



# EURO AREA POLICIES

## FINANCIAL SYSTEM STABILITY ASSESSMENT

July 2018

This Financial System Stability Assessment on the euro area was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in June 2018.

Copies of this report are available to the public from

International Monetary Fund • Publication Services  
PO Box 92780 • Washington, D.C. 20090  
Telephone: (202) 623-7430 • Fax: (202) 623-7201  
E-mail: [publications@imf.org](mailto:publications@imf.org) Web: <http://www.imf.org>  
Price: \$18.00 per printed copy

**International Monetary Fund**  
**Washington, D.C.**



# EURO AREA POLICIES

## FINANCIAL SYSTEM STABILITY ASSESSMENT

June 27, 2018

Approved By  
**James Morsink and  
Mahmood Pradhan**  
Prepared By  
**Monetary and Capital  
Markets Department**

This report is based on the work of the Financial Sector Assessment Program (FSAP) missions that visited Europe during 2017–18. The FSAP findings were discussed with the authorities during the Article IV consultation mission in May 2018.

- The FSAP team was led by Daniel Hardy (Mission Chief), Selim Elekdag, and Jennifer Elliott (Deputy Mission Chiefs) under the general supervision of James Morsink, and included Atilla Arda, Wolfgang Bergthaler, Tadeusz Galeza, Rohit Goel, Dale Gray, Pierpaolo Grippa, Eija Holttinen, Dinah Knight, Mindaugas Leika, Maike Luedersen, Sheheryar Malik, Fabiana Melo, Srobona Mitra, Dermot Monaghan, Diarmuid Murphy, Felipe Nierhoff, Jonathan Pampolina, Laura Valderrama, Froukelien Wendt, Shamsiah Yunus (all IMF), and Timo Broszeit, Thomas Curry, Paul Fisher, Ziya Gorpe, John Laker, William Murden, Stefan Schmitz, and Robert Sheehy (external experts).
- The mission met senior management and staff of the European Central Bank (ECB) and Single Supervisory Mechanism, the Single Resolution Board (SRB), the Economic and Financial Committee (EFC), the European Banking Authority (EBA), the European Commission (EC), the European Court of Auditors (ECA), the European Insurance and Occupational Pensions Authority (EIOPA), the European Securities and Markets Authority (ESMA), the European Systemic Risk Board (ESRB), and the European Stability Mechanism (ESM), as well as representatives from National Central Banks, National Competent Authorities, and National Resolution Authorities and a wide range of market participants, industry associations, and think tanks.
- FSAPs assess the stability of the financial system as a whole, not that of individual institutions. They are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.
- This report was prepared by Daniel Hardy, Selim Elekdag, and Jennifer Elliott, with input from the team.

# CONTENTS

Glossary	4
<b>EXECUTIVE SUMMARY</b>	<b>6</b>
<b>BACKGROUND</b>	<b>9</b>
<b>SYSTEMIC RISK ANALYSIS</b>	<b>10</b>
A. Vulnerabilities and Risks	10
B. Banking System Resilience and Stress Testing	12
C. Interconnectedness and Spillovers Analysis	16
D. Data Gaps	16
<b>FINANCIAL SECTOR OVERSIGHT</b>	<b>17</b>
A. Significant Banks	17
B. Less Significant Banks	20
C. Investment Firms	20
D. Third Country Branches	20
E. Insurers	21
F. Financial Market Infrastructures	21
G. Macroprudential Policy	22
H. Anti-Money Laundering and Combatting the Financing of Terrorism (AML/CFT)	23
<b>MEASURES TO SUPPORT THE CAPITAL MARKETS UNION</b>	<b>24</b>
<b>CRISIS MANAGEMENT AND SAFETY NETS</b>	<b>24</b>
A. Progress and Challenges	24
B. Operational and Financial Capacity	25
C. Further Strengthening the Architecture	26
<b>SYSTEMIC LIQUIDITY</b>	<b>29</b>
A. Emergency Liquidity Assistance	29
B. Systemic Liquidity Management	30
<b>BOX</b>	
1. Resolving Nonperforming Loans	19
<b>FIGURES</b>	
1. Financial System Overview	32
2. Sectoral Interconnectedness	33
3. Macroeconomic Developments	34

4. Financial Conditions	35
5. Macrofinancial Developments	36
6. Banking Developments	37
7. Nonperforming Loans	38
8 Bank Profitability	39
9. Bank-Sovereign Nexus	40
10. Insurance Sector	41
11. Solvency Stress Test	42
12. Liquidity Stress Test	43
13. Balance Sheet-based Interconnectedness	44
14. Market-based Interconnectedness	45

## TABLES

1. Financial System Structure	46
2. Main Economic Indicators, 2015–2023	47
3. Financial Soundness Indicators for Significant Institutions	48
4. Policy Tools to Address Macroprudential Risks	49

## ANNEX

I. Report on Observance of Standards and Codes: Basel Core Principles	55
---	----

## APPENDICES

I. Main Recommendations of the 2013 EU FSAP	50
II. Risk Assessment Matrix	52
III. Stress Testing and Systemic Risk Analysis	53

## Glossary

AML/CFT	Anti-money laundering/combating the financing of terrorism
bp	Basis point
BRRD	Bank Recovery and Resolution Directive
CBC	Counter-balancing Capacity
CCP	Central counterparty
CET1	Common Equity Tier 1
CMU	Capital Markets Union
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
DIS	Deposit Insurance System
DA	Designated Authority
EFC	Economic and Financial Committee
ELA	Emergency Liquidity Assistance
EA	Euro area
EBA	European Banking Authority
ECA	European Court of Auditors
EC	European Commission
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pensions Authority
ESA	European Supervisory Agency
ESCB	European System of Central Banks
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FCI	Financial Conditions Index
FMI	Financial market infrastructure
FOLF	Failing or likely to fail
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSE	Financial Stability Exemption
FSI	Financial soundness indicator
GDP	Gross Domestic Product
GG	General government
G-SIB	Global systemically important bank
HQLA	High-quality liquid asset
ICSD	International central securities depository
ICPF	Insurance corporations and pension funds
IT	Information technology

LCR	Liquidity Coverage Ratio
LSI	Less significant institution
MFI	Monetary financial institution
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
NCA	National Competent Authority
NCB	National Central Bank
NDA	National Designated Authority
NFC	Nonfinancial corporation
NII	Net interest income
NPE	Nonperforming exposure
NPL	Nonperforming loan
NRA	National Resolution Authority
NSFR	Net Stable Funding Ratio
NTI	Net trading income
OFI	Other financial institution
PD	Probability of default
RAM	Risk Assessment Matrix
ROA	Return on assets
ROE	Return on equity
RoW	Rest of World
RWA	Risk-weighted assets
sd	standard deviation
SI	Significant institution
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SRMR	Single Resolution Mechanism Regulation
SSM	Single Supervisory Mechanism
TLTRO	Targeted longer-term refinancing operation
WEO	World Economic Outlook

## EXECUTIVE SUMMARY

**Overall the resilience of large euro area banks has improved, but important vulnerabilities remain.** Capital buffers are in aggregate sizeable relative to immediate threats, but some banks are especially vulnerable to credit risk and others to market risks, including a substantial rise in risk premia. The banking system as a whole has ample liquidity, against a backdrop of ECB support. At a structural level, low profitability is found in many banks across all business models, despite improving conjunctural conditions. The interconnectedness analysis shows that strong buffers are effective in dampening both vulnerabilities and onward transmission.

**Risks to financial stability relate mainly to tighter financial conditions, weaker growth, and policy and geopolitical uncertainties.** The withdrawal of the United Kingdom from the EU (Brexit) could potentially disrupt financial market and services, and thus the wider economy. Also, policy reversals could hurt debt sustainability and test the cohesion of policy making in the union.

**Banking supervision in the euro area has improved significantly following the creation of the Single Supervisory Mechanism (SSM).** A detailed assessment against the Basel Core Principles finds that the SSM has established its operational independence and effectiveness, intensifying supervision while harmonizing at a high level. The SSM has also implemented sophisticated risk analysis in the process of setting capital targets for individual institutions.

**Nonetheless, banking supervision continues to face important challenges, mostly relating to resources, liquidity risk, credit risk, and the fragmentation of national laws.** Supervision would be more effective were there more assured continuity in the assignment of suitable resources provided by national competent authorities. Gauging in real time the evolving capacity of a weak bank to cope with potential liquidity strains is essential. Addressing the persistence of nonperforming loans (NPLs) in some member countries must remain a supervisory priority. Beyond that, common definitions of NPL, minimum standards for insolvency and creditor rights, and rules for valuation of collateral would accelerate resolution of NPLs. Gaps and fragmentation in areas such as fit and proper criteria, major acquisitions, related party transactions, country risk, and sanctions need to be addressed, minimizing divergence at the national level. Divergences from international standards should be eliminated. In addition, further efforts are needed to ensure effective coordination of prudential supervision with oversight of anti-money laundering structures.

**Financial oversight of the nonbank financial sector is likewise being strengthened.** One element is the proposed transfer of supervisory responsibility for systemic investment firms and third country branches in the euro area to the SSM. More centralized oversight of financial market infrastructure (FMI) by European Securities and Markets Authority (ESMA) and the ECB is warranted given the systemic nature of the entities involved, while strong cooperation with third country authorities is maintained. Macroprudential policy will have to become more adept at addressing risks related to cross-border flows and nonbank sources of financing as the financial system evolves.

**Bank crisis preparedness and management have been substantially upgraded, but here too the regime remains fragmented.** The adoption of the Bank Recovery and Resolution Directive

(BRRD) and Single Resolution Mechanism Regulation (SRMR), and the creation of the SSM and the Single Resolution Mechanism (SRM) provide a foundation for dealing with problem banks. Recent cases of bank intervention demonstrate some strengths, but also that incentives remain to use approaches other than resolution under the SRMR/BRRD, with less stringent burden sharing. Therefore, the treatment of bank creditors diverges depending where intervention takes place.

**The bank crisis preparedness and management framework faces significant transitional and structural challenges.** A critical transitional challenge is the buildup of bail-in-able financing (known as MREL), which should be expedited, prioritizing large banks. The SSM and the Single Resolution Board (SRB) need to continue to strengthen their operational capacity. Improving their intrusiveness in weak banks, and initiating preparation for resolution at a much earlier stage, will be important. Also, triggers for action need to be made consistent. In this connection, the ECB should extend its “horizon scanning” arrangements to detect emerging liquidity strains, including information on asset encumbrance for emergency liquidity assistance (ELA) purposes, and integrate these arrangements into liquidity management and prudential supervision. Effective resolution will depend in part on the ready availability of adequate financial resources, so it is essential to make fully operational the Single Resolution Fund (SRF), to designate the European Stability Mechanism (ESM) as its backstop, and establish a European Deposit Insurance Scheme (EDIS).

**Aligning the loss sharing requirements under state aid rules with those in the BRRD, and creating an administrative bank liquidation tool under the SRB’s remit would help reduce fragmentation and increase the effectiveness of the common resolution framework.**

Restricting access to options subject to less strict burden sharing requirements through these reforms should be balanced by the introduction of alternative flexibility, in the form of a financial stability exemption, under which departure from the 8 percent bail-in requirements for public support would be allowed at times of severe financial stability risk and subject to strict criteria and appropriate governance arrangements. Consideration should be given to paring back or at least streamlining state-aid oversight of resolution decisions (for example, on resolution funding by the SRB) when there is little risk of a distortion to competition, and subject to European-level oversight. The authorities should also explore options to strengthen the SRB’s decision-making authority, including the possibility of designating the SRB as a European institution.

**Arrangements for ELA should be enhanced through greater harmonization and ultimately centralization.** The ECB would be best placed to harmonize ELA preparations, such as pre-verification of collateral availability before mobilization, coordinate responses especially for cross-border institutions, and ultimately judge whether all criteria for ELA are met. A clarified financial stability mandate for the ECB would help in this regard.

**Careful planning will be needed for the phase-out of ECB/Eurosystem exceptional measures and update of the operational framework, taking into account structural changes in funding markets.** Collateral policy should be set to further incentivize banks to manage risks in the markets. The ECB/Eurosystem’s targeted longer-term refinancing operations (TLTROs) and asset purchases have squeezed term funding markets, making the careful sequencing of exit—and its communication—crucial for some banks and markets.

## Main Recommendations

Recommendation*	Timing**
<b>Supervision</b>	
Reduce the fragmentation of national legal frameworks for bank supervision (EU)	MT
Revise legal provisions to close regulatory gaps with international standards (EU)	MT
Improve planning of supervisory resources (SSM)	ST
Raise standards for handling of loan classification and provisioning (SSM)	ST
Improve coordination and information sharing regarding AML/CFT (ECB, national authorities)	ST
Transfer supervision of systemic investment firms and third country branches to the SSM (EU)	ST
Ensure the availability of a full set of borrower-based macroprudential instruments (EC, ESRB)	MT
<b>Preparations for the U.K. exit from the EU</b>	
Accelerate discussions on action to ensure continuity of service and data access (ECB, ESAs, SSM)	I
<b>NPL resolution</b>	
Prescribe rules for valuation of immovable loan collateral, including repossessed collateral (EU)	MT
Set consistent NPL definitions and reporting standards (EC, EBA, SSM)	ST
Establish minimum standards for insolvency and creditor rights regimes (EU)	MT
<b>Crisis management and financial safety nets</b>	
Strengthen the early action framework and advance resolution preparation (SRB, SSM, EC, NRAs)	I
Proceed quickly with the buildup of MREL and internal MREL, prioritizing large banks (SRB)	I
Ensure availability of liquidity in resolution (SRB, EC, Eurosystem)	ST
Designate and make operational the SRF backstop (such as the ESM) (EU, SRB, ESM)	ST
Establish a EDIS with a backstop (EU)	ST
Ensure consistency of triggers for action such as resolution, liquidity assistance, and precautionary recapitalization (EC, ECB, SRB)	ST
Align the relevant state aid loss sharing requirements (in resolution) with the BRRD/SRMR, while introducing flexibility through a financial stability exemption subject to strict criteria (EU)	ST
Further harmonize the hierarchy of creditor claims in bank insolvency (EU)	MT
Introduce an administrative liquidation tool for the SRB (EU)	ST
Pare back state aid oversight of the use of the SRF and deposit insurance funding on a least cost basis (EC)	ST
Buttress SRB independence and powers (for example, by granting permanent observer status at the SSM Supervisory Board) (SSM, EC)	I
<b>Liquidity management</b>	
Articulate an explicit financial stability mandate for the ECB/Eurosystem (ECB)	MT
Intensify "horizon scanning" involving supervisory and operational functions (ECB, SSM)	I
Further harmonize and ultimately centralize ELA arrangements (ECB)	ST
Manage the transition from crisis-related policy settings and develop the future operational framework to reflect regulatory and market developments (ECB)	MT
* In this table EU will refer to the Council of the EU, the European Parliament, and the European Commission.	
**I: Immediate, within one year; ST: short term, within 1 to 2 years; MT: medium term, within 2 to 5 years.	

## BACKGROUND

**1. The euro area is home to a large, complex, and globally interconnected financial system (Table 1, Figure 1).** Several banks and insurers are classified as globally systemically important. The interbank and cross-border connections of the euro area banking system are extensive, although they have contracted since the global crisis. The euro area hosts two international central securities depositories (ICSDs) and several central counterparties (CCPs).

**2. Banks remain the dominant players in the financial system, but market-based intermediation is of growing importance.** Banks are the most important financial intermediaries for households, nonfinancial corporates (NFC), and the public sector (Figure 2). Since the global financial crisis, nonbanks and financial markets are playing a greater role, particularly in funding larger nonfinancial firms.

**3. The short-term macrofinancial outlook is broadly favorable (Figure 3, Table 2):**

- Macroeconomic prospects in the near term are favorable, underpinned by solid domestic demand, accommodative financial conditions, and supportive policies. Euro area financial conditions have been relatively loose, with compressed spreads and low volatility across many asset classes (Figure 4).
- Over the medium term, monetary policy accommodation is expected to gradually unwind as inflation converges steadily towards 2 percent. As a result, financial conditions are expected to tighten.

**4. The establishment of the SSM and the SRM has transformed banking sector oversight and other aspects of the euro area financial sector framework have been reinforced (Appendix I):**

- The SSM, comprising the ECB and national competent authorities (NCAs), undertakes banking supervision in the euro area. The SSM is fully operational. At the start of 2018, the ECB was the lead authority for 118 significant banking groups (SIs), constituting more than 80 percent of euro area banking assets;
- The SRB became operational in 2016 and is the banking union's central resolution authority. The SRB and the 19 NRAs in the banking union constitute the SRM. It has within its remit all SIs and, additionally, several less significant institutions (LSIs) with cross-border activity.

Many elements of the regulatory framework, set at the EU level, have been strengthened in recent years. New capital and other standards are in place for banks and insurers; enhanced standards for FMI, asset management, derivatives markets, and investment firms are being implemented; an ambitious project for a Capital Markets Union (CMU) has been initiated; and the macroprudential toolkit has been expanded in many euro area countries.

## SYSTEMIC RISK ANALYSIS

### A. Vulnerabilities and Risks

**5. Vulnerabilities remain significant, though unevenly distributed.** In certain countries, households, nonfinancial firms, and government bear heavy debt burdens, making them vulnerable to a tightening of rollover conditions, and limiting the buffers available to deal with contingencies (Figure 5). There are some indications suggesting that credit and market risks are being underpriced, particularly in fixed income markets. Commercial real estate prices, according to available data, have increased markedly in some main centers, while residential real estate prices appear overvalued in a few countries.

**6. Banking system soundness indicators have been improving, but lingering structural challenges point to important weaknesses:**

- Bank capital ratios have risen on average and capital quality has improved (Table 3, Figure 6);
- Despite recent improvements, progress in reducing NPL and raising provisioning remains uneven (Figure 7);
- Funding has become more stable as banks are relying more on retail deposits. However, some banks are still heavily reliant on central bank refinancing; and
- Profitability remains generally low, and banks' average return on equity continues to trail the estimated cost of equity (Figure 8; see also the 2017 Netherlands FSAP and the 2017 Spain FSAP). Depressed market valuations, despite the economic upswing, reflect concerns about banks' ability to decisively address problem loans and adapt business models to sustainably raise profits.

**7. The ongoing economic recovery is supportive of bank profitability, but it is unlikely to resolve the structural challenges faced by the least profitable banks.** Empirical analysis of 109 SIs over 2007–2016 reveals that real GDP growth and the NPL ratio are the most reliable predictors of profitability, after accounting for other factors. Although higher growth would raise profits—as seen in bank results achieved after the sample period—a large swath of banks with the weakest profitability would continue to struggle even with a robust recovery. Structural features, such as high operating costs, are important for many banks, and many banks still need to build up capital or other bail-in-able financing. Regulatory requirements, competition from nonbanks, and the need to invest heavily in information technology (IT) are some of the elements weighing on returns. Going forward, achieving cost efficiency through digitalization, for example could be important in durably raising profitability, and should be combined with a tailored approach to revamping business models, headcount, and branch networks. Taking advantage of the current upswing and low funding cost environment to resolutely address NPL stocks (improving profitability over the medium term)

and acquire MREL (building buffers) will contribute importantly to meeting medium-term challenges.

**8. Market perceptions of the risks from the bank-sovereign nexus have abated in recent years, yet concerns could reemerge.**

The correlation between bank and sovereign credit default swap (CDS) spreads has come down from their peaks (Figure 9). Likewise, the Too-Important-To-Fail implicit subsidy for large banks has fallen from 200 basis points to around 20 basis points, illustrating the attenuation of the sovereign-bank nexus as perceived by financial markets. However, bank capital levels are exposed to decompression of risk premia and rate hikes through valuation effects to their available for sale (AFS) portfolios, which account for three quarters of total sovereign holdings. Moreover, sovereign holdings still display a considerable degree of home bias even in high-spread economies, raising concerns over possible reemergence of adverse feedback loops.

**9. Systemic risks emanating from the insurance sector are modest at present, but the low-yield environment remains challenging (Figure 10).**

Long-term business with guaranteed rates act as a drag on life insurers' solvency and profitability in some member states (as elaborated on in the 2016 Germany FSAP, the 2017 Euro Area Selected Issues Paper, and the 2018 Belgium FSAP). The sector has adapted by offering fewer guarantee products, which, along with the recent increase in interest rates, has shored up solvency metrics. To bolster investment yields, insurers are accepting more credit and liquidity risk by marginally increasing their exposures towards mortgages, real estate, and infrastructure, increasing their risks. Structurally, insurers' investments in many member states is very concentrated in domestic (sovereign) bonds and the domestic banking sector, adding to contagion risks.

**10. As the role of investment funds and possibly other financial institutions (OFIs) grows, related vulnerabilities merit deeper analysis, yet they remain difficult to quantify owing to data gaps.**

Investments funds, which have been expanding rapidly owing to net inflows and rising valuations, were examined in the 2016 Ireland FSAP and the 2017 Luxembourg FSAP. Vulnerabilities may be building up in other OFIs, which have stronger interconnections with banks and nonfinancial firms, yet remain outside of the monitoring perimeter.

**11. Cyber risk is a key concern for financial institutions, markets, and central banks.**

Leaps in technology and accessibility has widened the range of potential disruptors, including from increasingly sophisticated malicious attacks. Interconnectedness within the financial sector and between the financial sector and technology companies—in some cases concentrated in a few global providers—creates an environment for systemic contagion.

**12. The withdrawal of the United Kingdom from the EU (Brexit) creates significant short-term financial stability risks in many markets.**

Major disruptions to financial markets and interruptions in the provision of financial services to customers, especially in derivatives and insurance, could have negative spillover effects to the economy. Payments clearing systems must continue to function normally. The European Supervisory Agencies (ESAs) have undertaken analysis and convened discussions on the topic, and at the time of writing EU and U.K. authorities indicated

technical discussions would soon be underway. Close supervisory cooperation, regulatory pragmatism, and clear communication will be essential to address promptly the many related issues.

**13. These vulnerabilities and the macroeconomic situation define the main risks faced by the euro area financial system.** The risks, which could be mutually reinforcing, are summarized in the Risk Assessment Matrix (RAM, Appendix II) and entail:

- **Tighter-than-expected financial conditions:** A reassessment of fundamentals amid global monetary policy normalization could trigger abrupt financial market movements, which may be amplified by a resurgence of concern over sovereign, bank, and corporate creditworthiness, with adverse knock-on effects to the real economy. Higher risk premia (including a possible decompression in term premia associated with an upside inflation surprise) and lower asset prices imply valuation losses and a reduction in the value of collateral and recoveries. Given vulnerabilities and other risk factors, distress in a single major institution or group of institutions could create contagious investor uncertainty.
- **Weaker global growth:** A relapse of growth in advanced economies or a significant slowdown in China and other larger emerging market countries could have a sustained negative impact on euro area exports, investment, and consumption, thereby bringing the recent growth surge to a halt. The impact on public and private debt sustainability may contribute to higher risk premia.
- **Heightened policy and geopolitical uncertainty:** Political developments leading to policy reversals could undermine debt sustainability and test the cohesion of monetary union. An increase in geopolitical tail risks could abruptly affect investor sentiment. Policy uncertainty—for example, over Brexit negotiations—combined with a wide-scale retreat from cross-border integration, spurred on by rising protectionism, could reduce policy collaboration. The result could be dampened flows of capital and liquidity across countries; much higher risk premia for sovereigns, banks, and corporates; and a sharp break on the cyclical recovery.

## B. Banking System Resilience and Stress Testing

### Solvency Stress Testing

**14. Balance sheet-based solvency stress tests focused on the largest banks.** The FSAP top-down stress tests were designed mainly to identify macroprudential concerns and complement the bottom-up EBA exercise (scheduled for release in November 2018), which serves microprudential and supervisory purposes (Appendix III). The FSAP sample comprised the 28 largest euro area banks, accounting for about 65 percent of consolidated banking sector assets. Banks were grouped into three broad business models: (1) Globally systemically important banks (G-SIBs); (2) large, but less complex, internationally-active banks; and (3) relatively smaller domestically-oriented banks.

**15. The resilience of euro area banks was assessed under baseline and adverse scenarios covering three years.** The projections encompass macrofinancial variables for 36 geographies material for euro area banks, and financial conditions in regional and global markets.

- The baseline scenario is aligned with the October 2017 World Economic Outlook (WEO) projections, which are broadly similar to those of the April 2018 WEO projections.
- The adverse scenario covers the risk factors presented in the RAM, and is calibrated in line with tests undertaken as part of past euro area country FSAPs and in coordination with the ECB. The severity of the economic contraction in this scenario is broadly comparable to those in other euro area country FSAPs.

**16. Under the baseline scenario, there is a modest increase in average capitalization ratios, reflecting supportive cyclical conditions that have allowed most banks to retain sufficient earnings (Figure 11).** The results differ across business models, with large, but less complex, internationally-active banks benefitting the most from the improved macroeconomic conditions. These banks experience a relatively greater improvement in lending margins, asset quality, and an expansion in their loan books.

**17. Under the adverse scenario, although minimum capital requirements are met in aggregate, a few banks are significantly more vulnerable.** Macroeconomic shocks and trading book stress are the main determinants of outcomes, but with a wide degree of variation across banks due to differences in business models, exposures, and legacy portfolios. Even within the broad business model groupings, bank results differ substantially across G-SIBs and more domestically-oriented banks due to differences in their geographic exposures and sensitivity to market shocks. The reported results focus on common equity tier 1 (CET1), but similar results are obtained using alternative solvency metrics such as the leverage ratio. Contingent claims analysis, which uses market-based data encompassing banks, insurers, sovereigns, and the nonfinancial corporate sector, broadly corroborates these results.

**18. The impact of the adverse scenario on banks' capital positions mainly reflects large impairment charges, increased risk-weighted assets (RWA), and valuation effects:**

- Weaker global growth, falling real estate prices, and tighter financial conditions increase credit risk and erode collateral values, reducing average capitalization substantially.
- Heightened credit and market risk, valuation effects related to foreign-currency exposures, and the projected paths for aggregate lending in the stress scenario contribute to an expansion of RWAs, thereby lowering average capitalization significantly.
- Sharp movements in market prices result in substantial losses for banks with large trading books and AFS holdings. These losses partially unwind as asset prices recover, and therefore valuation losses decrease end-period average capitalization only moderately.

- The overall effect of interest rate risk on net income is moderate for most banks, due to the large stock of customer deposits, which are less sensitive to money market stress; hedging; the repricing structure of debt instruments with longer tenors; and banks' ability to partly pass-on funding cost to loans.

**19. Banks are also generally resilient to a range of additional shocks taken individually.**

These results do not allow for correlations or feedback loops, for example, associated with heightened policy uncertainty. Nonetheless, they are indicative of relative exposures to first round effects:

- *Interest rate risk:* An abrupt hypothetical 200 basis points parallel upward shift in interest rates reduces the aggregate CET1 substantially. G-SIBs are relatively more impacted given their larger shares of trading and AFS securities;
- *Low-for-long:* Under an extended period of low interest rates, most banks would suffer a hit to their net interest income, resulting in a moderate average reduction in capitalization over three years;
- *Decompression of sovereign risk premia:* A 200 basis points widening of own (not all) sovereign spreads lowers average capitalization only modestly, but some less international banks are affected relatively strongly;
- *Decompression of corporate risk premia:* A 350 basis points widening of spreads on corporate bonds, like that observed in 2008, leads to a substantial reduction in capitalization; the valuation losses more than offset higher earnings. G-SIBs are more severely affected given their larger corporate bond exposures;
- *Hard-to-value assets:* Even a modest valuation shock on Level 3 assets (those that cannot be marked to market) would have a significant impact on some G-SIBs' capital buffers; and
- *Solvency-funding cost feedback:* Deteriorating solvency metrics result in higher funding costs. Although, on average, the additional impact of this feedback channel is limited, the results can be twice as large for banks with the weakest stressed capital ratios.

**20. The range of results highlights the diversity of the euro area banking sector.** The large, but less complex, internationally-active banks are more robust to stress scenarios and the single factor shocks, pointing to the potential risk-sharing benefits conferred from cross-border banking. Because G-SIBs' business models generally emphasize trading and capital markets-related activities, they are disproportionately affected by market risk. In contrast, domestically-oriented banks are more vulnerable to deteriorations in macroeconomic conditions.

### Liquidity Stress Testing

**21. A comprehensive analysis of large banks' structural liquidity ratios was complemented with a variety of liquidity stress tests.** The cash flow-based liquidity stress tests employed multiple

scenarios of increasing severity covering several horizons with varying assumptions regarding liquidity buffers and shocks to cash inflows and outflows. Also, a “collateral freeze” scenario was simulated, wherein the collateral held at CCPs and available for rehypothecation remains inaccessible for five business days due to a cyber risk event. The sample consisted of 29 SIs, accounting for about 70 percent of banking system assets.

**22. All banks meet the 100 percent minimum Liquidity Coverage Ratio (LCR) requirement, but some are subject to foreign currency liquidity and funding concentration risks.** The average LCR was supported by an ample stock of high-quality liquid assets (HQLA; withdrawable central bank reserves account for nearly one half of immediately available liquidity buffers). In contrast, the LCR for foreign currencies tends to be more volatile and falls substantially below 100 percent for many banks. Dollar liquidity poses a potential challenge for some banks. Most banks are well placed to meet net stable funding ratio (NSFR) requirements. Funding concentration has risen on average, partly reflecting the role of central bank financing.

**23. Cash flow-based liquidity stress tests suggest that banks are for now resilient to stressed liquidity conditions, again with significant variation (Figure 12).** This resilience is underpinned by large liquidity buffers, despite a significant stress impact on counter-balancing capacity (CBC, that is, liquid assets available for immediate use):

- The mild 1-month scenario leads to a relatively small reduction in CBC—no banks fail this test;
- Under a scenario wherein reliance on central bank support is reduced (by assuming that only marketable securities are available to cover liquidity needs), five banks would run out of CBC, but the average shortfall is small, especially from a system-wide perspective;
- In the most severe scenario (3-month horizon, only liquid securities available as collateral), 11 banks face marginal liquidity shortages, and the aggregate shortfall is still limited; and
- The five-day collateral freeze scenario did not result in a depletion of liquidity buffers for any of the banks within the first three days, but affects a few banks moderately over the remaining days. This outcome reflects sufficient CBC and the fact that only a few banks (mostly G-SIBs) have elevated levels of the re-pledged (rehypothecated) collateral that can aggravate liquidity shortages under more extreme conditions.

**24. Going forward, some banks will need to proactively strengthen their balance sheets to ensure reasonable funding costs (Figure 13).** Tighter financial conditions would affect banks’ funding costs and access to liquidity unevenly. Extraordinary Eurosystem operations in recent years have reduced reliance on short-term market funding, and increased reserves at central banks, but banks differ notably in terms of funding structures, asset encumbrance, and the amount and composition of CBC. Banks which are more dependent on central bank refinancing operations, such as TLTRO, and those which used lower quality collateral to obtain liquidity are most at risk of facing

higher funding costs once they revert to more market funding. Moreover, some banks may be especially vulnerable because they have relatively low capitalization and liquidity metrics.

### Stress Testing Framework

**25. The ECB’s stress testing framework—already sophisticated—could be enhanced along several dimensions.** Further integrating supervisory data (for example, on market risk exposures) into the existing stress testing framework would facilitate more regular and comprehensive risk monitoring. The initiative to collect cash flow data for all significant currencies is a welcome step and will help monitor foreign exchange-related funding and liquidity risks. More granular reporting by jurisdictions would enhance the monitoring of contingent liquidity risks, including those associated with the cross-border flow of collateral, securities funding transactions, and cyber risks. The analysis of risk interactions could also be deepened. For example, it would be worth following up on how funding stress could interact with solvency concerns for banks with greater capital shortfalls, involving amplification mechanisms and adverse feedback loops.

## C. Interconnectedness and Spillovers Analysis

### Balance Sheet-based Measures

**26. The analysis suggests that the risk of contagion through interbank exposures within the euro area are currently low relative to extra-euro area exposures.** Large SIs display a modest degree of interbank connectedness relative to banks’ capitalization levels (Figure 13). In contrast, cross-border linkages, including with other European and U.S. banks, are stronger. Within the euro area sample of banks, G-SIBs tend to be associated with greater outward spillovers, while more domestically-oriented banks are more vulnerable to inward spillovers. Country-level analysis corroborates these results, and indicates that euro area spillovers have been decreasing in recent years, in parallel with the downward trend in exposures with other regions.

### Market-based Measures

**27. The analysis indicates that stronger bank fundamentals reduce spillovers from the rest of the world not only on average, but also in terms of tail risks (Figure 14).** Lower NPL ratios, greater profitability, and higher capitalization levels are shown to decrease the probability of inward spillovers to the euro area banking system from the rest of the world. Evidence over recent years (2012–2017) suggests stronger fundamentals, such as better asset quality, reduce inwards spillovers more than they did previously (2006–2012). Furthermore, evidence indicates that progressively stronger fundamentals can increase the euro area banking system’s resilience to inward spillovers without aggravating outward spillovers. Thus, stronger euro area fundamentals enhance the stability of other regions.

## D. Data Gaps

**28. Several data gaps need to be closed, not least to understand structural shifts in the financial system.** A key data gap relates to the “other financial institutions” (nonbank, non-

insurance). Reflecting statistical challenges, at least half of the sector (by assets) cannot be categorized at the euro level, thereby hindering comprehensive monitoring and appraisal of risks. Although many of these institutions (such as broker-dealers) do not engage in credit intermediation, their activities and connections need to be better understood. Another gap relates to the lack of legal entity identifiers for many subsidiaries within banking groups; their absence can obscure legal and economic connections, impede consolidated supervision, and compromise bank resolvability. Data gaps related to commercial real estate prices and the characteristics of loans to households impede macroprudential policy making.

## FINANCIAL SECTOR OVERSIGHT

### A. Significant Banks

- 29. An assessment against the Basel Core Principles for Banking Supervision illustrates that supervision of banks has improved significantly under the SSM (Annex I).** The SSM has quickly put in place effective supervisory policies and procedures that have intensified supervision and created a more robust and harmonized approach across the euro area. It has been able to attract high quality and committed staff. The SSM has had success in challenging bank governance and risk management practices. It has developed a thorough Pillar II approach, bringing more risk analysis into the process of setting capital targets for individual institutions.
- 30. ECB banking supervision is independent and accountable but lacks sufficient control of supervisory resources.** The planning and execution of supervision (and especially on-site supervision) can be disrupted by uncertainty about the continuity of assignments: most supervisory staff are provided by NCAs, whose deployment on behalf of the SSM may compete with the fulfilment of national commitments.
- 31. Streamlined decision-making, with more delegation, would be desirable to further enhance the SSM's ability to act in a timely, decisive, and prioritized manner.** Efforts have been made to delegate certain decisions from the Governing Council and Supervisory Board to staff level. More delegation of supervisory action to the staff level should be possible.
- 32. While significant gains have been made toward regulatory convergence, heterogeneous national legislative frameworks remain a key obstacle to more effective supervision.** The SSM applies—apart from directly applicable EU rules—national laws that transpose EU legislation and these vary widely in scope and detail. Some important areas are at best partially covered by EU-level legislation, including fit and proper criteria; related party transactions; major acquisitions; risk management; country risk; and enforcement and corrective action. This fragmentation of applicable law delays decision making and jeopardizes consistency. Some EU directives and regulations, including on capital adequacy and large exposures, also diverge in important respects from international standards.
- 33. The ongoing review of internal models is expected to contribute importantly to greater consistency in risk-weighting across the euro area.** The review should also be used to

reduce the deviations from the Basel standard. FSAP analysis suggests that high risk-weight density is a source of vulnerability, adding to the importance of this work.

**34. The regulation and supervision of liquidity risk has been stepped up but requires further attention.** The FSAP stability analysis identifies liquidity risk as a matter of particular concern for some banks. The authorities have strengthened their oversight of SIs' liquidity risk management, and recently began collecting data on liquidity positions by currency. Yet EU regulation was found to be only "largely compliant" with the Basel III standards regarding the LCR, due mainly to a more extensive definition of high-quality liquid assets (HQLA). Recent episodes of bank intervention underline the importance of the ready availability to all concerned authorities of the information needed to gauge the capacity of a weak bank to cope with possible liquidity strains (for example, in terms of the true availability of usable collateral). Improving this aspect of supervision should be part of a comprehensive, more forward-looking approach to liquidity management and contingency preparations for possible intervention in troubled banks.

**35. Supervision on market risk is intense yet merits strengthening given the importance of this risk factor.** The opaqueness in the valuation of certain products classified as "Level 3" in terms of fair value hierarchy and the uncertainties in the classification of "Level 2" assets and liabilities— together with the sheer size of these in the balance-sheets of some institutions in the euro area— justify intense and frequent supervisory scrutiny. The SSM's recent work on Level 3 assets (and on a specific family of products classified as Level 2) should be extended to all Level 2 instruments.

**36. Further improvements are needed in loan classification, loan provisioning, and credit risk management to address both the legacy stock of impaired loans and the possible flow of new impairments.** The SSM and the EBA have begun to tackle supervisory issues related to the persistence of NPLs and under-provisioning. Nonetheless, loan classification and provisioning practices may be insufficiently conservative and inconsistent across jurisdictions. These concerns apply to LSIs as well as SIs. The ECB should therefore introduce the proposed explicit supervisory expectations for NPL provisioning, and EU legislation should explicitly grant the ECB powers to require adjustments to classification and provisions (or capital deductions to address under-provisioning and misclassification of assets). The expectations and powers would apply consistently to all euro area banks. Also, certain non-supervisory measures would be useful (Box 1).

**37. The SSM has recognized cyber risk as a key issue for banks, and should take the lead in setting up-to-date standards for industry.** Going forward, the SSM should develop an overall strategy to help structure its work on cyber risk, leveraging the role of the recently established Euro Cyber Resilience Board as a way to coordinate the efforts of banks with FMIs. Priorities for supervision include building dedicated resources, and periodically publishing cyberthreat best practice guidance gleaned from supervisory activities and IT industry standard setters.

### Box 1. Resolving Nonperforming Loans

**European authorities have taken action to reduce NPL levels, yet challenges remain.** The 2017 EU Council action plan on NPLs is a welcome step. In March 2018, the EC issued a proposal for the extra-judicial enforcement of collateral, harmonized rules for credit servicers and purchasers, and published a blueprint for asset management companies (AMCs). In 2016, the EC proposed enhanced preventative restructuring procedures, a fresh start for good faith entrepreneurs, and minimum standards for insolvency practitioners. However, the lack of comparable data continues to hamper the benchmarking/peer review exercise to assess insolvency and creditor rights regimes. The SSM agreed NPL reduction targets with banks in 2017, but overall the internal workout plans lack ambition, and explicit criteria for timely provision or write-down of deeply delinquent debt are lacking. The SSM's 2018 guidance for NPL provision and the EC's proposed "prudential backstop" for provisioning are positive but do not extend to existing NPLs and credit exposures, respectively.

**The authorities should consider extending their NPL action plan to address legacy issues quickly but without undue disruption, and improve incentives going forward.** The approach should cover both SIs and LSIs. The following elements are suggested:

- Minimum valuation rules and guidance for immovable property used as loan collateral;
- Improved NPL reporting standards, with a more precise NPL definition and consistent and comparable NPL reporting by banks;
- Minimum standards for insolvency and creditor rights regimes based on international best practices;
- The collection of comparable data on insolvency and debt enforcement cases should be pursued vigorously. The EU Justice Scoreboard should be enhanced to collect and analyze data on insolvency and debt enforcement cases to assess their efficiency and effectiveness;
- Explicit criteria (including ambitious time-based triggers) for the write-down of all deeply delinquent debt;
- An EU-level regulation to discourage prolonged holding of repossessed collateral;
- Eliminating excessive accrual of interest income by enhanced prescription of recoverability tests. At a minimum, interest accrued but not collected should be recorded as a separate line item to enhance transparency and act as an early warning indicator; and
- Requiring banks to increase related capacity, so as to meet more ambitious NPL reduction targets. Banks with high NPLs might be expected to achieve manager-case ratios comparable to those of specialist collection and workout firms through a mix of building internal teams and outsourcing operations. Missed NPL reduction targets should be compensated by more ambitious targets for NPL sales.

## B. Less Significant Banks

**38. The ECB has worked with the NCAs to foster convergence and consistency in supervisory approaches to LSIs, and cooperation is improving.** The ECB oversees LSI supervision but NCAs are normally responsible for their direct supervision. Joint Supervisory Standards and common supervisory approaches for on-site inspections; supervision of auto financing institutions; recovery planning; and licensing of fintech companies, amongst others, have been developed. Cooperation is improving. Some of the standards applicable to LSIs, such as the Supervisory Review and Evaluation Process (SREP), to be implemented beginning in 2018, and recovery and resolution planning have been refined; and discussions about proportionality are ongoing.

## C. Investment Firms

**39. The consistency of supervision of investment firms should be strengthened.** EU investment firms are a heterogeneous group, ranging from large subsidiaries of global investment banks to small investment advisors. The firms are subject to many of the same regulations as banks, including capital requirements, as well as EU directives and regulations that apply to trading, sales, and market activities (including the Markets in Financial Instruments Directive). They are currently supervised nationally and while ESMA and EBA promote supervisory convergence, national practices in supervision remain widely varied. To develop a more level playing field, ESMA and EBA should have more authority to address the risks of uneven supervision of investment firms as well as to enhance cross-border supervisory cooperation (for example, on sharing data and analysis) and consistency.

**40. Systemic investment firms should be subject to prudential supervision by the SSM.** Brexit may prompt several U.K.-based investment firms, the largest of which are subsidiaries of G-SIBs, to relocate some activities to the euro area. Centralized prudential supervision of systemic investment firms by the SSM, as proposed by the EC, would reduce the supervisory arbitrage risks that national supervision could create and ensure that their investment banking activities are similarly supervised. Even before that proposal takes effect, the ECB should coordinate with NCAs and prepare resources to ensure sufficient expertise in supervising these complex firms. Cooperation with the U.K. authorities is important as well. As bilateral cooperation between the ECB and the various national conduct supervisors could be too cumbersome, the responsibility for supervising banks' and investment firms' wholesale market conduct could be allocated to ESMA, or ESMA could be given a stronger role in facilitating enhanced cooperation.

## D. Third Country Branches

**41. The SSM should have supervisory powers over significant third-country branches operating in the euro area.** Third-country bank branches are outside the perimeter of ECB banking supervision, creating scope for arbitrage and inconsistent supervisory treatment. Relevant rules should be altered to introduce a harmonized EU regime for third-country branches, and bring significant branches of credit institutions and investment firms under mandatory SSM supervision, in

order to promote a more level playing field and enhance the SSM's ability to undertake group supervision.

## E. Insurers

**42. Solvency II has materially improved the regulatory environment and risk governance of insurance undertakings, but is complex.** Solvency II has been implemented across member states but it is a demanding regime, further complicated by the fragmentation of the insurance sector due to national accounting, tax, social security laws and national supervisory practices, and by the use of long-term guarantee measures such as the matching and volatility adjustments and transitional measures. Hence, disclosed solvency ratios are not comparable across jurisdictions and may mask true vulnerabilities, especially in times of financial stress.

**43. Supervisory practices are converging, but EIOPA's powers and efforts need to be strengthened further.** EIOPA is already vested with a wide range of tools to achieve supervisory convergence, for example, by issuing guidelines and participating in supervisory colleges. To achieve a level playing field, however, more convergence is needed, especially with regard to internal models, quality of capital, and the loss-absorbing capacity of deferred taxes. To this end, EIOPA needs more comprehensive access to information from NCAs. Cooperation with third-country authorities should be further intensified to supervise more effectively globally active insurance groups.

## F. Financial Market Infrastructures

**44. The increased systemic importance of CCPs over the past several years suggests that further centralization of the supervisory framework would be appropriate.** Currently, NCAs are responsible for the authorization and supervision of CCPs, coordinating with ESMA and central banks of issue in supervisory colleges. These arrangements have increased consistency of supervisory practices, but do not go far enough to ensure a level playing field. Endowing ESMA with direct supervisory power would promote a consistent approach in addressing cross-border risks and enhance the level playing field among CCPs. Such a shift would require ESMA to acquire enough staff with relevant expertise. A stronger role for the ECB in oversight of CCPs would provide it with the necessary information and comfort as potential liquidity providers for CCPs. To avoid overlap and inconsistencies, potential ECB regulations for CCPs should be consistent with the European Market Infrastructure Regulation (EMIR), and limited to areas that are in the European System of Central Banks (ESCB) mandate.

**45. The Eurosystem should further develop a harmonized policy for CCP access to central bank accounts and liquidity provision.** There could be extreme circumstances in which CCPs' liquid resources turn out to be insufficient or unavailable, in which case a central bank must step in. Access for all CCPs authorized under EMIR to central bank accounts and liquidity arrangements, under certain conditions, would reduce CCPs' dependence on commercial banks and repo markets for liquidity. The availability of such a safety net in times of market strain is critical to financial stability. Currently the Eurosystem may offer account facilities to European Economic Area (EEA) and

non-EEA clearing and settlement entities and may provide liquidity to euro area CCPs. A further harmonized policy is needed for all CCPs, with and without a banking license, addressing also third country CCPs, to ensure a level playing field.

**46. While strengthening supervision of third country CCPs is warranted, strong cooperation and information sharing with third country authorities is preferred over mandatory relocation of clearing to the EU for CCPs servicing global markets.** The systemic importance for the euro area of London-based CCPs has raised concerns for EU authorities in light of Brexit. Increased requirements for third country CCPs, with ongoing supervision by ESMA, is warranted. The potential forced relocation of a globally systemically important CCP to the EU should be viewed with great hesitation and as a last resort. Such a measure would negatively impact EU markets (through market fragmentation, increased cost, and reduced market liquidity). Instead of relocation, a global deference framework should be put in place, characterized by strong cooperation and information sharing among authorities, application of comparable rules (for example, based on the Committee on Payment and Settlement Systems–International Organization of Securities Commissions Principles for Financial Market Infrastructures) and safeguards to ensure that the home authority is carrying out its responsibilities appropriately.

**47. ICSDs are another highly interconnected and systemically important group of FMIs, which should be subject to centralized supervision.** For example, ESMA’s recent stress tests of CCPs shows a large dependency of CCPs on only a few institutions that provide custody services for dollar and sterling collateral, including ICSDs. As with CCPs, a central EU supervisory approach is needed to ensure that cross-border risks are appropriately addressed and a level playing among ICSDs is ensured. A good option would be to transfer supervision of ICSDs to the SSM, first building capacity within the SSM to take on this task.

## G. Macroprudential Policy

**48. The institutional framework for macroprudential policies appears functional, although assessments could be made more transparent.** Macroprudential policy is a shared competency between national authorities and the ECB. National designated authorities (NDAs), overseeing domestic financial systems, can use capital and other tools in the Capital Requirements Regulation/Capital Requirements Directive (CRR/CRD), and borrower-based tools from national legislations. A “pecking order” applies to the CRR/CRD tools to ensure that national measures are appropriate and do not harm interests of the single market. The ECB can act as a macroprudential authority and “top up” CRR/CRD measures to reduce inaction bias of country authorities. In practice, a euro area country first notifies the ECB to ensure full coordination. The ESRB, responsible for EU-wide macroprudential oversight, issues warnings on financial stability risks and recommendations, while coordinating cross-border reciprocity of policies. In practice, almost all countries warned by the ESRB have appropriately tightened prudential measures. However, transparency and accountability would be enhanced by regularly publishing the (i) reasonings behind ECB “top up” decisions and its assessment of macroprudential risks in euro area member states; and, (ii) ESRB warnings on individual countries.

**49. The activation process for temporary measures could be simplified.** Introducing a presumption of reciprocity for a broader set of tools, with some exceptions, is recommended to streamline the decision-making process further. The process for activating CRR Article 458—temporary capital, liquidity and other measures, fourth in the pecking order—could be streamlined (Table 4). In some cases, the Commission, the Council, and, the Parliament would need to provide their non-objection, after EBA and ESRB have approved these measures. A practical approach would be to rely only on the early ECB assessment (for euro area measures), the opinion of the ESRB on the appropriateness of the proposed measure for the identified risk, and the opinion of the EBA regarding any adverse impact of the measure on the single market.

**50. The toolkit should be harmonized and expanded.** Borrower-based tools, with harmonized definitions at the Union level and in the hands of national macroprudential authorities will be needed to address (i) systemic risks arising from nonbank financial institutions, which intermediate a growing and significant portion of NFC loans (Figure 2); (ii) leakages from capital-based tools from large third-country branches that are outside reciprocity arrangements; and (iii) growing risks from insurers that are extending credit. The scope to use sectoral risk weights in Article 124/164 CRR, first in the pecking order, and other capital tools for macroprudential purposes should be clarified. Closing data gaps related to lending-OFIs and commercial real estate data and prices would facilitate risk monitoring. Moreover, greater coordination with tax policies and zoning restrictions, for example, which could fuel real estate prices, could help avoid overburdening macroprudential measures.

## H. Anti-Money Laundering and Combatting the Financing of Terrorism (AML/CFT)

**51. AML/CFT supervision of banks is the primary responsibility of national AML/CFT supervisors, but variations in approach open the possibility of regulatory arbitrage.** In this context, the EC's evaluation of the effective implementation of the 4th Anti-Money Laundering Directive (4AMLD) will be important.

**52. The inadequate framework for the exchange of information among prudential supervisors (including the ECB) and AML/CFT supervisors hampers effective banking supervision, and should be addressed as a matter of urgency.** Welcome ongoing initiatives include stronger enforcement tools for the EBA's AML/CFT guidelines, and the recent amendments to the 4AMLD (the Fifth AMLD) that should facilitate the sharing of confidential information among prudential and AML/CFT supervisors. The aim is to ensure that bank supervisors, including the SSM, have sufficient and timely information to consider AML/CFT issues in risk assessments and supervision. On this basis, the SSM could and should take targeted measures directed at AML/CFT-related risk management and operational risk deficiencies, instead of relying on higher capital and liquidity requirements. The authorities should consider ultimately establishing a European-level institution responsible for AML/CFT supervision, which would facilitate a consistent and comprehensive approach to what are often cross-border risks.

## MEASURES TO SUPPORT THE CAPITAL MARKETS UNION

**53. Some progress has been made towards the CMU.** Nonbank financing of larger corporations and investment in mutual funds have been growing, and these are both relatively internationalized. Less satisfactory is the very limited availability of diverse funding instruments for small and medium-sized enterprises (SMEs); and the tendency towards home bias by many investors, which reduces diversification and efficiency. Achievements under the CMU have included the "Simple and Transparent Securitization" initiative; and the Prospectuses Regulation.

**54. Developing the CMU further could bring benefits in terms of both stability and efficiency.** A more diversified financial system would be more robust, especially in case of a major disturbance to any one sector. It would also offer better investment opportunities for savers and well-tailored financing for enterprises.

**55. To regain momentum for the CMU, focus should shift to developing a larger investor base for innovative and cross-border products.** Significant steps could include (i) collecting company financial data in a central warehouse, and mapping differences across national accounting standards; (ii) extending the International Securities Dealers' Association (ISDA) collateral conventions—which have proven robust in severe stress situations—to additional financial instruments such as senior bonds of listed companies; and (iii) exemption or offsetting at source for withholding tax on a broad set of securities (for example, sovereign and corporate bonds, on which tax information has already been exchanged). A more ambitious, but important, project would be to remove features of the tax system that favor debt over equity.

## CRISIS MANAGEMENT AND SAFETY NETS

### A. Progress and Challenges

**56. The bank resolution and crisis management arrangements have been strengthened considerably over recent years, but work remains to complete and unify the regime.** The adoption of the BRRD and the SRMR, and the establishment of the SSM and the SRM provide a foundation to deal with problem banks. The SSM, the SRB, the Commission, and the EBA play key roles. The ECB (in its supervisory capacity) and the NCAs, are responsible for recovery planning and taking early intervention measures against problem banks. The SRB and national resolution authorities (NRAs) are responsible for resolution planning and taking resolution actions against failing banks, with certain actions (for example, adoption of resolution schemes) being subject to endorsement/non-objection by the EC (the EU executive) and, in some cases, the Council (an EU co-legislator). The EC ensures that government financial support to problem banks—also in resolution actions—complies with the state aid regime using restructuring requirements and post-restructuring monitoring of intervened banks. The newly established SRF may provide resolution financing. The ESM is available for direct and indirect bank recapitalizations. The EBA issues relevant guidelines and regulations.

**57. Some lessons can be drawn from the bank interventions that have been carried out under the new framework.** Just one bank was resolved by the SRB, and the others were handled outside the resolution framework. These cases and earlier experience point to the need to align the conditions and triggers of the resolution, state aid, and liquidation regimes; strengthen liquidity support before and in resolution; and enhance capacity to “pre-schedule resolution.”

**58. Despite the progress, the bank resolution and crisis management arrangements face transitional and structural challenges, and improvements are needed to enhance their effectiveness, efficiency, and robustness.** These arrangements should be refined so as to better contain the overall cost of dealing with a problem bank; minimize moral hazard; attenuate the nexus from banks to sovereigns; and support the banking union and competition, under which a bank’s cost of funding should depend on its own financial characteristics, and not on the jurisdiction to which it belongs. Practical arrangements need to balance predictability based on rules against flexibility to deal with contingencies and ensure incentive compatibility. Progress towards these objectives will contribute importantly towards risk reduction.

## B. Operational and Financial Capacity

**59. Perhaps the most urgent need is to strengthen early bank intervention and resolution preparations.** Most of the recommendations in this area build on the authorities’ ongoing efforts. They include:

- **Continuing to build up operational capacity.** The SRB will need additional resources, for example, to fulfil its back-up authority to determine failing-or-likely-to-fail (FOLF) status; cope with litigation pressures; and engage in more in-depth resolution preparations (for example, to ensure the maintenance of essential functions in an intervened institution).
- **Enhancing the early intervention framework and procedures.** The ECB and the SRB have made welcome proposals to address legal constraints on the formal use of early intervention measures and advance resolution preparation (such as reaching out to potentially interested parties for a sale of business transaction) independently of such measures.
- **Operationalizing the resolution toolkit.** More resolution tools—and combinations thereof—should be considered in resolution planning. For example, the bridge-bank tool could be more often considered for SIs, and the practicalities of sale-of-business operations (including the identification of suitable buyers) could be worked out in more detail. The SRB and the ECB should test their (updated) manuals with dry-runs, involving home and host NRAs, and also extra-euro area authorities where relevant. These dry-runs should encompass the preparation period, during which, for example, available collateral is verified.
- **Pre-scheduling FOLF determinations and the “resolution weekend.”** The ECB and the SRB should adopt policies and operational arrangements to ensure that the FOLF determination and “resolution weekend” are closely coordinated and can be prescheduled, allowing for advance resolution preparation, and a seamless transfer of responsibility for a problem bank from the

SSM to the SRB. Preparation is needed to anticipate a range of possible interventions in a bank identified as fragile even when the probability of outright failure in the near term is moderate.

- **Mitigating resolvability impediments, including on management information systems, service level agreements, access to FMIs, and banks' legal structures.** A funding plan should be included in each bank's resolution plan.
- **Ensuring cross-border cooperation.** While the banking union is completed, host authorities, especially of domestic systemically important banks, must be integral to resolution planning, preparation, and implementation for the respective subsidiary or branch. This involvement will help to meet the imperative of maintaining critical functions in that jurisdiction, and promote cooperative approaches. Ex ante determination of which banks are of major importance for the wider economy is needed so that supervisory action and contingency planning can be directed at reducing the probability and severity of difficulties in these banks. In this connection, the frameworks of cooperation agreements and memoranda of understanding with counterparts in Europe and beyond need to be completed.
- **Building up MREL.** The availability of sufficient bail-in-able liabilities is critical to effective resolution—even more so in a regime that mandates the bail-in of creditors. Internal MREL in material subsidiaries is a critical support of a cooperative approach to resolving or liquidating a cross-border group—as recognized in FSB and EBA guidance on the matter—because it ensures the pooling of losses across the respective group. The SRB has started setting parent-level external MREL targets, and will set internal (that is, intra-group) MREL targets by 2019; given its criticality, the authorities are encouraged to explore the feasibility of expediting MREL buildup both at the group and subsidiary levels, with priority given to larger banks. The buildup may pose challenges, especially to less profitable banks or those that have not recently gone to the market. However, the current environment offers a limited window of opportunity to issue at relatively low rates.
- **Ensuring the availability of liquidity in the course of resolution.** Preparations for intervention in a problem bank must ensure the availability of liquidity in the course of resolution. Preparations must fully anticipate the need for, and the availability of central bank financing (whether from regular facilities or ELA at the central bank's discretion) and the applicable constraints in terms of solvency conditions and eligible collateral. In this regard, the provision of a government indemnity to a central bank for ELA could be helpful in cases where the relevant bank has insufficient unencumbered collateral. Such indemnities may be needed to support both effective resolution and overall financial stability. Policies and operational arrangements for SRF capital and liquidity contributions in resolution should promote prompt mobilization of resources.

## C. Further Strengthening the Architecture

**60. A more complete banking union requires a unified, transparent, and predictable resolution regime.** Diverging national bank insolvency regimes, subject to less stringent loss

sharing requirements under state aid rules than in the SRM, deliver substantially different outcomes for bank creditors, and therefore create an uneven playing field across the banking union in terms of banks' funding costs. Moreover, these divergences provide strong incentives for member states to resolve systemic banks under national bank insolvency regimes.

**61. Aligning loss sharing requirements (in resolution) under state aid rules with the more stringent requirements for public support under the SRM is essential to reducing the scope to minimize bail-in through non-euro area level approaches, subject to alternative means of flexibility being introduced (see below).** Currently, to resolve a bank using SRF support requires writing down 8 percent of assets. Otherwise, intervention is governed by national insolvency laws and the state aid rules, which may impose smaller losses on certain creditors. Those creditors may be better off in liquidation than in resolution even though the aggregate cost is higher. This and other inconsistencies may create incentives and means to “escape” the resolution regime. Aligning concepts such as solvency, financial stability, and public interest, and their coverage, would likewise help unify the regime.

**62. A financial stability exemption—to be used only in times of euro area-wide or country-wide crisis and subject to strict conditions—is likewise essential to help mitigate critical constraints in the framework.** The SRM has been designed to deal with idiosyncratic events. The BRRD/SRMR does allow some flexibility, notably through “precautionary recapitalization” (for vulnerable banks which still have sufficient regulatory capital), but these possibilities are not useful when flexibility is needed most, namely, during a system-wide crisis when banks are under-capitalized. Further, flexibility is being found in national alternatives to resolution, subject to less strict loss sharing requirements under state aid rules than in the SRM, but they may undermine the coherence of the regime. A financial stability exemption, to be used only in a time of system-wide crisis and subject to strict governance arrangements, would grant appropriate flexibility, for example, through departure from the 8 percent bail-in requirements for accessing the SRF and public funds, and other limitations. Without such flexibility, the framework may become “time inconsistent” in circumstances where the risk of contagion is severe. In the few scenarios where this flexibility might be needed, loss absorption by shareholders and subordinated debtholders should still be required as a minimum. The authorities should also start to design an overarching, system-wide crisis management framework, bringing together pertinent agencies to effectively cooperate in formulating feasible responses to a system-wide crisis.

**63. To further harmonize the framework, the SRMR should include an administrative bank liquidation tool.** This tool would allow the resolution authority to appoint a liquidator and commence proceedings. The SRB would be able to apply this tool to all banks within its remit and banks considered systemic at the time of failure, by itself or in combination with other resolution tools, including an effective sale-of-business tool. Such a tool should be underpinned by a harmonized creditor hierarchy (applicable also for purposes of the “no creditor worse off” safeguard) and would be especially useful for ensuring that cases involving cross-border banks are dealt with at a euro area level, facilitating needed coordination. Meanwhile, creditor hierarchies (where progress

has been made following the 2017 BRRD amendment) and the availability of resolution tools (which differs widely) under national bank insolvency frameworks should be further harmonized.

**64. The banking union needs a common deposit insurance system.** A well-designed and adequately funded EDIS—with a backstop—would give confidence to retail depositors; a common system would address host countries’ risk-sharing concerns. It will also be important to ensure that deposit insurance systems (DISs) can finance deposit transfers in resolution. Experience elsewhere suggests that DIS financing of such transfers subject to a least cost test are often in the best interests of the depositors of the failed institution, and helps preserve DIS resources.

**65. A backstop to the SRF would strengthen the system.** SRF funds will be limited even in the steady state from 2024; a credible backstop would reassure markets. The Commission’s proposals for an EDIS and an ESM backstop for the SRF are therefore very welcome. The authorities could now consider folding the ESM’s existing direct recapitalization tool into the backstop for the SRF, rather than maintaining two funds that can only be used sequentially and would require the SRF to be depleted first. In the future, the SRF target level should be adjusted to maintain at least a one percent ratio to covered deposits also after end-2023.

**66. The independence and powers of the SRB should be buttressed.** The authorities should explore options to strengthen the SRB’s role in shaping crisis management policy and decision-making. For example, the SRB could be given permanent observer status on the ECB Supervisory Board. Ultimately, the SRB could be designated as an independent EU institution, which would allow the SRB to obtain a sufficiently high credit rating for the SRF (which would facilitate resolution funding); to exercise rule-making power (for example, to address system-wide resolvability impediments); to help it design its own personnel policies to attract specialist staff; and to manage the SRM’s litigation risk in resolution cases. It would make sense for the SRB to be a voting member of the EBA Board of Supervisors and the resolution committee.

**67. Consideration should be given to paring back procedures for state aid oversight of resolution-related actions—including resolution funding—that are unlikely to affect competition or create an undue advantage.** Resolution decisions taken by the SRB rather than national authorities, according to agreed fair and open procedures, could be presumed to meet state aid rules (if outright exemption were not possible), considering the lower risk of distorting competition for national interest. Deposit and asset transfers funded by DISs could likewise be granted a presumption of compliance when provided on a “least cost” basis according to agreed open procedures and subject to European-level oversight, thus minimizing competition concerns. Provision of indemnification of ELA would be facilitated by an analogous ex ante elaboration by the Commission of the conditions under which it would be deemed to be compatible with EU state aid rules, and of any safeguards.

## SYSTEMIC LIQUIDITY

### A. Emergency Liquidity Assistance

**68. The provision of ELA is currently a national responsibility, and while it has worked well, there is scope for greater coordination and advanced preparation to deal with contingencies.** The ECB/Eurosystem is able to track individual banks' flows once strains materialized. However, procedures for identifying emergent collateral shortages and pre-verification of collateral availability have not been fully effective. Hence, liquidity and collateral-related "horizon scanning" should be more forward looking and embedded in a mechanism for cooperation between supervisory and operational areas within the ECB, at the national level, and between the two. Earlier preparation and sharing of information would allow for the development of a shared watchlist of vulnerable financial institutions, and jointly agreed ELA funding plans to be prepared earlier. Such enhancements would also facilitate pre-verifying the availability of collateral before mobilization to allow legal and other barriers to be identified. In addition, a more explicit and forward-looking business model assessment would help set boundaries on the extent of liquidity support. For a bank that is using its capital buffers, a forward-looking solvency assessment does not need to wait, as now, for formal data to show that these buffers have become exhausted; ELA preparations can be started in anticipation.

**69. Any use of ELA, even for a brief period, must go hand-in-hand with appropriate supervisory action.** Evidence that an entity's buffers are deteriorating, along with any reliance on ELA, should be taken as a strong signal of deficiencies in liquidity management by the bank in question, which deserve supervisory attention and, typically, timely corrective action. Effectiveness in this area will require close cooperation between the supervisory and monetary functions of the ECB, and between the SSM and the SRM. In general, there should be more information sharing and joint analysis between the ECB/Eurosystem monetary and supervisory functions (and by extension the SRM given its role in resolution) in order to fully exploit informational advantages and take account of different perspectives.

**70. A move towards greater harmonization and ultimately centralization of ELA arrangements would bring benefits to the banking and monetary unions.** Consistent with its role in the SSM, the ECB/Eurosystem is best placed to take a view on whether and for how long a bank should receive ELA. Shifting to a centralized system would require at least standardizing the collateral framework across member countries, and the adoption of adequate governance arrangements, including agreements on profit and loss sharing.

**71. Emergency liquidity support facilities for CCPs should be better defined.** Euro and foreign exchange support should be formalized within a centralized framework, in recognition of CCPs' strong cross-border connections. While the liquidity arrangement established under the TARGET2 Guideline provides a safety net, this arrangement should have the safeguards (for example, increased supervisory intrusion, preparation of funding plans) equivalent to an ELA framework.

**72. It would be helpful for the ECB/Eurosystem and the European authorities generally to articulate more explicitly what is understood to be the ECB/Eurosystem’s financial stability mandate.** An expressed mandate would have benefits in operational design and emergency support situations, and in signaling and accountability. For example, it would allow the ECB/Eurosystem to evaluate and present ELA actions (including the status of preparations and collateral arrangements) from a wider financial stability perspective.

## B. Systemic Liquidity Management

**73. The level of overall liquidity is adequate and funding markets are functioning well, most of the time, albeit with some periods of volatility.** Extensions to ECB’s and national securities lending programs, notably the introduction of cash collateral and removing the deposit facility floor on eligible purchases, have helped market functioning. Window-dressing behavior by banks, with the aim of meeting regulatory and other requirements appears to be adding to market volatility at the end of reporting periods, therefore moving from end-period reporting to a period-average would also help.

**74. Some amendments to the ECB/Eurosystem’s liquidity operations are warranted now that conditions are generally stable.** Some operational changes would allow a clearer delineation between ECB/Eurosystem monetary policy operations and ELA. Thus, the ECB/Eurosystem should remove current derogations for banks to use self-issued government guaranteed bank bonds as collateral in ECB/Eurosystem monetary policy operations to minimize the potential for their use as surrogate ELA. The ECB/Eurosystem’s U.S. dollar facility should be reviewed to prevent opportunities for arbitrage (when the refinancing is priced below effective market rates) whilst retaining it as an effective market backstop. To the extent that the ECB/Eurosystem retains a broad collateral pool, it should consider possible undue incentives for banks to deliver the least liquid assets to the ECB/Eurosystem; one way to correct the incentives would be through differentiated charges (such as through interest rate add-ons) across collateral classes

**75. Current arrangements should be reviewed to better support monetary and capital markets union.** For example, securities lending arrangements are still conducted on a different basis in each jurisdiction. Further harmonization would reinforce financial market integration.

**76. Careful planning will be needed for the phase-out of exceptional measures over the medium term.** As corroborated by FSAP work on liquidity risk and funding costs, TLTROs have reduced reliance on term funding markets, and generally the use of exceptional monetary measures has eased quantitative constraints on bank funding and its cost. Therefore, the careful sequencing of exit from these measures is crucial, particularly for banks with limited access to wholesale markets. Publishing normalization principles would help market participants understand the ECB/Eurosystem’s intentions. Increased transparency around the maturity of purchased assets may be worthwhile: if a decision is taken to run-off these assets, such actions could then be more easily priced into markets. As monetary policy normalizes, the ECB/Eurosystem may need to intervene in systemically important markets to maintain liquidity and price discovery, which could be done other

than by large scale asset purchases or lending operations. It would be useful if the ECB were to design principles for such operations, without indicating a pre-commitment.

**77. The ECB/Eurosystem will soon need to take forward its thinking on the eventual steady state operational framework.** A key consideration will be how much of the current excess liquidity is likely to be structural, perhaps reflecting new regulatory requirements for high quality liquid assets and term funding. In that context, choices will need to be made around the calibration of instruments and collateral policy. Dealing with these issues would benefit from advanced planning, and support from a clear and consistent communication policy and dialogue with market participants so as to minimize risks of policy misinterpretation.

**Figure 1. Euro Area: Financial System Overview**

The euro area banking system is large...

**Structure of the Financial System**

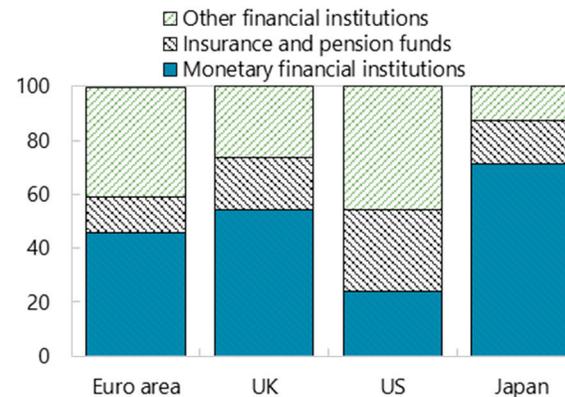
(Assets as percent of GDP)



...also relative to the financial system...

**Structure of the Financial System**

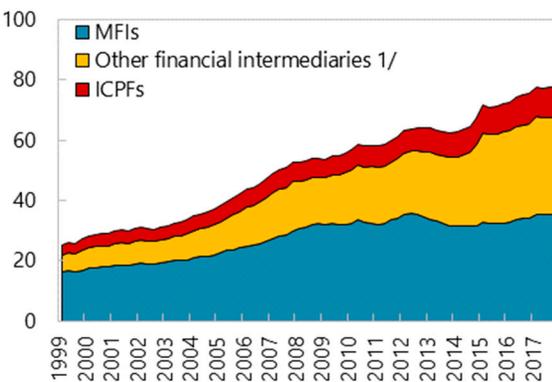
(Share of total assets of the financial sector)



... but the nonbank financial sector is growing.

**Total Assets of the Euro Area Financial Sectors**

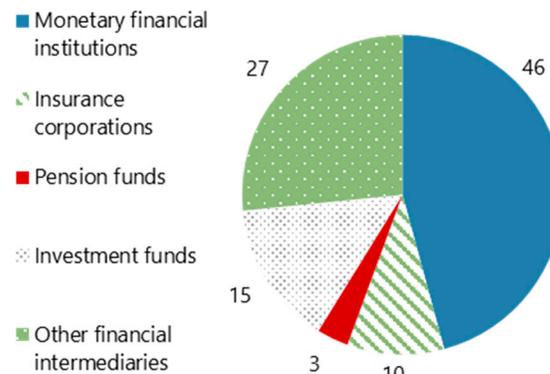
(Trillions of euros)



Nonbanks are diverse, and include a large "other" sector.

**Share of Total Assets of the Financial Sector**

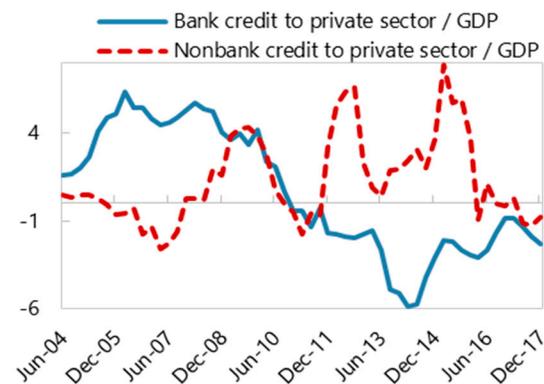
(Percent, 2017Q4)



Since 2009, nonbanks are playing a greater role...

**Private Sector Credit Growth: Bank and Nonbank**

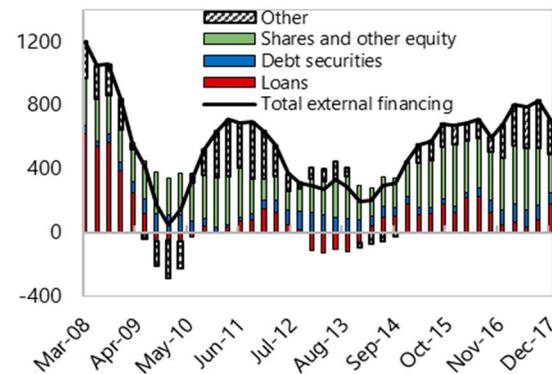
(Year-over-year change, percent of GDP)



...particularly in funding nonfinancial firms.

**Sources of External Financing Provided to the Nonfinancial Corporate Sector**

(Billions of euros, annual flows)



Sources: ECB, Haver Analytics, and IMF staff calculations.

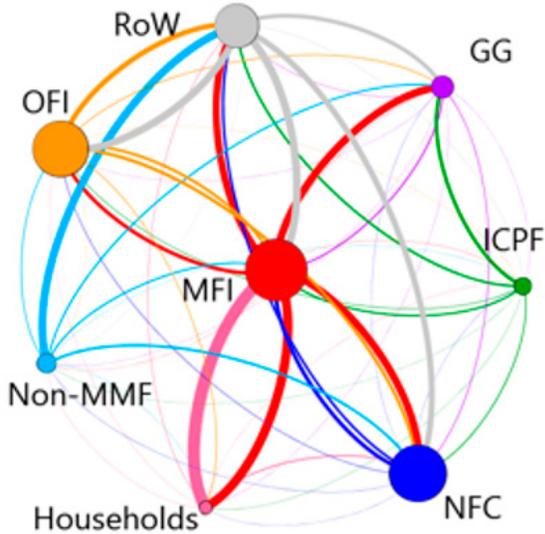
1/ OFIs comprise investment funds, money market funds, financial vehicle corporations, and a sizeable OFI residual.

**Figure 2. Euro Area: Sectoral Interconnectedness**

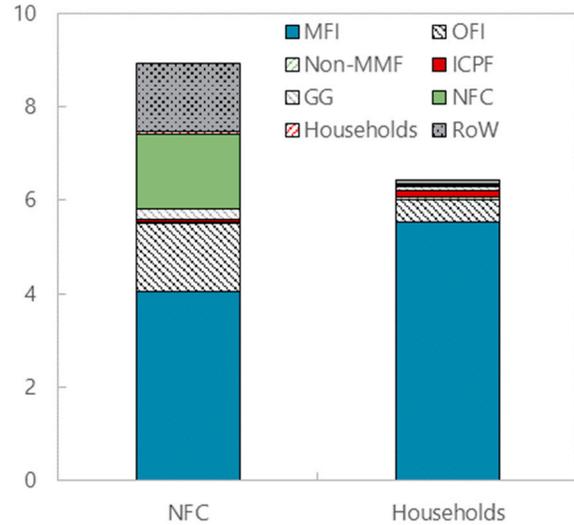
Banks remain the most important source of financial intermediation for the public sector...

...as well as for nonfinancial firms and households.

**Inter-Sectoral Funding 1/**



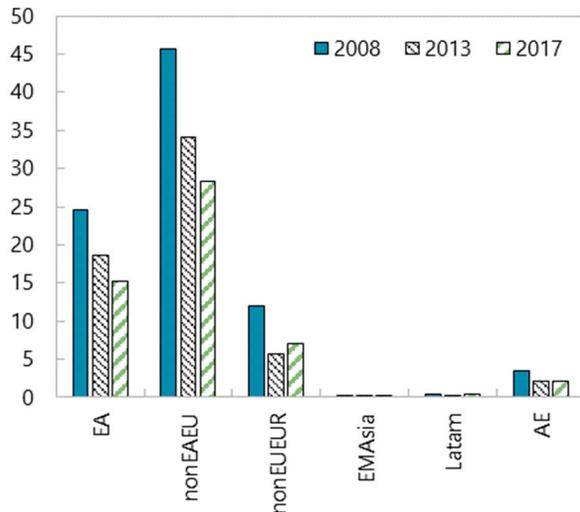
**Euro Area NFCs and Households: Sources of Loans (Trillions of euros)**



Euro area banking interconnectedness with other regions has declined in recent years.

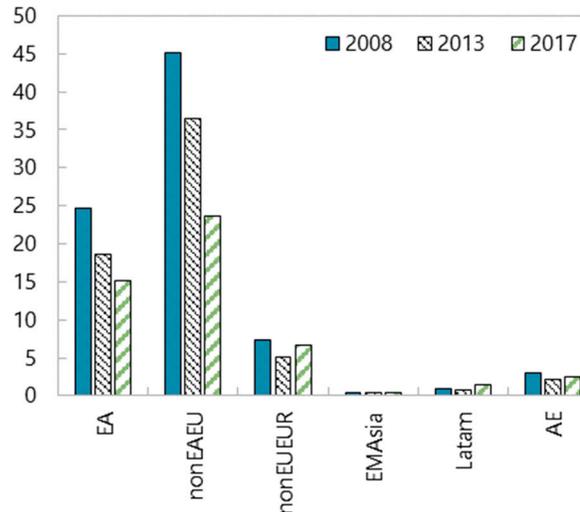
**Exposures from Euro Area 2/**

(Percent of GDP of the target area)



**Exposures to Euro Area 2/**

(Percent of GDP of the target area)



Sources: Haver, ECB, and IMF staff calculations.

1/ The size of the nodes indicates relative value of liabilities for each sector (based on billions of euros). The thickness of the connections reflects relative amount of inter-sectoral funding (deposits, short-term and long-term debt, short-term and long-term loans, and listed shares). The colors of connections correspond to the source of funding, for example red connections indicate the funding provided by Monetary Financial Institutions (MFIs). RoW, GG, ICPF, NFC, and Non-MMF denote rest of the world, general government, insurance companies and pension funds, nonfinancial corporations, and investment funds, except money market funds, respectively.

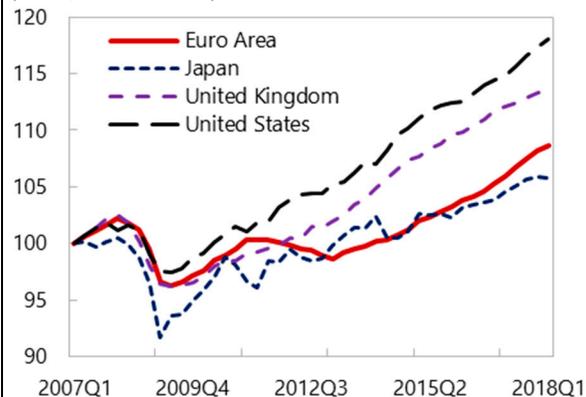
2/ Regions: EA: Euro Area; nonEAEU: Non-Euro Area EU; nonEUEUR: Non-EU Europe; EMAsia: Emerging Asia; Latam: Latin America; AE: Other Advanced Economies.

**Figure 3. Euro Area: Macroeconomic Developments**

*The cyclical recovery continues...*

**Euro Area: Real GDP Level**

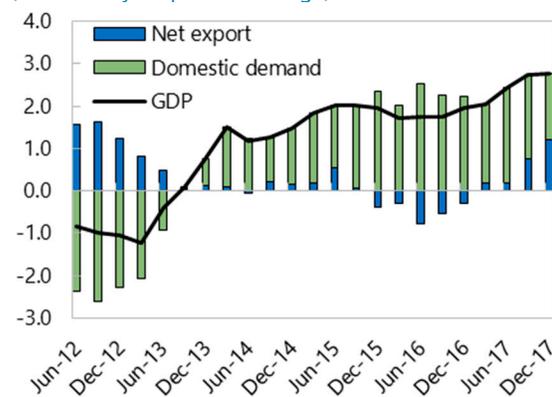
(Index, 2007Q1=100)



*...underpinned by domestic demand...*

**Contribution to Growth**

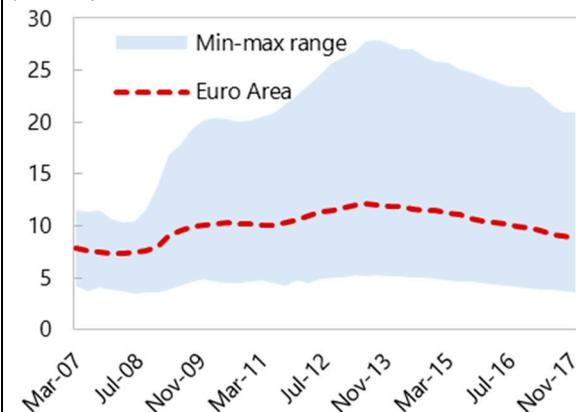
(Year-over-year percent change)



*...helping bring the unemployment rate down to the lowest level since 2009.*

**Euro Area: Unemployment Rate**

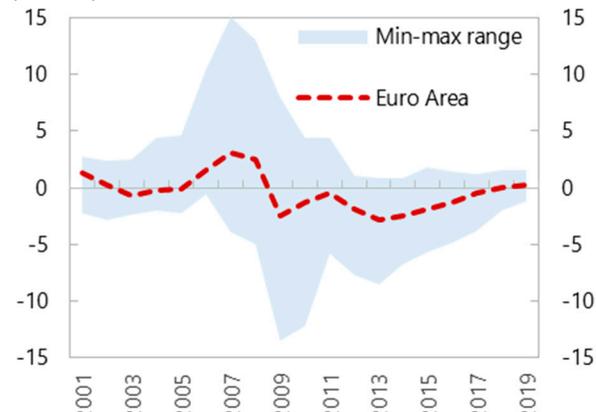
(Percent)



*After a decade of below-potential growth, the output gap is projected to close in 2018.*

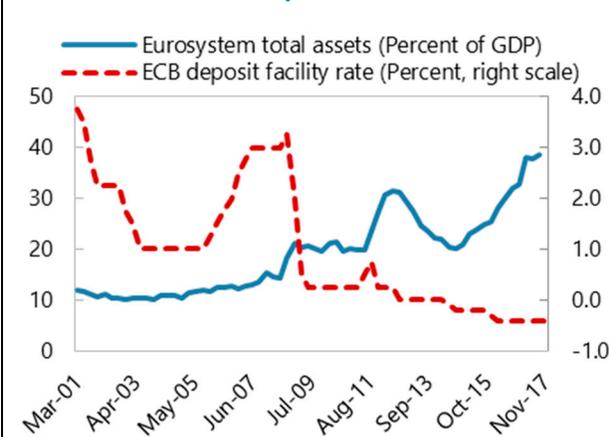
**Output Gap**

(Percent)



*The monetary stance is still strongly accommodative...*

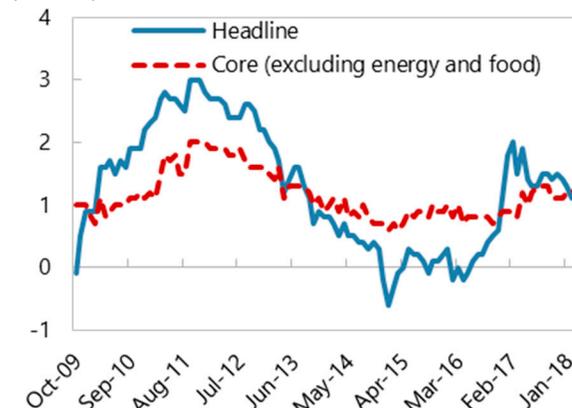
**ECB Balance Sheet and Deposit Rate**



*...yet inflation remains subdued.*

**Euro Area: Inflation Measures**

(Percent)

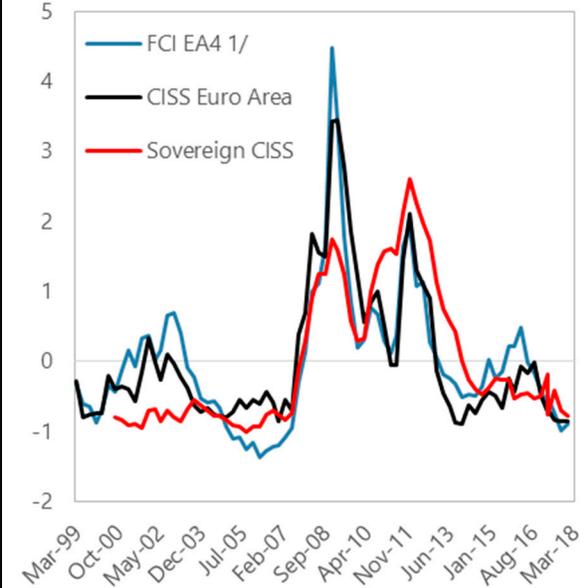


Sources: IMF IFS, IMF WEO, Eurostat, Haver Analytics, and IMF staff calculations.

**Figure 4. Euro Area: Financial Conditions**

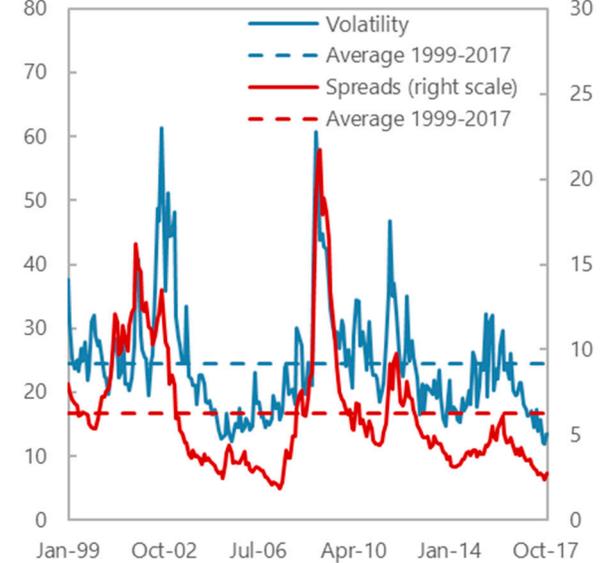
Financial conditions are generally loose...

**Financial Conditions Index (FCI)**  
(Index)



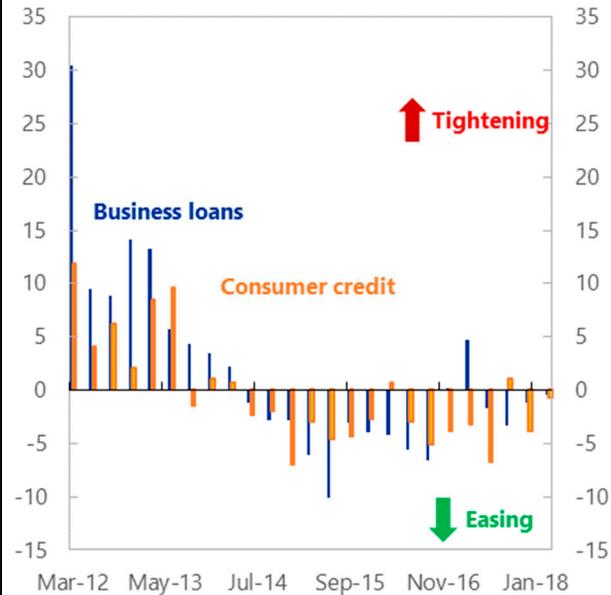
...reflecting compressed spreads and low volatility across asset classes.

**Stock Market Volatility and High Yield Spreads 2/**  
(Percent)



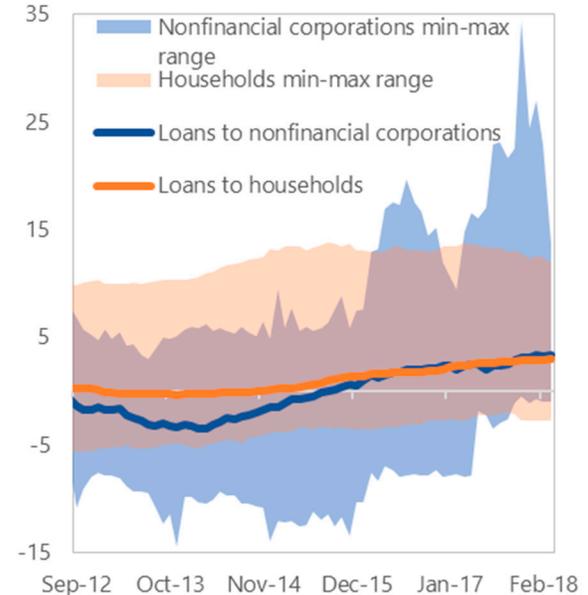
Easing bank lending standards...

**Change in Credit Standards**  
(Net percentage balance)



...have been accompanied by rising credit growth.

**Credit Growth**  
(Year-over-year percent change)



Sources: ECB, Bloomberg Finance L.P., Haver Analytics, and IMF staff calculations.

1/ The EA4 FCI is defined as the first principal component of the country-level FCIs of France, Germany, Italy, and Spain. FCIs including a broader set of euro area countries produces similar patterns.

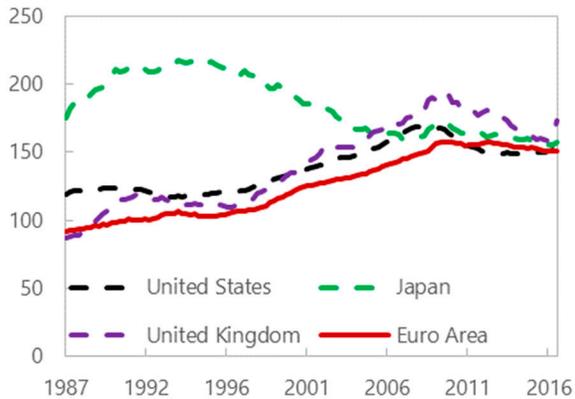
2/ High-yield corporate bond spread shown.

**Figure 5. Euro Area: Macroeconomic Developments**

*Private sector debt remains elevated...*

**Indebtedness of the Nonfinancial Private Sector**

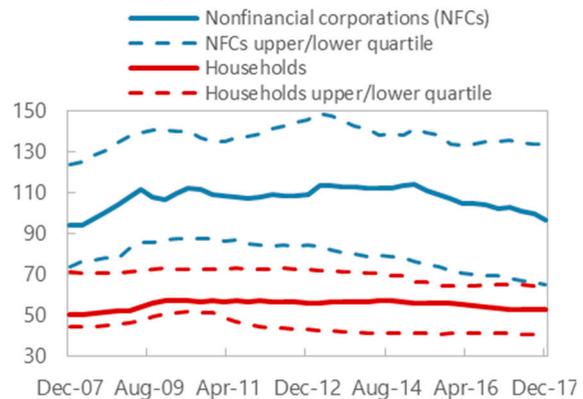
(Percent of GDP)



*...albeit declining relative to GDP in some countries...*

**Household and Corporate Debt**

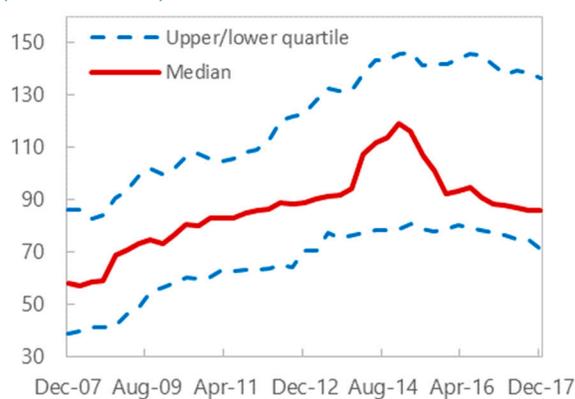
(Percent of GDP)



*...amid high levels of public debt.*

**General Government Debt**

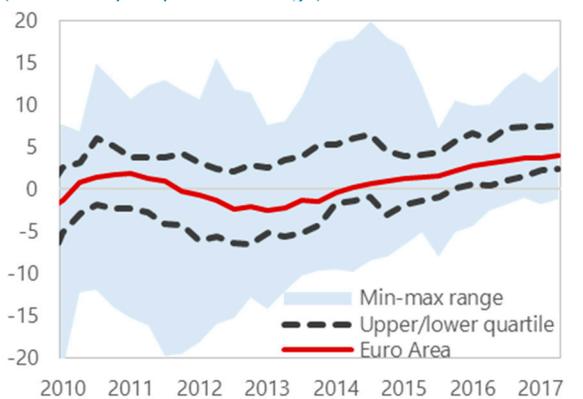
(Percent of GDP)



*Rising residential real estate prices in some areas...*

**Dispersion of Nominal House Price Growth**

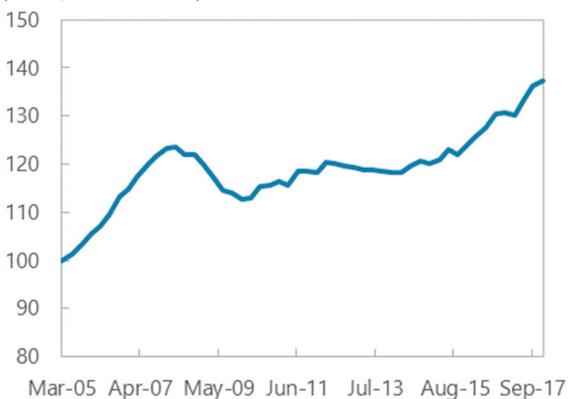
(Year-over-year percent change)



*...and EA-wide commercial real estate prices...*

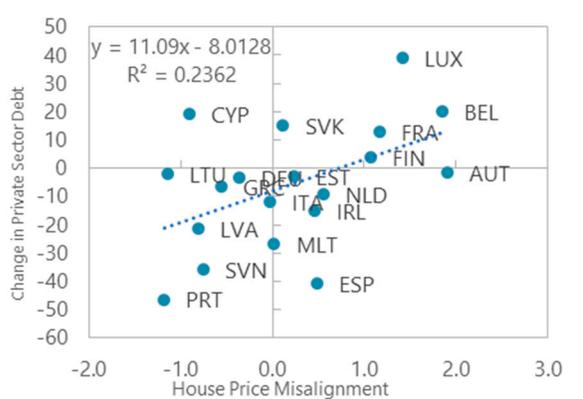
**Commercial Property Prices**

(Index, 2005Q1-100)



*...together with high private sector indebtedness are sources of concern.*

**House Price Misalignment and Private Sector Debt 1/**



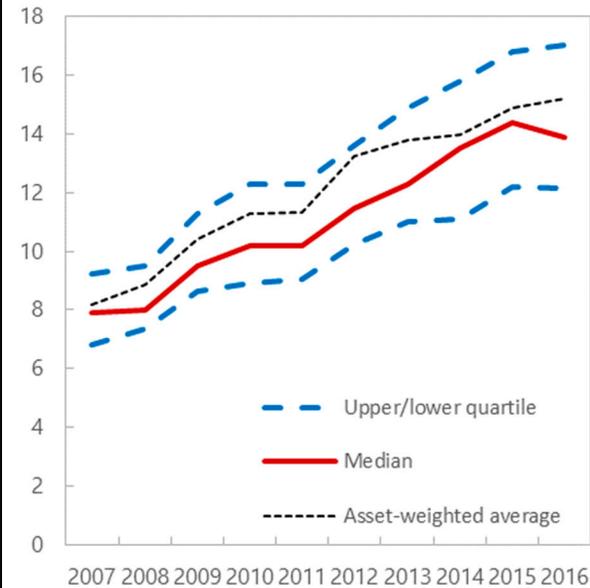
Sources: Haver Analytics, ECB, BIS, IMF, and IMF staff calculations.

1/ Y-axis: Change in private sector debt-to-GDP ratio (percentage points; 2012Q4–2017Q1); x-axis: Max of deviation of house price-to-income or house price-to-rent ratios from historical averages (standard deviations; 2016Q3)

**Figure 6. Euro Area: Banking Developments**

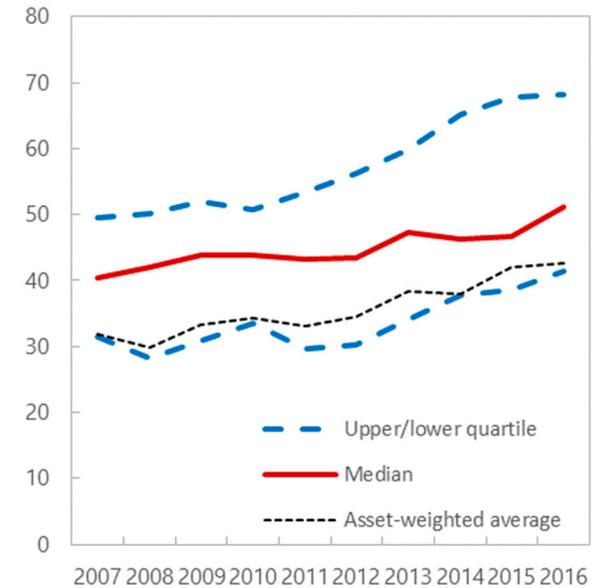
Bank capitalization ratios have risen significantly...

**Tier 1 Capital 1/**  
(Percent)



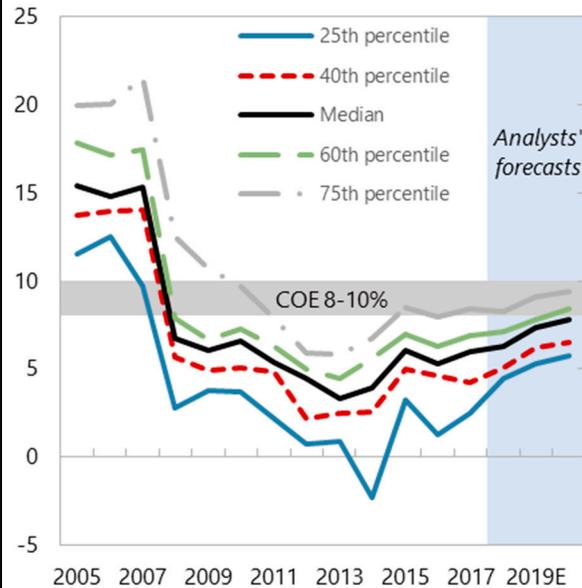
...and funding metrics have improved...

**Deposit-to-Asset Ratio 1/**  
(Percent)



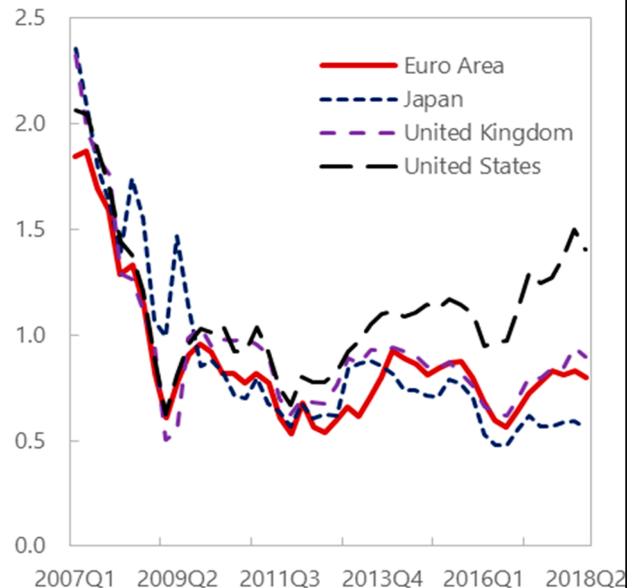
...but average return on equity continues to trail cost of equity estimates...

**Return on Equity (ROE) 2/**  
(Percent)



...contributing to depressed bank valuations.

**Price to Book Ratio**  
(Banks weighted by assets)



Sources: Bloomberg Finance L.P., Fitch Data, and IMF staff calculations.

1/ Based on a balanced sample of 45 SSM banks over 2007–2016, with 56 percent of end-2016 SSM assets.

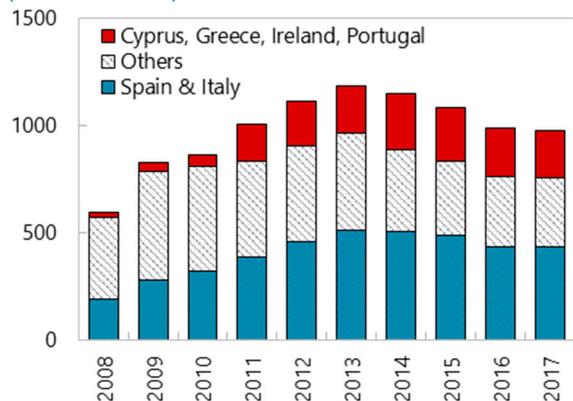
2/ Cost of equity (COE) estimates, ranging from 8–10 percent, are subject to caveats including with regards to measurement.

**Figure 7. Euro Area: Nonperforming Loans**

*NPLs remain elevated across some countries...*

**Nonperforming Loans Stock**

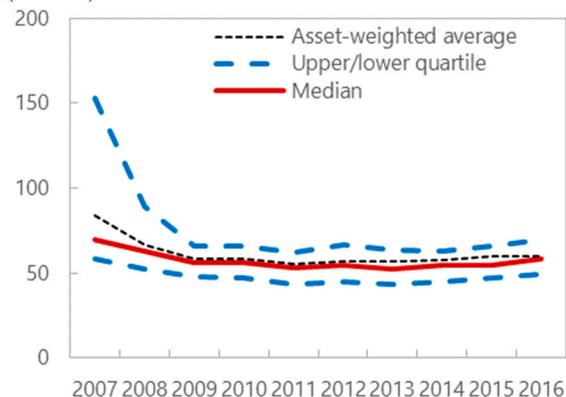
(Billions of euros)



*...with generally low coverage ratios...*

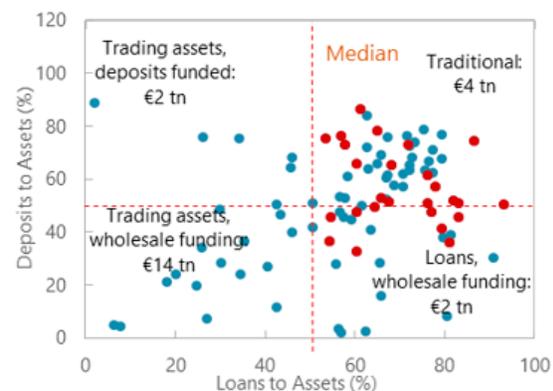
**Coverage Ratio**

(Percent)



*NPLs are concentrated in banks with higher loan-to-asset ratios...*

**NPLs and Bank Business Models 3/**



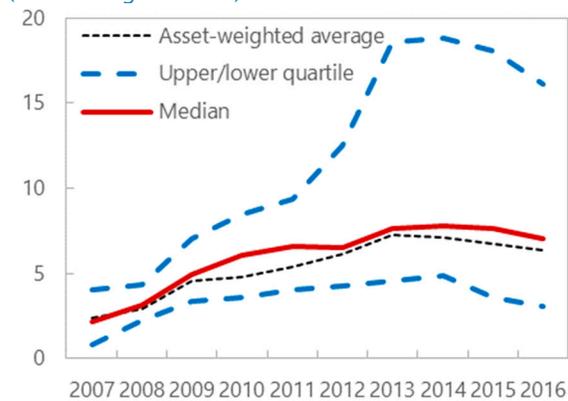
Sources: ECB, Fitch, and IMF staff calculations.

- 1/ Based on a balanced sample of 45 SSM banks over 2007–2016, with 56 percent of end-2016 SSM assets.
- 2/ Illustrative computation where all uncovered NPLs are subtracted from Tier 1 capital.
- 3/ Red dots indicate banks with NPL ratios greater than 10 percent in 2016.

*...and some SSM banks...*

**NPL Ratio 1/**

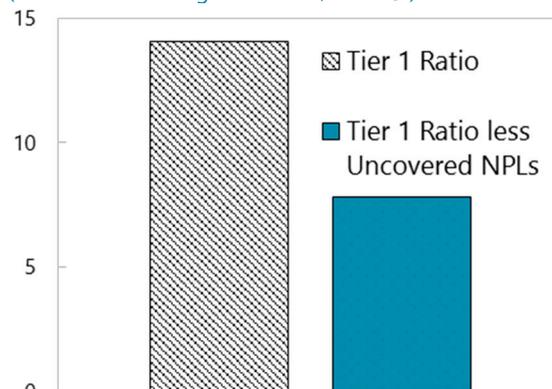
(Percent of gross loans)



*...so that writing off all un-provisioned NPLs could substantially erode bank buffers.*

**SSM Banks: Tier 1 Capital Ratio 2/**

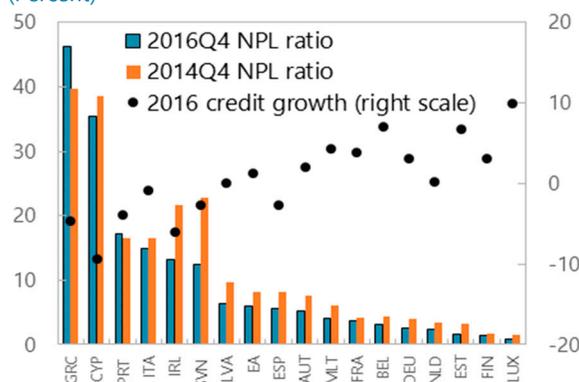
(Percent of risk weighted assets, 2017Q1)



*...which may help explain weaker credit growth in countries with greater asset quality challenges.*

**Nonperforming Loans Ratio and Credit Growth**

(Percent)

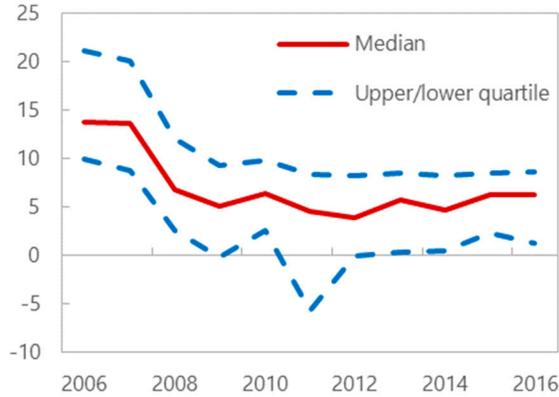


**Figure 8. Euro Area: Bank Profitability**

Return on equity (ROE) has declined sharply since 2007...

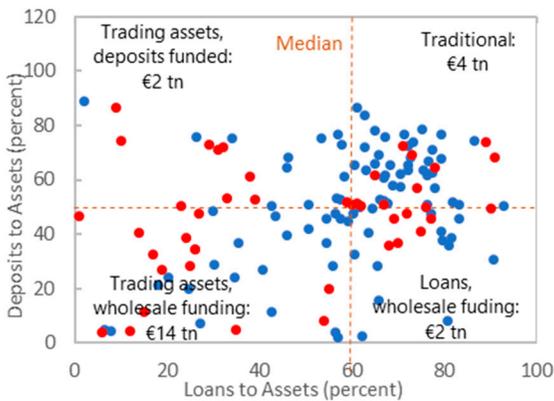
**Return on Equity (ROE) 1/**

(Percent)



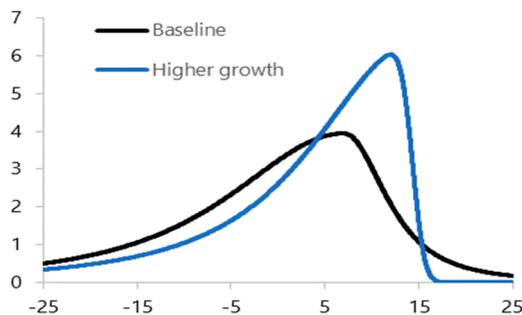
Weak profitability is pervasive across business models.

**Profitability and Banks Business Models 2/**



Higher growth would raise profits on average, yet weaker banks would continue to struggle even with a recovery.

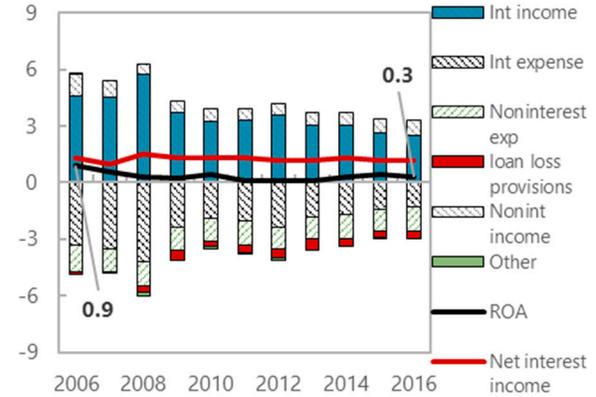
**Conditional Bank Profitability (ROE) Distribution 3/ (Probability)**



...whereas return on assets (ROA) remains structurally low.

**SSM Banks: Profitability and its Components**

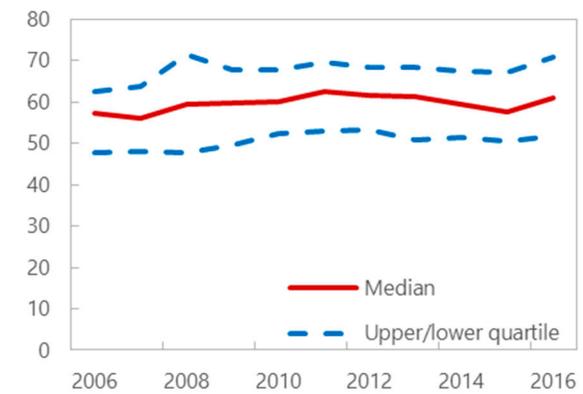
(Percent of average assets)



Recently, cost efficiency metrics have deteriorated slightly.

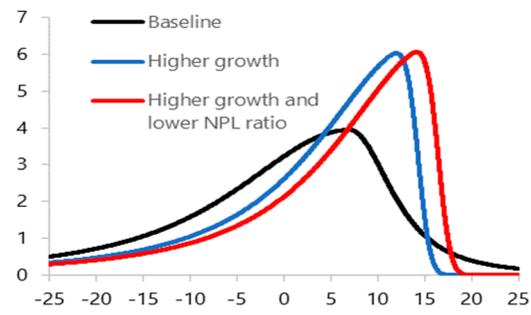
**Cost to Income Ratio 1/**

(Percent)



Resolutely addressing NPLs amid a recovery would increase banks' profitability to a greater extent.

**Conditional Bank Profitability (ROE) Distribution 3/ (Probability)**



Sources: Fitch Data and IMF staff calculations.

1/ Based on a balanced sample of 45 SSM banks over 2007–2016, with 56 percent of end-2016 SSM assets.

2/ Red dots indicate banks with ROE below 8 percent in 2016.

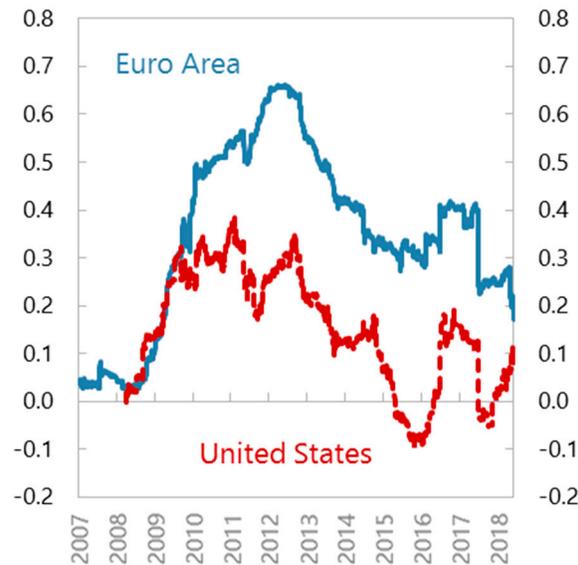
3/ The figure shows illustrative baseline and “shocked” conditional bank ROE probability distributions for a “representative” bank based on quantile regressions for 109 SSM banks over 2007–2016.

**Figure 9. Euro Area: Bank-Sovereign Nexus**

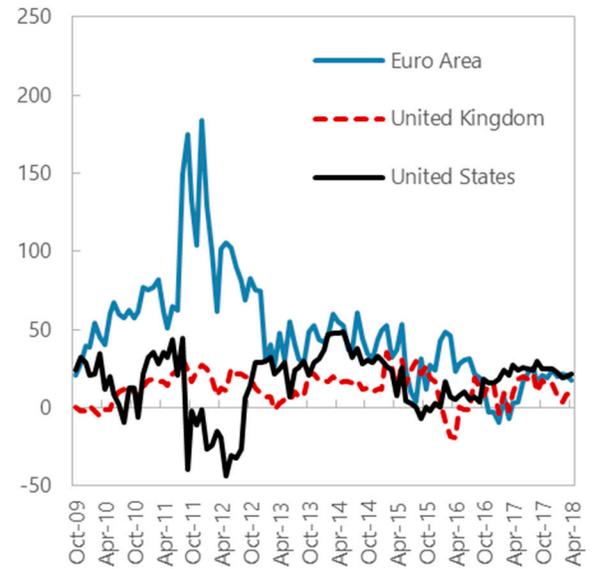
Currently, marked-based metrics of the bank-sovereign nexus remain relatively subdued.

**Correlations of Changes in Bank and Sovereign CDS Spreads**

(12-month rolling window)



**Implicit GSIB (Too-Important-To-Fail) Subsidy 1/**  
(Basis points)



Sources: Bloomberg Finance L.P., CCA, and IMF staff calculations.

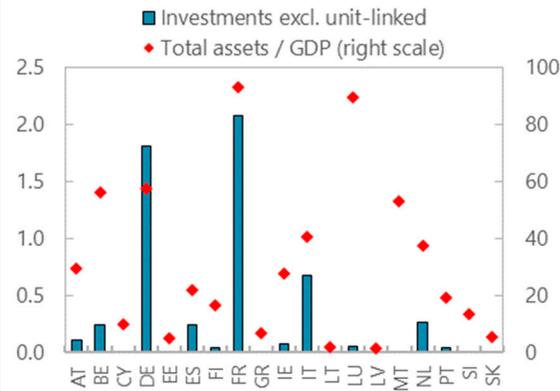
1/ The subsidy is the difference between observed CDS spreads and CCA-based fair-value spreads that disregard the possibility of government support, see April 2014 GFSR (chapter 3) for further details.

**Figure 10. Euro Area: Insurance Sector**

Insurance sectors differ notably in size.

**Size of the Insurance Sector**

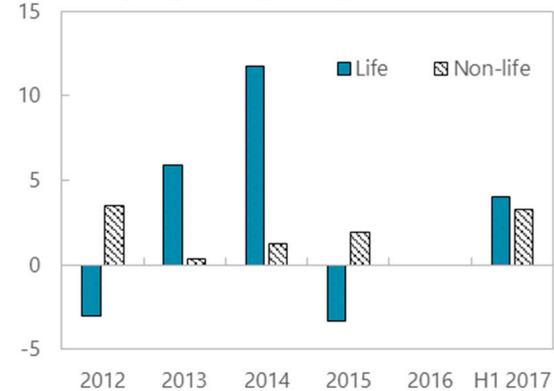
(Trillions of euros)



Life premiums were volatile in recent years.

**Gross Written Premiums 1/**

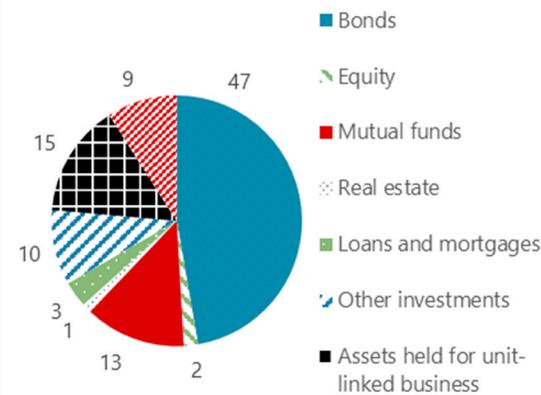
(Year-over-year percentage change)



Bonds account for nearly half of the sector's assets.

**Asset Allocation**

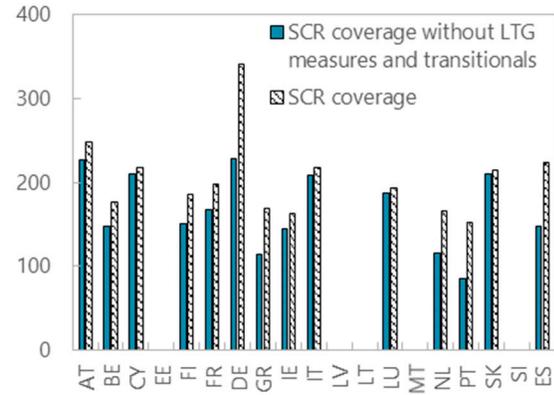
(Percent)



Solvency ratios and the relative importance of LTG measures and transitionals differ.

**Average SCR Coverage**

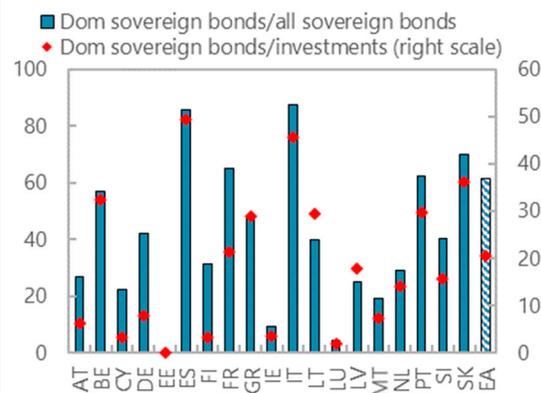
(Percent)



Exposures are biased towards domestic sovereigns...

**Domestic Sovereign Exposures**

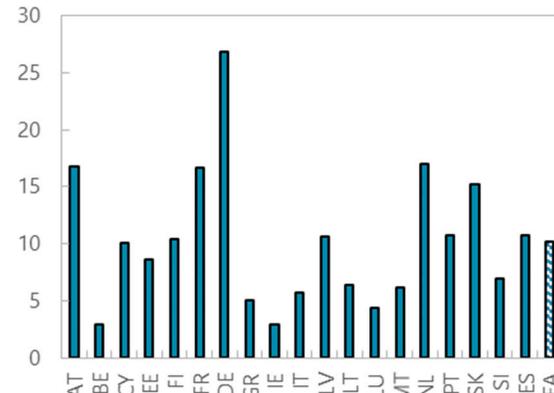
(Percent)



... as well as domestic banks.

**Exposure Towards Domestic Financial Services 2/**

(Percent of total assets)



Source: IMF staff calculations based on EIOPA data.

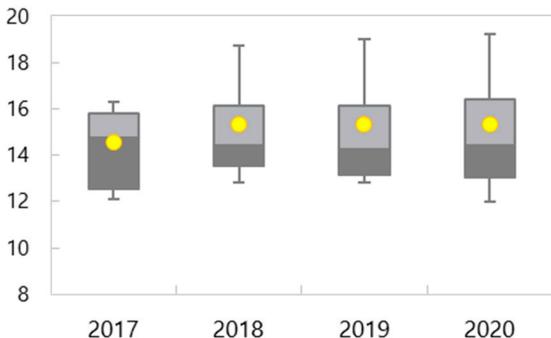
1/ Year-on-year growth rates of gross written premiums not available for 2016 due to structural breaks in the time series.

2/ Includes financial institutions except insurance and pension funds.

**Figure 11. Euro Area: Solvency Stress Testing**

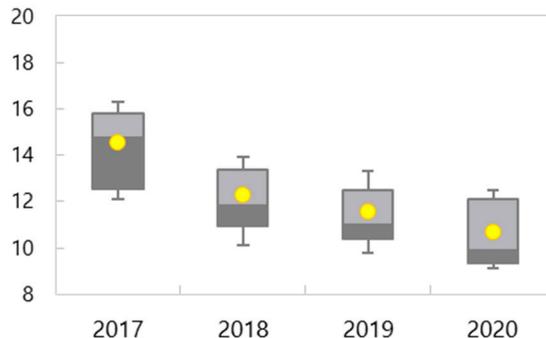
Aggregate capital ratios rise modestly under the baseline scenario...

**CET1 Ratio, All Banks: Baseline Scenario 1/**  
(Percent)



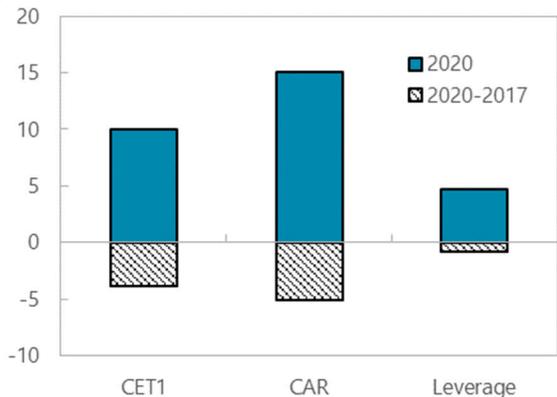
...and decline by about 390 basis points after three years under the adverse scenario.

**CET1 Ratio, All Banks: Adverse Scenario 1/**  
(Percent)



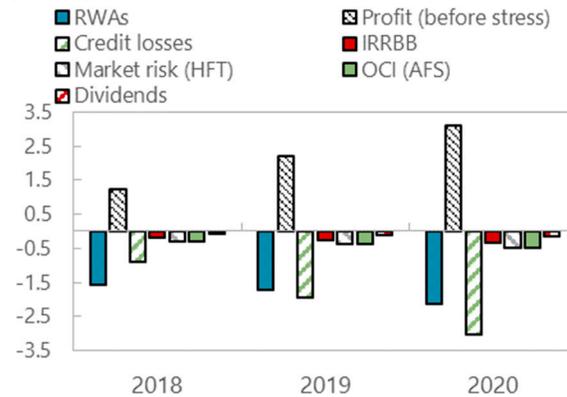
Broadly comparable results are obtained using alternative solvency metrics.

**All Banks: Alternative Solvency Metrics 2/**  
(Percent)



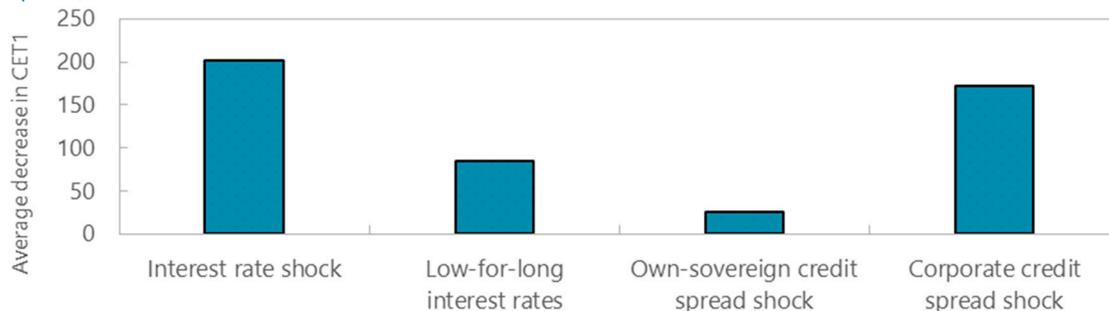
Capital shortfalls reflect impairment charges, rising risk-weighted assets (RWAs), and traded risk stress.

**Cumulative Impact on Common Equity Tier 1 Capital 3/**  
(Percent)



Banks are generally resilient to stylized shocks applied across a range of sensitivity tests.

**Summary: Selected Sensitivity Tests 4/**  
(Basis points)



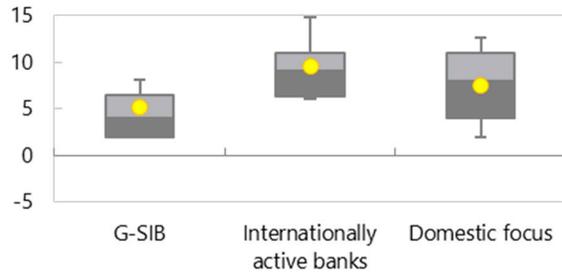
Sources: IMF staff estimates based on ECB/SSM supervisory data.

- 1/ The CET1 capital ratio is defined as common equity tier 1 capital in percent of risk-weighted assets (RWA) consistent with CRR and CRD IV. Boxplots include the mean (yellow dot), the 25th and 75th percentiles (grey box, with the change of shade indicating the median), and the 15th and 85th percentiles (whiskers).
- 2/ CAR and Leverage denote the capital adequacy and leverage ratios, respectively.
- 3/ RWA, IRRBB, HFT, OCI, and AFS denotes risk-weighted assets, interest rate risk in the banking book, held-for-trading (securities), other comprehensive income, and available-for-sale (securities), respectively
- 4/ Bars denote peak capital depletions to instantaneous shocks except for the low-for-long interest rates sensitivity test.

**Figure 12. Euro Area: Liquidity Stress Testing**

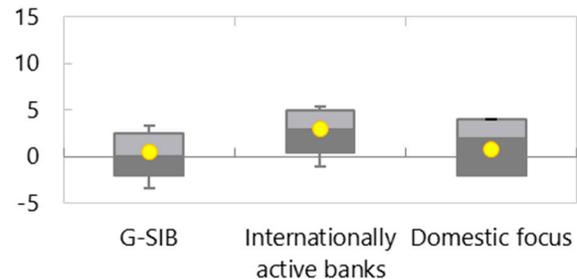
All banks have sufficient liquidity buffers under the baseline scenario.

**Liquidity Surplus 1/**  
(Percent)



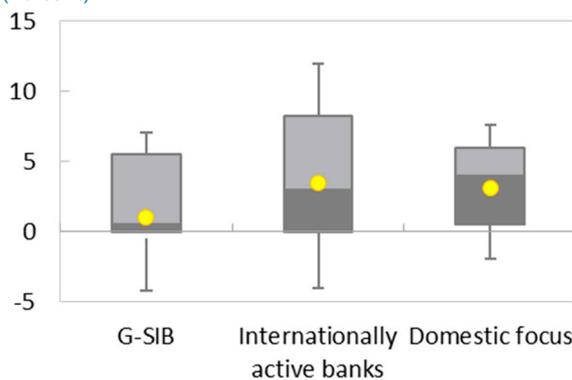
Under the more severe scenario, G-SIBs and domestically-oriented banks suffer relatively greater liquidity shortfalls

**Liquidity Surplus 1/**  
(Percent)



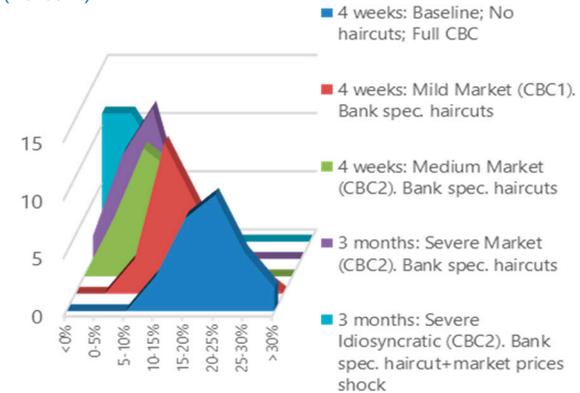
The 5-day collateral freeze scenario reveals that several banks are vulnerable, albeit after 3 days of stress.

**Liquidity Surplus 1/**  
(Percent)



The most severe scenario implies that 11 banks' CBC would fail marginally below zero.

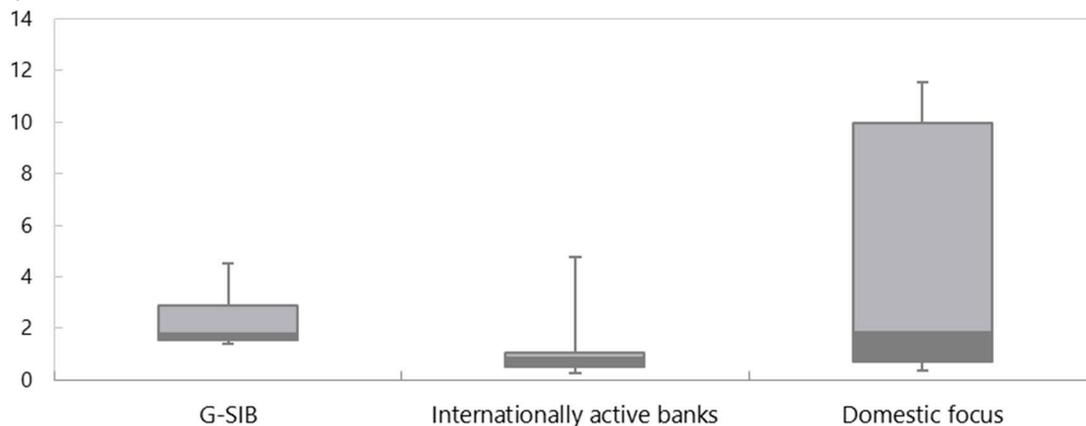
**Distribution of Number of Banks by CBC 1/**  
(Percent)



An illustrative exercise suggests that the impact on funding costs from a greater reliance on market funding differs across banks. Relatively smaller domestically-oriented banks are affected the most.

**Impact on Net Interest Expense of Greater Reliance on Market Funding 2/**

(Percent)



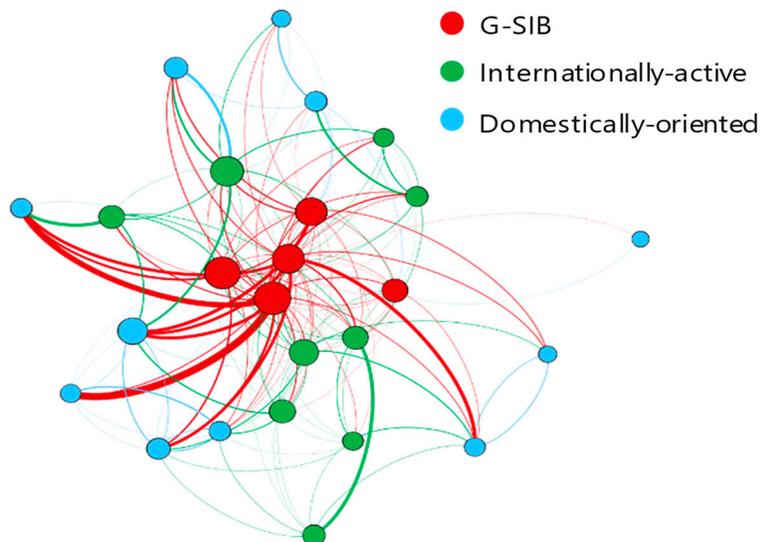
Sources: IMF staff estimates based on ECB/SSM supervisory data.

1/ Liquidity surplus and counterbalancing capacity is scaled by total assets. Boxplots include the mean (yellow dot), the 25th and 75th percentiles (grey box, with the change of shade indicating the median), and the 15th and 85th percentiles (whiskers).  
2/ Boxplots include the 25th and 75th percentiles (grey box, with the change of shade indicating the median), and the 15th and 85th percentiles (whiskers).

**Figure 13. Euro Area: Balance Sheet-based Interconnectedness**

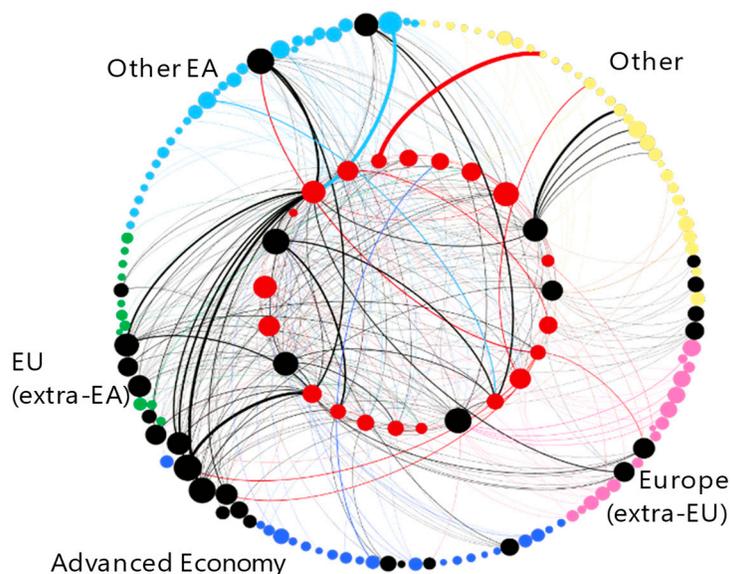
The euro area network indicates that G-SIBs tend to be associated with greater outward spillovers, while domestically-oriented banks are more susceptible to inward spillovers.

**Intra-EA Network 1/**  
(Percent of capital buffer)



The global banking network reveals that spillovers are greatest between the euro area and other advanced economies.

**EA-centric Global Network 2/**  
(Percent of total cross-border liabilities)



Sources: ECB, and IMF staff calculations.

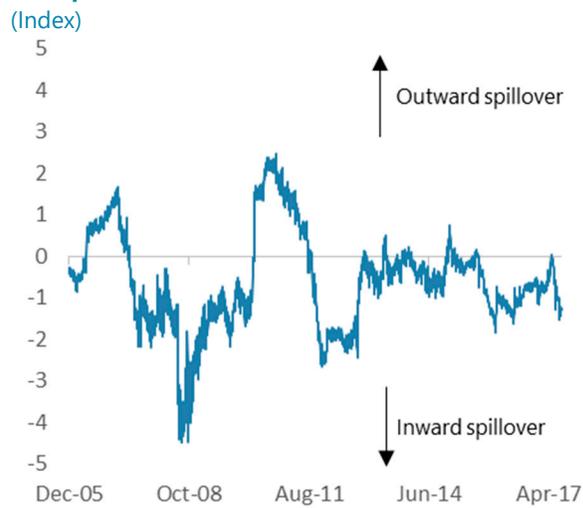
1/ The major (25) euro area (EA) banks are grouped into three broad business models: (1) G-SIBs (red nodes), (2) large, but less complex, internationally-active banks (green nodes), and (3) relatively smaller domestically-oriented banks (blue nodes). Node size represents the strength of contagion; node color indicates business model; line thickness is proportional to the ratio of exposures to capital buffer; line color is the same color as the contagion source.

2/ Banks are grouped by regions: EA (25 banks), other EA, EU (extra-EA), Europe (extra-EU), (other) Advanced Economies, and Other. Inner circle comprises 25 EA banks with their important banking counterparts placed in the outer circle, grouped into regions denoted with colors. Node size: contagion index; line color: matches the color of the source of contagion (indicates direction); edge size; exposure-to-capital ratio; GSIBs are in black.

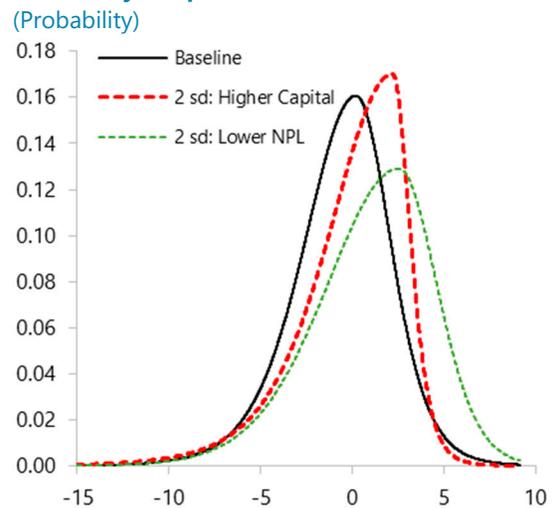
**Figure 14. Euro Area: Market-based Interconnectedness**

Stronger bank fundamentals reduce spillovers from the rest of the world not only on average, but also in terms of tail risks...

**Net Spillovers 1/**

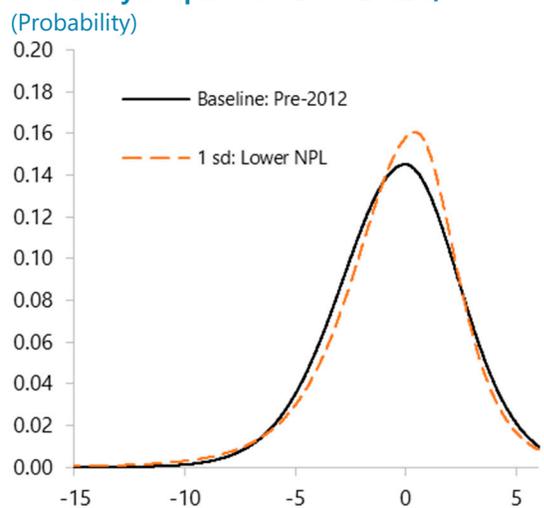


**Probability of Spillovers 1/**

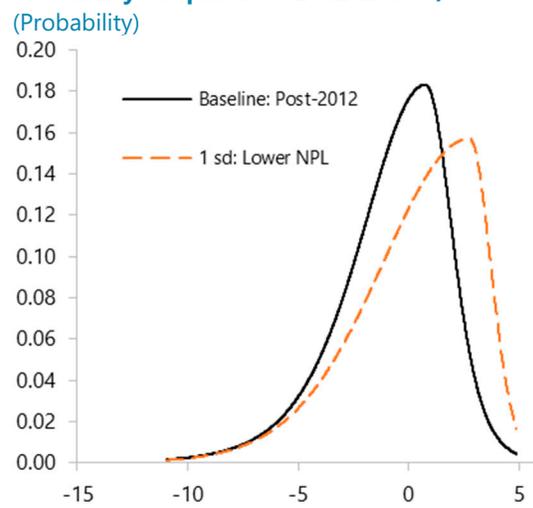


...and that the beneficial impact of such stronger fundamentals appears to have increased in recent years.

**Probability of Spillovers: 2006–2012 1/**



**Probability of Spillovers: 2012–2017 1/**



Sources: ECB, and IMF staff calculations.

1/ Index values of net spillovers between the euro area and U.S. banking systems are shown on the horizontal axis. "Capital" denotes capital adequacy, proxied by the ratio of Tier 1 capital to total assets. The ratio of nonperforming loans to total loans (NPL), measures asset quality. The standard deviation (sd) shock is relative to the historical mean of the determinants.

Table 1. Euro Area: Financial System Structure

	1999	2007	2009	2012	2017	1999	2007	2009	2012	2017	1999	2007	2009	2012	2017
	(In billions of euros)					(In percent of GDP)					(In percent of total)				
<b>Financial Institutions</b>															
Total assets	27,116	52,469	55,558	63,737	77,542	406	558	598	627	694	100	100	100	100	100
Monetary financial institutions	16,916	30,042	31,881	34,560	35,487	253	319	343	340	318	62	57	57	54	46
Insurance and pension funds	3,823	6,497	6,680	7,777	10,094	57	69	72	77	90	14	12	12	12	13
Of which: insurance corporations	3,171	5,246	5,377	6,042	7,577	47	56	58	59	68	12	10	10	9	10
Of which: pension funds	639	1,245	1,297	1,665	2,476	10	13	14	16	22	2	2	2	3	3
Investment funds	2,759	5,293	4,911	6,500	11,347	41	56	53	64	102	10	10	9	10	15
Other financial institutions	6,377	15,930	16,997	14,900	20,614	95	169	183	147	185	24	30	31	23	27
<b>Financial markets</b>															
Outstanding debt securities	...	2,069	2,081	2,969	4,384	...	22	22	29	39	...	...	...	...	...
Of which: general government	...	...	682	748	866	...	...	7	7	8	...	...	...	...	...
Stock market capitalization	...	6,150	4,193	4,290	6,377	...	65	45	42	57	...	...	...	...	...
<b>Memorandum items</b>															
Nominal GDP	6,679	9,403	9,292	10,158	11,165	...	...	...	...	...	...	...	...	...	...

Sources: European Central Bank; IMF, World Economic Outlook database; and IMF staff calculations.

**Table 2. Euro Area: Main Economic Indicators, 2015–2023**

(in percent, unless otherwise indicated)

	2015	2016	2017	Projections 1/					
				2018	2019	2020	2021	2022	2023
<b>Demand and Supply</b>									
Real GDP	2.1	1.8	2.4	2.2	1.9	1.7	1.5	1.5	1.4
Private consumption	1.8	2.0	1.6	1.5	1.7	1.5	1.5	1.4	1.3
Public consumption	1.3	1.8	1.2	1.4	1.2	1.0	1.0	1.0	1.0
Gross fixed investment	3.3	4.6	3.2	3.9	3.6	2.9	2.5	2.3	2.2
Stock building 2/	0.0	-0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Domestic Demand	2.0	2.3	1.9	2.1	2.0	1.7	1.6	1.5	1.5
Foreign balance 2/	0.1	-0.4	0.6	0.2	0.0	0.0	0.0	0.0	0.0
Exports 3/	6.4	3.3	5.3	4.7	4.4	3.8	3.6	3.4	3.3
Imports 3/	6.7	4.6	4.3	4.6	4.7	4.2	3.9	3.6	3.6
<b>Resource Utilization</b>									
Potential GDP	1.5	1.3	1.4	1.6	1.6	1.6	1.6	1.5	1.5
Output gap	-1.6	-1.2	-0.2	0.4	0.8	0.8	0.8	0.7	0.6
Employment	1.0	1.4	1.6	1.0	0.7	0.6	0.4	0.3	0.2
Unemployment rate	10.9	10.0	9.1	8.4	8.0	7.8	7.6	7.5	7.4
<b>Prices</b>									
GDP deflator	1.4	0.8	1.1	1.5	1.6	1.8	1.9	2.0	2.0
Consumer prices	0.0	0.2	1.5	1.7	1.7	1.8	2.0	2.1	2.1
<b>Public Finance 4/</b>									
General government balance	-2.0	-1.5	-0.9	-0.6	-0.6	-0.5	-0.7	-0.7	-0.8
General government structural balance	-1.0	-0.8	-0.7	-0.8	-1.0	-0.9	-1.1	-1.1	-1.2
General government gross debt	89.9	89.0	86.7	84.3	81.8	79.8	77.9	76.1	74.5
<b>External Sector 4/, 5/</b>									
Current account balance	3.2	3.6	3.5	3.2	3.1	3.1	3.0	3.0	2.9
<b>Interest Rates (end of period) 6/</b>									
EURIBOR 3-month offered rate	-0.1	-0.3	-0.3	-0.3	...	...	...	...	...
10-year government benchmark bond yield	1.2	1.3	0.9	1.2	...	...	...	...	...
<b>Exchange Rates (end of period) 6/</b>									
U.S. dollar per euro	1.09	1.05	1.18	1.18	...	...	...	...	...
Nominal effective rate (2005=100)	101.2	102.6	110.0	110.2	...	...	...	...	...
Real effective rate (2005=100, ULC based)	90.7	90.6	96.3	96.7	...	...	...	...	...

Sources: IMF, World Economic Outlook, Global Data Source; Reuters Group; and Eurostat.

1/ Projections are based on aggregation of WEO projections submitted by IMF country teams.

2/ Contribution to growth.

3/ Includes intra-euro area trade.

4/ In percent of GDP.

5/ Projections are based on member countries' current account aggregations excluding intra-euro flows and corrected for aggregation discrepancy over the projection period.

6/ As of June 2018.

**Table 3. Euro Area: Financial Soundness Indicators for Significant Institutions**  
(in percent, unless otherwise indicated)

	2015 Q4	2016 Q4	2017 Q3	2017 Q4
<b>Capital adequacy</b>				
Common Equity Tier 1 ratio	13.5	13.8	14.3	14.6
Tier 1 ratio	14.3	14.7	15.3	15.6
Total capital ratio	16.9	17.3	18.0	18.1
Leverage ratio (fully phased-in definition)	...	5.0	5.2	5.4
Leverage ratio (transitional definition)	...	5.4	5.4	5.6
<b>Asset quality</b>				
Loans and advances (in billions of euro) 1/	13,626	14,262	14,728	14,652
NPL and advances (in billions of euro)	959	878	759	721
Nonperforming loans ratio	7.0	6.2	5.2	4.9
<b>Earnings and profitability</b>				
Return on equity	4.4	3.2	7.0	6.0
Return on assets	0.3	0.2	0.5	0.4
<b>Funding and liquidity</b>				
Loan-to-deposit ratio	123	120	118	117
Liquidity coverage ratio	...	136	140	144
<b>Assets</b>				
Total assets (in billion Euro)	21,690	21,738	21,298	20,753
Total assets (in percent of GDP)	206	202	192	186
<b>Significant institutions by size (number of)</b>				
Total	117	121	114	111
Banks with total assets				
Less than €30 billion	27	32	30	28
Between €30 billion and €100 billion	47	50	48	47
Between €100 billion and €200 billion	19	15	14	13
Between €200 billion and €300 billion	7	8	6	7
More than €300 billion	9	8	8	9
Global systemically important banks 2/	8	8	8	7

Sources: ECB, Haver Analytics, and IMF staff calculations.  
Note: Data before 2015 is not available.  
1/ Loans and advances in the asset quality tables are displayed at gross carrying amount.  
2/ Data based on the last available list of G-SIBs as published by the Financial Stability Board. On November 21, 2017, the list of euro area G-SIBs was reduced to 7 banks.

**Table 4. Policy Tools to Address Macroprudential Risks**

<b>Tools; Risks addressed</b>	<b>Pecking Order 1/</b>	<b>Notify/consult</b>	<b>Obtain opinion/recommendation</b>	<b>Obtain authorization/non-rejection</b>
Countercyclical Capital Buffer—cyclical, all banks	1	Notify ESRB		
Global (or Other) Systemic Institution buffer—structural, institution-specific	1	Notify ESRB, EBA, EC		
Risk-weights (for banks on standardized models), real estate--cyclical, exposure-based	1	Consult EBA		
Higher Loss-given-defaults for real estate in IRB banks—cyclical, exposure-based	1	Notify EBA		
Pillar 2 (systemic risks in SREP) for institutions with similar risk profiles	2	Notify EBA		
Systemic Risk Buffer—structural, institution-specific	3	Notify EBA, ESRB	EC 2/, EBA, ESRB 3/	EC 2/
Flexibility measures—cyclical or structural, temporary	4	Notify EP, EC, EBA, ESRB	EBA, ESRB 4/	Non-rejection by Council 5/
Non-capital measures		Notify ECB, ESRB		

Sources: EU treaties, and FSAP questionnaire responses.

1/ "Pecking Order" refers to the sequence in which tools in the CRD/CRR legislation can be used. For example, tools in the 3rd pecking order can only be used if it is well-justified that those in the first and second order would not be appropriate.

2/ If EC opinion is negative, the member state needs to provide further reasons for the need of such measures. EC authorization required also for a Systemic Risk Buffer above 3 percent of exposures in other EU member states, and for a Systemic Risk Buffer above 5 percent on domestic and third country exposures.

3/ For subsidiaries whose parent is from another member state, the EC and the ESRB are notified and are required to provide recommendations.

4/ Issue opinions to the Council and the EC.

5/ Based on EC proposal.

## Appendix I. Main Recommendations of the 2013 EU FSAP

Area	Policy Action	Implementation Status
Bank balance sheet repair	Secure strong capital buffers, enhance disclosure, and conduct selective asset quality reviews.	<b>Implemented.</b> In general, capital buffers have increased notably and are of higher quality. Asset quality reviews have been conducted. Disclosure has been increased (for example, in the context of stress testing exercises).
Progress toward banking union	Make SSM operational, providing the ECB with adequate resources, staff of highest professional competence and the authority to directly supervise any bank.	<b>Implemented.</b> SSM is operational; as of January 2018, the ECB was the lead authority for 118 SIs.
	Initiate preparations for an SRM, to become operational around the same time as the SSM becomes effective.	<b>Implemented.</b> SRM is now established.
	Agree on a time-bound roadmap to full banking union, including a single resolution authority, and a common DIS with common backstops.	<b>Partially implemented.</b> The SRB, which became operational in 2016, coordinates the resolution of SIs. The SRF is in place with a buildup of resources over time. A common DIS is not yet agreed.
	Establish modalities and governance arrangements for ESM direct recapitalization of banks.	<b>Implemented.</b> The ESM is authorized to directly recapitalize banks. This tool has been elaborated upon in the ESM Guideline on Financial Assistance for the Direct Recapitalisation of Institutions.
Near-term steps toward stronger EU-wide financial oversight	Prompt passage and implementation of directives and regulations of capital requirements (fully in line with Basel III) and resolution (enhanced from current proposals).	<b>Partially implemented.</b> Directives and regulations on capital requirements and resolution have been passed and implemented, but some divergence from Basel III persist. There is an on-going review of CRR/CRD and, on the crisis management side, CRR/CRD, BRRD and SRMR to incorporate new standards, including on TLAC/MREL.
	Modify the roles of EBA and ESRB to accommodate SSM.	<b>Partially implemented.</b> Practice has been modified to accommodate the SSM. The ECB is now a NDA, subject to ESRB oversight. The ECB has an observer status at EBA Board of Supervisors. Legislative proposals on the revision of the governance arrangements of the ESRB and ESAs are currently under discussion.
	Ensure full coordination of crisis management and financial sector policies among all agencies, possibly through a new committee.	<b>Partially implemented.</b> A committee “integrating the crisis related work of the ESAs, the ESRB, the SSM, the [SRB], DG COMP and the supranational support facilities” does not exist. However, the EBA does work across both crisis management and supervision, participating in supervisory colleges and CMG’s.

Area	Policy Action	Implementation Status
European Supervisory Agencies	Modify governance of ESAs to limit national bias.	<b>Not implemented.</b> A review of the European System of Financial Supervision has been announced, which could address governance issues, aiming to strengthen the European perspective and limit national bias.
	Improve access of ESAs to data.	<b>Partially implemented.</b> Considerably more data is available, but reporting requirements are difficult to adjust.
	Increase resources of ESAs.	<b>Partially implemented.</b> Staffing has increased but less than anticipated and budgets are sharply constrained.
	Strengthen supervisory colleges and crisis management groups by enhancing the roles of EBA and the European Insurance and Occupational Pension Authority (EIOPA).	<b>Partially implemented.</b> The EBA's role in relation to crisis management groups has been enhanced under BRRD.
Policy Framework	DG COMP to continue to improve transparency, and to consider— together with IMF and ECB— methodologies for pricing and deleveraging formulae for banks receiving state aid.	<b>Not implemented.</b> The methodology is not public. The 2013 Banking Communication is unchanged.
	Strengthen macroprudential oversight of the EU financial system by enhancing capacity of the ESRB, the SSM, and national authorities, and ensuring their more effective coordination. ECB's macroprudential tools should go beyond those identified in CRD IV.	<b>Partially implemented.</b> Capacity has been increased at the ESRB and the ECB SSM. The ECB's tools have not been extended. The current CRR/CRD review may address shortcomings in the toolkit.
Regulations	Enhance, adopt and implement the EU DIS Directive.	<b>Partially implemented.</b> The DIS Directive has been transposed by Member States. Work on the EC's EDIS proposal is ongoing.
	Adopt and implement Solvency II.	<b>Implemented.</b> Solvency II came into force in January 2016; some transitional elements are still being phased out.
Insurance	Plan remedial strategies in advance of possible weakening of pensions and life insurance companies' positions as Solvency II becomes effective.	<b>Partially implemented.</b> Common stress tests have been conducted. Action plans have been prepared.
Financial Market Infrastructure	Pass EMIR technical standards and CSD Regulation, as well as an EU framework for recovery and resolution of nonbank financial institutions.	<b>Implemented.</b> EMIR technical standards, the CSD Regulation and CSD Regulation technical standards have been adopted with the last set of technical standards for CSDs expected in March 2018. A proposal for recovery and resolution for CCPs has been developed.
	Place Euroclear Bank and Clearstream Banking Luxembourg under SSM supervision.	<b>Partially implemented.</b> The two ICSDs fall under SSM supervision as systemically important less significant institutions.
	Enhance information available to ECB on an ongoing basis on TARGET2 participants' liquidity and collateral positions, and strengthen the capacity and competences of the ECB oversight over payment systems.	<b>Partially implemented.</b> Available information on collateral and liquidity positions has improved, but monitoring of potential liquidity strains needs further enhancement.

## Appendix II. Risk Assessment Matrix

Sources of Risk	Likelihood	Expected Impact
Tighter global financial conditions	<b>High</b> Financial conditions tighten as investors reassess policy fundamentals, and term premia decompress (possibly associated with an upside inflation surprise), amid monetary normalization.	<b>High</b> <ul style="list-style-type: none"> <li>• Less favorable financial conditions for vulnerable sectors and countries.</li> <li>• Higher funding costs for banks, especially those regarded as less sound.</li> <li>• Valuation losses on assets, reduced value of collateral, and lower recovery in default cases Loss of market confidence. Negative shocks to growth.</li> </ul>
Further pressure on traditional bank business models	<b>Medium</b> Strained bank balance sheets with a weak profitability outlook lead to financial distress in one or more major financial institutions.	<b>Medium</b> Given slow 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.
Structurally weak growth in key advanced economies relative to baseline	<b>High</b> Low productivity growth, a failure to fully address crisis legacies and undertake structural reforms, as well as persistently low inflation undermine medium-term growth.	<b>High</b> <ul style="list-style-type: none"> <li>• Lower growth potential and higher output gaps compared to baseline due to weaker investment and persistent long-term unemployment.</li> <li>• Further deterioration in public debt sustainability, private balance sheets, intra-euro area rebalancing.</li> </ul>
Significant slowdown in China and its spillovers	<b>Low-Medium</b> Too fast adjustment and improper sequencing of actions in China to “de-risk” the financial system weigh on near-term growth (Low). Over the medium term, overly ambitious growth targets lead to unsustainable policies and a sharp adjustment that would weaken demand and spill over abroad (Medium).	<b>Medium</b> <ul style="list-style-type: none"> <li>• Slower export growth, higher output gap</li> <li>• Lower growth and inflation weakens public debt sustainability and private balance sheets.</li> </ul>
Brexit and other policy and geopolitical uncertainties	<b>Medium</b> Uncertainty regarding post-Brexit arrangements, evolving political processes in some European countries and policy reversals, global spillovers from difficult-to-predict U.S. policies, and other geopolitical developments have widespread negative effects.	<b>High</b> <ul style="list-style-type: none"> <li>• Financial market disruptions associated with Brexit.</li> <li>• Abrupt increase in risk premia.</li> <li>• Increased investor uncertainty, exacerbating low investment and weak productivity, and undermining cyclical recovery.</li> </ul>
Retreat from cross-border integration	<b>Medium</b> Protectionism and economic isolationism reduce global and regional policy collaboration, have negative consequences for trade, capital and labor flows, sentiment and growth.	<b>High</b> <ul style="list-style-type: none"> <li>• Lower growth due to trade barriers.</li> <li>• Escalation of euro skepticism, leading to less cooperation and a reversal of integration.</li> <li>• Increase in policy-related risk premia.</li> </ul>

## Appendix III. Stress Testing and Systemic Risk Analysis

1. **The assessment of banking systemic resilience was multifaceted.** Several complementary approaches were used including solvency and liquidity stress tests as well as interconnectedness, profitability, and contingent claims analysis (see Summary Table below).
2. **Balance sheet-based solvency stress tests focused on the largest 28 banks accounting for about 65 percent of consolidated banking sector assets.** The FSAP top-down stress tests were designed mainly to identify macroprudential concerns and complement the bottom-up EBA exercise, which serves microprudential and supervisory purposes (and scheduled for release in November 2018). The resilience of euro area banks was assessed under baseline and adverse scenarios covering three years and a range of sensitivity tests. Attention focused on projections of common Tier 1 capital (CET1), which was complemented by projections of other metrics of bank strength (including regulatory capital and leverage ratios).
3. **Cash flow-based liquidity stress tests were complemented by a comprehensive analysis of large banks' structural liquidity ratios.** The sample consisted of 29 SIs, accounting for about 70 percent of banking system assets. The structural analysis considered the Basel III LCR and NSFR. While the former measures short-term liquidity risks, the latter ratio gauge more structural longer-term refinancing and funding risks. Cash flow-based liquidity stress tests were conducted using supervisory data on contractual cash flows for different maturity buckets. This approach employed multiple scenarios of increasing severity, covering several horizons (for example, 4 weeks, 3 months) with varying assumptions regarding liquidity buffers and shocks to cash inflows and outflows. In addition, a "collateral freeze" scenario was simulated, wherein the collateral held at CCPs and available for rehypothecation was assumed to remain inaccessible for five business days due to a cyber risk event.
4. **The analysis of financial system interconnectedness and spillovers took both cross-sectoral and cross-country perspectives, centered on the major SIs.** The goal was to assess whether the financial system is more likely to absorb or amplify severe shocks originating from within the euro area, from the rest of the EU (including the United Kingdom), or from extra-EU institutions and economies. Two complementary approaches were used.
5. **The appraisal of contagion risks was conducted using granular supervisory balance sheet data on interbank exposures.** The analysis included stylized credit and funding shock simulations whereby one bank defaults at a time, inducing credit losses, and possibly funding shortfall as well. Two complementary networks were considered: one focusing exclusively on large SIs, and another which focuses on each of their most material extra-euro area exposures. In addition, country-level data were used to construct a network map of interconnectedness with extra-euro area banking systems, including some in emerging markets.
6. **Market-based information provided a complementary perspective on the extent and the determinants of interconnectedness and spillovers.** Equity prices were used to estimate spillovers between euro area and non-euro area listed banks across 28 countries over 2006–2017.

The estimated spillovers were then related to relevant financial soundness indicators (FSIs) such as capital adequacy and asset quality. Quantile regressions were used to generate distributions of net spillovers conditional on the various FSIs and other determinants.

**7. The analysis of profitability considered 109 significant banks over 2007–2016.** The aim was to uncover the key bank-specific, cyclical, and structural determinants of euro area bank profitability. Quantile regressions were used to generate profitability distributions conditional on such determinates which can then be shocked to see how the shape of the profitability distribution for a representative bank changes.

**8. Contingent claims analysis provided another complementary perspective on banking system resilience.** An integrated, contingent claims, mixed cross-section, global vector autoregressive (CCA-MCS-GVAR) model was estimated using market-based data encompassing banks, insurers, sovereigns, and the nonfinancial corporate sector.

<b>Summary Table</b>		
<b>Exercise Type</b>	<b>Coverage</b>	<b>Range or Cut-Off</b>
<b>Stress Testing</b>		
1. Solvency	28 major EA banks (65 percent of total EA banking system assets)	Cut-off: 2017Q4.
2. Liquidity	29 major EA banks (70 percent of total EA banking system assets)	Cut-off: 2017Q3.
<b>Systemic Risk Analysis</b>		
3. Bank Profitability Analysis	109 significant (SSM) banks	2007–2016
4. Interconnectedness Analysis:		
Balance sheet-based:		
Bank-level supervisory data	Interbank network: 25 major EA banks (55 percent of total EA banking system assets) Global network: 154 banks	Cut-off: 2017Q2.
Country-level BIS data	208 jurisdictions (of which 19 EA)	2008, 2013, 2017
Market-based	93 banks (of which 27 EA)	2006–2017
5. Contingent Claims Analysis	30 banks, 11 insurers, 19 nonfinancial firms	1999–2017
Note: For further details, see "Euro Area: Financial System Stability Assessment—Technical Note—Stress Testing the Banking Sector" and "Euro Area: Financial System Stability Assessment—Technical Note—Systemic Risk Analysis."		

## Annex I. Report on Observance of Standards and Codes: Basel Core Principles

### A. Introduction

**1. This assessment of the implementation of the Basel Core Principles for Effective Banking Supervision (BCP) in the euro area has been completed as a part of the Financial Sector Assessment Program (FSAP) mission undertaken by the International Monetary Fund (IMF) during November 2017 and February 2018, at the request of the euro area authorities.<sup>1</sup>**

It reflects the regulatory and supervisory framework in place as of the date of the completion of the assessment. It is not intended to represent an analysis of the state of the banking sector or the crisis management framework, which are addressed in other parts of the FSAP.

**2. An assessment of the effectiveness of banking supervision requires a review of the legal framework, and detailed examination of the policies and practices of the institutions responsible for banking regulation and supervision.** Since November 2014, banking supervision in the euro area has been conducted in the context of the SSM, which comprises the European Central Bank (ECB) and the NCAs of the 19 euro area Member States. The assessment focused on the ECB, which has overall supervisory responsibilities for the euro area banking system and for the efficient operation of the SSM, and did not cover the specificities of regulation and supervision of other financial intermediaries. More specifically, this assessment is limited to the direct supervision by the ECB of SIs. It is important to note, however, that to the extent regulations and practices are harmonized across SSM members, the assessment of the supervisory environment for SIs may provide a useful picture of regulation and supervision of the Less Significant Institutions (LSIs) indirectly supervised by the ECB.

**3. This is the first detailed assessment of the BCP conducted for the euro area.** Since the establishment of the SSM, one detailed assessment of Germany was conducted in 2016 and, while several SSM member countries have undergone FSAP exercises,<sup>2</sup> no other detailed assessment has been conducted. Nevertheless, this assessment leverages on the work and material provided to the teams that covered banking regulation and supervision during these FSAPs.<sup>3</sup>

### B. Information and Methodology Used for Assessment

**4. The ECB requested to be assessed according to the Revised BCP Methodology issued by the Basel Committee of Banking Supervision in September 2012.** The current assessment was

---

<sup>1</sup> The assessment team comprised John Laker (former Chairman of the Australian Prudential Regulatory Authority), Thomas Curry (former United States Comptroller of the Currency), and Pierpaolo Grippa (IMF). Fabiana Melo (IMF) coordinated the assessment work and drafting of this report.

<sup>2</sup> Ireland, Netherlands, Luxembourg, Finland, Spain, Belgium.

<sup>3</sup> This assessment was also informed by the findings of a preliminary work conducted in March 2017 by Pierpaolo Grippa (IMF), and Swee Lian Teo and John Laker (IMF experts).

thus performed on a revised content and methodological basis compared with previous BCP assessments carried out in several SSM member countries. Hence, such assessments cannot be directly compared to the current assessment. The revised BCP have a heightened focus on corporate governance and risk management practices in supervised institutions and their assessment by the supervisory authority, raising the bar in measuring the effectiveness of the supervisory framework.

**5. The ECB chose to be assessed and rated against both the essential criteria and the additional criteria of the BCP, the highest standards of supervision and regulation.** To assess compliance, the BCP Methodology uses a set of essential and additional assessment criteria for each principle. The essential criteria (EC) were usually the only elements on which to gauge full compliance with a Core Principle (CP). The additional criteria (AC) are recommended best practices against which the authorities of some more complex financial systems may agree to be assessed and rated. The assessment of compliance with each principle is made on a qualitative basis. The assessment of compliance with each CP requires a judgment on whether the criteria are fulfilled in practice. Evidence of effective application of relevant laws and regulations is essential to confirm that the criteria are met.

**6. The assessment team reviewed the framework of laws, rules, and guidance and held extensive meetings with officials of ECB banking supervision, NCAs, auditing firms, and banking sector participants.** The authorities provided a self-assessment of the CPs rich in quality and comprehensiveness, as well as detailed responses to additional questionnaires, and facilitated access to supervisory documents and files, staff, and systems.

**7. The team appreciated the very high quality of cooperation received from the authorities.** The team extends its thanks to staff of the authorities who provided excellent support, including extensive provision of documentation and access, at a time when staff was burdened by many initiatives related to European and global regulatory changes, and was still adapting to the new euro area supervisory framework.

**8. The standards were evaluated in the context of the euro area financial system's structure and complexity.** The BCP methodology requires that a proportionate approach be adopted, both in terms of the expectations on supervisors for the discharge of their own functions and the standards that supervisors impose on banks. The assessment must recognize that supervisory practices should be commensurate with the complexity, interconnectedness, size, risk profile and cross-border operation of the banks being supervised. Further, the assessment team evaluated the euro area supervisory and regulatory framework in the context of the considerable transition challenges created by the implementation of the SSM. Nevertheless, the assessment of the current legal and regulatory framework and supervisory practices against a common, agreed methodology should provide bank supervisors with an internationally consistent measure of the quality of banking supervision in relation to the CPs, which are internationally acknowledged as minimum standards, and point the way forward.

**9. Assessing a cross-national supervisory framework imposed additional methodological challenges.** The ECB is responsible for the supervision of credit institutions in the euro area, but not

for all aspects of banking supervision. Specifically, supervision of potential abuses of financial services, including money laundering and the financing of terrorism, is not under the ECB's mandate. This made the assessment of Core Principle 29 impracticable, and it has therefore been excluded from this report. In addition, while several regulatory aspects of the CPs have been harmonized in the euro area, different national legal frameworks apply in many cases. In such cases, the ECB must apply national legislation. The ECB and the NCAs provided detailed information on the various national law frameworks, which confirmed the wide diversity of approaches. This assessment does not aspire to convey a detailed picture of the regulatory framework in each of the 19 euro area Member States; rather, it uses the national information as a source for a more general assessment of regulatory adequacy and supervisory effectiveness.

### C. Preconditions for Effective Banking Supervision<sup>4</sup>

**10. At the time of the assessment the euro area was enjoying a robust cyclical recovery with solid job growth, combined with low inflation and low wage growth.** All Member States were expanding together, with the lowest cross-country dispersion in growth rates since the launch of the euro in 1999. Low core inflation partly reflected slow wage growth, which had remained below 2 percent for the last five years, albeit with wide differences across countries. Many net external debtor countries had regained much of their lost competitiveness in recent years through price, wage, and employment adjustments, with current account deficits becoming surpluses.

**11. In the euro area, macroprudential policy is a shared competency between the national authorities and the ECB.** The SSM Regulation confers to the national authorities and the ECB specific tasks relating to macroprudential instruments for the banking sector set out in the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD IV). Some instruments can be activated only by the microprudential supervisor (that is, the national competent authority or NCAs) and other instruments can also be introduced by the macroprudential authority (that is, the national designated authority or NDA). For macroprudential purposes, the ECB SSM is both a competent authority and a designated authority. In addition to these tools, Member States can use borrower-based instruments, such as limits on loan-to-value, debt-service-to-income or loan-to-income ratios for real estate lending, if these are legislated under national law.

**12. National designated authorities (NDAs) in each EU member state monitor financial stability risks arising from the entire financial system, and important powers were given to the ECB to counter potential inaction bias in EA member states.** The NDA is expected to have control over the necessary macroprudential instruments for achieving its objective. NDAs have not been set up fully in all countries, however. The ECB can apply higher requirements for capital buffers and more stringent measures than those applied by national authorities ("topping-up power"), but cannot set lower requirements than those set nationally. At the time of the assessment, the ECB had

---

<sup>4</sup> This summarized section draws from other documents produced for the FSAP. A complete analysis of the macroeconomic framework is contained in Article IV reports.

not exercised its topping-up power. The Governing Council is the ultimate decision-maker for macroprudential policy in the ECB. The Council decides on macroprudential measures based on a proposal by the Supervisory Board, taking into account the input of the ECB's Financial Stability Council and the Macroprudential Coordination group.

**13. Financial sector regulation in the EA in general covers all relevant areas (banking, insurance, and securities).** Large parts of the regulatory framework are rooted in the transposition or implementation of EU directives and directly applicable EU regulations. Specific national rules exist where topics considered relevant are not regulated by EU law or where EU law leaves room for additional national rules.

**14. International Financial Reporting Standards (IFRS) are required for publicly traded companies, and the EU adopted new rules regarding auditing standards in 2014.** Regulation 1606/2002 mandatorily applies IFRS to the consolidated accounts of publicly traded companies, including in cases where only debt securities of that company are listed on the market. Member States are allowed to permit listed entities to prepare their solo financial statements based on IFRS, and to permit other (non-listed) entities to prepare their solo or consolidated accounts under IFRS. Entities that do not apply IFRS for their consolidated or solo financial statements apply national GAAP. Several banks in the euro area apply national GAAP. Directive 2014/56/EU sets out the framework for all statutory audits, strengthens public oversight of the audit profession and improves cooperation between competent authorities in the EU. Regulation No 537/2014 specifies requirements for statutory audits of public interest entities (PIEs), such as listed companies, banks and insurance undertakings. Member States may apply national auditing standards, procedures or requirements as long as the Commission has not adopted an international auditing standard covering the same topic. At national level, additional audit requirements may exist.<sup>5</sup>

**15. The EU supervisory framework significantly changed in 2011, with the set-up of European supervisory agencies (ESAs).** On 1 January 2011, the European Banking Authority (EBA) was created, along with the European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA). Their creation aimed at enhancing the mechanisms to coordinate cross-border supervision, facilitate cooperation between supervisors, promote convergence of supervisory practices, and monitor implementation of the Single Rule Book. The ESAs are regulatory agencies of the Commission accountable to the European Parliament and the Council of the European Union. They have legal personality as well as administrative and financial autonomy. In this context, the ECB is obliged to cooperate with and support the work of the ESAs. This also includes the implementation of ESA guidelines and recommendations.

**16. The European Commission adopted an action plan to promote a Capital Markets Union (CMU) in 2015.** The objective of the CMU project is to create a true single market for capital within

---

<sup>5</sup> Based on an EBA survey across Member States in EU in 2015, the scope of the audit varies across Member States.

the member states, so as to enhance investment, better channel savings, make the financial system more stable, deepen financial integration and increase competition. Despite the progress that has been achieved, capital markets in Europe continue to be highly fragmented. Domestic contractual requirements vary markedly among countries, as do rules on potential conflicts of interest, credit guidelines and ongoing provision of company information.

**17. On a European level the Banking Recovery and Resolution Directive (2014/59/EU, BRRD) and a Deposit Guarantee Schemes Directive (2014/49/EU, DGSD) were enacted.** It establishes a common European framework for the recovery and resolution of failing banks. Regulation (EU) No 806/2014 establishes uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism (SRM) and a Single Resolution Fund. In addition to the BRRD, the reform of the deposit guarantee schemes directive was enacted in 2014. The DGSD harmonized deposit insurance coverage and extended coverage to deposits of large nonfinancial companies, introduced faster pay-outs and ex ante funding arrangements. The EC announced in 2015 a proposal to implement a European Deposit Insurance Scheme (EDIS) for Banking Union members by 2024.

**18. Bank resolution within the Banking Union falls under the scope of the SRM.** Under the SRM Regulation, a new agency, the SRB, has been established and vested with direct responsibility for resolution planning and resolution decision-making for all SIs directly supervised by the ECB, all cross-border banks established in the euro area, and any other LSI where resolution requires the use of the SRF. The SRM centralizes decision-making for resolution actions and relies on joint SRB/NRA teams (internal resolution teams or “IRTs”) for resolution planning for SIs and cross-border banks. However, resolution implementation is primarily the responsibility of the National Resolution Authorities (NRAs). With respect to both SIs and LSIs, the SRB maintains back-up authority to intervene and directly implement a resolution if necessary to ensure high resolution standards or to ensure that resolution objectives are being met.

## D. Main Findings

### Responsibility, Objectives, Powers, Independence, Accountability (CPs 1–2)

**19. The SSM has established a clear allocation of responsibilities for the supervision of euro area credit institutions between the ECB and the NCAs in participating Member States.** However, the legal underpinnings of the SSM are complex. The ECB has a broad range of powers provided for in the CRR and the SSM Regulation and can apply the powers set out in CRD IV as transposed into national legislation, but the EU legislation also makes a considerable number of options and discretions available to either the NCAs or the Member States. The ECB has harmonized a range of options and discretions granted to NCAs in the SSM, but harmonization of options granted to Member States would require changes in EU law.

**20. The SSM legislative framework, reflecting the uneven coverage of national laws, leaves the ECB facing gaps and asymmetries in its supervisory powers.** For example, the ECB does not have supervisory powers that apply to all significant forms of credit intermediation in the euro area.

In particular, investment firms undertaking “bank like” business in the euro area are subject to many of the same regulations as banks, including for capital and liquidity, but are currently supervised nationally even when they are of significant size and very active in cross-border business. The European Commission’s proposals for an extensive revision of EU law related to prudential supervision provide an opportunity to remedy this. In addition, euro area branches of non-EU or EEA banks are not subject to authorization or supervision by the ECB, nor to CRD IV/CRR (and related EBA standards and guidelines). The regulatory and supervisory framework applicable to such third-country branches needs to be harmonized.

**21. The independence of the ECB’s banking supervision function is enshrined in law, and the ECB performs its supervisory tasks in an operationally independent manner.** Decision-making processes are complex and time-consuming. A substantial volume of routine supervisory decisions requires Governing Council approval. However, a new delegation framework, which truncates decision-making for certain routine decisions at the level of ECB Senior Manager, has considerably shortened timetables, and further delegation of decisions is under discussion.

**22. The aggregate resources available to ECB banking supervision to supervise SIs are variable and largely beyond its control.** With its Supervisory Examination Programme (SEP), the ECB has a well-structured process for determining and prioritizing its resource needs, but it has only limited control over the levels and allocation of NCA staff dedicated to the supervision of SIs, or over their suitability and performance. Since NCA staff are generally not committed full-time to SI supervision, their availability at any particular point cannot always be assured. The ECB has experienced varying levels of cooperation from NCAs in making up supervisory teams, but collaboration is improving for off-site supervision.

### **Ownership, Licensing, and Structure (CPs 4–7)**

**23. EU legislation, as transposed into national laws, protects the special status of credit institutions, with the necessary powers residing in most cases with NCAs.** The ECB is the licensing authority for credit institutions in the euro area, but the NCAs are fully integrated in the authorization process and authorization decisions are taken on the basis of applicable national laws, which are not fully harmonized. The legal framework—though fragmented—and various supporting EBA, EBA/ESMA and ECB guidance provide a comprehensive basis for supervisory assessments of applications for authorization. As discussed above, the ECB does not have authority to authorize and supervise euro area branches of non-EU or EEA banks, or investment firms undertaking “bank like” activities in the euro area. These gaps in the regulatory perimeter raise concerns about regulatory and supervisory arbitrage and, in the case of large investment firms, can pose increased financial stability risks. The gaps can only be closed through legislative changes.

**24. The SSM legislative framework establishes a clear basis for approving acquisitions or disposals of qualifying holdings in a credit institution by the ECB, the competent authority in this area.** As with authorizations, the NCAs are fully integrated in the approval process, which is supported by recent EBA/ESMA/EIOPA joint guidelines and ECB internal rules and detailed procedures. However, there are no specific EU requirements for credit institutions to notify the

supervisor as soon as they become aware of any material information that may negatively affect the suitability of a major shareholder, while notification requirements in national law are not consistent.

**25. In contrast, EU law does not provide an adequate or consistent supervisory regime for major acquisitions by a credit institution.** Some national laws require the approval of acquisitions in third countries by the relevant NCA, and the ECB has confirmed that it is competent to decide on such approvals. However, there are no explicit requirements in EU law on the acquisition of holdings in credit institutions outside the EU, nor are there harmonized assessment criteria at EU level, including whether acquisitions expose the credit institution to undue risks or hinder effective supervision. While the ECB may impose higher capital requirements or even require divestment in the case of an unsound acquisition, it cannot require *ex ante* review and approval. The ECB is seeking amendments to EU law that include a clear reference to additional supervisory powers in relation to material acquisitions in third countries.

### Methods of Ongoing Supervision (CPs 8–10)

**26. The fundamentals of the ECB’s methodological framework for supervision are sound.** The main elements of the supervision methodology—SREP, RAS, and SEP—are firmly in place. The methodology has been refined through the experience gained since its initial launch in 2015. This process of continual assessment and improvement should continue as the SREP, RAS, and SEP mature over time. The greater emphasis on quantitative analysis is consistent with the EBA’s SREP guidance. The SREP is a forward-looking risk-based assessment of individual banks and banking groups, proportionate to their systemic importance. The ECB’s supervisory approach identifies risks within banks and the banking system. The ECB in conjunction with the SRB and NRBs is a key participant in the euro area’s early intervention and resolution framework.

**27. ECB banking supervision uses a mix of off-site analysis and on-site inspections that focus on both horizontal risk themes and vertical assessments of institution-specific risks.** The techniques and tools to implement the supervisory approach appear to be appropriately designed, as evidenced by the (confidential) SSM Supervisory Manual and Appendices. The SEPs and onsite inspections also appear to be appropriately calibrated according to institutions’ risk profiles, including systemic importance, and the ECB’s supervisory resources. Further refinements in methodology and technique should be adopted as the ECB gains additional experience over time.

**28. The assessors recommend that ECB banking supervision be more transparent about its supervisory approach and techniques.** The ECB’s draft guide to onsite inspections and internal model investigations is a good primer for public consumption, and the ECB’s practice of publishing guides on important supervisory topics should be continued. In the same vein, a condensed version of the SSM Supervisory Manual was published in March 2018, after the assessors’ onsite visit. The published manual removed much of the detail on internal processes and methodologies. Such transparency may help credit institutions comply with the ECB’s expectations and assure the public that the SSM operates under well-designed supervisory processes.

**29. Supervisory reporting at EU level is not sufficiently granular to adequately support off-site supervision, while “maximum harmonization” does not allow sufficient flexibility and agility.**<sup>6</sup> Not all data needs are covered by reporting under the EBA’s implementing technical standards (ITS). The ECB complements the information collected via the ITS through Short Term Exercises (STE) data collections and surveys, which cover fundamentally some of the data needs for SREP (for example, assets and liabilities by repricing date, IRRBB, concentration, liquidity, and operational risk). Timely and accurate data is fundamental to effective supervision. While STE reporting and surveys give the ECB some flexibility in addressing its data needs, the process for amending and augmenting the EU-wide harmonized supervisory reporting based on the ITS is lengthy and cumbersome and should be streamlined and expedited. While focusing mainly on statistical requirements for the moment, the ESCB initiatives related the Banks’ Integrated Reporting Dictionary (BIRD) and the Integrated Reporting Framework (IReF) may contribute to ensuring harmonization of reporting while allowing for more flexibility in its uses.

### **Corrective and Sanctioning Powers of Supervisors (CP 11)**

**30. ECB banking supervision adopts a progressive remedial process to address unsafe and unsound practices.** The ECB uses the SREP methodology and its SEP to identify unsafe or unsound practices at an early stage. Ongoing supervision identifies issues, and recommends specific corrective actions within defined time periods, informally and in writing. Written communications from the JSTs are “operational acts”, which carry significant moral suasion weight even though they are not legally binding. Matters are escalated to the Supervisory Board for a formal decision if an SI does not comply with an operational act. That decision is legally binding and enforceable, as noncompliance constitutes a breach subject to sanctions. Article 16.2 of the SSM Regulation lists a broad range of powers, which the ECB uses, regarding both affirmative obligations and significant consequences to correct deficiencies.

**31. The legal framework for enforcement and sanctions, however, is complex and fragmented, and contains substantive and procedural gaps that should be addressed.** The complex legal enforcement framework may make it operationally difficult and time-consuming for the ECB to impose formal enforcement actions and sanctions in some countries, in particular where such powers are not available under national laws. The ECB’s direct enforcement and sanctions powers are limited. The ECB can make use of the powers available to NCAs, but there is a lack of harmonization in the scope of and approach to the enforcement of sanctions between the ECB and the NCAs. The ECB may impose sanctions only on legal entities; it does not have the power to directly impose sanctions on natural persons. While the ECB has effectively used its authorities under Article 16.2 to effect necessary remedial measures, express authority to impose non-pecuniary

---

<sup>6</sup> ‘Maximum harmonization’ means that “with regard to the scope of application of the Implementing Regulation [on Supervisory Reporting], competent authorities cannot add nor delete data to be reported, nor can they require the reporting of that data in a different format nor in a different (less or more granular) breakdown, nor in a combination, other than in accordance with the CRR and with [CRD],” as explained by the EBA.

sanctions, such as enforceable administrative “cease and desist” orders with affirmative covenants, would provide an additional supervisory tool that could be used in appropriate circumstances.

### **Cooperation, Consolidated and Cross-Border Banking Supervision (CPs 3, 12–13)**

**32. ECB banking supervision has an extensive and effective framework for cooperation and collaboration.** Within the SSM, the framework is inherent in the various structures and elements of cooperation between ECB banking supervision and the euro area NCAs, starting from the Supervisory Board. Outside the SSM, ECB banking supervision has been seeking to build on the highly developed communication channels it inherited from the NCAs under “step in” arrangements. Nevertheless, the ECB’s progress in finalizing Memoranda of Understanding (MoUs) with third-country authorities has been slower than expected, although the absence of formal arrangements has not precluded effective working relationships with key authorities. The ECB-led supervisory colleges appear to serve their intended purpose. The assessment of recovery plans, early intervention measures and the overall planning of supervisory responses of home and host authorities in preparation for and during emergency situations is performed in a coordinated way through the colleges. The SSM’s preparations for Brexit from a banking supervision viewpoint have involved heightened interaction with other supervisory authorities.

**33. The ECB does not have the authority to review activities of certain affiliates and parent companies that are unsupervised entities, and there are no specific legal requirements authorizing the ECB or NCAs to prohibit shell banks or the continued operation of shell banks.** The activities of companies affiliated with parent companies may have an impact on the safety and soundness of the banking group. Where such powers are not provided under national law, this gap may hinder the ECB’s ability to assess potential material impact on safety and soundness, and to take appropriate supervisory action. Another layer of complexity is that, while the ECB is lead supervisor for some conglomerates under FICOD, mixed financial holding companies are not included in the definition of conglomerates. This may imply a constrained capacity to identify related parties or nonfinancial entities that may impact on the conglomerate, and to include them within the supervisory perimeter. In addition, while the ECB will not authorize shell banks that only serve as a booking office, there is no clear mandate to prohibit shell banks or to limit the use of foreign branches as mere booking offices.

### **Corporate Governance (CP 14)**

**34. SIs operate under a corporate governance legal structure that is governed by disparate national law requirements supplemented by EBA guidelines and ECB explanatory guides.** The ECB uses its supervisory process to identify weaknesses in management bodies and to recommend and effect changes. The ECB’s thematic review of governance and risk appetite provided a horizontal baseline view of industry practice and focused supervision on internal governance, and resulted in recommendations and actions addressed to banks aimed at making supervisory board involvement more robust. The ECB has defined processes for making required fit-and-proper determinations of management body members. However, its dependence on national law for these determinations makes the process very complex, time consuming, and not fully harmonized. The ECB also should be

granted greater legal discretion to object to persons whose prior work experience and relationships may have made them not fully independent from management. Internal governance standards for financial conglomerates could be enhanced beyond the general risk considerations outlined in the SSM Supervisory Manual.

### **Prudential Requirements, Regulatory Framework, Accounting and Disclosure (CPs 15–28)**

**35. ECB banking supervisors have learnt to overcome the hurdles of a fragmented regulatory framework by correctly adopting an extensive interpretation of their role in ensuring the sound management and coverage of risks by banks.** However, a more complete and harmonized regulatory framework on risk management would mitigate unnecessary distractions caused by the need to deal with an incomplete and heterogeneous set of rules. It would also facilitate the banks' understanding of supervisory expectations and improve the quality of the supervisory dialogue.

**36. Deviations of the EU capital framework from international standards are material, though the ECB has the powers to impose additional requirements.** The Basel Committee's RCAP assessment found that, in the calculation of risk weighted assets, some deviations may be significant: these deviations related, for example, to sovereign exposures under the permanent and temporary partial use of the standardized approach, lower risk weights for covered bonds, treatment of participation in insurance, and the counterparty credit risk framework. Some of these deficiencies are addressed by banks' internal capital adequacy assessments and supervisory action under the SREP process. The ECB can require banks to hold capital in excess of the minima under Pillar 2. The ECB's Regulation and Guide on National Options and Discretions attempts to harmonize the exercise of some capital-related options and discretions although material deviations exist, for example, in the capital treatment of insurance interests. Overall, deviations cited in the RCAP continue to exist.

**37. Supervisory activity on problems assets and provisioning in the SSM has progressed significantly since the recent issue of the ECB's guidance to banks on nonperforming loans.<sup>7</sup>** The guidance strengthens the SSM's ability to tackle the long-term issue of extremely high NPL ratios in certain banks. The guidance sets supervisory expectations for how the NPL issue should be addressed by banks in terms of governance, operations, classification (of forbearance and non-performing status), provisioning, write-off, and collateral valuation. Banks with a high level of NPLs are requested to define an NPL strategy and are subject to *ad hoc* reporting requests. The follow-up and monitoring of banks' NPL reduction plans is intense and it is producing positive results in terms of banks' increased proactivity in addressing their issues.

---

<sup>7</sup> At the time of the assessment, the ECB had published its "Guidance to banks on non-performing loans" (NPL Guidance, March 2017). After the assessment, in March 2018, an Addendum was published.

**38. The NPL guidance fills a number of gaps in the EU-wide framework, but its impact is uncertain.** Because of its non-binding nature, the guidance cannot override national provisions on the same topics, where these are contained in laws or regulations.<sup>8</sup>

**39. The European Commission has clarified the ECB’s power to require banks to apply specific adjustments (deductions, filters or similar measures) where the accounting treatment applied by the bank is considered not prudent from a supervisory perspective.** An explicit granting of these powers in EU law would represent an even firmer legal basis. The ECB must now make use of this power to foster the convergence of banks’ provisions towards more realistic levels, so as to reduce the high levels of legacy NPLs. However, the ECB still lacks explicit power to require banks to classify an exposure as NPL when it does not fully meet all the conditions to be considered defaulted. The ECB should introduce explicit supervisory expectations for NPL provisioning and write-offs.<sup>9</sup>

**40. On-site review of problem loans and provisioning relies on a structured methodology that includes detailed indications on credit file reviews, but it suffers from limited resources.** The level of on-site attention to problem assets has improved. New statistical procedures that extrapolate results from loan files samples will be employed soon. The limited number of ECB inspectors constrains their direct participation in on-site missions, thus requiring substantial support (and effort) from NCA inspectors. Stretched on-site resources across the SSM could weaken the capacity to maintain pressure on the banks for decisive action on NPLs.

**41. Market risk management standards are generally sound, and supervisors take an active approach.** The larger, more systemic and risk-oriented banks with a trading bias face greater supervisory intensity and intrusiveness. Market risk has been a focus of supervisors during 2014 and 2015, and a targeted review of banks’ internal models is now under way. The activity of JSTs and inspection teams in this area is wide-ranging, covering the different dimensions of market risk. The opaqueness in the valuation of certain products classified as Level 3 and the uncertainties in the classification of Level 2 assets and liabilities—together with the sheer size of these in the balance-sheets of some institutions in the EA—require intense and frequent supervisory scrutiny.

**42. IRRBB has received a significant amount of supervisory attention during recent years and features as a key priority for SIs.** The stress-test exercise on IRRBB conducted on SIs in 2017 has allowed the ECB to gather granular information on banks’ exposure to this risk after years of low

---

<sup>8</sup> Based on the review of a large (though incomplete) synopsis of national legal frameworks, even if in some jurisdictions there can be more detailed requirements and criteria for the assessment of banks’ policies and processes for identifying and managing problem assets, these do not appear to be in contradiction with the indications provided by the guidance.

<sup>9</sup> After the assessment mission, the ECB published, on March 15, 2018, an Addendum to the 2017 NPL Guidance.

interest rates. As part of the exercise, the ECB collected also qualitative information for a broader assessment of banks' risk management practices, on which JSTs will follow up.

**43. Concentration risk and country risk should be viewed in a more comprehensive manner, and deserve more supervisory attention.** The definition of concentration risk is limited to credit exposures and does not include different types of exposures in a broader sense. Supervisory expectations with respect to concentration risk and country risk management are not clearly communicated to the banks. There is no requirement that all material concentrations be regularly reviewed and reported to the bank's supervisory board. Reporting and monitoring of country risk and concentrations can be improved, and their inclusion in banks' stress tests specifically required.

**44. The framework for transactions with related parties is weak.** There is no requirement that related party exposures be monitored and controlled separately and in aggregate. There is no regular reporting of exposures to related parties. Supervision of related party risk is mostly carried out by external auditors, but their analysis of related party risk is very limited. While some national laws provide for limits to transactions with related parties, there is no harmonized approach at EU level.

**45. Supervisors have stepped up the frequency and intensity of interaction with credit institutions regarding their management of liquidity risk, contingency plans, and funding requirements, though important challenges remain.** Supervisors have built up an in-depth understanding of liquidity and funding risks at individual institutions. Funding plans and results of stress testing are reported and evaluated periodically. Guidance for assessing ILAAPs was implemented in 2016 and helped strengthen the assessment of liquidity risk management as part of the SREP. Supervisors periodically meet with treasury staff and receive monthly monitoring of Liquidity Coverage Ratio (LCR) data. However, the LCR adopted in the EU has a number of elements that are less stringent than the Basel standard, most notably a wider definition of high-quality liquid assets (HQLA). In addition, given the centrality of liquidity risk in bank crises and in the light of recent experience, assumptions on the outflows of different categories of deposits over various time horizons should be revised, both for the banks' own and supervisory stress testing, and the actual availability of supposedly liquid assets should be kept under review, since the information on unencumbered assets currently available to ECB banking supervision might not be sufficient to gauge the residual capacity of a bank to obtain emergency liquidity in a quickly deteriorating environment. Finally, given the sizeable currency transformation operated by certain internationally active banks—some with considerable presence in non-euro markets—the ECB needs adequately granular and frequent information on their cash flows in material non-euro currencies and by jurisdiction for JSTs to monitor it on a regular basis; reporting of the maturity ladder broken down by significant currencies has started in March 2018.

**46. While operational risk has undergone several enhancements, more attention needs to be paid to monitoring the effective implementation of operational risk management frameworks.** The ECB has initiated several reviews on operational risk matters, involving information technology (IT) and cybersecurity risk, and conduct risk, as well as an IT outsourcing questionnaire and a pilot exercise on cyber incidents reporting. Nevertheless, the ECB should take steps to

enhance cybersecurity awareness, business continuity and recovery planning and third-party vendor management in the outsourcing of significant functions. Operational risk is a major risk area under the SSM framework. The on-site examination process for Advanced Measurement Approaches (AMA) model accreditation appeared to be robust. Ongoing monitoring of AMA models has been strengthened by the recent implementation of the reporting for banks' validation functions, and the operational risk benchmarking tool (IDRA).

**47. European law and EBA guidelines, particularly the revised *Guidelines on Internal Governance*, provide a comprehensive set of requirements and supervisory expectations for the internal control framework of credit institutions.** The revised *Guidelines on Internal Governance* clarify the responsibilities of the supervisory board in relation to the internal control framework, and emphasize the importance of a direct reporting line from the heads of compliance and internal audit to the supervisory function so that concerns and warnings may be raised. The Guidelines have been reinforced by the ECB's supervisory expectations set out in the June 2016 "SSM supervisory statement on governance and risk appetite" and by the detailed assessment of internal governance undertaken by supervisors as part of the SREP process.

**48. ECB banking supervision has only limited scope under EU law to engage in assessments of the integrity and external audit of financial statements of SIs prepared in accordance with relevant accounting standards.** Responsibilities under EU directives in this area lie with other competent authorities. The overall EU framework, however, appears robust and ensures broad consistency with international standards. The ECB is stepping up its involvement in the external audit process, by assuming any powers granted by national laws to NCAs in relation to the appointment/replacement of external auditors, and through heightened engagement with external auditors, although engagement at the individual and collective level is already active. The ECB is seeking amendments to EU law that include a clear reference to additional supervisory powers regarding external auditors.

**Table 1 offers a principle-by-principle summary of the assessment results, while recommendations to improve the effectiveness of regulatory and supervisory frameworks are summarized in Table 2.**

<b>Table 1. Euro Area: Summary Compliance with the BCPs</b>	
<b>Core Principle</b>	<b>Comments</b>
1. Responsibilities, objectives, and powers	The allocation of supervisory responsibilities under the SSM is clear and the ECB has a broad set of powers. However, the SSM legislative framework—reflecting in particular the uneven coverage of national laws—leaves the ECB facing gaps or legal uncertainty with regard to its direct supervisory powers in some areas.

2. Independence, accountability, resourcing, and legal protection for supervisors
ECB banking supervision is independent in law and operation. However, decision-making processes are complex and time-consuming and the ECB does not have full control over the level and availability of NCA staff committed to SI supervision.
3. Cooperation and collaboration
The framework for cooperation and collaboration is extensive and effective. Progress in finalizing MoUs with third country authorities, within and outside the EEA, has been slower than expected. Substantial differences between legal systems and national legal requirements have also affected finalization of WCCAs for crisis management coordination in supervisory colleges in which the ECB is consolidating supervisor. The absence of formal arrangements has not, however, precluded effective working relationships with key authorities.
4. Permissible activities
Definition of permissible activities for banks and powers regarding the use of the word “bank” are conferred to the NCAs. Third-country groups have increasingly complex structures in the EA, operating through entities that escape ECB supervision. Investment firms undertaking “bank like” activities, for instance, are not authorized and supervised by the ECB as credit institutions but are supervised at the national level.
5. Licensing criteria
Supervisory assessments of applications for authorization are comprehensive. The ECB is the licensing authority, making decisions on the basis of applicable national laws and NCAs are fully involved in the authorization process. However, the ECB does not have authority to authorize and supervise euro area branches of non-EU or EEA banks. These branches are regulated by national laws and regulations (not CRR/CRD IV) and supervised directly by local NCAs. These arrangements create regulatory and supervisory arbitrage opportunities for non-EU banks, which can, inter alia, establish a presence in the euro area through branches
6. Transfer of significant ownership
The SSM legislative framework provides a clear basis for approving acquisitions or disposals of qualifying holdings in a credit institution, but there are gaps in notification and reporting requirements. There are no specific EU requirements for credit institutions to notify the supervisor as soon as they become aware of any material information that may negatively affect the suitability of a major shareholder or a party that has a controlling interest, while notification requirements in national law are not consistent. There is no consistent requirement for periodic reporting by credit institutions of the ultimate beneficial owners of qualifying holdings, nor are there specific penalties in respect of the modification or reversal of a change of control that took place without proper authorization.
7. Major acquisitions
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.

#### 8. Supervisory approach

The fundamentals of the ECB's methodological framework for supervision are sound. The main elements of the supervision methodology—SREP, RAS, and SEP—are firmly in place. The greater emphasis on quantitative analysis is consistent with the EBA's SREP Guidelines. The methodology is a forward-looking risk-based assessment of individual banks and banking groups, proportionate to their systemic importance. The ECB's supervisory approach identifies risks within banks and the banking system.

While a formal resolution framework is in place, the timeliness and level of coordination and collaboration between the ECB and SRB could be improved. The ECB's crisis management function could make better use of recovery plan assessments and developing operational guidance for crisis management activities and to enhance management reporting systems.

#### 9. Supervisory techniques and tools

The ECB, through the SREP, uses a mix of off-site analysis and on-site inspections that focus on both horizontal risk themes and vertical assessments of institution-specific risks.

The ECB uses a complete array of techniques and tools to implement its supervisory approach that is appropriately designed, as evidenced by the SSM Supervisory Manual and Appendices. The SEPs and on-site inspections also are appropriately calibrated according to institutions' risk profiles and systemic importance. The ECB SEP appropriately covers the tasks and activities related to off-site ongoing supervision and on-site missions, in line with available quantitative and other resources.

The ECB's horizontal thematic reviews, in-depth reviews and ad hoc reviews are conducted on certain topics by off-site analyses and dedicated on-site missions are effective and address key areas and allow peer comparisons. The ECB's General Information Systems maintains and develops appropriate information and communications systems necessary for ECB banking supervision to carry out its tasks.

#### 10. Supervisory reporting

Harmonized supervisory reporting is not sufficiently granular to adequately support off-site supervision. The ECB complements it through additional data collections and surveys that, if confirmed as necessary, can migrate to the harmonized reporting set, but only via a lengthy and cumbersome process.

#### 11. Corrective and sanctioning powers of supervisors

ECB ongoing supervision effectively identifies issues and recommends specific corrective actions within defined time periods to SI management informally and in writing through informal "operational acts" and formal, enforceable ECB Supervisory Board Decisions. Noncompliance with a Decision constitutes a breach that is subject to sanctions.

<p>The ECB's sanction and enforcement powers contain gaps and are fragmented. They do not act as a deterrence and do not ensure a level playing field because of gaps in Union law and national law implementing EU directives.</p>
<h3>12. Consolidated supervision</h3>
<p>The ECB is the consolidated supervisor for all SIs. The ECB utilizes its SREP and SEP programs to monitor consolidated parents and affiliates and applies its prudential standards to all aspects of the business conducted by the banking group worldwide to the extent permitted by law. The supervisory framework is effective.</p> <p>However, there are several legal gaps regarding the activities of certain affiliates and parent companies, which may not be supervised entities at all. Gaps also exist with respect to Mixed Financial Holding Companies. The lack of authority to review such activities in national law may hinder the ECB's ability to assess whether these entities activities have a material impact on the safety and soundness of the bank and the banking group and its ability to take appropriate supervisory action if warranted.</p> <p>There is no framework for resolution of a conglomerate.</p>
<h3>13. Home-host relationships</h3>
<p>The ECB-led supervisory colleges provide effective oversight by considering the risk profile and systemic importance of the banking group and the corresponding needs of its supervisors in the case of subsidiaries of SIs located within and outside the SSM.</p> <p>The ECB has not finalized agreements with all international supervisors of G-SIBs with systemic importance.</p> <p>The EU framework for cross-border crisis cooperation and coordination among home and host authorities for the management of a cross-border financial crisis has been significantly improved because of the creation of the SSM and the SRM, as well as the adoption of the BRRD.</p> <p>The ECB's participation as home or host authority for significant banking groups in supervisory colleges fosters coordination between competent authorities in crisis.</p> <p>The ECB does not have the authority to expressly prohibit shell banks or the continued operation of shell banks. There is also no clear mandate to supervise booking offices in a manner consistent with internationally agreed standards.</p>
<h3>14. Corporate governance</h3>
<p>The ECB has established clear regulatory corporate governance expectations. The qualifications, effectiveness and remuneration of management bodies and key function holders through the SREP. The ECB applies the governing legal requirements and guidelines on remuneration in the context of SREP's internal governance subcomponents and as part of the SEP process.</p> <p>The fit and proper authorization process effects necessary changes in SIs' management bodies and key function holders.</p>
<h3>15. Risk management process</h3>
<p>EU law addresses the main risk categories at a high level, leaving room for non-harmonized standards at national level. While the ECB has published a number of documents that provide indications about</p>

its expectations regarding the management of different categories of risk, these documents neither cover the whole spectrum of risks listed in this CP, nor ensure that banks can be held to comply with them, given the potential overriding by national (binding) legal provisions. The practice of supervision within the SSM demonstrates how JSTs, on-site inspection teams and internal model investigation teams strive to overcome gap in the regulatory framework. Nevertheless, some important elements are missing at EU level and some national legal frameworks, such as: (i) the need for Board and senior management awareness of the uncertainties attached to risk measurement; (ii) the requirement for the removal of CROs to be discussed with the supervisor and for such a removal to be disclosed publicly; (iii) certain requirements on stress testing, such as the need for stress testing programs to actively involve the Board and senior management and to be appropriately documented and regularly maintained and updated; and (iv) the requirement for banks to appropriately account for risks (including liquidity impacts) in their new product approval process.

#### 16. Capital adequacy

The EU's capital adequacy requirements, found in CRR and CRD IV, do not conform to the Basel standards. Some of the deviations, such as the non-deduction of insurance holdings, are material and continue to be authorized by the ECB OND Guide.

The ECB requires banks to hold capital in excess of the minima through its supervisory powers exercised under Pillar 2 through the SREP process.

The ECB does not regularly monitor the effects on banks' capital ratios of deviations from the Basel standard.

Internal model requirements are not consistently applied, including the enforcement of the permanent partial use of the standardized approach by IRB banks in line with Basel standards (that is, only for asset classes that are immaterial in terms of size and perceived risk profile).

#### 17. Credit risk

EU law sets some general requirements on banks' credit risk management, but these are not accompanied by more detailed requirements or supervisory expectations. The SSM Supervisory Manual provides suggestions for on-site inspections, broadly covering the lifecycle of the lending activity, from granting loans to foreclosing collateral. However, these suggestions are meant for on-site activity and for the use of examiners, and are not shared with the supervised entities, hence, they cannot be considered either (binding) regulatory requirements or (non-binding) supervisory expectations. In addition, in the EU framework there is no explicit requirement for banks to make credit decisions on an arm's-length basis, and no requirement for a bank's Board or senior management to approve credit risk exposures exceeding a certain amount or percentage of a bank's capital or that are especially risky or otherwise not in line with the mainstream of the bank's activities. Some of these elements exist in some national jurisdictions.

#### 18. Problem assets, provisions, and reserves

The supervisory activity on problems assets and provisioning in the SSM has progressed significantly since the issuance, by the ECB, of its guidance on NPLs. This has allowed the SSM to tackle with more

<p>determination the long-term issue of extremely high NPL ratios in certain banks. The NPL guidance has filled a number of pre-existent gaps in the EU-wide framework, but it is non-binding.</p> <p>The ECB powers to require credit institutions to apply specific adjustments to own funds calculations have been clarified, but should be explicitly enshrined in the law. However, the ECB cannot impose a reclassification as NPL in those cases where an exposure does not fully meet all the conditions necessary to be considered defaulted.</p>
<p>19. Concentration risk and large exposure limits</p>
<p>The EU large exposures regime is not fully aligned with the Basel standard (which will only take effect from January 2019), in particular regarding some off-balance sheet contingent facilities, and the treatment of covered bonds, as well as the definition of eligible capital</p> <p>The EU-wide framework does not cover concentration risk in the broader sense, that is, beyond credit risk; there is no requirement that all material concentrations be regularly reviewed and reported to a bank's supervisory board.</p>
<p>20. Transactions with related parties</p>
<p>There is no EU-wide framework for transaction with related parties. Some, though not all the SSM Member States have laws and/or regulations in place that provide definitions of related parties and, in certain cases, prescribe limits for such transactions. While some JSTs actively discuss related party risk in individual cases, there is no common approach to the supervision of related party risk for significant institutions in the SSM.</p>
<p>21. Country and transfer risks</p>
<p>There is no EU-wide framework and no SSM-specific expectations for country and transfer risk with explicit requirements on how banks should identify, measure, evaluate, monitor, report and control or mitigate country and transfer risk. Similarly, the incorporation of country risk into stress tests is not explicitly required. There is no provisioning scheme against country risk and transfer risk.</p>
<p>22. Market risk</p>
<p>Market risk management standards are generally sound and supervisors take an active approach. The opaqueness in the valuation of certain products classified as Level 3 and the uncertainties in the classification of Level 2 assets require an intense and frequent supervisory scrutiny. The SSM has stepped up the efforts by ascertaining the correct valuation of Level 3 assets and liabilities and, for a specific family of products, Level 2 assets. This degree of scrutiny should continue and be extended to all Level 2 instruments.</p>
<p>23. Interest rate risk in the banking book</p>
<p>The stress-test exercise on IRRBB conducted on SIs in 2017 has allowed the ECB to gather granular information on banks' exposure to this risk after years of low interest rates. As part of the exercise the ECB also collected qualitative information for a broader assessment of banks' risk management practices. The assessors verified evidence of off-site and on-site supervisory activity specifically focused on IRRBB.</p>

24. Liquidity risk
<p>The LCR requirement is not fully aligned with the Basel standard: there is no explicit requirement for the Board to conduct a regular review and appropriate adjustment of the bank's strategy, policies and processes for the management of liquidity risk in the light of the bank's changing risk profile and external developments in the markets and macroeconomic conditions in which it operates; and no explicit requirement for supervisors to conduct separate analysis of liquidity risk strategy and monitoring of liquidity needs for each significant currency and to evaluate the bank's ability to transfer liquidity from one currency to another across jurisdictions and legal entities. Data to support this kind of analysis were not generally available at the time of the assessment, though regular reporting of a maturity ladder with a breakdown also by significant currency started in March 2018.</p> <p>The information on unencumbered assets currently available to the SSM might not be sufficient to gauge the residual capacity of a bank to obtain emergency liquidity in a quickly deteriorating environment.</p>
25. Operational risk
<p>The ECB has strengthened its operational risk program, the caliber of IT risk specialists, data reporting, collection and use of loss data, verification.</p> <p>Information Technology, cybersecurity and outsourcing are all areas meriting continued attention.</p> <p>Supervisory practices to assess that operational risk management is effectively implemented need to be given greater attention in order to confirm whether the operational risk framework is implemented effectively.</p> <p>While operational risk is considered as part of the annual risk assessments of banks, a system-wide analysis of common points of exposure to operational risk or potential vulnerabilities is needed. There is an opportunity for greater emphasis on the collection and analysis of material outsource providers.</p>
26. Internal control and audit
<p>European law, EBA guidelines, and the SSM supervisory statement published in 2016 provide a comprehensive set of requirements and supervisory expectations for the internal control framework of credit institutions, which is reinforced through the SREP process.</p>
27. Financial reporting and external audit
<p>Responsibilities under EU directives in this area lie with other competent authorities, but the ECB is stepping up its involvement in the external audit process. The overall EU framework appears robust, but the power to access external auditors' working papers is absent in EU law.</p>
28. Disclosure and transparency
<p>Disclosure standards are generally sound and promote transparency, reflecting the substance of the Basel II Pillar 3 standards. Supervisors routinely confirm compliance with the standards through both sample testing and thematic reviews.</p> <p>Euro area banks do not mandatorily disclose related party exposures or transactions with related parties as part of the Pillar 3 disclosures.</p>

Euro area banks disclose/report some average ratios instead of only end-of period for certain ratios, such as the leverage ratio and LCR.
29. Abuse of financial services
Not assessed.

<b>Table 2. Recommendations to Improve the Effectiveness of Regulatory and Supervisory Frameworks</b>	
<b>Reference Principle</b>	<b>Recommended Action</b>
Principle 1,4,5	The EU should give the ECB supervisory powers over all significant forms of credit intermediation in the euro area.
Principle 2	<ul style="list-style-type: none"> <li>• The ECB should further streamline its decision-making processes.</li> <li>• The ECB should formalize staffing arrangements with NCAs if collaborative efforts cannot ensure the level, suitability, and availability of NCA staff on JSTs and OSIs.</li> </ul>
Principle 3	<ul style="list-style-type: none"> <li>• The ECB should finalize MoUs with third-country authorities within and outside the EEA.</li> <li>• The ECB should finalize WCCAs for crisis management coordination in supervisory colleges for which it is consolidating supervisor.</li> </ul>
Principle 4	The CRR/CRD should be amended to ensure that large cross-border investment firms undertaking “bank-like” activities establishing in the euro area are authorized and supervised by the ECB as credit institutions.
Principle 5	Euro area branches of a third country banking group exceeding a certain threshold should be authorized and supervised by the ECB.
Principle 6	The ECB should confirm its supervisory expectation that credit institutions notify their JST as soon as they become aware of any material information that may negatively affect the suitability of a major shareholder or a party that has a controlling interest.
Principle 7	The EU should give the ECB supervisory powers to require a credit institution undertaking a material acquisition or investment within or outside the EU to notify the ECB in advance of the proposed transaction, and to approve or reject the proposed transaction.
Principle 8	<ul style="list-style-type: none"> <li>• The ECB should continue to streamline and simplify its supervisory processes to ensure effective resource use and timely responses to emerging supervisory issues.</li> <li>• The ECB’s supervisory processes should also be reviewed for effectiveness in light of recent resolution experience. The ECB’s crisis management function should make better use of recovery plan assessments and develop operational guidance for crisis management activities.</li> <li>• The ECB and SRB should forge closer working relationships in recovery and resolution planning.</li> <li>• The ECB should finalize revisions to the existing MoU with the SRB. In doing so, priority should be given to maximizing information sharing early in the process, well before formal “failure or likely to fail” notifications are required, to facilitate seamless recovery and resolution planning.</li> </ul>
Principle 9	<ul style="list-style-type: none"> <li>• The ECB should streamline Internal reporting lines to ensure the timely communication of supervisory and other information within the ECB and timely feedback to SIs.</li> </ul>

	<ul style="list-style-type: none"> <li>• The ECB should seek a mandatory notification requirement that SIs report all substantive changes in their activities, structure and overall condition, or as soon as they become aware of any material adverse developments.</li> <li>• The ECB should increase its transparency about its supervisory policies, expectations, and approaches through the publication of further guides on supervisory topics.</li> </ul>
Principle 10	<ul style="list-style-type: none"> <li>• Processes for amending and augmenting harmonized supervisory reporting should be streamlined and expedited.</li> <li>• The development and widespread adoption of an integrated reporting dictionary (BIRD) and integrated reporting framework (IReF) as the single source for supervisors' multiple information needs should be further promoted.</li> </ul>
Principle 11	<ul style="list-style-type: none"> <li>• The legal framework for enforcement and sanctions is asymmetrical and should be harmonized, including for direct enforcement measures and sanctions on individuals and entities regarding all breaches of the CRR.</li> <li>• The EU should give the ECB express authority to impose non-pecuniary sanctions, such as enforceable "cease and desist" orders with affirmative covenants, as an additional supervisory tool.</li> </ul>
Principle 12	<ul style="list-style-type: none"> <li>• Gaps in national laws that impact the ECB's ability to supervise the activities of companies affiliated with parent companies should be closed.</li> <li>• Potential gaps in the ECB's fit and proper supervisory authority where there is corporate ownership of the group and there is no governing national law should be closed.</li> <li>• Potential gaps in the supervision of financial conglomerates under FICOD, which do not require MFHCs to obtain authorization from regulators should be addressed.</li> <li>• Thresholds for the conglomerate definition under FICOD should be changed to include off-balance-sheet assets, with supervisory discretion to include other assets or to deem a group a conglomerate based on risk.</li> <li>• A framework for resolution of a conglomerate should be established.</li> </ul>
Principle 13	<ul style="list-style-type: none"> <li>• The ECB should finalize MoUs with all supervisors of G-SIBs as quickly as possible.</li> <li>• The EU should give the ECB express authority to prohibit shell banks or to limit the use of foreign branches as mere booking offices.</li> </ul>
Principle 14	<ul style="list-style-type: none"> <li>• The fit and proper framework should be harmonized in line with international best practice principles.</li> <li>• The ECB should have greater discretion to object to persons whose prior work experience and relationships may make them not fully independent from management.</li> <li>• Internal governance standards for financial conglomerates should be enhanced.</li> </ul>

Principle 15	<ul style="list-style-type: none"> <li>• Responsibility for defining the prudential standards for different categories of risk should be assigned to competent authorities (for example, by moving Articles 79 to 87 of CRD IV to the CRR).</li> <li>• The ECB should issue a comprehensive document on risk management that collects, structures, and reorganizes all existing guidelines, letters and other documents issued so far and completes them, with indications on areas not covered yet.</li> <li>• A requirement or explicit supervisory expectations about Board and senior management awareness of the uncertainties attached to risk measurement should be introduced.</li> <li>• EU law should introduce a requirement that the removal of a CRO should be discussed with the supervisor and should be disclosed publicly.</li> <li>• A requirement or explicit supervisory expectations should be introduced that stress testing programs should actively involve the Board and senior management, be appropriately documented and regularly maintained and updated.</li> <li>• A requirement or explicit supervisory expectations should be introduced for banks to appropriately account for risks (including liquidity impacts) in their new product approval process.</li> </ul>
Principle 16	<ul style="list-style-type: none"> <li>• The EU should conform the capital adequacy requirements of the CRR and CRD IV to the Basel standards.</li> <li>• The requirement for banks to hold capital in excess of the minima should remain a supervisory power exercised by the ECB under Pillar 2 through the SREP process.</li> <li>• The ECB should regularly monitor the effects on banks' capital ratios of deviations from the Basel standard.</li> <li>• The ECB should continue to require the consistent application of internal model requirements, including by enforcing the permanent partial use of the standardized approach by IRB banks in line with Basel standards (that is, only for asset classes that are immaterial in terms of size and perceived risk profile).</li> </ul>
Principle 17	<ul style="list-style-type: none"> <li>• EU law should introduce a requirement for banks to make credit decisions on an arm's-length basis.</li> <li>• EU law should introduce a requirement for banks' credit policies to prescribe Board or senior management approval of credit risk exposures that exceed a certain amount or percentage of a bank's capital, or are especially risky, or are otherwise not in line with the mainstream of the bank's activities.</li> </ul>
Principle 18	<ul style="list-style-type: none"> <li>• Further convergence between the definitions of defaulted and non-performing exposures and between these and the accounting definition of 'impaired' should be promoted.</li> <li>• The EU legislation should confirm the ECB powers to require capital deductions in case of mis-classification or under-provisioning of assets from a prudential perspective.</li> <li>• Criteria and approaches for adequate write-off should be introduced.</li> </ul>

Principle 19	<ul style="list-style-type: none"> <li>• The EU should amend the rules on large exposures to ensure closer alignment with the international standard.</li> <li>• Supervisors should address the potential consequences of deviations of the large exposure regime from the international standard in their risk assessments, closely monitoring the risk concentrations that these deviations could incentivize.</li> <li>• SIs should obtain legal entity identifiers (LEIs) for all supervised entities in their group and regularly use LEIs in reporting and in identifying their corporate clients.</li> <li>• A requirement or explicit supervisory expectations should be introduced that all material concentrations be regularly reviewed and reported to a bank's Board.</li> <li>• A more comprehensive framework for the analysis of concentration risk should be adopted, encompassing all forms of risk concentration, beyond those linked to credit risk.</li> </ul>
Principle 20	<ul style="list-style-type: none"> <li>• The EU should introduce a harmonized framework for exposures to related parties, compliant with this Core Principle.</li> </ul>
Principle 21	<ul style="list-style-type: none"> <li>• The EU should introduce a harmonized framework for country risk, compliant with this Core Principle.</li> </ul>
Principle 22	<ul style="list-style-type: none"> <li>• Verification of the adequacy of classification and valuation should be extended to all L2 assets and liabilities.</li> </ul>
Principle 23	<ul style="list-style-type: none"> <li>• EU legislation should incorporate the principles of the Basel standard on interest rate risk in the banking book (April 2016)</li> </ul>
Principle 24	<ul style="list-style-type: none"> <li>• The EU should conform the rules on LCR to the Basel standard.</li> <li>• Assumptions on the outflows of different categories of deposits within given time horizons should be revised, both for the bank's own and supervisory stress testing, in the light of the circumstances that led to the recent resolution of certain banks.</li> <li>• Adequate circulation of relevant information - within the ECB and at national level - between the units in charge of Emergency Liquidity Assistance (ELA) and the JSTs should be ensured for banks experiencing (or likely to experience) liquidity stress.</li> <li>• A requirement or explicit supervisory expectations should be introduced for the Board to conduct (at least annually) a regular review and appropriate adjustment of the bank's strategy, policies and processes for liquidity risk management.</li> <li>• Supervisors should conduct separate analyses of liquidity risk strategy and monitoring of liquidity needs for each significant currency and evaluate the bank's ability to transfer liquidity from one currency to another across jurisdictions and legal entities; supervisory reporting should be integrated accordingly.</li> </ul>
Principle 25	<ul style="list-style-type: none"> <li>• IT and cybersecurity risks require more intense supervisory attention.</li> <li>• Intra-industry IT/cybersecurity threat incident information sharing mechanisms should be strongly encouraged.</li> </ul>

	<ul style="list-style-type: none"> <li>• Inter-governmental IT/cybersecurity threat information sharing and crisis management mechanisms among ECB banking supervision and euro area, EU and global financial regulators should be strengthened and formalized.</li> <li>• The ECB, either alone or in conjunction with the EBA, should periodically publish IT/cybersecurity threat best practice guidance gleaned from its supervisory activities and IT industry standard setters.</li> <li>• The ECB's IT/cybersecurity threat recovery planning and crisis management policies and practices should be strengthened and formalized.</li> <li>• The ECB should encourage the industry development of data vaults that would permit the storage and recovery of preserved data should a bank suffer an IT/cybersecurity incident.</li> <li>• The ECB should strengthen its review of third party vendors and SI due diligence practices in the IT/cybersecurity context.</li> <li>• The EU should give the ECB prior approval and notification powers over outsourcing activities, including the power to restrict such outsourcing, to require information from the outsourcing provider and to undertake inspections.</li> <li>• The ECB should have sufficient and timely information to consider AML risk in its risk assessments and supervision of banks. Legal barriers to the mandatory exchange of AML information among the ECB and euro area AML supervisory authorities should be removed. The ECB should take supervisory measures based on AML-related risk management and operational risk deficiencies (instead of only increasing capital and liquidity requirements).</li> </ul>
Principle 27	<ul style="list-style-type: none"> <li>• EU law should include a clear reference to additional supervisory powers for the competent authorities regarding the replacement of an external auditor.</li> </ul>
Principle 28	<ul style="list-style-type: none"> <li>• Euro area banks should be required to disclose related party exposures or transactions with related parties as part of their Pillar 3 disclosures.</li> <li>• Euro area banks should be required to disclose/report average ratios instead of only end-of period for certain ratios, such as the leverage ratio and LCR.</li> </ul>

## E. Authorities' Response to the Assessment

### European Central Bank's response:

The ECB welcomes the comprehensive assessment undertaken by the IMF of the banking supervision methods and practices carried out by the European Central Bank (ECB) in close coordination with National Competent Authorities (NCAs) in the Single Supervisory Mechanism (SSM), as part of the Euro Area FSAP. The ECB appreciates the effort made by the IMF to produce this thorough, high quality assessment based on the Basel Core Principles (BCP) methodology, and generally, except on liquidity risk supervision, the ECB concurs with its findings and values the

recommendations included therein, as they can serve as an opportunity to further improve banking supervision in the Banking Union.

The Euro Area FSAP has taken place five years after the IMF performed a financial stability assessment of the European Union, and almost three years after the Single Supervisory Mechanism (SSM) was formally established. This has allowed the system to go through an initial set-up phase and reach its current full consolidation, in which intrusive, forward-looking, risk-based, homogeneous supervision of significant institutions is carried out on a daily basis across the euro area. In this period of time also the Single Resolution Board (SRB) has been established, so both supervision and resolution of significant institutions have now a truly euro area dimension.

For these reasons, the ECB considers that this Euro Area FSAP is especially timely, as the analysis of the effectiveness of the system now in place needs to be done from a Euro Area-wide perspective, and that future national Euro Area Member State FSAPs should fully take into account the new Banking Union architecture for the supervision and resolution of significant institutions.

As regards the concrete findings and recommendations included in the BCP Detailed Assessment Report (DAR), the ECB appreciates that the IMF recognises the ECB's achievements, in particular the increased level of supervisory intensity and intrusiveness, and the definition of clear supervisory methodologies and processes, as they have led to a more forward-looking, pre-emptive and even-handed supervision, and promoted the level playing field within the euro area and the harmonisation of supervisory practices across the SSM. The ECB also welcomes that the IMF acknowledges the ECB's efforts to streamline the ECB's decision-making process by way of delegation, and to simplify its processes to the extent possible. The ECB broadly shares the other findings and welcomes the related recommendations.

However, the ECB disagrees with **the assessment of BCP24 on Liquidity Risk** as Materially Non-Compliant. In the view of the ECB, this assessment severely misrepresents the intrusiveness, intensiveness, timeliness and efficaciousness of the current supervisory practices carried out by the ECB in close cooperation with the NCAs to ensure that significant institutions have this risk under control. This assessment also downplays the ECB capacity and readiness to act when significant institutions' controls are not up to the ECB standards and expectations regarding liquidity risk. While we agree with the IMF that some regulatory deficiencies still exist, the determined actions carried out by the ECB during recent episodes of crisis affecting a number of significant institutions have proved that the regulatory deficiencies have not prevented the ECB from delivering on its supervisory mandate.

In this regard, the ECB wants to emphasize that by means of the work of the Joint Supervisory Teams and the Horizontal Functions, and in close cooperation with the National Competent Authorities, the ECB monitors the liquidity situation of all significant institutions in a timely and forward looking manner, both in normal and stressed situations. Furthermore, as proved during the crises mentioned above, when early signs arise of a potential deterioration of the liquidity position of a significant institution – due to either idiosyncratic weaknesses or challenging market conditions –, the intrusiveness and frequency of the engagement with these institutions and the other relevant

stakeholders increases with a view to determine current and future liquidity needs. These supervisory actions are adopted well ahead of the actual manifestation of any liquidity constraints, in order to ensure that in case an outright liquidity crisis eventually occurs all relevant stakeholders are sufficiently informed and the necessary decisions can be timely made.

This supervisory approach to liquidity risk also permitted the orderly resolution, according to the applicable legislation, of those institutions whose deteriorating liquidity situation threatened the very existence of the bank, without affecting financial stability or the banks' depositors, or requiring public funding.

In addition to liquidity risk, the ECB would like to highlight a number of key policy issues that it deems of particular relevance. These relate to supervisory scope and powers as well as to harmonising the EU regulatory framework.

With regard to the scope and powers of the ECB in the area of banking supervision, three topics should be emphasized.

- First, the ECB concurs with IMF that the lack of ECB supervisory powers in the domain of large branches in the Euro Area of non-EU banks (often referred to as '3<sup>rd</sup> country branches') entails important risks for regulatory and supervisory arbitrage. As a consequence, the ECB agrees that further harmonisation at the EU level through appropriate legislative changes is needed as soon as possible.
- Second, the ECB strongly supports IMF staff's recommendation that the supervisory powers of the ECB should be extended to cover also relevant cross-border investment firms which carry out bank-like activities in the euro area.
- Third, the ECB welcomes the IMF staff's recommendation that the requirement for banks to hold capital in excess of the minima should remain an agile supervisory power exercised by the ECB under Pillar 2 through its Supervisory Review and Evaluation Process (SREP). In this regard, the ECB underlines that this power includes the setting of the appropriate level of additional capital taking into account a holistic risk analysis as well as its capital composition on a general basis. The ECB notes also the recommendation to the EU co-legislators that the deviations of the capital adequacy requirements of the CRR and CRD IV from the Basel standards should be minimised.

Moreover on the EU prudential framework, the ECB agrees with the IMF assessment that there are still a number of important areas which are yet to be harmonised at EU level, or which have been harmonised by means of a Directive leaving too much flexibility for their transposition into national laws, or where options are provided to Member States to determine the actual provisions on key aspects of the regulatory framework, like Large Exposure limits. This regulatory heterogeneity has an important impact on the level playing field and complicates the exercise of homogeneous supervision across the SSM. For these reasons, the ECB welcomes that the IMF acknowledges the need for further harmonization of, notably, the 'fit and proper' framework and authorisation

requirements, including licensing and license withdrawals, where harmonisation is urgently needed, as well as a more complete set of harmonised supervisory powers, including sanctioning. More specifically, the ECB shares the IMF's assessment that the current legal framework does not ensure a level playing field regarding enforcement and sanctioning measures, and that therefore further harmonization is necessary.

In this regard, the ECB has already signalled in its Opinion on the Commission's proposal to amend CRDIV that the list of infringements subject to sanctions under the CRD does not include a number of important breaches in respect of Pillar 1 capital requirements, supervisory regulations and decisions issued by a competent authority, the requirement to apply for prior permission, and the obligations to notify the competent authority. It is therefore for the Member States to discretionary decide as to whether to provide the competent authorities with the power to impose administrative penalties in such cases or not, which may lead to inconsistencies among the Member States and undermine the effective enforcement of prudential requirements. To counter this, the ECB already proposed at least to expand the list of infringements subject to sanctions. More generally, the ECB welcomes the IMF's recommendation that the scope of the ECB's enforcement and sanctioning powers should be fully aligned with the ECB's supervisory tasks, in order to ensure proper deterrence.

The ECB also agrees with the IMF assessment that the EU legal framework should be completed to ensure proper supervision of exposures to related parties and the transfer of significant ownership of banks.

Regarding the recommendations related to crisis management, the ECB agrees that the existing operational guidance for crisis management should be updated in light of the lessons learned from recent cases. The ECB has already decided on an action plan to address the issue, including revisions in its crisis procedures and manuals, more explicit incorporation of recovery planning in crisis identification and management, and further work on early intervention operational guidance. The ECB also agrees that close working relationships with the SRB in recovery and resolution planning is necessary and considers that such crucial relationships are already in place. The ECB and SRB have recently reviewed their bilateral Memorandum of Understanding to reflect the experience gained in the first two years of its implementation. The revised Memorandum of Understanding will further enhance cooperation and information exchange between ECB Banking Supervision and the SRB for resolution planning purposes as well as for crisis cases.

As regards supervisory reporting, the ECB shares the views expressed in the IMF's assessment that, while a fundamental pillar for the development of the single market in the EU, the maximum harmonization principle applied in the field of supervisory reporting is not necessarily compatible with the need of a supervisory authority to swiftly adapt the reporting framework as new risks develop. For this reason, the ECB agrees with the IMF's recommendation that the process for amending and augmenting harmonized supervisory reporting in the EU should be streamlined and expedited. Moreover, the ECB would like to stress the necessity for the institutions to keep the flexibility – as provided by Article 10 of the SSMR – to promptly and efficiently address, consistently

with the maximum harmonization principle, any data needs necessary to perform a sound, homogeneous supervision across the SSM.

Finally, the ECB wants to welcome once again this Euro Area FSAP, which should take place on a regular basis in order to fully account for the new supervisory and resolution framework for significant institutions currently in place in the Euro Area, and whose findings and conclusions are to be used in national FSAPs in Euro Area Member States. The ECB fully supports the IMF in its efforts to improve by means of FSAPs the quality of financial supervision globally, as we consider that this is a key element to achieve efficient financial systems that are capable of providing financing and other services to the economy in all phases of the economic cycle. The ECB looks forward to continuing its current close engagement with the IMF with a view to promote stable and efficient financial sectors globally, also by ensuring effective supervision.

European Commission's response:

The European Commission welcomes the IMF's comprehensive assessment of the Euro Area's observance of compliance with the Basel Core Principles for effective banking supervision. The European Commission appreciates the effort made by the IMF to produce this thorough assessment, and largely agrees with its findings, with notable exceptions.

Most notably, the European Commission disagrees with the assessment of the Basel Core Principle on liquidity risk as 'materially non-compliant'. In the European Commission's view, it is not clear how, based on the argumentation provided in the detailed assessment, the assessment team came to its conclusion. The driver behind the grade cannot be the deviations contained in the EU liquidity coverage ratio (LCR) framework since those were deemed as not having a significant overall impact by the Basel Committee (as indicated in the assessment, the Basel RCAP found the EU implementation of the international standard on the LCR to be 'largely compliant'). To the extent that the grade is driven by the alleged deficiencies of the EU regulatory framework on liquidity risk management, the European Commission would like to point out that the assessment appears to be based on a misunderstanding of the actual requirements set out within that framework. Article 86(1) of the Capital Requirements Directive (CRDIV) contains all-encompassing requirements on how competent authorities need to supervise liquidity risk<sup>10</sup>, including inter alia a clear reference to the need to ensure that the management of liquidity risk is tailored to different currencies. As such, the deficiencies that the assessment identifies are actually not present.

---

<sup>10</sup> "Competent authorities shall ensure that institutions have robust strategies, policies, processes and systems for the identification, measurement, management and monitoring of liquidity risk over an appropriate set of time horizons, including intraday, so as to ensure that institutions maintain adequate levels of liquidity buffers. Those strategies, policies, processes and systems shall be tailored to business lines, currencies, branches and legal entities and shall include adequate allocation mechanisms of liquidity costs, benefits and risks."

In addition to liquidity risk, the European Commission would like to highlight a number of other key policy areas where the assessment appears to be based on a misunderstanding of how the existing (future) EU framework works (would work).

First, the assessment appears to be overly focused on the tasks of the European Central Bank (ECB) and, in some instances, appears not to take into account the tasks attributed to the National Competent Authorities (NCA) under the Single Supervisory Mechanism (SSM). Indeed, the SSM was set up as a system composed of different supervisors, with clear rules on task allocation and with the ECB as the authority responsible of ensuring its overall functioning. In short, as regards the supervision of the bigger and more relevant institutions (so called Significant Institutions), the ECB is responsible for the main supervisory tasks, with the support of the NCAs. In some occasions, certain supervisory powers are allocated to the NCAs, which can be requested to act by the ECB. This is the case, for instance, of certain sanctioning powers. Assessing only the powers explicitly attributed to the ECB without taking into consideration the broader framework of the SSM may lead to an inaccurate view of the harmonised supervisory and regulatory framework in the Euro Area.

Second, the assessment references the proposed amendments to the CRDIV that concern supervisory powers under Pillar 2, noting their potential impact on the exercise of the ECB's supervisory powers. Specifically, the assessment team opines that while mitigating the legal uncertainty around the exercise of powers in some cases, the amendments could at the same time "*constrain supervisory discretion in the setting of prudential requirements*". The European Commission is of the view that the assessment should be based on adopted rules and not on proposed ones. Furthermore, the assessment appears to misunderstand the proposed amendments. These would not change or limit any powers or tools that are currently used by the SSM under Pillar 2. In fact, their aim is to provide further clarity and harmonisation in the Pillar 2 framework, as well as greater transparency towards the supervised entities. Additional provisions and clarifications proposed by the European Commission are also codifying certain best practices, elevating such best practices to the level of EU legislation.

Third, while acknowledging the European Commission's clarification of the supervisory powers to impose capital deductions in case an institution is considered to have insufficient provisions for non-performing loans, the assessment still calls for an explicit granting of these powers in EU legislation. The European Commission would like to point out that those powers are already explicitly granted in Article 104(1)(d) of the CRDIV. Furthermore, the existence of such powers is fully accepted and acknowledged – as demonstrated by the "Action Plan To Tackle Non-Performing Loans in Europe" endorsed by the ECOFIN Council on 11 July 2017, the Commission proposal on a Regulation amending Regulation (EU) No 575/2013 as regards minimum loss coverage for non-performing exposures, as well as the Addendum to the ECB Guidance to banks on nonperforming loans: Prudential provisioning backstop for non-performing exposures.

Fourth, one of the main findings concerns the supervisory reporting framework, which is harmonised at EU level, but allegedly "*not sufficiently granular*" for the purposes of the off-site supervision. In this specific context, harmonisation is deemed as a negative feature since it "*does not allow for sufficient flexibility and agility*". The explanation of the finding is somewhat more nuanced, mentioning "some

flexibility" via supplementary data collections by the ECB. This flexibility is not coincidental, but is explicitly envisaged by the primary legislation as part of the Pillar 2 powers of supervisory authorities to require any missing data necessary for effective supervision.

Fifth, in the assessment of the EU disclosure framework, the assessment team opines that disclosures, especially those related to the leverage ratio, are not in line with international best practice because they are made based on end-of-period instead of average figures. The European Commission would like to point out that the EU rules on the particular issue are fully in line with the international standards agreed by the Basel Committee.

Last, but not least, the assessment still contains some factual inaccuracies. For instance, while corrected elsewhere, the finding 25 still stipulates that "*the mixed financial holding companies are not included in the definition of conglomerates*" and are thus not included in the supervisory perimeter. Both statements are incorrect, as evidenced by the very definition of the term 'mixed financial holding company' in the FICO Directive and numerous provisions in the CRD IV and the CRR which explicitly include mixed financial holding companies into the scope of consolidated supervision.