprudential oversight was strengthened.

41. The ACPR and AMF should have autonomy to determine their own resource levels based on a forward-looking review of current and projected demands. The two authorities lack budgetary autonomy, are bound by legislation to a ceiling on their headcount, governing of fees levied and retained, and (in the case of ACPR) constrained by BdF salary scales. The ACPR and AMF should be allowed to offer more market-based salaries to protect skill sets, and the AMF to retain excess fees. All these are consistent with the expected practices in jurisdictions with large internationally active financial groups, G-SIBs, asset managers, and insurers.

42. In line with international standards consistent with financial systems with internationally active financial firms, reform of governance arrangements is needed. This would further strengthen the oversight of the French financial system and eliminate any perception of conflict of interest. Alternative structures would better support the relationship and exchange of information between the government and the financial supervisors. The government should not be present on any decision-making supervisory committees or colleges of either the AMF or ACPR. While the Loi PACTE has rectified this situation for the AMF's Sanctions Committee, the AMF should re-assess whether it is appropriate to allow individuals employed by entities supervised by the AMF to sit on that Committee. A short biography of all members of the boards, colleges, and committees of the ACPR should also be published.

43. The functions of resolution and supervision within ACPR require a good level of cooperation and coordination between domestic agents, but critical decision making should stay independent. In the case of insurance, the supervision college has veto power over the resolution college, and the membership of both colleges has overlaps. In accordance with the best international practices and as discussed during the last FSAP, the "perception" of conflict should be avoided.

B. Macroprudential Policies and Tools

44. France has established a macroprudential framework that supports willingness and ability to act. (Table 8 and Figure 32). The HCSF has broad hard and soft powers over tools and warnings, an explicit mandate for financial stability, and can request information from both regulated and unregulated entities.¹⁴ The BdF and the ACPR take the lead in producing, on a semi-annual basis, an assessment of risks to financial stability that is discussed at the HCSF meetings.

45. It is still too early to determine the real impact of the macroprudential tools applied on bank-based finance thus far. It will be desirable to evaluate the effectiveness and for the HCSF to determine if adjustments are needed to boost banking sector resilience. The reduction in the large exposure limit to 5 percent of bank capital (for large indebted corporates) is an important step as it helps contain a potential rise in the concentration of individual banks' exposures to large

¹⁴ The HCSF is composed of the Minister of the Economy and Finance, the Governor of the BdF, the Vice-Chairman of the ACPR, the Chairman of the AMF, the Chairman of the Accounting Standards Authority, and three external members.

indebted corporates and communicates a need for prudence to market participants. But its scope is limited to large corporates and does not address directly nonbank finance. It has been complemented by a welcome two-step increase in the countercyclical capital buffer (CCyB) to 50 bps to build buffers in the banking system against broader vulnerabilities in the corporate and household sector. However, this measure also does not address risks related to growing nonbank finance in France.

46. France should actively engage at the EU level to broaden macroprudential toolkit for the corporate sector.¹⁵ There are few sectoral banking tools for corporates, and no tools to directly address risks from market-based finance at the EU level. The authorities should engage with the ECB on the possible use of Pillar II measures to address residual risks related to corporate exposures. In the event of continued buildup of corporate vulnerabilities in the near term, consideration could be given to the introduction of a sectoral SRB calibrated to corporate exposures. While HCSF has the power to introduce borrower-based tools for corporates, the task of properly designing such tools is inherently challenging. Nevertheless, France should continue to develop an analytical framework for borrower-based tools to address corporate sector risks, including by closely engaging at the EU level.

47. Tax incentives favoring debt to equity should be further weakened. A fiscal measure that incentivizes corporates to finance through equity rather than debt could bring about positive effects for both bank and market-based financing and hence complement the bank-based measures discussed above. The HCSF should recommend the MoF to further weaken the debt bias, if needed, by complementing the already legislated reduction in the Corporate Income Tax (CIT) rate to 25 percent by 2022 with: (i) an interest deductibility based on fixed debt-to-equity rule (i.e., denying interest deductibility if debt-to-equity exceeds some fixed value); and (ii) an allowance for corporate equity, which supplements deductibility of interest with a similar deduction for the normal return on equity.

48. The rise in insurance and asset management business lines also requires macroprudential readiness. While ACPR and AMF are actively monitoring sectoral risks, the macroprudential toolkit in this area remains largely incomplete.¹⁶ While this is a global gap, the French authorities could build on the lead taken by them and actively engage at the European and international levels on liquidity and leverage related tools for insurers and investment funds. The ongoing work by the international standard setters could be useful in this regard and advanced.

49. There is scope for strengthening the already strong risk monitoring and reporting requirements. While sectoral risk monitoring is on a good footing, concentrated exposures, which may cause amplification of risks, both at sectoral and at group level, are insufficiently analyzed.

¹⁵ Some of these measures will require interagency and stakeholder consultations. An early start would be desirable.

¹⁶ HCSF has however been proactive. Effective December 2016, the HCSF has been granted powers to modulate the rules for setting up and taking over the profit-sharing provision for all or a subset of the insurance companies. In addition, the HCSF can also take other precautionary measures, including temporary suspension of surrenders, to enhance resilience of insurance companies.

Nonbank financial institutions and large exposures between sectors and among FCs should be further incorporated in the HCSF reporting requirements and monitoring of systemic risk. The HCSF should also analyze the transmission of shocks between financial balance sheets within a FC; extend macro stress testing to investment funds and insurance companies; and liquidity stress testing at the conglomerate level. Quarterly or more regular flow data on intragroup transactions in a conglomerate should be reported and the HCSF should consider the development of concentration thresholds for direct exposures within conglomerates and common exposures among entities.

50. Some additional tools could also be brought under the HCSF remit. In line with European legal framework, there are some tools that are entrusted with HCSF's member institutions with HCSF having limited power to activate them, such as the O-SII buffer, and capital tools on residential or commercial real estate entrusted to the ACPR (Art. 124 and 164 CRR); and leverage limits for investment funds entrusted to the AMF. While the HCSF can issue public recommendations regarding the use of these tools, its powers can be further enhanced with a formal "comply or explain" mechanism.

C. Financial Conglomerates Oversight

51. The legislative framework, the Financial Conglomerates Directive, creates a non-intrusive "aggregation" or "supplementary" approach. While positive, it is insufficient. The framework does not promote active engagement between the sectoral authorities. While the relevant authorities can obtain information on unregulated entities in the wider group, there are no powers to impose conglomerate level prudential requirements. Capital adequacy is assured to the extent that double gearing is avoided, but the framework does not support a consideration of group risks or lead to a conclusion that the solvency of the FC is appropriate and adequate to its risks.

52. Reporting on intragroup transactions and risk concentration is infrequent and, while stress testing is encouraged it is not conducted at FC level. Liquidity is not assessed in the context of the FC. There are no prudential requirements for related party transactions, implying that relationships with connected entities and risk concentrations may be established and reach critical levels without being properly observed. Several of these are gaps in other jurisdictions as well and need a concerted attempt at the global level to secure the safety and soundness of FC models.

53. Recognizing the evolving institutional setup of the BU, progress on some issues can also be achieved through stronger domestic voluntary supervisory coordination. To ensure long-term improvements that apply throughout the EU, however, a broader set of legislative and regulatory changes are needed. An effective EU framework for conglomerate oversight can be achieved by revising the, now dated, Financial Conglomerates Directive.

54. Ongoing changes to the EU regulatory architecture have placed heavy burdens on national competent authorities and the ECB. Understandably, to date the issues of FC oversight have not been a priority. However, it is welcome that, both within the ECB and under the aegis of the ESAs, work is well under way to enhance supervisory guidance and consistency of reporting.

These critical objectives are at risk of being undermined if the national competent authorities do not enjoy a degree of operational independence.

55. There should be a greater cooperation and collaboration between the sectoral supervisors. While the work evaluated by the mission was of extremely high quality, the FSAP observed limited supervisory touch points between the authorities. Sectoral supervisors with responsibility for consolidated supervision require financial groups to take account of all the entities within the group. The perspective on group-wide stability and soundness can get distorted if there are gaps. This approach needs to be replicated at the level of the FC itself.

D. Regulated Savings

56. Governance arrangements of the CDC will be enhanced under the Loi PACTE by bringing it formally under the supervision and regulation of the ACPR. These changes are welcome as it is appropriate for the CDC, which is in receipt of public deposits and a full state guarantee, to be within a structure of scrutiny and accountability aligned with prevailing oversight standards in the financial sector. Folding the CDC into the national supervisory framework is consistent with IMF policy advice for state-owned banks.

57. The FSAP identified additional tasks for the authorities to focus on following the Loi PACTE. The first task is to ensure that the ACPR is properly remunerated for its activity and increased burden. Also, the practical and legal arrangements of the state guarantee should be worked out and agreed upon. In addition, given the FSAP's finding that relates the risk profile of the banking system to its relatively heavy reliance on wholesale funding and weak profitability, the authorities should conduct a review of the regulated savings policy and its impact on the financial system and on affordable housing policies. The FSAP supports the authorities' efforts to reduce the spread between market interest rates and the rate of return of Livret A, aimed at enhancing monetary policy transmission and improving the allocation of savings and financing of the economy. Given the systemic significance of regulated savings and its direct impact for households and banks, it will be desirable to review the framework and to determine how best to align it with the intended reforms towards promoting market-based savings and financing and deepening of Paris as a key financial center of Europe.

E. Banks

58. The less significant institutions (LSIs) are well supervised by the ACPR under the oversight of the ECB. The LSIs account for only 1.5 percent of French banking assets—excluding a central counterparty and EU branches—and are diversified by size and business model. The LSI sector was resilient during the financial crisis and the ECB has assessed French LSIs to be low risk.

59. Decisions made under national law affecting both LSIs and significant institutions (SIs) have addressed 2012 FSAP recommendations. Notably, the ACPR's powers regarding major acquisitions have been strengthened, ensuring that it receives prior notification of proposed acquisitions by credit institutions so that it is able to consider them ex ante. While these powers are

unlikely to be used in the case of LSIs, the powers add to the armory of the ECB, which has clarified that it is exclusively competent to exercise them in respect of SIs.

60. The weakened powers of the ACPR under national law related to transactions with related parties must be addressed. Before the CRR/CRD IV package, French regulations required related-party transactions that were in aggregate greater than 3 percent of own funds to be deducted from own funds, providing both a limit and a deterrent. The maximum harmonization in the CRR has removed these deductions from national law but no framework—such as large exposure limits—has replaced it. This gap must be remedied as such transactions expose firms to multiple vulnerabilities.

F. Insurance

61. The implementation of Solvency II is progressing well. Solvency II has been implemented since January 1, 2016, as in other EU jurisdictions.¹⁷ French insurance companies are significant users of the Volatility Adjustment (VA), with companies representing more than 90 percent of the technical provisions in the French insurance industry using the VA. The French insurance market relies largely on the standard method to calculate the SCR, with only two major (re)insurance groups using full internal models.

62. French and EU authorities should enhance liquidity monitoring. The release of a discussion paper by EIOPA in March 2019 indicates additional reporting on liquidity risk and improved monitoring of liquidity risk are under consideration at the European level for macroprudential purposes.¹⁸ ACPR and EIOPA should move toward putting these proposals in place with ACPR encouraged to begin field testing such requirements at the earliest opportunity. In addition, the ORSA and the Solvency and Financial Condition Report (SFCR) should be required to explicitly address liquidity risk in both a quantitative and a qualitative way. The ACPR should continue improving the implementation of ORSA and embedding the ORSA process in insurance company risk culture.

63. To improve the quality of data reporting, annual Quantitative Reporting Templates (QRTs) submitted to the ACPR should be audited. Currently, they are not required to be audited and there is no audit requirement for SFCRs disclosed to the public. In addition, audit assurance processes are recommended to be required for the systems and procedures used to complete QRTs and SFCRs. Furthermore, the ACPR should review the intensity and frequency of onsite supervision and its relationship to offsite supervision. More focused and regular onsite inspections could be envisaged, by adding flexibility in the rules around the frequency of onsite inspections, given offsite analysis may be close to “focused” onsite inspections.

G. Investment Services

¹⁷ Solvency I continues to apply to a very small part of the French insurance market.

¹⁸ Systemic Risk and Macroprudential Policy in Insurance, EIOPA, March 2019, Section 5.6.

64. The French investment services sector is one of the most significant in the EU and is well supervised on a risk-based approach consistent with EU frameworks. It spans the large credit institutions through to small financial advisers consisting of a handful of staff and includes non-French entities benefiting from the EU passport. Both the AMF and the ACPR have put in place a risk-based approach to supervision, and the amount of resources dedicated are commensurate to the associated risks. Extensive cooperation between the national supervisors helps mitigate risks of potential gaps. The implementation of MiFID II and MiFIR has proved particularly challenging to investment firms, and the CMU initiative means that the landscape will continue to evolve.

65. Brexit, combined with the new French regime for crypto-assets, could increase risks to the sector. While the authorities appear well prepared, Brexit could lead to a material increase in the number of investment firms in France in a relatively short period of time. This may exacerbate the resource constraints already faced by the AMF. France has introduced a specific regulatory regime for initial coin offerings (ICOs) and crypto-assets. The new crypto-assets regime appears to strike a sound balance between encouraging innovation and protecting investors. Once the regime is in place, close monitoring will be necessary, with a corresponding increase in supervisory resources.

H. AML/CFT

66. Significant progress has been made in aligning France's Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) framework with the revised FATF standard and the European AML Directives (AMLD). The Fourth European AMLD has been transposed, including with respect to the risk-based approaches to applying preventive measures and transparency of beneficial ownership. There have been improvements in the legal framework for seizure and confiscation and supervision of nonfinancial businesses and professions. Steps have been taken to strengthen the AML/CFT implementation in France's overseas territories. France's first national money laundering and terrorist financing (ML/TF) risk assessment is being finalized. New legislation to strengthen regulation and supervision of activities involving crypto-assets was enacted in April 2019.

67. Although AML/CFT supervision of banks, real estate agents, and company domiciliation agents, to varying degrees, has targeted higher-risk entities or areas, lawyers are subject to little AML/CFT oversight. The ACPR assesses ML/TF risks of individual banks, but in practice, its onsite inspections concentrate on large financial groups. There is a need to increase oversight of smaller banks rated as high-risk and speed up issuing penalties. Systematic ML/TF risk assessments of real estate agents and company domiciliation agents would better inform the focus and scope of supervision and the resources needed. To enable effective AML/CFT oversight of lawyers, the National Bar Council should work with local bar associations in promoting unified understanding of ML/TF risks and developing consistent approaches to a risk-based monitoring program, procedures, and disciplinary actions.

68. Steps have been taken to improve prevention, detection, investigation, and prosecution of TF, as well as ML with a cross-border dimension, but there is room for

improvement. Financial intelligence from Tracfin has been used extensively in the investigation and prosecution of TF cases, which has resulted in the identification and investigation of several networks funding terrorist activities, and over a hundred TF convictions secured between 2010 and 2017. The National Financial Prosecutor was created to focus on financial crimes, particularly those with an international dimension. These efforts will benefit from more systematic guidance on TF to reporting entities and strengthened oversight of and more guidance to sectors most exposed to cross-border ML risks.

CRISIS MANAGEMENT AND SAFETY NETS

69. France is better placed today to manage a crisis. The ACPR acts as the Resolution Authority (RA) for banks, insurers, and investment firms. It can start liquidation procedures for institutions under its supervision. Arrangements at the EA level are allowing national authorities to refocus their oversight towards LSIs. The BdF and Fonds de Garantie des Dépôts et de Résolution (FGDR) play a critical role in terms of Emergency Liquidity Assistance (ELA) provision, deposit insurance and investor protection; policyholder protection of insurance contracts is mainly in the hands of two policyholder protection schemes (PPSs). Regarding inter-agency crisis preparedness, the HCSF does not have a specific function, but its mandate supports inter-agency policy coordination.

70. France is one of the first systemically important jurisdictions to establish a comprehensive resolution framework for insurers. The framework based on the Sapin II law, enacted in December 2016 and Ordinance 1608 of November 2017, provides for a broad set of new resolution tools, such as transfers of assets and liabilities, and bridge entities, but does not include a bail-in tool. The framework applies to all insurance entities subject to Solvency II, except for the part on recovery and resolution planning (RRP), which currently applies only to 14 insurers covering a large share of the market. The resolution framework is designed to apply to insurers that breach capital requirements, while remaining balance sheet solvent in a Solvency II sense (i.e., assets still cover liabilities). In case of insolvency, the framework leads to liquidation.

71. To better align the insurance resolution framework with the Key Attributes, further work is needed in some areas. The resolution framework for insurers should have additional tools (notably, bail-in), safeguards, and legal protection of contractors, and a scheme for privately financed resolution funding). The overall preparedness would benefit from tests and simulation exercises at various levels. With respect to resolution funding, the Fonds de Garantie des Assurances de Personnes (FGAP) and Fonds de Garantie des Assurances Obligatoires de dommages (FGAO), the two PPSs, have a narrow scope of work as they are not prepared to support resolution processes, only compensation under liquidation procedures.¹⁹

72. Crisis preparedness has been enhanced by the ongoing RRP exercises, but the resolution and supervision colleges need greater independence. The RRP cycles are more

¹⁹ Both FGAO and FGAP are specialized by types of insurance, are governed by a Board of Directors, and supervised by the MoF.

advanced for bank SIs, followed by those for LSIs, and are at an early stage for insurers. Recovery plans are gradually improving and becoming more focused on key elements, including governance and feasibility of the recovery options, though operationalization and quantification of recovery options are aspects for further development. Regarding LSIs, the strategy is to opt for liquidation in cases of failure. The assessment of RRP has improved coordination between ACPR's Supervision and Resolution Departments. The membership of the supervision and resolution colleges have significant overlaps, and for an entity under ACPR's remit to be declared as failing or likely to fail the resolution college must consult the supervisory college, which amounts to a veto. This feature could raise concerns about independence and the possibility of supervisory forbearance. Moreover, France chose not to adopt financial stabilization tools available under the BRRD, which would be helpful to manage system-wide crises. Finally, ACPR needs to deploy enough resources for RRP, particularly for insurers.

73. Regarding deposit insurance, the FGDR design is well aligned with EU standards, both as a deposit guarantee scheme and as a resolution fund, but the Supervisory Board membership needs reform.

The governance of the FGDR includes a Supervisory Board composed of 12 active financial sector executives and an Executive Board that deals with day-to-day decisions. There is a separation of functions between both levels of authority and there are specific practices geared to avoid conflict of interest. However, in line with good practices, the eligibility for Supervisory Board membership should be changed to include only independent members. The FGDR also manages the investor protection scheme, which covers retail investors from losses due to fraud and operational risk by investment service providers. The resolution fund, covering a subset of LSIs, is on track to reach its funding target by 2024 and could be tapped to support the application of Bank Recovery and Resolution Directive (BRRD) resolution tools. The FGDR is represented in the resolution college when it must decide on the resolution modality for entities under its remit (LSIs, insurers, and investment service providers).

74. The BdF ELA scheme, which is well aligned with the euro system framework, would benefit from enhancements.

Given the importance of FX wholesale funding in the banking system, establishing mechanisms and rules regarding ELA in FX is an avenue that needs to be explored while addressing the feasibility of advance agreements and the conditions for swap lines for this purpose. Also, ELA can be provided to a bank in resolution, but to anticipate cases in which ELA collateral would be insufficient, the BdF could establish rules to help banks (i) identify in advance which assets in their balance sheets might be proposed as ELA collateral, and (ii) to buttress their operational readiness to pledge them. At the same time, contingent arrangements, such as a public guarantee at the national or European level under strict safeguards could add readiness to the ELA scheme, which would be admissible under state aid rules revised as recommended by the EA FSAP.²⁰

75. An important challenge is to ensure preparedness to deal with failure of a conglomerate. In the medium term, RRP exercises should incorporate the intra-conglomerate

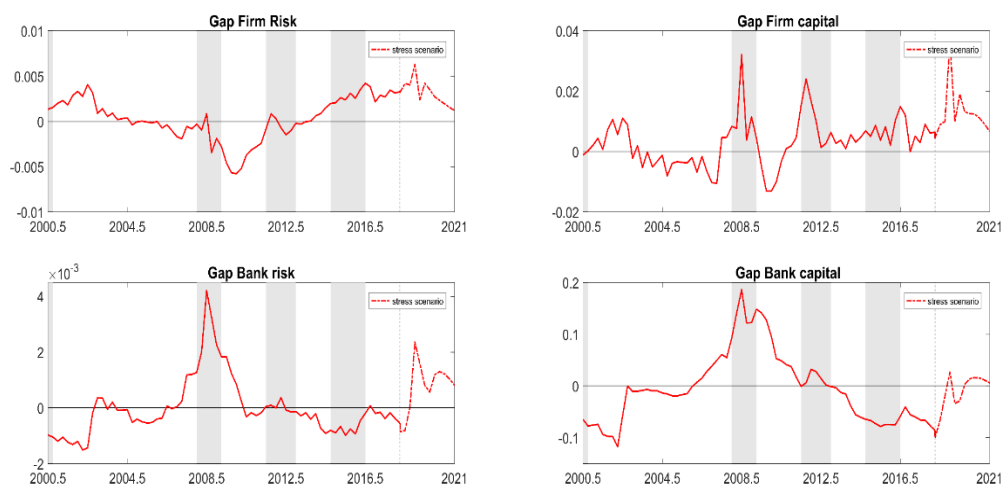
²⁰ See IMF "Euro Area Policies: Financial System Stability Assessment, June 2018." The Technical Note on Systemic Liquidity Management covers these issues in detail.

dimension, including for safety net arrangements. By checking the separability of business units, the resolvability analysis will partly cover these aspects, but more can be done in full coordination with EU institutions. Authorities need to ensure operational readiness and conducting intra and inter-institutional crises simulations and tests would help identify potential gaps.

Box 1. Gap Analysis of Default Risk and Capital of Nonfinancial Corporates and Banks

The model examines default risks and aggregate capital of the sectors relative to their potential levels. Similar to the concept of output gap between sticky and flexible prices, risk gaps and capital gaps between sticky and flexible capital structure (potential) are calculated. The model used for the FSAP captures various feedback effects between the sectors. Risks are elevated (positive risk gap) during four periods: the 2002 technology crisis, the 2008 GFC, the 2012 European sovereign debt crisis, and present.

Applying the same shocks that occurred during the 2008 GFC shows that corporate balance sheets are more vulnerable than those of the banks. In particular, the results show that default risk of the nonfinancial corporate sector is high and capital low, both relative to their potential levels, while bank default risk and aggregate bank capital are closer to their potential levels.



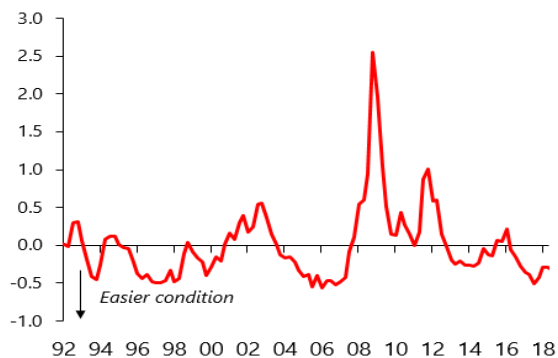
Source: IMF staff calculations.

Note: The figure shows gaps of default risk and aggregate capital of the nonfinancial corporate sector and the banking sector. A positive risk gap marks periods with too much risk relative to potential. A positive capital gap marks periods with too little capital relative to potential. When risk is too high (positive risk gap), capital tends to be too low (positive capital gap). The x-Axis denotes the year. The y-Axis denotes percentages (in the case of risk 0.005 equals to 0.5 percent excessive default risk in absolute terms; in the case of capital 0.2 equals to a 20 percent gap relative to the nominal amount of aggregate capital). The grey bars highlight recession periods of France's economy. The dotted red line simulates a crisis period that is in magnitude like the global financial crisis.

Figure 12. France: Macrofinancial Conditions

Financial conditions in France are accommodative ...

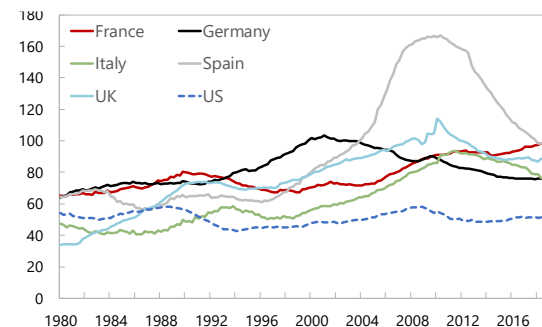
Financial Condition Index



Sources: BdF; ECB; EuroStat; and IMF staff calculations.

Bank credit to GDP is trending upward ...

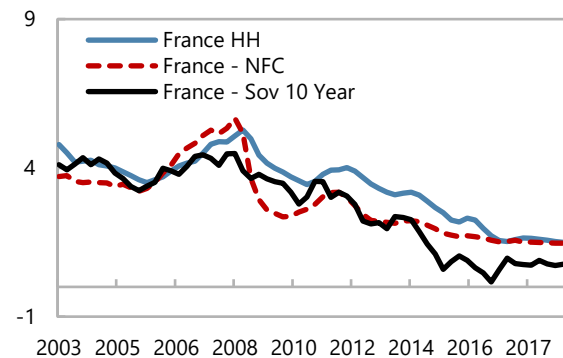
Bank Credit to Nonfinancial Private Sector (Percent of GDP)



Source: Haver Analytics.

The financial cycle is reinforced by low borrowing costs

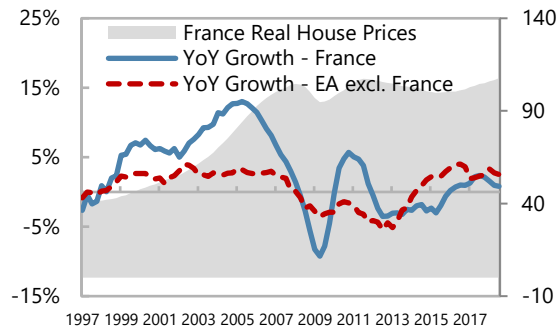
Cost of Borrowing (Percentage)



Source: ECB.

... placing upward pressure on asset prices.

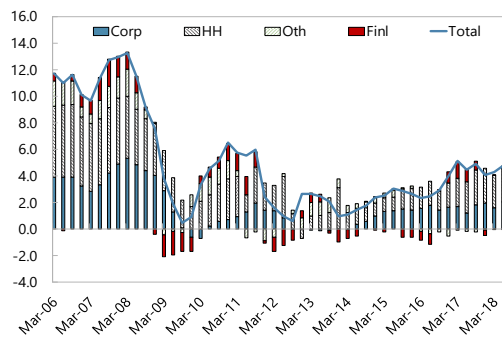
Real House Prices (Indexed 2015 = 100)



Sources: BdF; ECB; and IMF staff calculations.

... driven by credit to households and to firms.

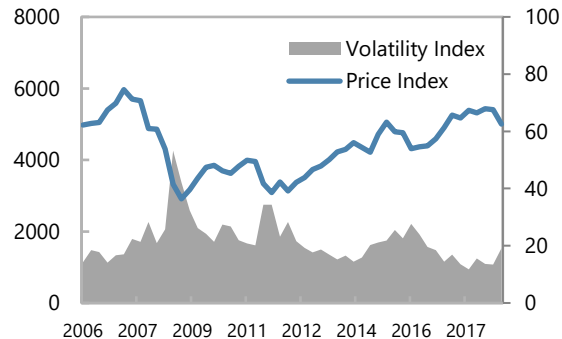
MFI Credit to Residents (Percent contribution, y-y)



Source: Haver Analytics.

... and low market volatility.

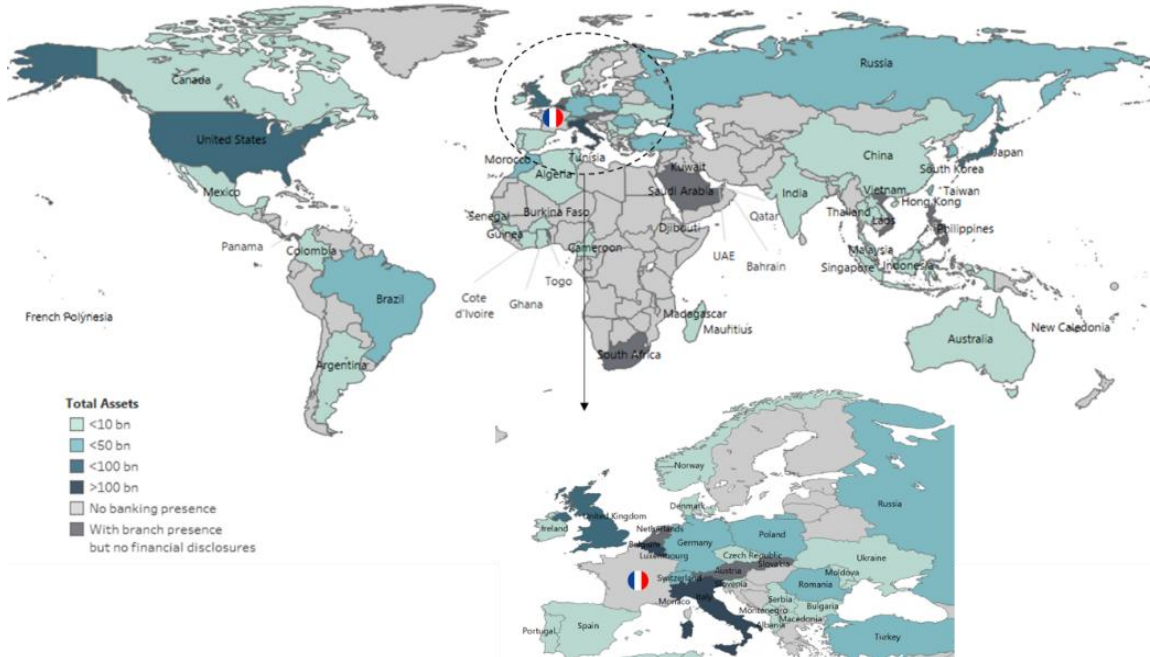
CAC 40 Conditions (Indices)



Sources: Haver Analytics; NYSE; and WSJ.

Figure 13. France: French Large Financial Groups International Footprint

Banking footprint—Total Assets
(Billions of U.S. dollars)



Banking footprint—Total Assets
(Percent of host country total banking assets)

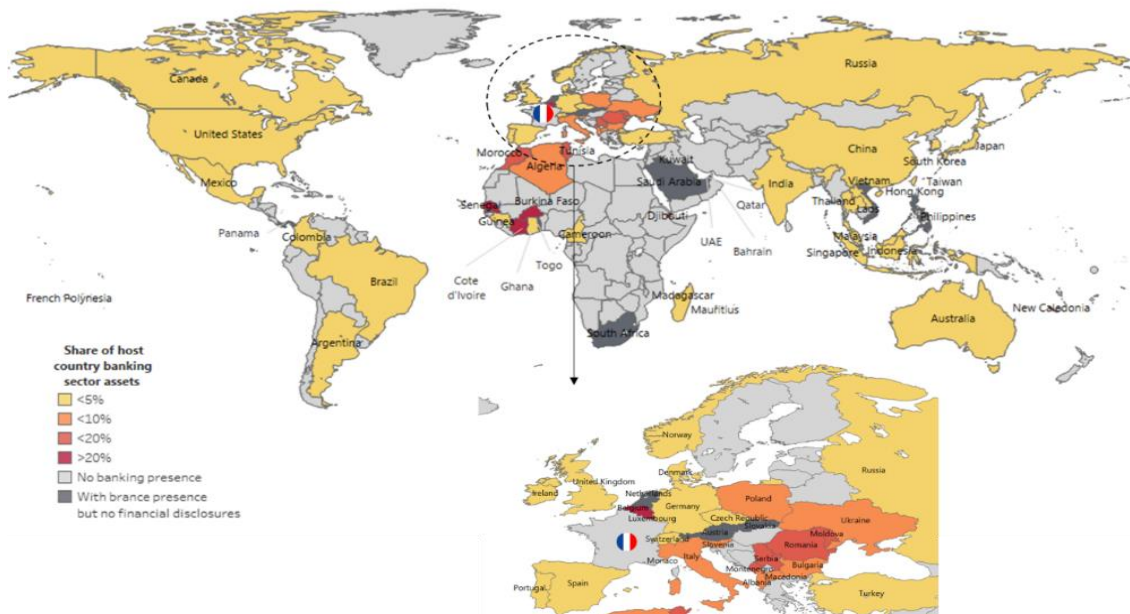
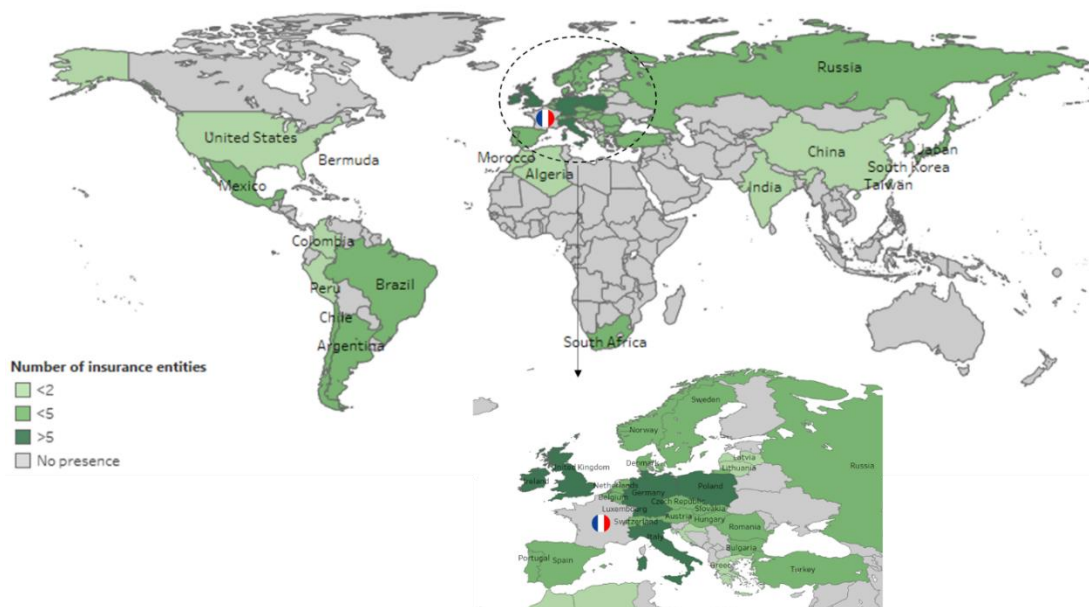


Figure 13. France: French Large Financial Groups International Footprint (concluded)

Insurance Footprint—Total Number of Insurance Related Entities



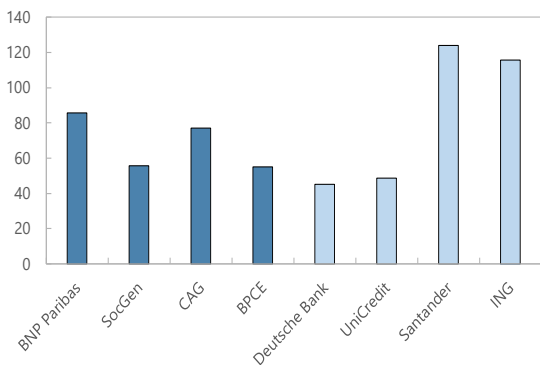
Sources: Banks' financial statements; SNL Financials; IMF Financial Soundness Indicators; Haver Analytics.

Note: French large financial groups include the four G-SIBs—BNP Paribas, Credit Agricole, Societe Generale, as well as BPCE. The banking footprint captures the total assets of material foreign subsidiaries in each country. For Japan, South Korea, Taiwan, and India total assets refer to the branch assets. For other countries it is possible for a financial group to have both subsidiary and branch presence, but branch financial disclosure is not available. The insurance footprint refer to the total number of insurance-related entities from these financial groups in each country, including life insurers and reinsurers. The data on total assets are not generally available for these entities.

Figure 14. France: Structure of Financial System

France is home to four G-SIBs.

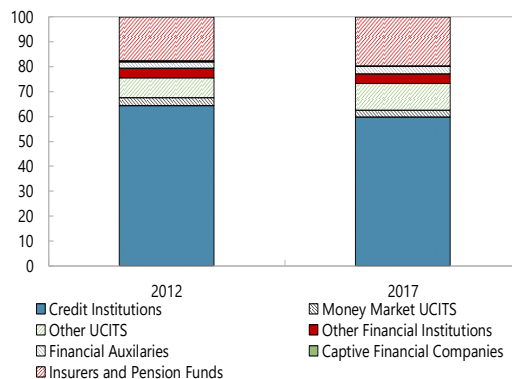
Bank Assets
(Percent of home country GDP), 2017



Sources: SNL; and IMF staff estimates.

At home, the share of the nonbanks in the financial sector has increased.

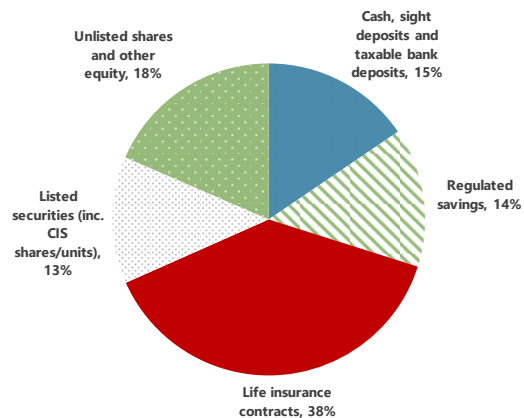
Share of Financial Sector Assets
(In percent)



Source: Banque de France.

Regulated savings products compete with bank deposits ...

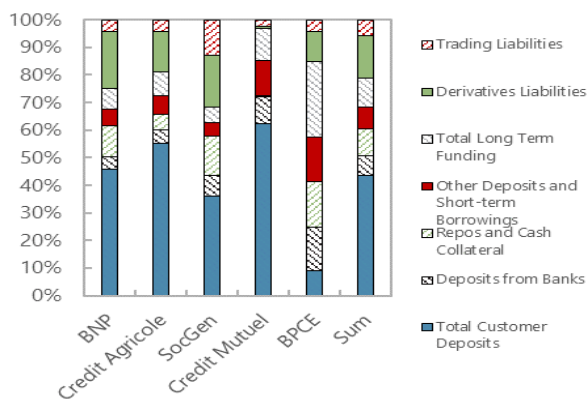
Allocation of Household Asset, End-2017
(Total household wealth = EUR 5,014 billion)



Source: Banque de France.

... Contributing to the diversified funding structure of major French banks.

Funding Structure
(Share of total funding as of December 2016)

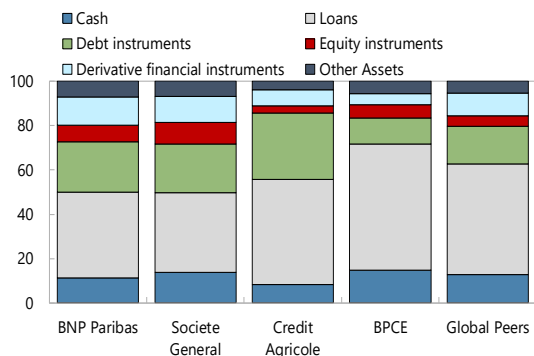


Source: FitchConnect.

Figure 15. France: Business Models of Large French Banks

BNP Paribas and Société Générale are more active in market activities.

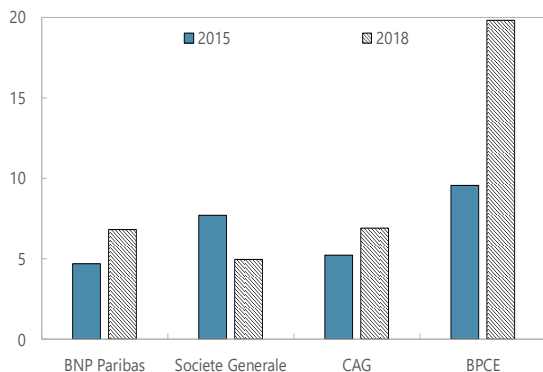
**Decomposition of Bank Assets, 2018
(Percent of total assets)**



Source: SNL; and IMF staff estimates.

Sovereign exposures have increased.

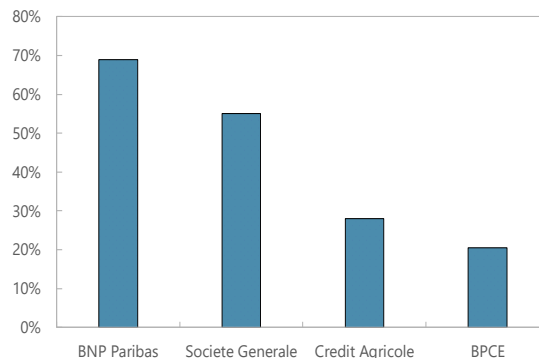
**Government Exposures
(As percentage of total assets)**



Sources: EBA Transparency Exercise 2015 and 2018; SNL; and IMF staff estimates.

BNP Paribas and Société Générale are also more international.

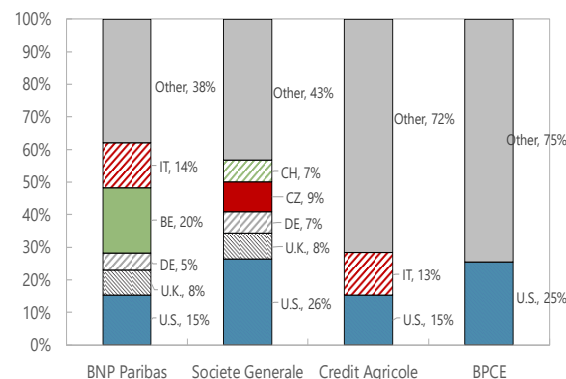
Share of Credit Exposures Outside France



Sources: EBA Transparency Exercise 2017; and IMF staff estimates.

Large exposures to EA and non-EA countries.

**Geographical Distribution of Total Credit Exposures
Outside France**



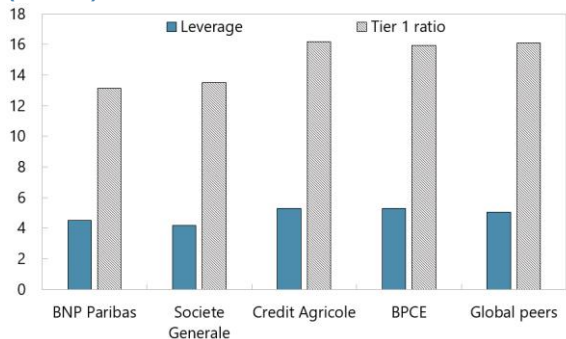
Sources: EBA Transparency Exercise 2017; and IMF staff estimates.

Figure 16. France: Banking Sector Performance

French large banks have improved capitalization.

But are reliant on wholesale funding.

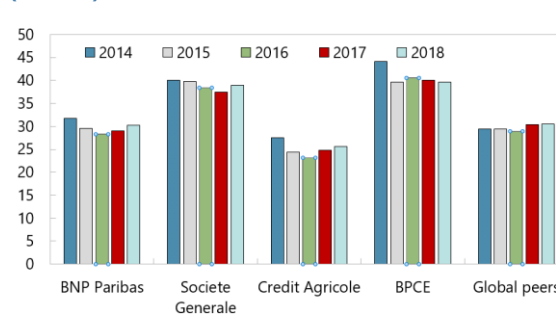
Leverage and Tier 1 Capital Ratios, 2018 (Percent)



Source: SNL.

Profitability is broadly in line with peers.

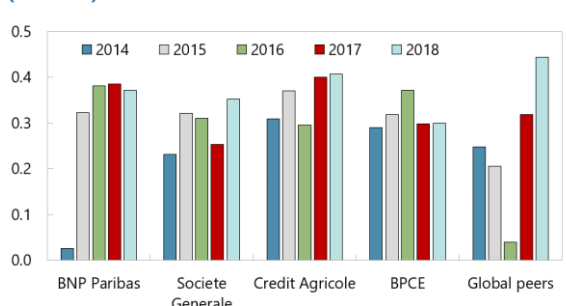
Wholesale Funding Share (Percent)



Source: SNL.

... But net interest margins are below EA peers' average.

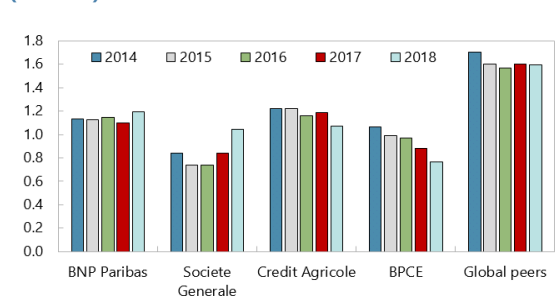
Profitability: Return of Assets (Percent)



Sources: SNL.

Partly due to regulated rates on deposits ...

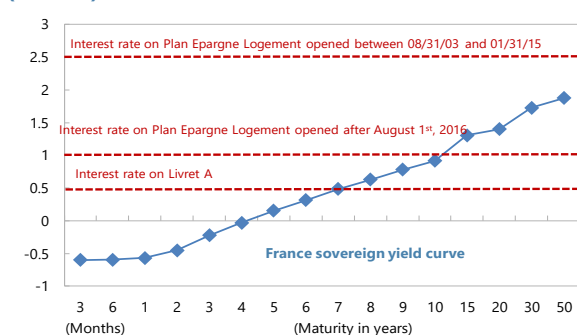
Net Interest Margins (Percent)



Source: SNL.

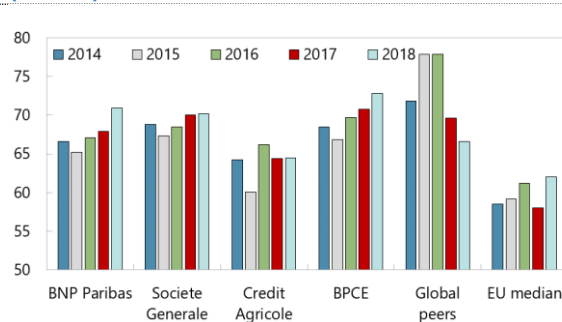
... and relatively lower cost efficiency.

Regulated Interest Rates in France, April 2019 (Percent)



Sources: SNL Agence France Trésor; and IMF staff calculations.

Cost-to-Income Ratio (Percent)

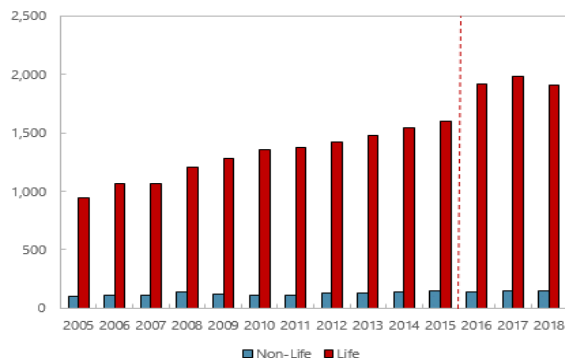


Sources: SNL; and EBA transparency reports 2016 and 2017.

Figure 17. France: Nonbank Sector Overview

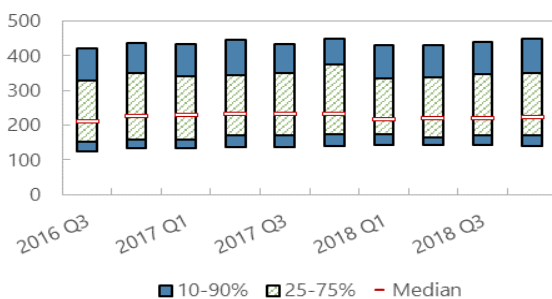
The life insurance sector reaches EUR 2 trillion after a steady expansion in recent years.

Insurance: Gross Technical Provisions (Billions of euros)



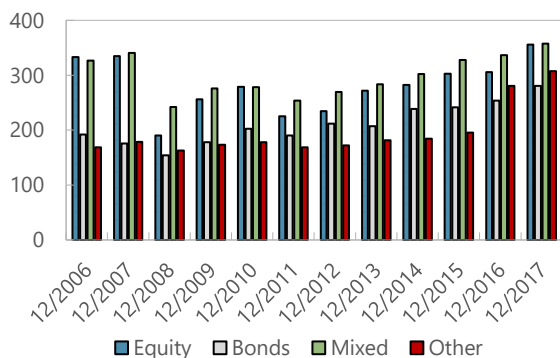
Since the implementation of Solvency II, French insurers' solvency ratios were rather stable ...

Insurance: Coverage of the Solvency Capital Requirement (Percent)



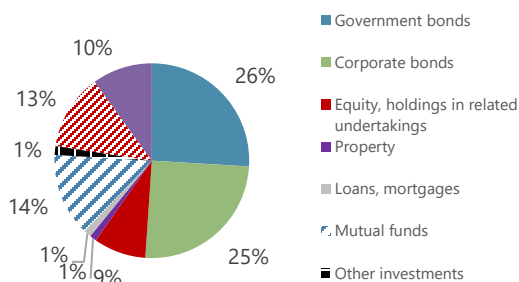
Excluding money-market funds, the French asset mgmt. sector manages EUR 1.3 trillion in mutual funds.

Mutual Funds (Excluding MMF): Assets (Billions of euros)



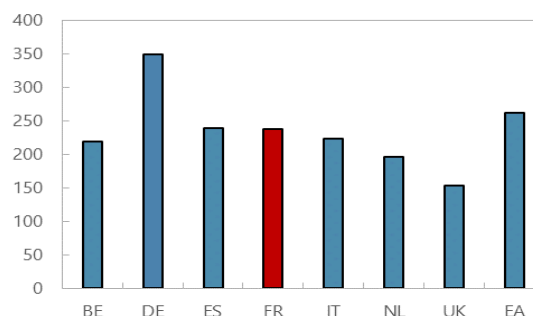
With about EUR 700 billion each, government and corporate bonds account for half of insurers' assets.

Insurance: Asset Allocation (2018:Q4)



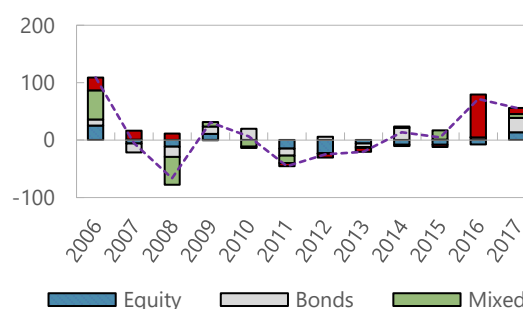
... and around the same level as the EA average.

Insurance: Coverage of the Solvency Capital Requirement, 2018: Q4 (Percent)



Since 2016 net flows into mutual funds have been positive.

Mutual Funds (Excluding MMF): Net Flows (Billions of Euros)



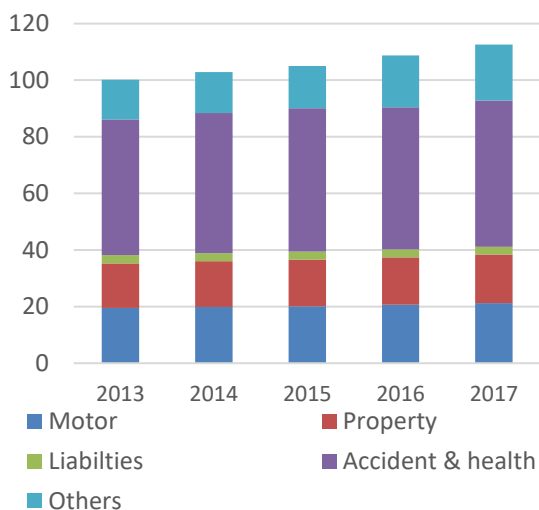
Sources: Banque de France; and IMF staff calculations based on EIOPA.

Note: Due to the Solvency II implementation, gross technical provisions of insurers before and after 2016 are not directly comparable.

Figure 18. France: Key Nonlife Insurance Metrics and Insurance Company SCR Ratios

There has been steady growth in nonlife premiums led by increases in premiums for accident & health ...

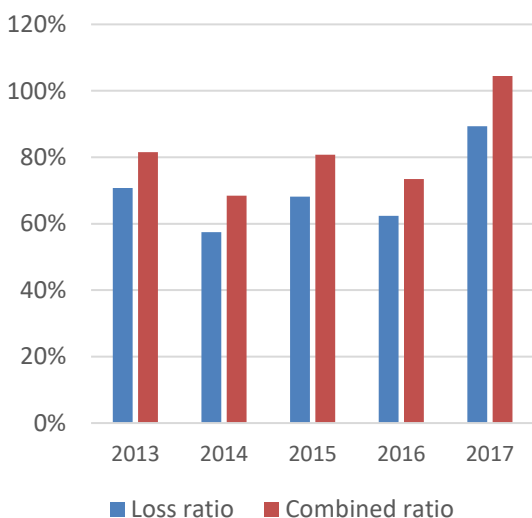
Direct Nonlife Premiums (Billions of euros)



Source: ACPR.

Loss ratios and combined ratios are more volatile for reinsurers with the combined ratio going above 100 percent in 2017, but well under that benchmark in previous years.

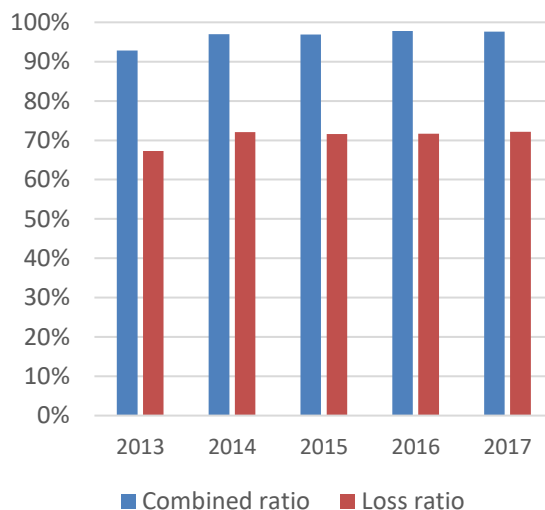
Reinsurance Loss Ratios and Combined Ratios (Percent)



Sources: ACPR; and IMF staff calculations.

... and combined ratios and loss ratios mean the industry is making an underwriting profit consistently.

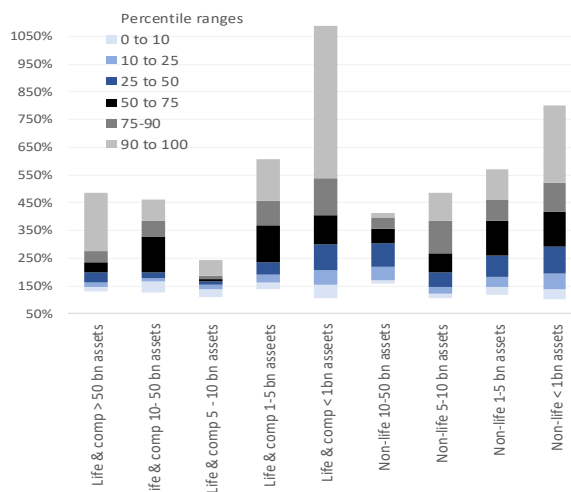
Nonlife Loss Ratios and Combined Ratios (Percent)



Sources: ACPR; and IMF staff calculations.

Including transitional and long-term guarantee (LTG) measures, all insurance companies meet the 100 percent SCR coverage ratio with the widest distribution of SCR coverage ratios seen for small insurance companies.

SCR Coverage Ratios by Company Type Presented in Percentile Ranges

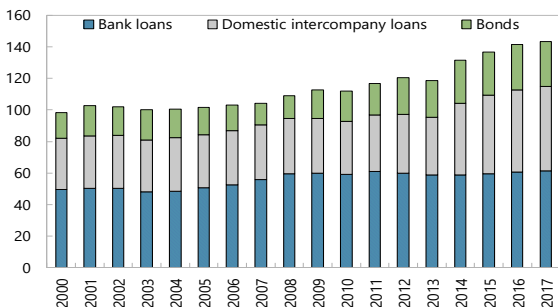


Source: ACPR.

Figure 19. France: Corporate Debt

Unconsolidated NFC debt has increased steadily ...

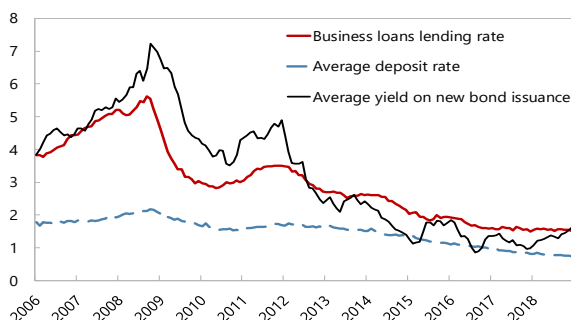
Nonfinancial Corporate Debt (Percent of GDP)



Sources: Haver Analytics; and IMF staff calculations.

... in the context of a very low interest rate environment ...

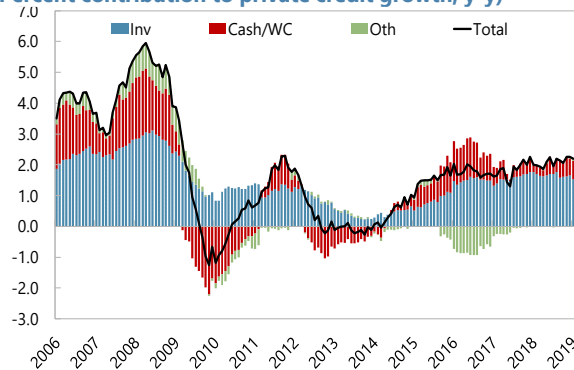
Lending Rates, Deposit Rate and Yield on Corporate Bonds



Source: Haver Analytics.

Bank credit has financed new investments as well as working capital ...

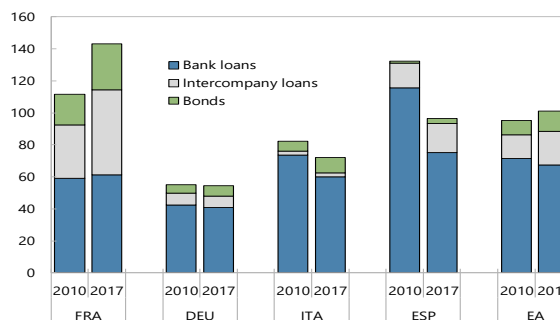
French Banks: Use of Bank Credit to Nonfinancial Corporations (Percent contribution to private credit growth, y-y)



Source: Haver Analytics.

... driven by intercompany loans and net bond issuance ...

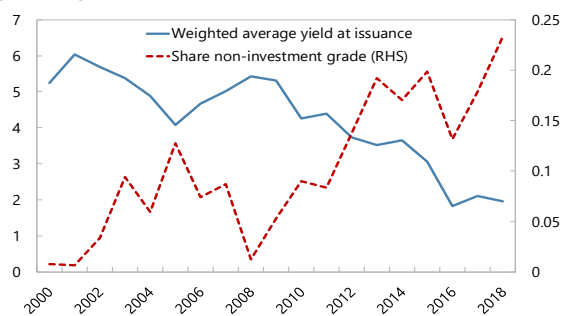
NFC Unconsolidated Debt Outstanding (Percent of GDP)



Source: Haver Analytics (ECB Sector Accounts).

... and a search for yield.

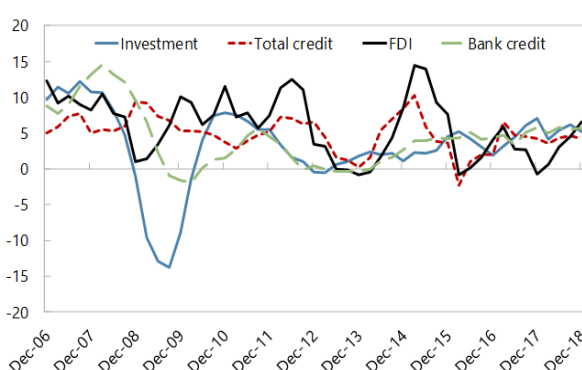
New Nonfinancial Corporate Bond Issuances (Percent)



Sources: Dialogic; and IMF staff calculations.

... while corporate debt has also been allocated to outward direct investment.

Nominal NFC Investment, Credit, and FDI Growth (Percent)

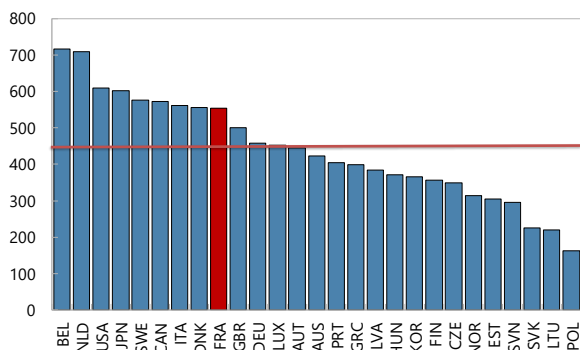


Sources: Haver Analytics; and IMF staff estimates.

Figure 20. France: Households Balance Sheet

Households have relatively high net worth ...

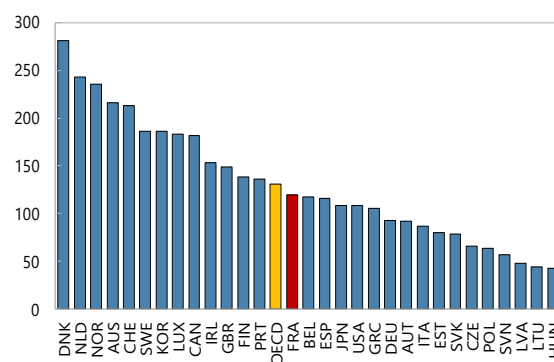
**Household Net Worth, 2017 or Latest Available
(Percent of net disposable income)**



Source: OECD.

... and their debt is at the Organization for Economic Co-Operation and Development (OECD) average.

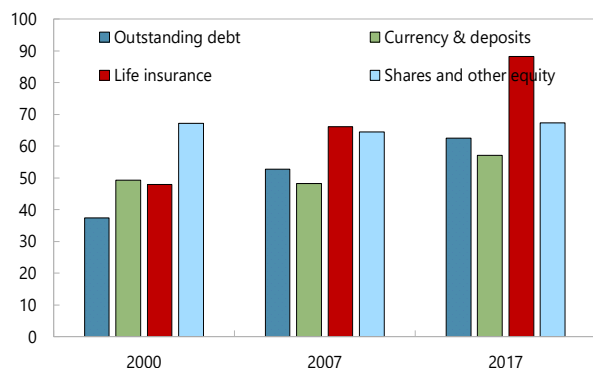
**Household Debt/Net Disposable Income, 2017
(Percent of net disposable income)**



Source: OECD.
Note: Latest available data for Japan, Poland, and Switzerland is 2016.

Life insurance and deposit and saving accounts have grown over time.

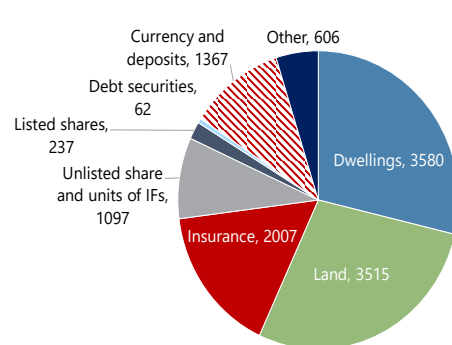
**Households' Financial Balance Sheet
(Percent of GDP)**



Source: Haver Analytics.

Real estate, life insurance, currency and deposits are the main assets of French households.

**Structure of Household Assets at End-2016
(Billions of euros)**

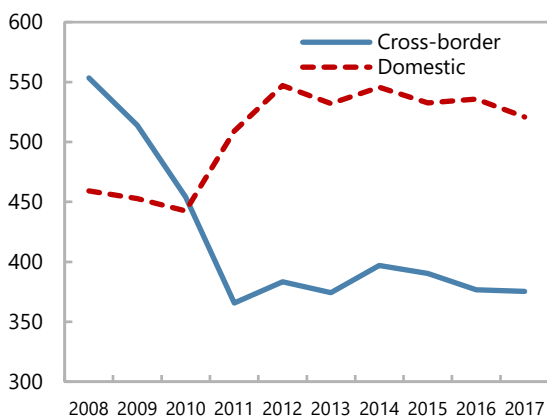


Source: AMF 2018 Markets and Risk Outlook.

Figure 21. France: Domestic and Cross-Border Exposures in Marketable Securities

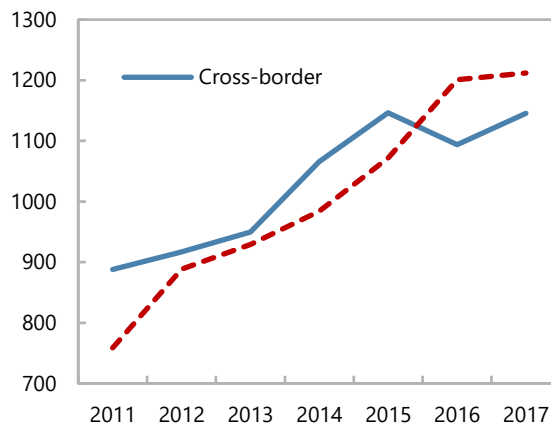
Banks' reduced cross-border positions have been offset by increased domestic exposures.

**Total Positions of Banks
(Billions of euros)**



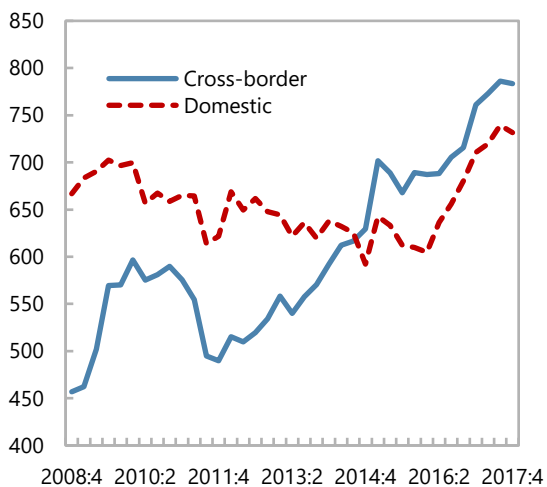
Insurance companies' domestic exposures have increased, as have cross-border exposures.

**Total Positions of Insurers
(Billions of euros)**



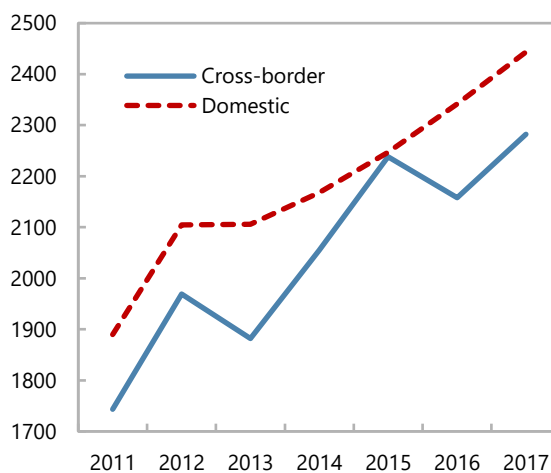
Funds' domestic and cross-border exposures have also increased dramatically.

**Total Positions of Funds
(Billions of euros)**



Total exposures in marketable securities of the financial system at end-2017 are EUR 4,726 billion.

**Total Positions
(Billions of euros)**

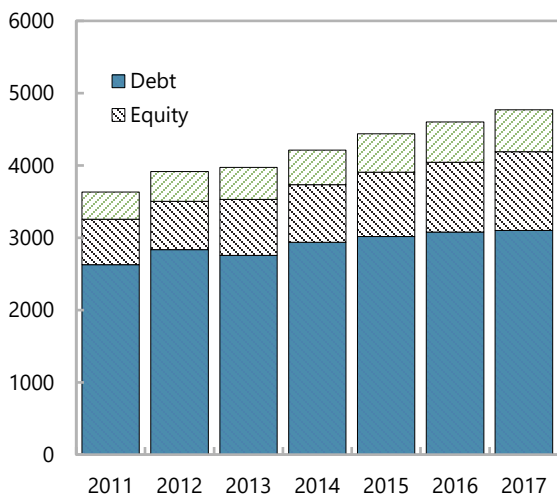


Sources: Banque de France; and IMF staff calculations.

Figure 22. France: Domestic and Cross-Border Exposure Composition

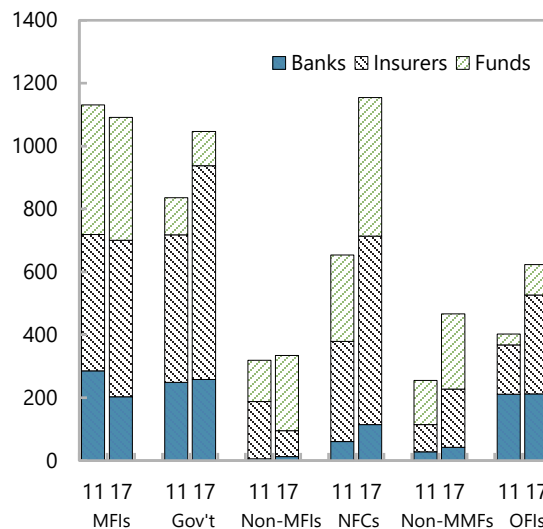
Exposures are mainly held in debt securities.

Total Positions
(Billions of euros)



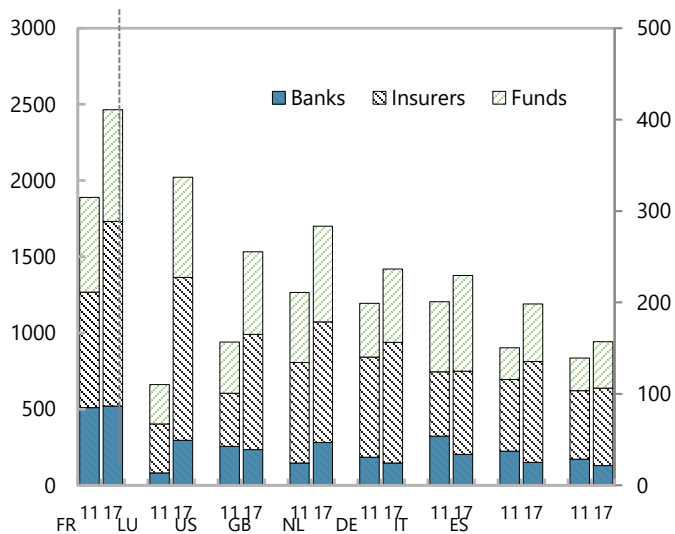
Increased exposures since 2011 are primarily due to high insurance and fund holdings of NFCs.

Exposures by Counterparty Sector
(Billions of euros)



Exposures have increased across all major counterparty countries and domestically, driven by insurers and funds.

Exposures by Counterparty Country
(Billions of euros, FR right scale others left scale)

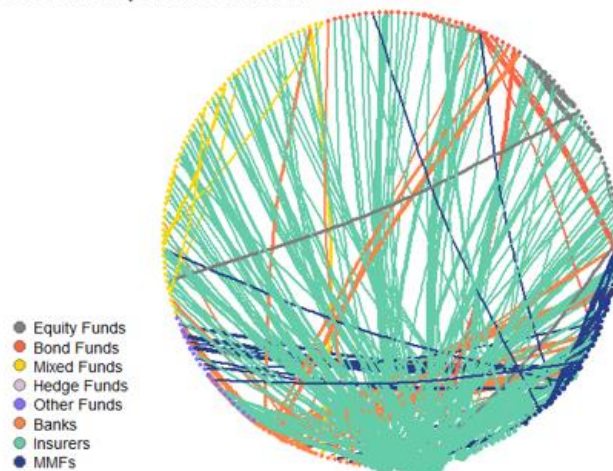


Sources: Banque de France; and IMF staff calculations.

Figure 23. France: Network Visualization of Cross-Sector Exposures

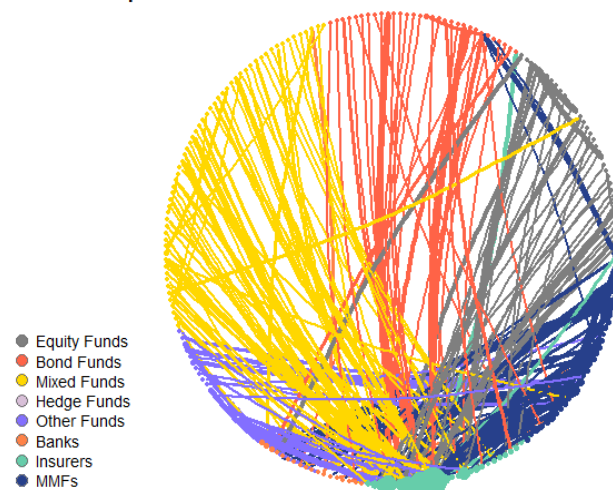
Exposures are held predominantly by insurers ...

Cross-sector positions as assets



... in the form of fund shares issued primarily by mixed and money market funds.

Cross-sector positions as liabilities



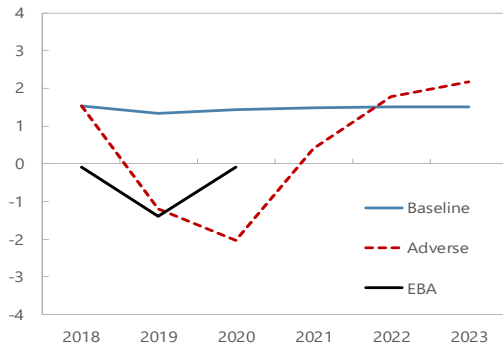
Sources: HCSF; and IMF staff calculations.

Note: Only exposures over 1-billion euros are shown. The panel above show bilateral exposures between funds, banks, and insurance companies exceeding EUR 1 billion. Vertices represent individual institutions, while vertex size represents total marketable securities held as assets. In the top panel, edges represent assets, whereas in the bottom panel they represent liabilities. Edges are directed, and they colored according the source of the edge.

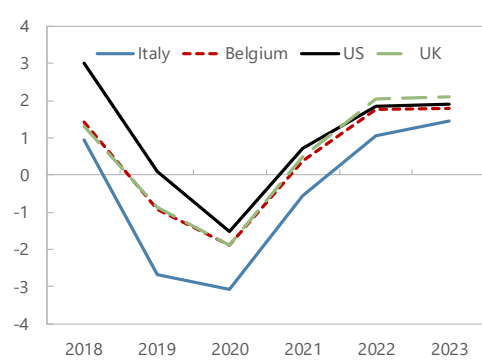
Figure 24. France: Solvency Stress Test Scenario Assumptions

**Scenario Assumptions on Key Variables
(Levels and deviation from baseline under adverse scenarios)**

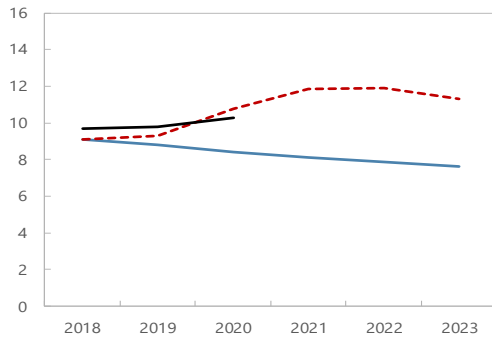
**Real GDP Growth
(Percent)**



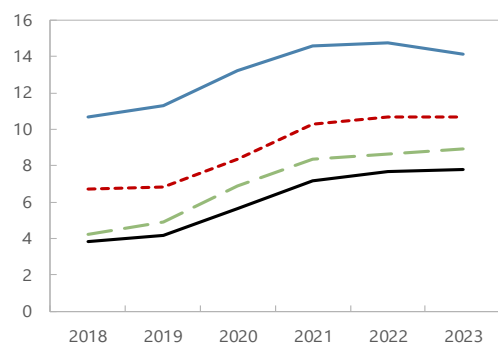
**Real GDP Growth
(Percent)**



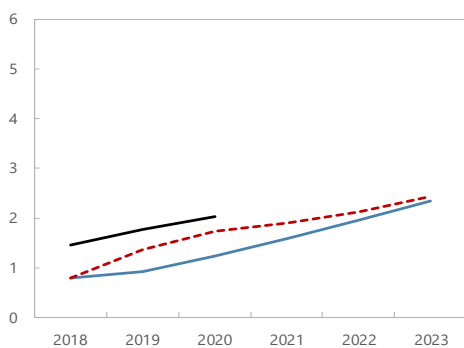
**Unemployment Rate
(Percent)**



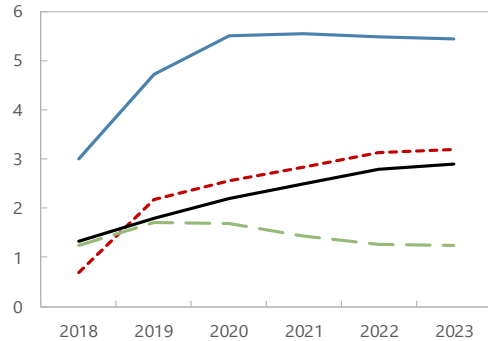
**Unemployment Rate
(Percent)**



**Long-Term Government bond Yield
(Percent)**



**Long-Term Government Yield
(Percent)**

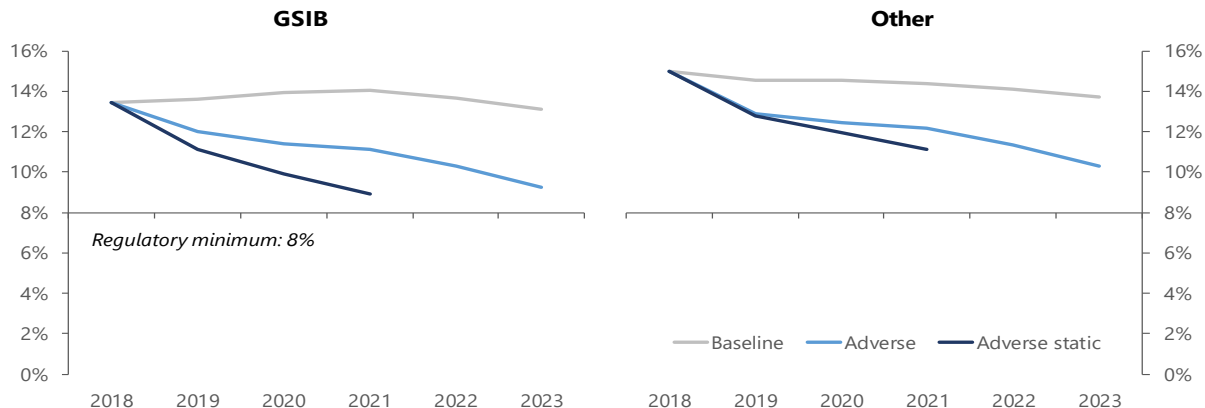


Sources: EBA; WEO; and IMF staff calculations.
Note: Baseline based on February 2019 WEO.

Figure 25. France: Solvency Stress Test Key Results

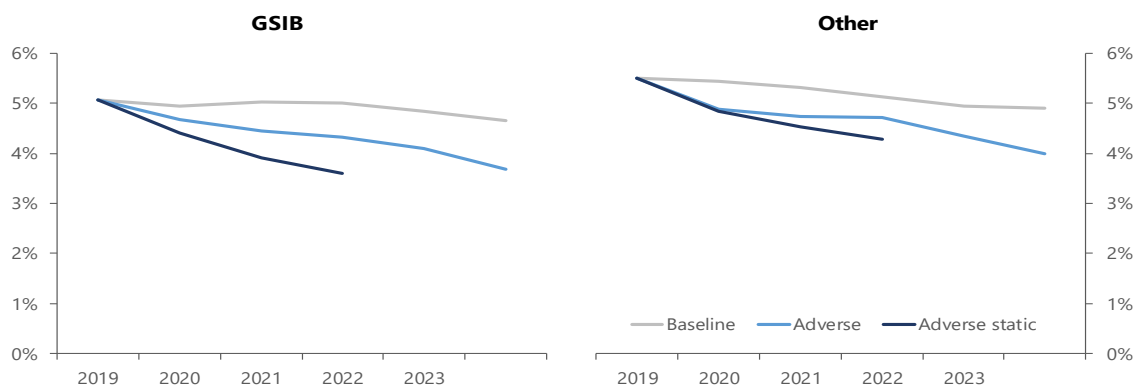
Aggregated CET1 capital ratio rises slightly under baseline and fell by around 400 bps over five years under the adverse scenario, with larger impact on internationally active banks.

1. CET1 Ratio under Different Scenarios



Aggregate leverage ratio will fall by 100 bps under the adverse scenario.

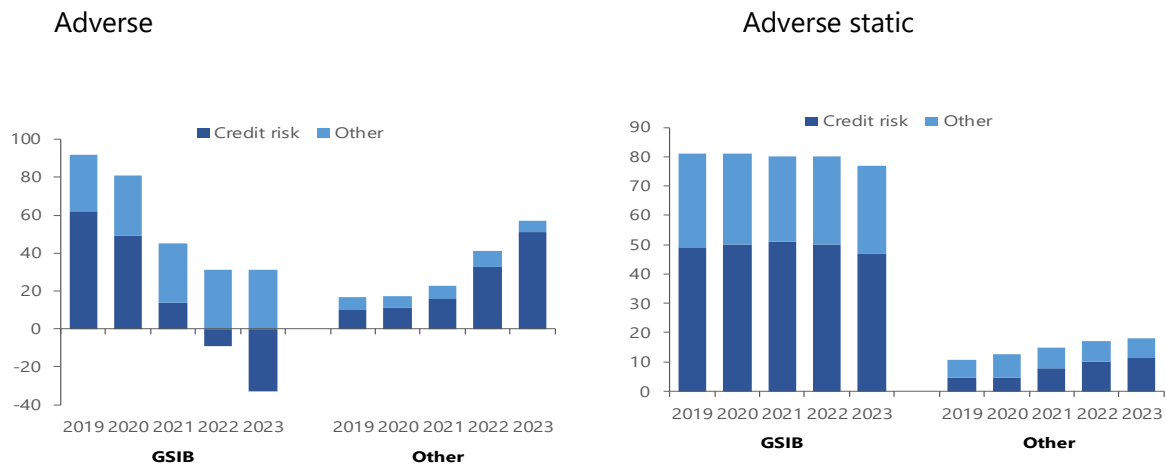
2. Leverage Ratio under Different Scenarios



Changes in Risk-Weighted Assets (RWA) are predominantly associated with credit risk.

3. Cumulative Changes in RWA

(Since 2018, in billions of euros)

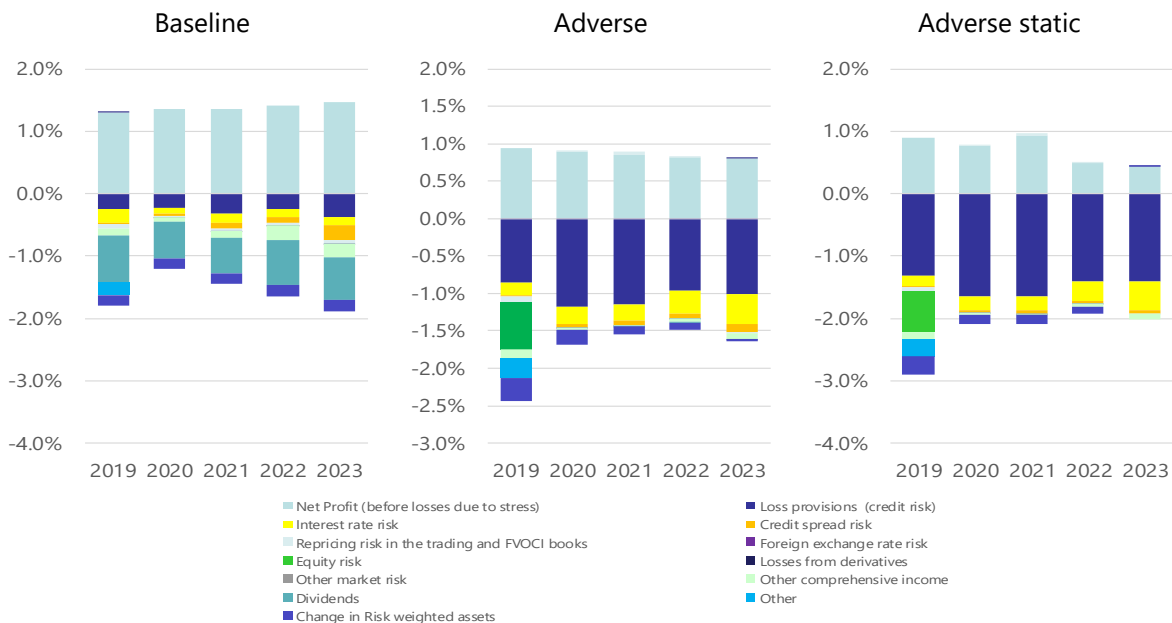


Source: IMF staff estimates.

Figure 25. France: Solvency Stress Test Key Results (concluded)

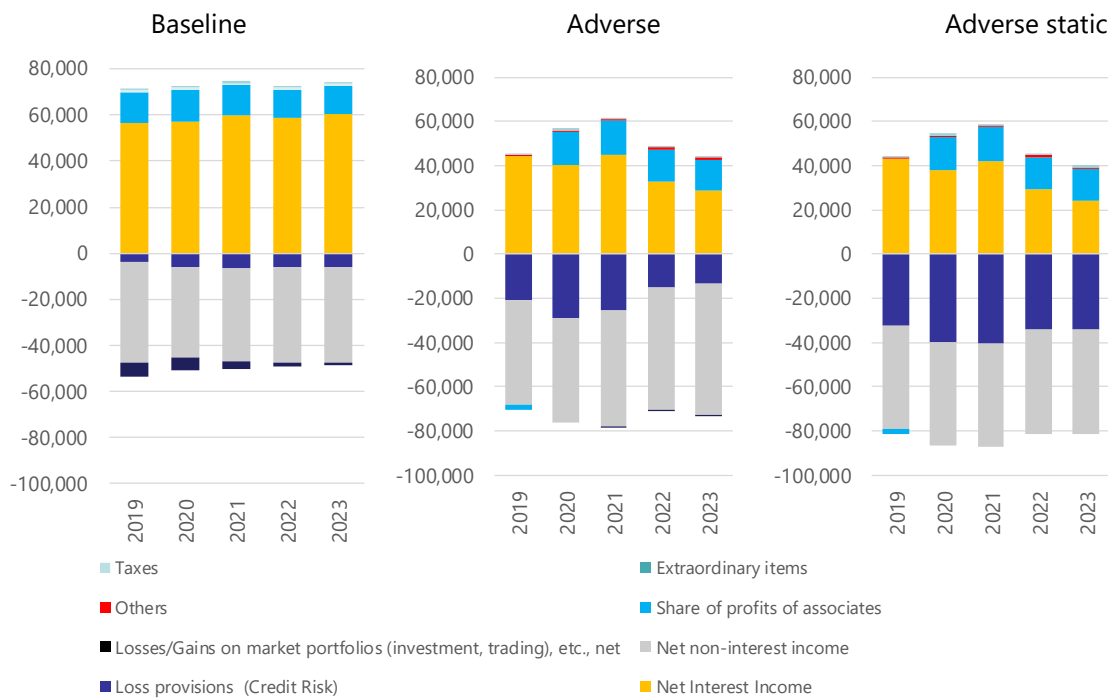
Increase in loss provision against credit risk is the main driver of capital depletion.

4. Contributions to Changes in Capital Ratio



Similarly, higher loss provisions and lower non-interest income are the main contributors to profit losses.

5. Net Profit Components (Millions of euros)



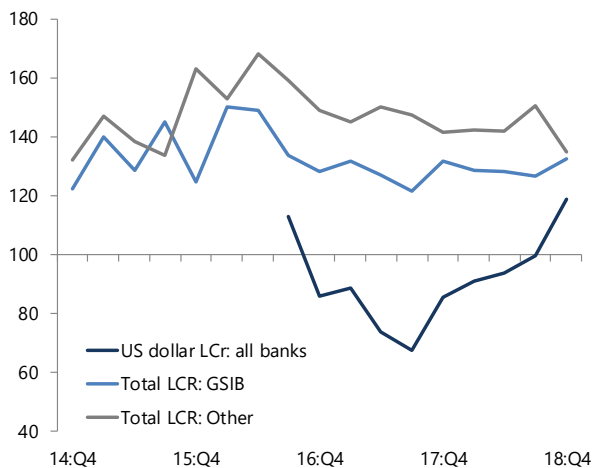
Source: IMF staff estimates.

Figure 26. France: Liquidity and Stable Funding

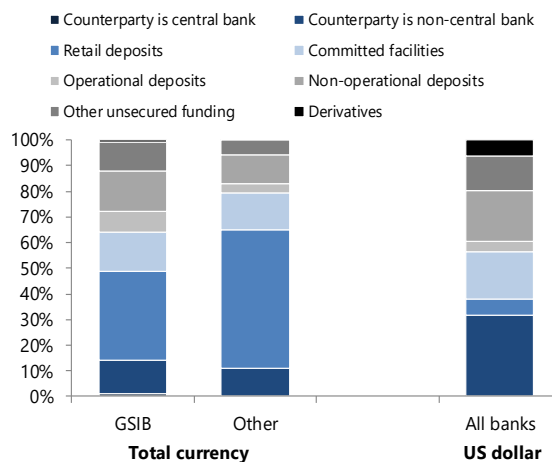
The liquidity coverage ratio is well above 100 percent.

LCR funding structure is diversified and concentrated in high quality liquid assets.

1. Liquidity Coverage Ratio (LCR)



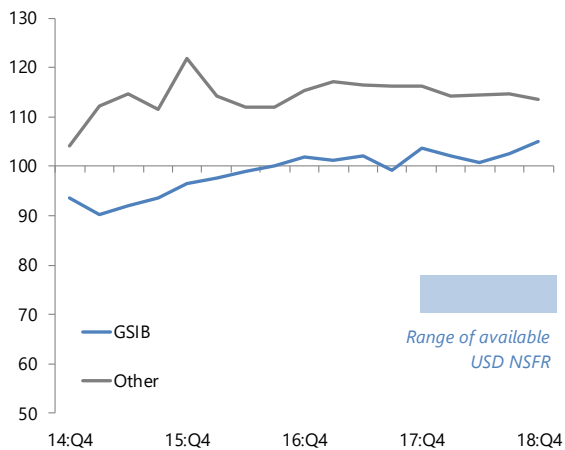
2. LCR Composition



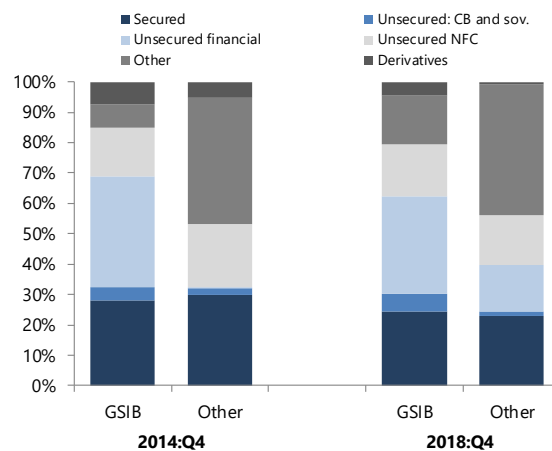
Overall, net stable funding ratio is also above 100 percent, though dollar funding ratio remains challenging ...

... while NSFR funding structure is tilted towards wholesale funding sources.

3. Net Stable Funding Ratio (NSFR)



4. NSFR Composition

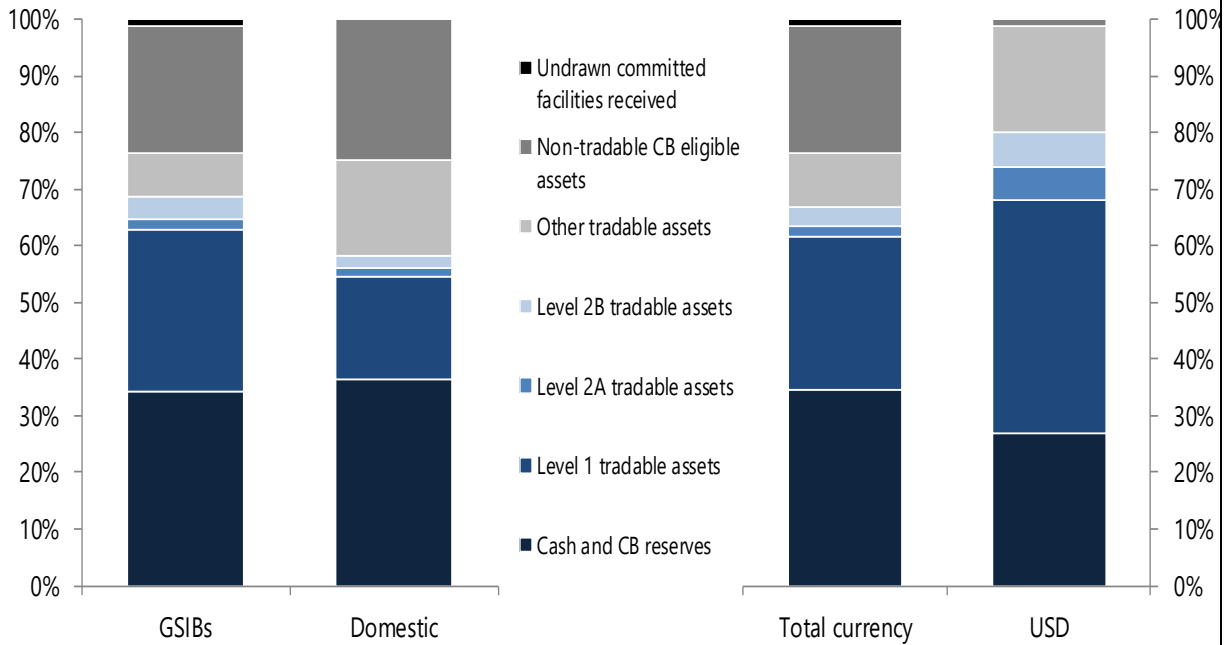


Sources: COREP reports; and IMF staff estimates.

Figure 26. France: Liquidity and Stable Funding (concluded)

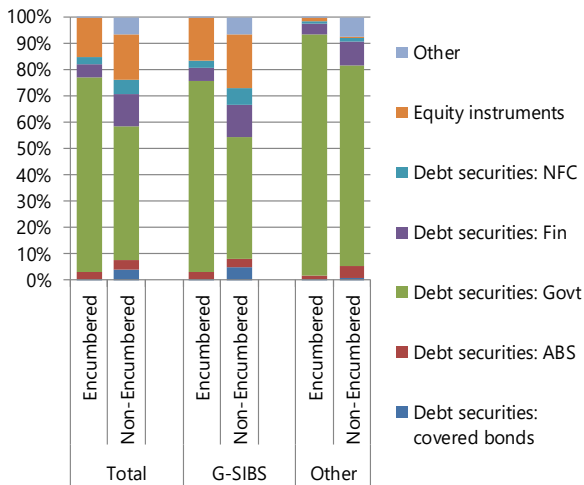
There is a high level of counter-balancing capacity with low concentration.

5. Composition of Counter Balancing Capacity



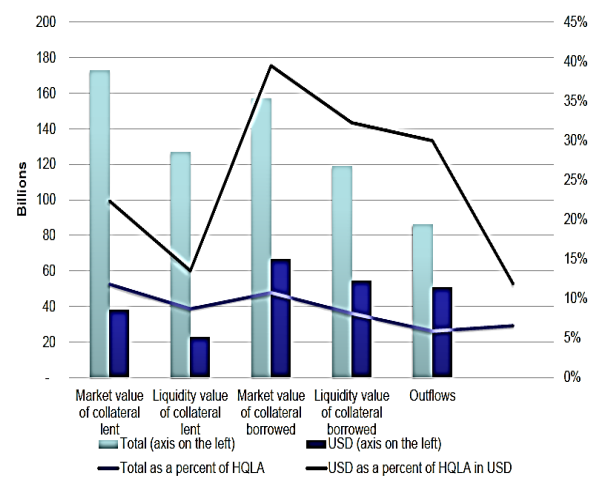
Most of encumbered assets are sovereign securities.

6. Asset Encumbrance



The use of collateral swaps in U.S. dollar HQLA is relatively high.

7. Collateral Swaps

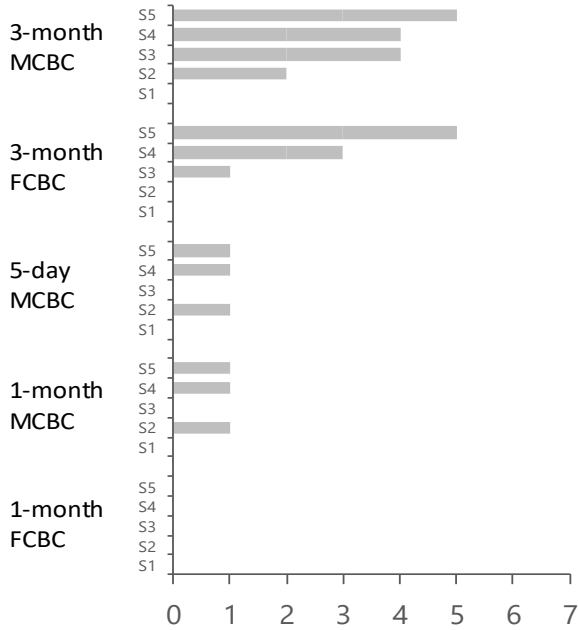


Sources: COREP reports; and IMF staff estimates.

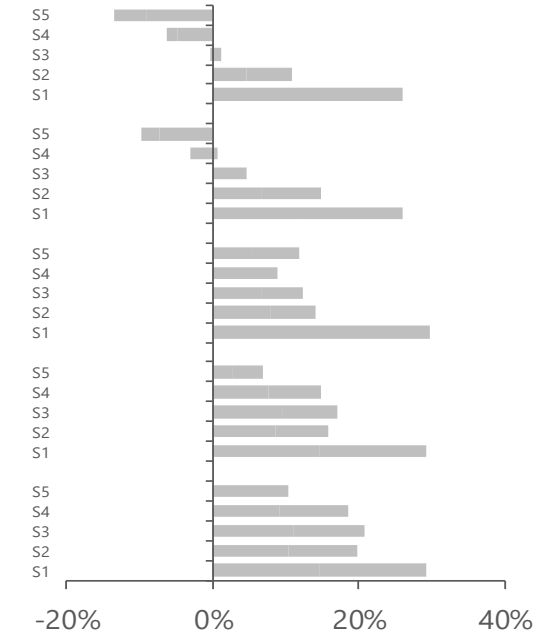
Figure 27. France: Liquidity Stress Test

Results: Total Currency

Number of Banks with Negative Counterbalancing Capacity (CBC)

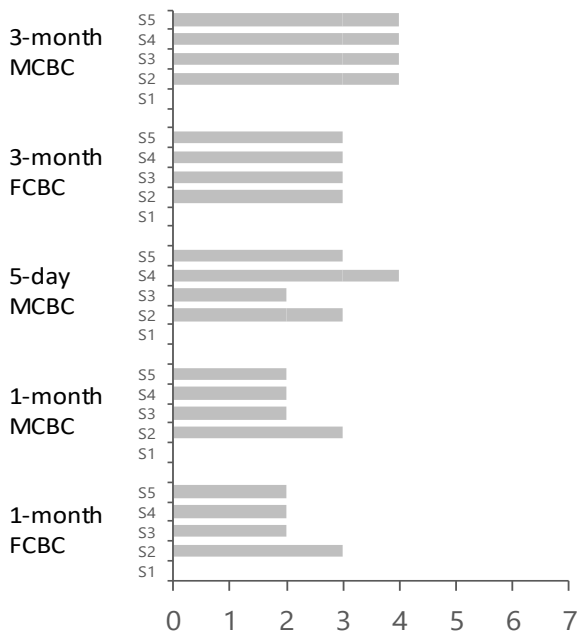


Liquidity Surplus/Deficit (Percent of total assets)

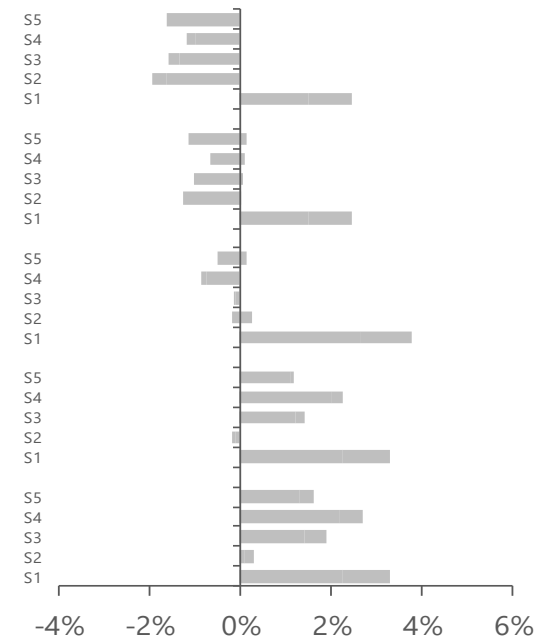


Results: U.S. Dollars

Number of Banks with Negative CBC



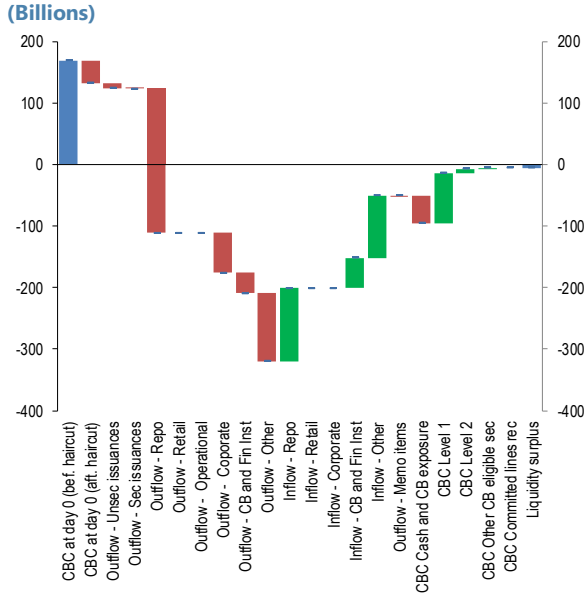
Liquidity Surplus/Deficit (Percent of total assets)



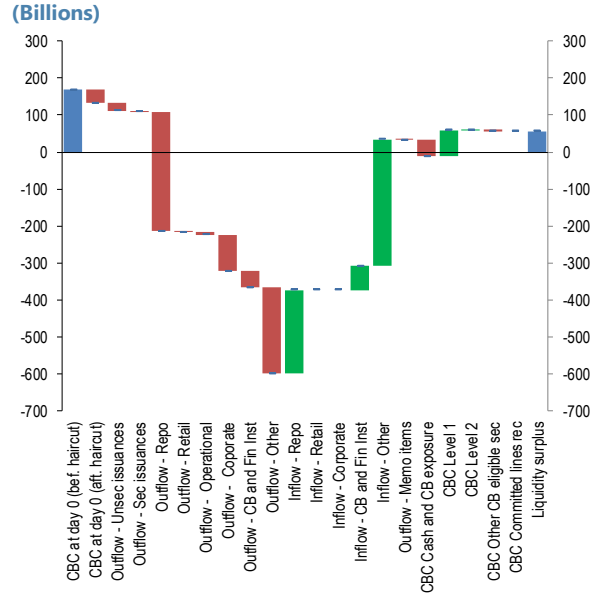
Source: IMF staff estimates.

Figure 27. France: Liquidity Stress Test (concluded)

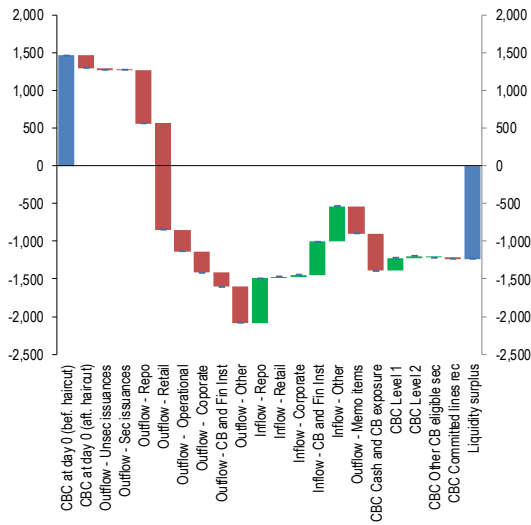
Factors Driving Liquidity Positions under Wholesale Outflow Scenario: 5-day, U.S. dollars (Billions)



Factors Driving Liquidity Positions under Wholesale Outflow Scenario: 1-month, U.S. dollars (Billions)



Factors Driving Liquidity Positions: Contractual: 1-Month, U.S. dollars (Billions)



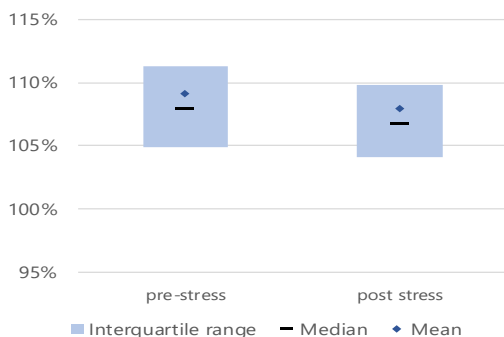
Source: IMF staff estimates.

Figure 28. France: Insurance Risk Analysis

The ratio of assets over liabilities for the median company declines slightly from 108 to 107 percent from the baseline to adverse scenario.

Assets to Liabilities

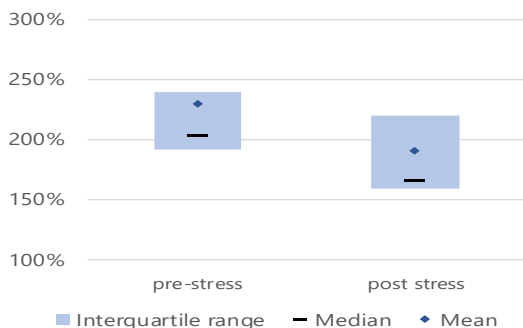
(Percent)



The median SCR ratio drops from 204 to 166 percent, and three quarters of participants remain above 160 percent.

SCR Ratio

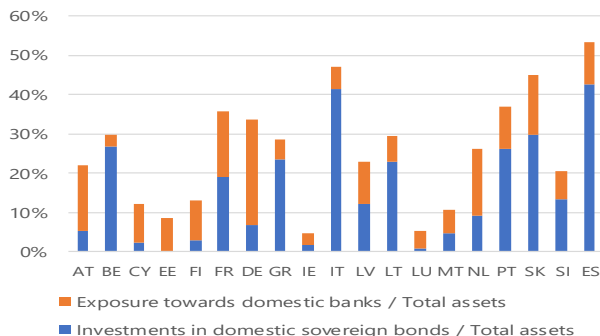
(Percent)



The home bias of French insurers in their sovereign and banking exposures is high, being more pronounced only in four other Euro Area countries.

Insurers' Exposures towards Domestic Sovereign and Banks

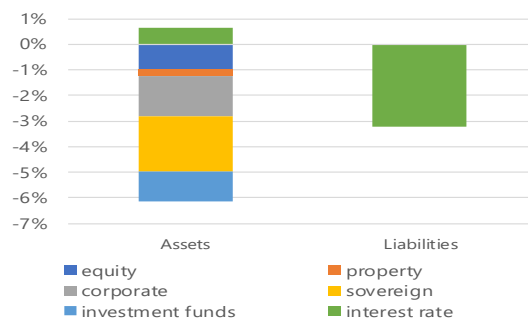
(Percent of assets)



Sovereign and corporate spread increases contribute substantially to the overall impact, while the (risk-free) interest rate shock has a compensating effect.

Impact of Shocks on Asset and Liability Valuation

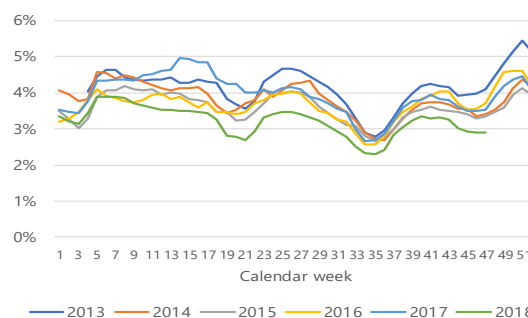
(Percent)



Life insurance lapse rates follow a seasonal pattern and have been lower in 2018 than in previous years.

Seasonal Pattern to Life Insurance Lapses

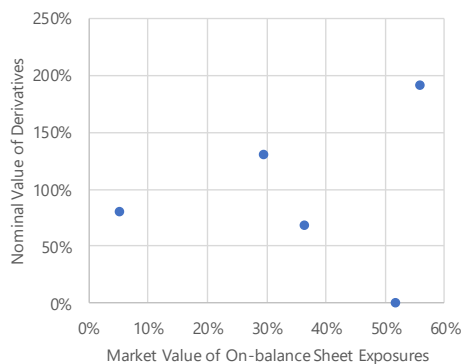
(4-week Moving Average)



On-balance sheet exposures towards the parent bank are diverse, but they can reach more than 50 percent of eligible capital of some insurers.

Exposure towards Parent Bank

(Percent of capital)

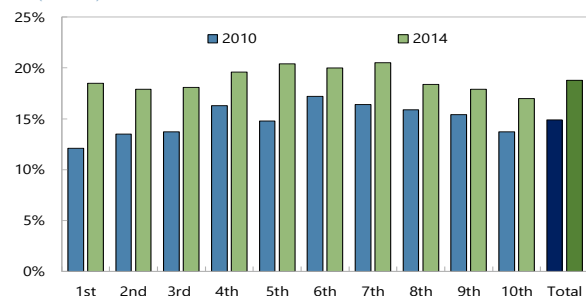


Sources: IMF Staff calculations based on EIOPA and ACPR data.

Figure 29. France: Housing Loan Vulnerabilities

The Debt-Service-to-Income (DSTI) has increased for all income groups ...

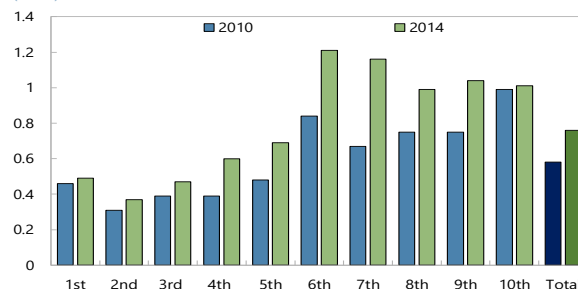
Debt Service to Income Ratio, by Income Decile (Percent)



Source: INSEE, Enquête Patrimoine.

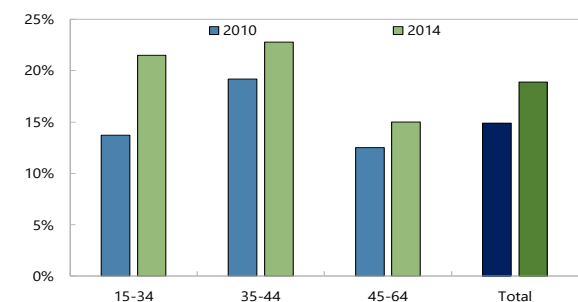
... while the increase in leverage is larger among upper-middle income groups.

Debt-to-Income Ratio by Income Decile (Ratio)



Debt service to income has increased particularly among younger age cohorts ...

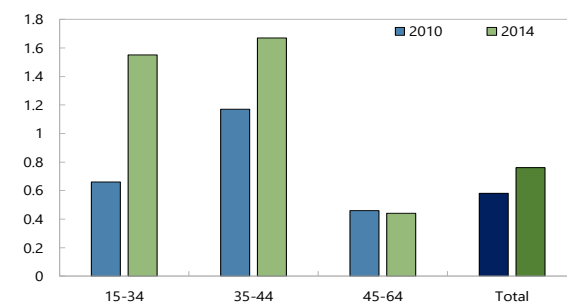
Debt Service-to-Income Ratio by Age Cohort (Percent)



Sources: INSEE, Enquête Patrimoine.

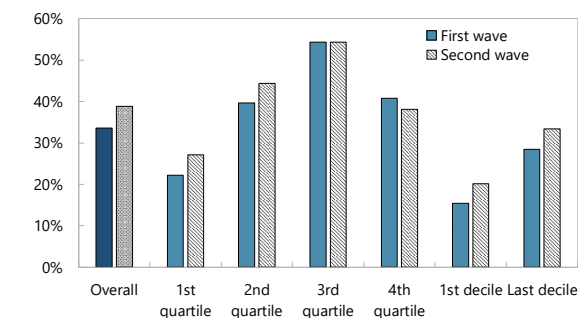
... and so, has leverage, which has remained stable in older cohorts.

Debt-to-Income Ratio by Age Cohort (Ratio)



The share of high LTV housing loans is the highest among middle income groups and has increased in the bottom half of the income distribution.

Proportion of Households with Loans-to-Value Ratios > 90 percent



Sources: ECB Household Finance and Consumption Surveys; and IMF staff calculations.

The bottom half of the income distribution (including the lowest decile) has experienced a worsening of its financial net worth.

Median Debt to Financial Assets by Percentile of Income Distribution

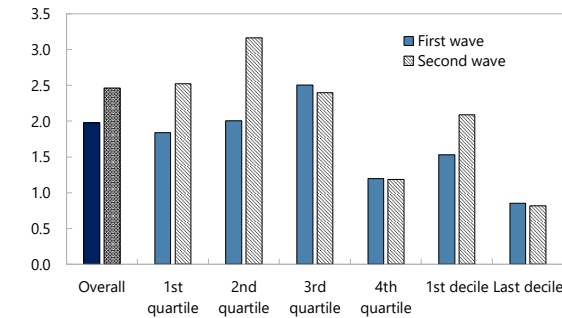
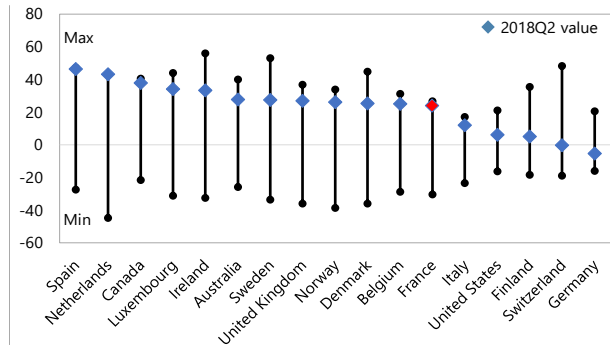


Figure 30. France: Real Estate Market

The average price-to-income ratio is close to its historical high, but the deviation does not appear excessive when compared to peer countries ...

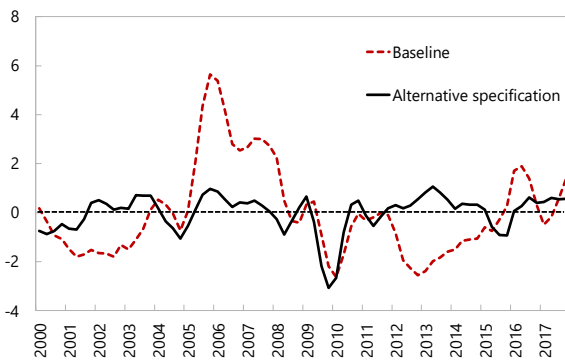
Price to Income Ratio
(Percent deviation from the average over the period 1990:Q1–2018:Q2)



Source: OECD.

At the national level, house prices do not appear misaligned.

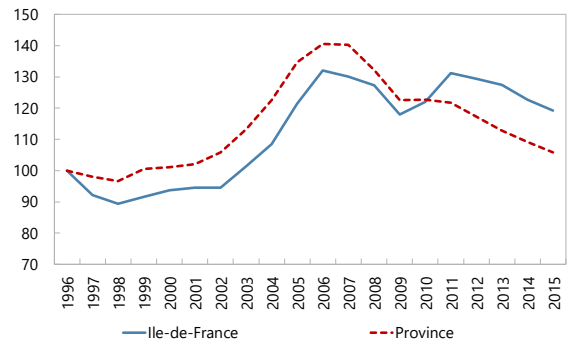
Housing Valuation
(The percentage deviation of actual price from equilibrium level)



Sources: INSEE; and IMF staff estimates.

Since the GFC, the price-to-income ratio has declined, both in Ile-de-France and in Province

Housing Price to Income Ratio by Region
(Percentage, 1996 = 100)



Sources: INSEE; and IMF staff calculations.

Similarly, for Ile-de-France and Province.

Housing Valuation—Ile-de-France and Provincial France
(The percentage deviation of actual price from equilibrium level)

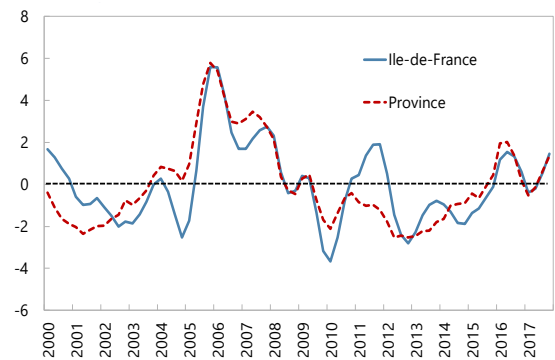
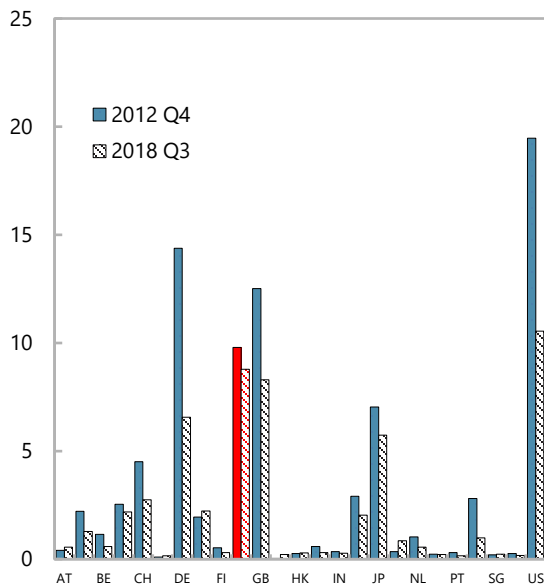


Figure 31. France: Cross-Border Contagion

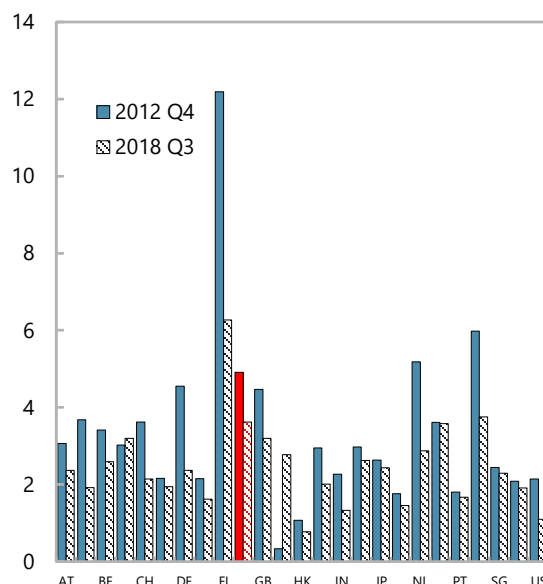
French banks are as globally systemic as they were during the last FSAP in 2012 ...

Contagion Index, Credit and Funding Shock (Percentage of capital)



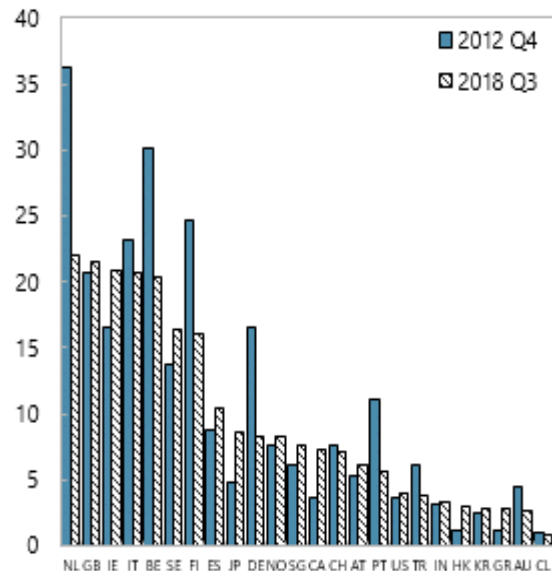
... though at the same time they are relatively less vulnerable.

Vulnerability Index, Credit and Funding Shock (Percentage of capital)



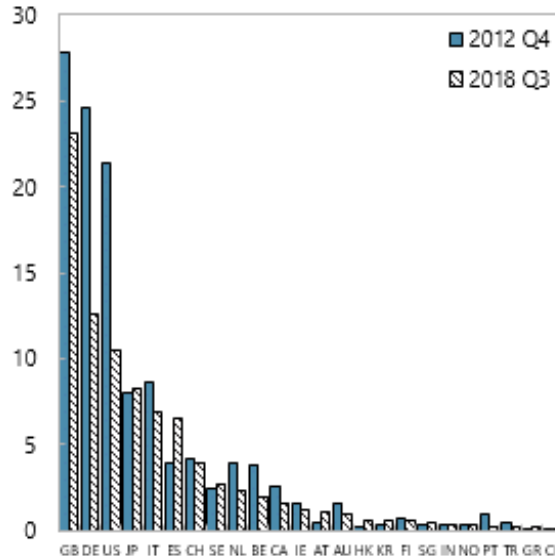
The Netherlands, the United Kingdom, Ireland, Italy, and Belgium, are most susceptible to French banks...

Contagion from France, Credit and Funding Shock (Percentage of capital)



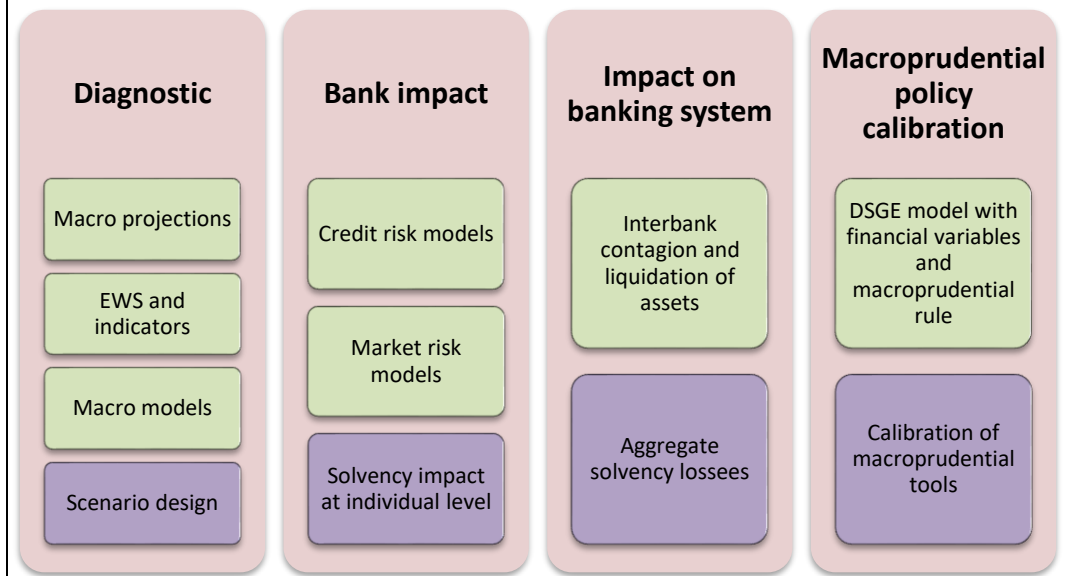
...while French banks are most exposed to the United Kingdom, Germany, and the United States.

Contagion to France, Credit and Funding Shock (Percentage of capital)



Sources: BIS; and IMF staff estimates.

Figure 32. France: Systemic Risk Monitoring—A Four-Block Strategy



Source: French Authorities.

Table 4. France: Selected Economic and Social Indicators, 2015–24

	2015	2016	2017	Est.		Projections				
				2018	2019	2020	2021	2022	2023	2024
Real economy (change in percent)										
Real GDP	1.1	1.2	2.2	1.5	1.3	1.4	1.5	1.5	1.5	1.5
Domestic demand	1.5	1.7	2.1	1.0	1.0	1.1	1.4	1.7	1.9	2.0
Private consumption	1.5	2.1	1.0	0.9	0.8	1.0	1.4	1.7	2.0	2.1
Public consumption	1.0	1.4	1.3	1.0	0.8	0.5	0.5	0.5	0.5	0.5
Gross fixed investment	1.0	2.8	4.5	2.9	1.8	1.8	2.3	3.2	3.3	3.3
Foreign balance (contr. to GDP growth)	-0.4	-0.5	0.1	0.6	0.3	0.3	0.1	-0.2	-0.4	-0.5
Exports of goods and services	4.6	1.5	4.5	3.0	3.6	3.7	3.8	3.5	3.4	3.3
Imports of goods and services	5.9	3.0	4.0	1.2	2.5	2.7	3.5	4.1	4.5	4.6
Nominal GDP (billions of euros)	2,198	2,229	2,292	2,349	2,415	2,488	2,565	2,649	2,741	2,837
CPI (year average)	0.1	0.3	1.2	2.1	1.3	1.5	1.6	1.7	1.8	1.9
GDP deflator	1.1	0.2	0.7	1.0	1.5	1.6	1.6	1.7	1.9	1.9
Gross national savings (percent of GDP)	22.3	21.9	22.9	22.1	22.2	22.5	22.7	22.8	22.7	22.5
Gross domestic investment (percent of GDP)	22.7	22.7	23.5	22.8	22.6	22.6	22.6	22.8	23.0	23.3
Public finance (percent of GDP)										
General government balance	-3.6	-3.4	-2.7	-2.6	-3.3	-2.4	-2.5	-2.5	-2.6	-2.6
Revenue	53.2	53.2	53.8	53.6	52.4	52.0	51.6	51.5	51.4	51.4
Expenditure	56.8	56.6	56.5	56.2	55.7	54.4	54.1	54.0	54.0	54.0
Primary balance	-1.8	-1.7	-1.0	-0.9	-1.7	-0.8	-0.9	-0.9	-0.9	-0.9
Structural balance (percent of pot. GDP)	-3.0	-2.8	-2.6	-2.5	-2.5	-2.5	-2.6	-2.6	-2.6	-2.6
Nominal expenditure (change in percent)	1.5	1.0	2.6	1.9	2.0	0.6	2.6	3.1	3.4	3.5
Real expenditure (change in percent)	1.4	0.7	1.5	-0.2	0.7	-1.0	1.0	1.3	1.5	1.5
General government gross debt	95.6	96.6	98.5	98.6	99.2	98.7	98.2	97.6	97.0	96.2
Labor market (percent change)										
Employment	0.7	0.6	0.9	0.7	0.3	0.5	0.4	0.4	0.4	0.4
Labor force	0.8	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1
Unemployment rate (percent)	10.4	10.1	9.4	9.1	8.8	8.4	8.1	7.9	7.6	7.4
Total compensation per employee	0.6	1.0	2.2	2.2	...	...	...	...	...	...
Credit and interest rates (percent)										
Growth of credit to the private non-financial sector	3.7	3.8	5.6	5.4	4.9	4.6	4.0	3.4	3.5	3.5
Money market rate (Euro area)	-0.1	-0.3	-0.4	-0.4	...	...	...	...	...	...
Government bond yield, 10-year	0.8	0.5	0.8	0.8	...	...	...	...	...	...
Balance of payments (percent of GDP)										
Current account	-0.4	-0.8	-0.6	-0.7	-0.4	0.0	0.1	0.0	-0.4	-0.8
Trade balance of goods and services	-0.4	-0.8	-0.9	-1.1	-0.6	-0.2	-0.1	-0.2	-0.6	-1.0
Exports of goods and services	31.9	31.7	32.1	32.0	33.3	33.2	33.6	33.8	33.9	34.1
Imports of goods and services	-32.3	-32.4	-33.0	-33.1	-33.9	-33.5	-33.6	-33.9	-34.5	-35.0
FDI (net)	0.3	1.1	0.3	1.6	1.7	1.8	1.9	2.0	2.1	2.1
Official reserves (US\$ billion)	55.2	56.1	54.8	66.1	...	...	...	...	...	...
Exchange rates										
Euro per U.S. dollar, period average	0.90	0.90	0.89	0.85	...	...	...	...	...	...
NEER, ULC-styled (2005=100, +=appreciation)	97.9	98.7	100.0	101.1	...	...	...	...	...	...
REER, ULC-based (2005=100, +=appreciation)	94.4	95.0	94.8	95.5	...	...	...	...	...	...
Potential output and output gap										
Potential output (change in percent)	1.0	1.1	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.5
<i>Memo: per working age person</i>	1.2	1.2	1.2	1.4	1.3	1.5	1.6	1.5	1.5	1.5
Output gap	-0.8	-0.8	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0

Sources: Haver Analytics, INSEE, Banque de France, and IMF Staff calculations.

Table 5. France: Core Financial Soundness Indicators, 2013–18

	2013	2014	2015	2016	2017	2018
Deposit-taking institutions 1/						
Regulatory capital to risk-weighted assets 2/	15.1	15.3	16.6	17.4	18.9	18.7
Regulatory Tier I capital to risk-weighted assets 2/	13.2	13.6	13.8	14.5	15.3	15.4
Nonperforming loans net of provisions to capital 3/	11.4	9.6	9.1	9.2	15.0	13.6
Bank provisions to Nonperforming loans 3/	104.7	103.8	104.2	103.0	50.6	50.4
Nonperforming loans to total gross loans 3/	4.5	4.0	3.9	3.9	3.1	2.8
Sectoral distribution of loans to total loans, of which						
Deposit-takers 3/	39.2	39.1	38.5	38.6	3.0	3.2
Nonfinancial corporation 3/	19.0	19.5	18.8	19.1	16.3	15.7
Households (including individual firms) 3/	30.3	29.8	28.1	28.1	25.7	25.5
Nonresidents (including financial sectors) 3/	5.4	5.5	5.3	5.3	37.5	40.4
ROA (aggregated data on a parent-company basis) 3/ 4/ 5/	0.4	0.2	0.3	0.7	0.4	0.4
ROA (main groups on a consolidated basis) 2/ 5/	0.4	0.4	0.6	0.5	0.4	0.4
ROE (aggregated data on a parent-company basis) 3/ 4/ 5/	10.1	4.4	7.7	14.8	6.4	6.5
ROE (main groups on a consolidated basis) 2/ 5/	8.1	6.2	9.2	8.4	6.3	6.7
Interest margin to gross income 3/	43.7	44.1	41.3	41.3	36.4	41.9
Noninterest expenses to gross income 3/	66.5	67.8	65.5	65.3	74.5	88.6
Liquid assets to total assets 6/	30.6	27.1	12.5	12.6	13.9	13.7
Liquid assets to short-term liabilities 6/	165.2	178.5	17.5	19.9	20.7	19.6

Sources: Banque de France, ACPR

1/ These may be grouped in different peer groups based on control, business lines, or group structure.

2/ Consolidated data for the five banking groups (IFRS).

3/ 2017-18 based on consolidated data, and thus not comparable with previous years' unconsolidated data. In particular, the level of consolidation has changed from the establishment level to the FINREP consolidated approach.

4/ All credit institutions' aggregated data on a parent-company basis.

5/ ROA and ROE ratios are calculated after taxes (same calculation as the ECB consolidated data ratios).

6/ 2015-18 data is based on new methodology which is not comparable to older figures.

Table 6. France: Risk Assessment Matrix

Risk	Overall Level of Concern	
	Relative Likelihood	Expected Impact if Materialized
Sharp tightening of global financial conditions	Low	<p style="text-align: center;">High</p> <ul style="list-style-type: none"> • Less favorable borrowing conditions could weigh on private-sector and public-sector balance sheets, with implications for growth. • Higher funding costs for banks and large corporations, especially those regarded as less sound. • Valuation losses on financial institutions' assets, reduced value of collateral, and lower recovery in default cases, which could be amplified through exposures to high spread EA countries. • Loss of market confidence. Negative shocks to growth, worsening growth outlook. • Impact on FX liquidity of financial institutions.
	Medium	
Rising protectionism and retreat from multilateralism	High	<p style="text-align: center;">High</p> <ul style="list-style-type: none"> • A retaliatory cycle of trade restrictions could hurt France's exports and investment, impairing the growth momentum. • Increase in policy-related risk premia, as well as mark-to-market losses on holdings of sovereign securities carrying higher risk.
Weaker-than-expected global growth. The global growth slowdown could be synchronized as weakening outlooks in the U.S., Europe and China feed off each other and impact on earnings, asset prices and credit performance	High	<p style="text-align: center;">Medium</p> <ul style="list-style-type: none"> • Lower growth would weigh on private sector and public-sector balance sheets, with feed-back effects on growth. • Lower profitability of nonfinancial corporations would aggravate debt service with adverse effects on fixed investment and productivity. • Deterioration in public finance would adversely impact confidence.
Weakening of reform implementation in France, including due to increased resistance	High	<p style="text-align: center;">Medium</p> <ul style="list-style-type: none"> • Lower medium-term growth due to weaker investment, low productivity, and persistent unemployment. • Further deterioration in public finance and private balance sheets.
Further pressure on traditional bank business models	Medium	<p style="text-align: center;">Medium</p> <ul style="list-style-type: none"> • Given insufficient progress in balance sheet repair in some countries and broader profitability concerns, such an event could reverberate through the entire financial sector and widen sovereign yield spreads within the banking union.
Capital outflows and significant slowdown in China and other large emerging market economies	Medium	<p style="text-align: center;">Medium</p> <ul style="list-style-type: none"> • Losses due to French banks' exposures to emerging market economies. • Slower export growth, resulting in higher negative output gap.

Table 7. France: Financial Sector Oversight Structure								
		Banking		Insurance	Investment Service Providers	Market Infrastructure Operators	Asset management	
		<i>SIs</i>	<i>LSIs</i>					
Legislation and Regulation	<i>EU</i>		EC, EP, Council and EBA	EC, EP, Council and EIOPA	EC, EP, Council and ESMA			
	<i>National</i>		Government, Parliament		Government, Parliament and AMF			
Supervision	<i>Micro prudential</i>	<i>EU</i> ¹		ECB SSM	ECB SSM (indirect)			
		<i>National</i>	<i>Prudential</i>		ACPR			
			<i>Conduct</i>			AMF ²		
	<i>Macro prudential</i>	<i>EU</i>	<i>Warnings & Recomm.</i> ³	ESRB				
			<i>Power of intervention</i> ⁴	ECB SSM				
	<i>National</i>		HCSF with proposal power from BdF ⁵					
Resolution	<i>EU</i>		SRB ⁶ ECB					
	<i>National</i>			ACPR				

Source: French authorities.

¹ The ESAs (European Banking Area (EBA), European Securities and Markets Authority (ESMA), European Insurance and Occupational Pensions Authority (EIOPA) also play a role, at the EU level, in microprudential surveillance and risk analysis.

² AMF is responsible for market and business conduct supervision of all market participants.

³ To the ESAs, EC, national supervisory authorities and member states.

⁴ The ECB's SSM has top-up powers over national designated and competent authorities for the use of CRR/CRD IV instruments. EIOPA (art. 16 PRIIPS), ESMA (art. 40 MIFIR) and EBA (art.41 MIFIR) also have targeted macroprudential powers.

⁵ The use of CRR/CRD IV instruments by national authorities requires close interactions with ECB and SSM and might require interactions with other EU bodies for the use of specific powers (e.g., art. 458 CRR). ACPR and AMF also have targeted macroprudential powers (art. 17 PRIIPS, art. 42 MIFIR, art. L.612-1 CMF, art. 124 CRR, art. 164 CRR, art. L.511-41-1-C CMF).

⁶ Single Resolution Board.

Table 8. France: A Comparison of the Macroprudential Tools in Select Countries

	France		Germany		Netherlands		Ireland		Italy		U.K.	
	Available	Active	Available	Active	Available	Active	Available	Active	Available	Active	Available	Active
Broad-based tools ¹												
Countercyclical capital buffer	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	Yes	Yes
Capital conservation buffer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Limit on leverage ratio	No	No	No	No	No	No	No	No	No	No	Yes	Yes
Systemic risk buffer	Yes	No	Yes	No	Yes	Yes	No	No	No	No	Yes	No
Household sector tools												
Household sector capital requirement	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Cap on loan-to-value ratio	Yes	No	Yes	No	Yes	Yes ²	Yes	Yes	No	No	Yes	No
Cap on loan-to-income ratio	Yes	No	Yes	No	Yes	No	Yes	Yes	No	No	Yes	No
Cap on debt-service to income ratio	Yes	No	Yes	No	Yes	Yes	Yes	No	No	No	Yes	No
Limits on new loans with high LTV ratio	Yes	No	Yes	No	No	No	Yes	Yes	No	No	Yes	No
Limits on new loans with high LTI ratio	Yes	No	Yes	No	No	No	Yes	Yes	No	No	Yes	Yes
Corporate sector tools												
Corporate sector capital requirement (CRE risk weight)	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Cap on LTV ratio of commercial real estate credit	Yes	No	Yes	No	No	No	Yes	No	No	No	Yes	No
Liquidity tools (banking sector)												
Liquidity coverage ratio (LCR)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LCR by currency	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Net stable funding ratio (NSFR)	No	No	No	No	No	No	No	No	No	No	No	No
Tools for systemic liquidity risk and nonbank sector												
Asset management industry	Yes	No	Yes	Yes	No	No	No	No	No	No	No	No
Pension funds	No	No	Yes	No	No	No	No	No	No	No	No	No
Insurance companies	Yes	No	Yes	Yes	No	No	No	No	No	No	Yes	Yes
Tools for SII and interconnectedness												
Capital surcharges for SII	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Limits of the size of exposure between financial institutions	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No

Source: IMF Macroprudential Policy Survey

¹ These broad-based tools are only applicable to the banking sector and in some cases to investment firms.

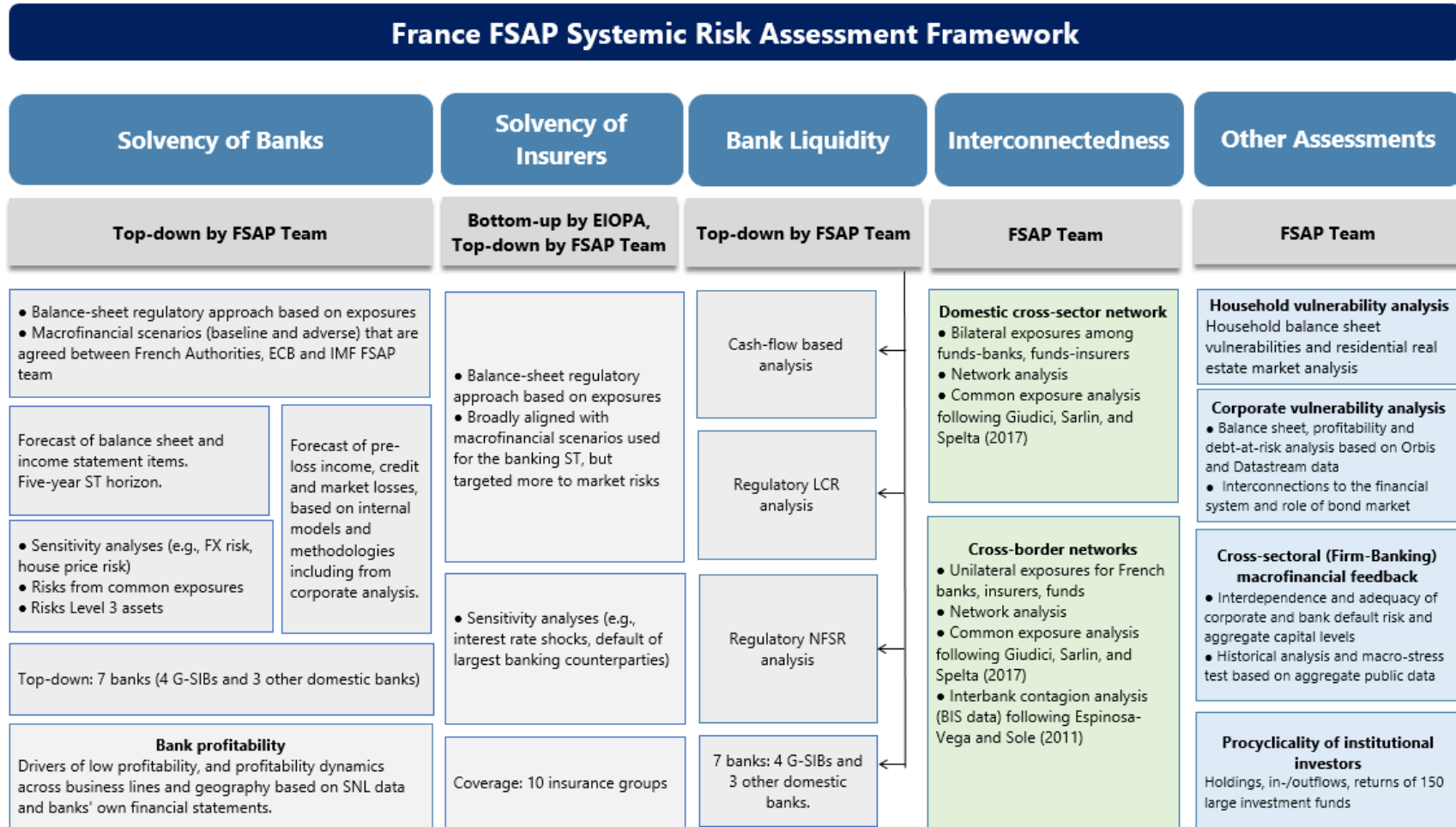
² In Netherlands, the cap on loan to value ratio is only applicable on new residential mortgages.

Appendix I. Implementation of 2012 FSAP Recommendations

Key Recommendation	Implementation Status D—Done / LD—Largely Done / PD—Partly Done / NA—No Action
Overall Financial Sector Oversight	
Enhance public disclosure of financial institution conditions and risks.	PD. In authorities' views, public disclosure of financial institution conditions and risks has been satisfactory. This FSAP will take a fresh look at this issue.
Give serious consideration to modifying MoF participation in the Boards of ACP and AMF to support independence of the supervisory process.	NA. The authorities continue to view that the structure does not threaten the independence of the supervisory process by ACPR and AMF. This FSAP will take a fresh look at this issue.
Eliminate limits on headcount for ACP, AMF, and H3C.	NA. The authorities noted do not have any plan to eliminate limits on headcount for budget control. This FSAP will review this.
Banking Supervision	
Continue monitoring banks' funding position and availability of collateral to access liquidity through the secured debt market and/or central bank facilities.	D. Reporting and supervisory arrangements introduced under the SSM have addressed monitoring of funding, collateral, etc.
Give ACP powers to assess the suitability of Board members (of both banks and insurance companies) and to require removal of all unsuitable Board members.	D. The ACPR/ECB are notified of appointment and reappointment and may object and deny such appointment and require removal of one or more Board members. Hence an important power is in place. The assessment of the suitability of Board members (individually and collectively) is supported by an ECB Guide of May 2017 on fit and proper assessments and an EBA/ESMA Guideline published in September 2017. However, it remains unclear, if there is an expectation/obligation for the ACPR/ECB to undertake an assessment of the suitability of Board members.
Give ACP powers to ensure it receives prior notification of major acquisitions and is, therefore, able to consider them ex ante.	NA. The finding from the EA FSAP for major acquisitions was materially non-compliant. The explanation is as follows: The SSM legislative framework does not provide an adequate or consistent basis for ECB banking supervision to approve or reject, and impose prudential conditions on, major acquisitions or investments by a credit institution. In particular: (i) there are no prior notification or approval requirements for acquisitions in an undertaking outside the financial sector; (ii) requirements relating to the acquisition of a qualifying holding in another EU credit institution are focused on safeguarding the sound and prudent management of the target, not the acquiring institution; (iii) there are no explicit requirements on the acquisition of holdings in credit institutions outside the EU; and (iv) there are no harmonized procedures or criteria at EU level for assessment of major acquisitions by credit institutions, including whether the acquisitions expose the credit institution to undue risks or hinder effective supervision.
Require full and consistent disclosure of the capital treatment in place and the related financial interactions within complex groups.	NA. The authorities continue to view that current practices are following the European regulations in effect, and the IMF assessment leads to an erroneous representation of the actual situation, while recognizing the specific characteristics of the French business model.
Insurance Supervision	
Introduce enforceable legal and regulatory	D.

Key Recommendation	Implementation Status D—Done / LD—Largely Done / PD—Partly Done / NA—No Action
corporate governance requirements.	
Require insurance companies to have internal audit and actuarial control functions.	D.
Enhance insurance companies' disclosures, including on valuation of technical provisions; risk exposures and concentrations; risk management; corporate governance; and sensitivity results from forms of stress testing.	D.
Securities Regulation	
Establish stronger conflict-of-interest arrangements to govern industry participation in the AMF Board.	NA. The membership of the AMF Board continues to include active market participants appointed by the Finance Minister.
Strengthen AMF's supervision of investment service providers and financial advisors by increasing onsite work, including inspections.	D. The AMF's supervision has been stepped up across all categories of investment service providers, including through onsite inspections.
Provide greater enforcement powers to the H3C and increase its staffing levels.	PD. The European audit reform was completed in June 2014 and was implemented in France in 2016. The results of this reform included a substantial increase in the enforcement powers of the H3C. However, there has been less progress on the objective of increasing staffing levels although efforts are continuing in this regard.
Resolution Framework	
Modify composition of Fonds de Garantie des Dépôts (FGD) Board to limit the potential for conflict of interest.	PD.
Expand FDG's powers in the resolution process, to assume assets and liabilities from a failing bank.	D.
Central Counterparties	
LCH.Clearnet SA should measure its exposures continuously throughout the business day.	D.
Carry out annually an external audit of LCH.Clearnet SA business continuity plan, including that of the in-sourcing company.	PD.
AML/CFT	
Strengthen the implementation of AML/CFT measures in the overseas territories.	PD.
Complete legislation to enable the authorities to seize laundered property.	D.

Appendix II. Systemic Risk Assessment Framework



Appendix III. Banking Sector Stress Testing Matrix (STeM)

A. Banking Sector: Solvency Test		
Domain		Framework
		Top Down by FSAP Team
1. Institutional perimeter	Institutions included	Seven major banks. The criteria used to determine the institutional perimeter include: 2018 EU-wide stress test sample of French banks; firm's balance sheet (size), and firms' share in the domestic market.
	Market share	About 95 percent of total banking sector assets.
	Data and horizon	<p>Effective date: December 2018.</p> <p>Data: Supervisory data: ITS files (FINREP, COREP) and STE files (Interest Rate Risk in the Banking Book (IRRBB) and Market Risk Sensitivities); EBA ST Submissions (2014).</p> <p>Public data sources: 2016 and 2017 EBA Transparency Exercise, Pillar 3 disclosures, ECB MIR statistics, Bloomberg, Dealogic, Haver Analytics, Moody's KMV, Fitch, MTS, IMF Global Assumptions (GAS), and IMF WEO.</p> <p>Scope of consolidation Consolidated group basis. Perimeter of the banking group (CRD IV). Insurance activities are excluded; banking associates are included.</p> <p>Three to five-year stress testing horizon.</p>
	Stress testing process	<p>The FSAP team conducted its own TD macroprudential stress test using October 2018 WEO forecast paths (baseline) and forecast paths generated by IMF's in-house models (adverse) for all material geographies (5) of participating banks, namely France, Italy, Belgium, UK, and USA.</p> <p>The FSAP team generated additional variables required to generate risk projections in a way which was consistent with the scenario (e.g., swap rates, yield curves, real estate prices, credit growth, equity prices, European corporate bond yields, Moody's corporate spreads).</p>
2. Channels of risk propagation	Methodology	<p>RWA calculation. Credit risk parameter (PD, LGD, EAD) projections generated by geographical breakdown (five jurisdictions) and product (six asset classes: retail unsecured, retail secured, large corporates, SME, institutions, and central banks and central governments). Loan growth paths capture reduced credit demand in material jurisdictions and FX shocks from revaluation effects on foreign currency loans.</p> <p>Robustness: empirical strategies to project baseline/adverse forecasts using country drivers, regional variables, and global factors based on (i) country level/bank-level/ regressions over different lag structures; and (ii) Bayesian model averaging (BMA).</p> <p>For internally-modelled exposures (IRB), projection of TTC PDs, LGD, RWA, EaD. For standardized (STA) exposures, projection of new flows of defaulted exposures, coverage ratio for defaulted loans, and risk weight downgrade for performing exposures.</p> <p>Credit risk projections for IRB and STA exposures include credit loss impairment charges and shifts to RWAs due to capital charges for defaulted assets.</p>

A. Banking Sector: Solvency Test	
Domain	Framework
Top Down by FSAP Team	
	<p>Traded risk impact from the revaluation of trading assets (FVPL), assets at fair value (FVO), and securities classified as fair value through other comprehensive income (FVOCI) securities by counterparty: central government (including 5 sovereign issuers), credit institutions, other financial institutions, and nonfinancial corporates. Credit spreads on sovereign securities interpolated using bank-specific residual maturity at the book and issuer level. Credit spreads on other securities estimated on a hypothetical portfolio using a duration proxy. Valuation effects assessed using a modified duration approach. Hedges are considered as ineffective under stress.</p> <p>Provisioning. Provisioning for IRB and STA was modeled using IFRS9 transition matrix approach. Transition matrices, PIT PDs, LGDs for different loan and securities classes were modeled on a consolidated basis using FINREP data and EBA submissions.</p> <p>Other P&L items. Funding costs projected at the bank level using bank-specific funding structure by product (deposits and debt securities issued), counterparty (central banks and general governments, financial institutions, retail customers and corporates), and maturity bucket overnight, 1-3m, 3-6m, 6-12m, 1-2y, 2-3y, 3-4y, 4-5y). Funding projections capture systematic risk (linked to the scenario) and idiosyncratic risk (for spreads on debt instruments issued over benchmark). Funding cost projections utilized bank level data on 30 EA banks from COREP templates. Lending rates projected at the bank level using bank-specific loan book composition (loans and advances to central banks, general governments, financial institutions, households and corporates).</p>
3. Tail shocks	<p>Scenario analysis</p> <p>The adverse scenario is calibrated using the IMF's Global Macroeconomic Model and auxiliary models to estimate stressed paths for residential real estate prices, benchmark curves, and corporate spreads. This scenario is characterized by a tightening of global financial conditions, term premium decompression, heightened uncertainty in the European Union and the United States on the back to de-globalization initiatives, sovereign risk concerns in high spread EA economies, balance sheet vulnerabilities in EMEs linked to debt at risk, and a reductions of trade flows and productivity losses. This scenario constitutes a 2.24 standard deviation move in two-year cumulative real GDP growth rate by 2023, calculated over 1990–2018.</p>
	<p>Sensitivity analysis</p> <p>Sensitivity tests identify potential vulnerabilities to standardized shifts to risk factors. These tests are focused on estimating the additional capital loss from replacing model-based shocks by six separate single-factor shocks:</p> <ul style="list-style-type: none"> • Tighter LGD floor on mortgage loans: A policy shock leading to an LGD floor of 18 percent on retail mortgages in home jurisdiction and Belgium. • Reverse stress test on valuation risk: For complex banks (G-SIBs) effect of soft mispricing of L3 assets. Quantification of the mispricing which could theoretically result in a breach of CET1 minimum requirement including Pillar 1 requirements, Pillar 2 requirement, and phased-in buffers. • Solvency-funding cost feedback: Exploration of compounding effect on bank capital depletion from the interaction of solvency risk and funding shocks. Funding cost projections on wholesale customer deposits and debt instruments are linked to projected bank capital ratios under stress using an iterative process over the stress testing horizon.

A. Banking Sector: Solvency Test

Domain		Framework
		Top Down by FSAP Team
4. Risks and buffers	Positions/risk factors assessed	<p>Traded risk losses recognized the year that the shock hits (over the five-year horizon), except for sensitivity tests (instantaneous shocks excluding low-for-long).</p> <p>Net trading income from equity positions, debt instruments, and trading derivatives.</p> <p>No interest income accrual from defaulted (Stage 3) assets.</p> <p>Interest income from non-defaulting loans is estimated according to satellite models.</p> <p>Interest expenses increase due to rising funding costs linked to banks' funding structure and market shocks, with model-based pass-through on corporate and household loans.</p> <p>Net fee and commission income, non-interest income (e.g., insurance income, dividend income, other income), and operational expenses evolve with the scenario.</p> <p>No change in business models (no rebalancing of portfolio is allowed).</p>
	Tax and regulatory impact	<p>Tax Rate. Effective tax rate for each bank.</p> <p>Regulatory impact. The effects of the phase-out of no-longer-eligible additional Tier 1 and Tier 2 capital are included. No conversion of additional Tier 1 capital is assumed during the stress horizon.</p>
5. Other adjustments and calibrations	Behavioral adjustments	<p>Dynamic Balance Sheet</p> <p>Credit demand shocks are included while credit supply effects are allowed.</p> <p>EaD from off-balance sheet exposures increases under stress, reflecting higher use of undrawn credit and liquidity facilities.</p> <p>EaD evolves with structural foreign exchange risk.</p> <p>Maturing assets are replaced by exposures of the same type and increase performing loans S1.</p> <p>Write-offs are allowed.</p> <p><u>Loans cure (i.e. migrate from S3 to S2 and S1).</u></p> <p><u>Fees and commissions, interest income modeled according to satellite models.</u></p>
		<p>Static balance sheet</p> <p>Credit demand shocks are included while credit supply effects are not allowed.</p> <p>EaD from off-balance sheet exposures increases under stress, reflecting higher use of undrawn credit and liquidity facilities.</p> <p>EaD evolves with structural foreign exchange risk.</p> <p>Maturing assets are replaced by exposures of the same type.</p> <p>Write-offs are not allowed.</p> <p>Loans do not cure (i.e. do not migrate from S3 to S2 and S1).</p> <p>Fees and commissions, interest income is capped at max of previous year level.</p>

A. Banking Sector: Solvency Test		
Domain		Framework
		Top Down by FSAP Team
	Dividend policy	Dividend payout ratio linked to banks' profits, historical payout ratios, capital ratios, subject to the following constraints.
	Parameter calibration	Initial regulatory PD and LGD parameters (hybrid PiT and TTC models) using COREP supervisory data by geographic and portfolio breakdown on the obligor pool. Calculations performed to extract PD and LGD for non-defaulted exposures using information related to gross defaulted exposures (09.01 and 09.02 templates) and breakdown by obligor grade (08.02). Shifts to IRB and STA exposures.
		Historical PDs informed by Moody's EDF proxies, Merton-model approach for sovereign spreads, and bank-specific PDs from Pillar 3 disclosures. Transition matrices for accounting PDs, LGDs from FINREP templates. PiT PDs/LGDs for some exposure classes from 2014 EBA submissions.
	Regulatory standards	Capital components that are no longer eligible for additional Tier 1 and Tier 2 capital components follow Basel III transitional path. No hurdle rates applied, though indicative CET1 ratio (which includes CCyB, G and D-Sib buffers where applicable) of 10 percent is used. Capital definition according to Capital Requirements Directive (CRD) IV rulebook, including CET1, Tier 1, and total CAR.
6. Reporting format for results	Output presentation	<ul style="list-style-type: none"> • Distribution of capital ratios under baseline/adverse scenario; • Contribution to profitability and capital depletion by driver; • Average CET1, CAR, and Tier 1 leverage ratio;
B. Banking Sector: Liquidity Test		
Domain		Framework
		Top Down by FSAP Team
1. Institutional Perimeter	Institutions included	Seven banks on the consolidated basis
	Market share	95 percent of total banking sector assets
	Output presentation	Supervisory data (Corep, Finrep and STE templates) Consolidated basis Baseline date: September 30, 2018

B. Banking Sector: Liquidity Test		
Domain		Framework
		Top Down by FSAP Team
2. Channels of risk propagation	Methodology	Cash flow-based analysis using contractual and behavioral (where available) cash flow data for significant currencies with assumptions about combined interaction of funding and market liquidity and different degrees of central bank support. LCR and NSFR analysis using granular data templates. Liquidity stock (maturity transformation) analysis using NFSR data. Five days collateral freeze scenario if collateral received is not available for rehypothecation. Asset encumbrance analysis. Funding concentration analysis.
	Feedback loops and links with solvency analysis	Exploratory scenario: Solvency-Funding cost loop.
3. Sensitivity analysis	Perimeter and type of analysis	LCR distribution and volatility across banks and significant currencies NSFR distribution across banks
4. Tail Shocks	Size of the shock	Baseline: business as usual (as reported by banks under normal market conditions). Behavioral assumptions: all maturing liabilities are rolled-over. <ul style="list-style-type: none"> • five-day collateral freeze scenario (due to cyber-risk related event at CCP) • one-month intermediate/severe market stress scenario: higher run-off rates on unsecured wholesale funding (incl. FX swaps), and undrawn committed credit/liquidity lines on top of the mild stress scenario; • one-months severe combined (market/idiosyncratic) scenario • three-months intermediate/severe market stress scenario: higher run-off rates on secured wholesale funding (particularly FX swaps) on top of the intermediate stress scenario. • three-months severe combined (market/idiosyncratic) scenario. <p>Each scenario provides for three approaches to the CBC with decreasing reliance on the CB and increasing focus on market liquidity (e.g., asset liquidation, asset encumbrance and collateral swaps).</p>
		All scenarios are EUR-based (acc. across all currencies) and U.S. dollar-based. In sum, the total number of scenarios is 40 (four sets of embedded scenarios of increasing severity). Liquidity concentration test: loss of funding from the largest providers.

Appendix IV. Insurance Sector Stress Testing Matrix (STeM)

		Bottom Up by Insurance Undertakings (EIOPA)	Top Down by IMF
Insurance Sector: Solvency Risk			
1. Institutional perimeter	Institutions included	<ul style="list-style-type: none"> Nine insurance groups (AXA, BNP Paribas Cardif, CNP Assurances, Covéa, Crédit Agricole Assurance, Groupama, Groupe des Assurances du Crédit Mutuel, Natixis Assurances, Sogecap). 	<ul style="list-style-type: none"> Nine insurance groups (AXA, BNP Paribas Cardif, CNP Assurances, Covéa, Crédit Agricole Assurance, Groupama, Groupe des Assurances du Crédit Mutuel, Natixis Assurances, Sogecap).
	Market share	<ul style="list-style-type: none"> Life: 70 percent (gross written premiums). Nonlife: 40 percent (gross written premiums). 	<ul style="list-style-type: none"> Life: 70 percent (gross written premiums). Nonlife: 40 percent (gross written premiums).
	Data	<ul style="list-style-type: none"> Regulatory reporting. 	<ul style="list-style-type: none"> Regulatory reporting.
	Reference date	<ul style="list-style-type: none"> December 31, 2017. 	<ul style="list-style-type: none"> June 30, 2018.
2. Channels of risk propagation	Methodology	<ul style="list-style-type: none"> Investment assets: market value changes after price shocks, affecting the solvency position. Sensitivity analysis: effect on available capital and solvency position. 	<ul style="list-style-type: none"> Investment assets: market value changes after price shocks, affecting the solvency position. Sensitivity analysis: effect on available capital and solvency position.
	Time horizon	<ul style="list-style-type: none"> Instantaneous shock. 	<ul style="list-style-type: none"> Instantaneous shock.
3. Tail shocks	Scenario analysis	<ul style="list-style-type: none"> “Yield down” scenario: EUR interest rates declining between -11 basis points (1y) and -80 basis points (10y); sovereign bond spread +41 basis points (France), between +30 basis points and +60 basis points for other major EA countries; stock prices -17.1 percent (France), -15.9 percent (average for EU), private equity -13.0 percent (EU), hedge funds -15.8 percent (EU); corporate bond spreads of 10y nonfinancials between +51 basis points (AAA) and +82 basis points (CCC), and for 10y financials between +53 basis points (AAA) and +68 basis points (CCC); 15 percent decrease in mortality rates. “Yield up” scenario: EUR interest rates increasing between +49 basis points (1y) and +85 basis points (10y); sovereign bond spread +64 basis points (France), between +30 basis points and +140 basis points for other major EA countries; stock prices -42.6 percent (France), -39.0 percent (average for EU), private 	<ul style="list-style-type: none"> Adverse scenario: EUR interest rates (without VA) declining between -45 basis points (1y) and -7 basis points (10y); sovereign bond spread +80 basis points (France and other low-yield EA countries), +160 basis points for high-yield EA countries; stock prices -15.0 percent (France), -15.6 percent (other advanced economies), private equity -10.0 percent, hedge funds and infrastructure -8.0 percent; corporate bond spreads between +50 basis points (AAA) and 350 basis points (B and lower) for non-financials, and between +65 basis points (AAA) and 465 basis points (B and lower) for financials; residential real estate prices -9.2 percent; commercial real estate prices -11.1 percent.

		equity -40.2 percent (EU), hedge funds -41.3 percent (EU); residential real estate prices -16.9 percent (France).	
		Bottom Up by Insurance Undertakings (EIOPA)	Top Down by IMF
Insurance Sector: Solvency Risk			
		<ul style="list-style-type: none"> -20.2 percent (average for EU); commercial real estate prices -30.5 percent (France), -31.4 percent (average for EU); corporate bond spreads of 10y nonfinancials between +53 basis points (AAA) and +225 basis points (CCC), and for 10y financials between +62 basis points (AAA) and +269 basis points (CCC); mass lapse shock (+20 percent); increase in annual claims inflation +2.24 percent Natural catastrophe scenario: series of four Northern European windstorms, two Central and Eastern European floods, and two earthquakes in Italy (total insured loss of EUR 48 billion) 	
	Sensitivity analysis	<ul style="list-style-type: none"> None. 	<ul style="list-style-type: none"> Default of parent bank (if applicable).
4. Risks and buffers	Risks/factors assessed	<ul style="list-style-type: none"> Market risks: interest rates, share prices, property prices, credit spreads. Underwriting risks: longevity, catastrophic events. Summation of risks, no diversification effects. 	<ul style="list-style-type: none"> Market risks: interest rates, share prices, property prices, credit spreads. Summation of risks, no diversification effects.
	Buffers	<ul style="list-style-type: none"> Product-specific. 	<ul style="list-style-type: none"> Loss-absorption capacity stemming from policyholder participation.
	Behavioral adjustments	<ul style="list-style-type: none"> Management actions limited to non-discretionary rules in place at the reference date. 	<ul style="list-style-type: none"> None.
5. Regulatory standards and parameters	Regulatory/accounting standards	<ul style="list-style-type: none"> Solvency II. National GAAP. 	<ul style="list-style-type: none"> Solvency II National GAAP.
6. Reporting format for results	Output presentation	<ul style="list-style-type: none"> Impact on solvency ratios (including and excluding the effect of long-term guarantee measures). Contribution of individual shocks. Dispersion measures of solvency ratios. 	<ul style="list-style-type: none"> Impact on solvency ratios. Contribution of individual shocks. Dispersion measures of solvency ratios.