

Boxes published in the ECB's Financial Stability Review

November 2017

1. Macro-financial and credit environment
 - Box 1** The prevalence of vulnerable firms in the euro area
2. Financial markets
 - Box 2** Update on reference rate reforms in the euro area
 - Box 3** Bond market liquidity indicators – an overview
3. Euro area financial institutions
 - Box 4** Market perceptions of bank risk in connection with cuts in the deposit facility rate to below zero
 - Box 5** Investment strategies of euro area insurers and pension funds: procyclical or countercyclical?
 - Box 6** How would a repricing in bond markets impact euro area investment funds?
 - Box 7** Can commodity trading firms create systemic risk via derivatives markets?

May 2017

1. Macro-financial and credit environment
 - Box 1** Preparing for Brexit to secure the smooth provision of financial services to the euro area economy
 - Box 2** Financial vulnerability of euro area households
 - Box 3** Residential real estate prices in capital cities: a review of trends
2. Financial markets
 - Box 4** Interpretations of the recent increases in TARGET2 balances
3. Euro area financial institutions
 - Box 5** Assessing the accuracy of euro area bank analysts' earnings forecasts

Box 6 A comparison of market-based indicators of banking system stress

Box 7 The growing role of non-bank lending to households – a case study on the Netherlands

Box 8 Exchange-traded funds in the euro area – recent trends and vulnerabilities

Box 9 Who would pay more for a European deposit insurance scheme: small, medium or large banks?

November 2016

1. Macro-financial and credit environment

Box 1 Is euro area financial stress becoming more global?

Box 2 Monitoring euro area residential real estate markets from a macroprudential perspective

2. Financial markets

Box 3 Have global uncertainty shocks become less persistent?

3. Euro area financial institutions

Box 4 The ECB's monetary policy and bank profitability

Box 5 The potential for spillovers from emerging markets to euro area banks

Box 6 Assessing the spillover potential between banks, shadow banks and insurance companies in Europe

Box 7 The evolution of sectoral holdings of bail-inable bank debt

May 2016

1. Macro-financial and credit environment

Box 1 Private credit overhang in emerging economies and risks to euro area financial stability

Box 2 Euro area corporate default probabilities by sector of activity and firm size

2. Financial Markets

Box 3 Financial stability implications of structural changes in market microstructures – algorithmic and high-frequency trading

3. Euro area financial institutions

Box 4 Financial stability vulnerabilities stemming from cyber risks within financial market infrastructures

Box 5 Latest indicators of euro area bank asset quality

November 2015

1. Macro-financial and credit environment

Box 1 Understanding the links between China and the euro area

Box 2 The relationship between business and financial cycles

Box 3 A model-based valuation metric for residential property markets

2. Financial Markets

Box 4 Dark pools and market liquidity

3. Euro area financial institutions

Box 5 Euro area banks' net interest margins and the low interest rate environment

Box 6 The information in systemic risk rankings

Box 7 Debt securities holdings of the financial sector in the current low-yield environment

May 2015

1. Macro-financial and credit environment

Box 1 Accommodative monetary policy and euro area financial stability

Box 2 Lower oil prices and their implications for financial stability in the euro area

Box 3 Statistical valuation metrics for residential property markets

2. Financial Markets

Box 4 Measuring commonality of bid-ask spreads in euro area bond markets

3. Euro area financial institutions

Box 5 Measuring the cost of bank equity in the euro area

Box 6 Evaluating the drivers of forbearance and underprovisioning

Box 7 Synthetic leverage in the investment fund sector

Box 8 Measuring the propagation of macro-financial shocks at the level of individual euro area financial institutions

November 2014

1. Macro-financial and credit environment

Box 1 Does the growing importance of emerging market banks pose a systemic risk?

2. Financial Markets

Box 2 Structural and systemic risk features of euro area investment funds

Box 3 Financial market volatility and banking sector leverage

3. Euro area financial institutions

Box 4 ECB's comprehensive assessment exercise

Box 5 Do contingent convertible capital instruments affect the risk perceptions of senior debt holders?

Box 6 Regulatory initiatives to enhance overall loss-absorption capacity

May 2014

1. Macro-financial and credit environment

Box 1 Financial stability challenges posed by very low rates of consumer price inflation

Box 2 Global corporate bond issuance and quantitative easing

Box 3 Financial stability implications of the crisis in Ukraine

2. Financial Markets

Box 4 Co-movements in euro area bond market indices

Box 5 Distinguishing risk aversion from uncertainty

3. Euro area financial institutions

Box 6 Provisioning and expected loss at European banks

Box 7 Recent balance sheet strengthening by euro area banks

Box 8 To what extent has banks' reduction in assets been a de-risking of balance sheets?

Box 9 Developments in markets for contingent capital instruments

Box 10 Forthcoming implementation of the bail-in tool

Box 11 Revival of "qualifying" securitisation, main hurdles and regulatory framework

November 2013

1. Macro-financial and credit environment

Box 1 Gauging the macroeconomic impacts of changing financial conditions in emerging market economies

Box 2 Financial fragility of euro area households

Box 3 House price cycles across Europe

2. Financial Markets

Box 4 Changing expectations of US monetary policy and global asset prices: what can we learn from the 1994 episode?

3. Euro area financial institutions

Box 5 A new bank sample for the ECB's Financial Stability Review

Box 6 The dynamics of fee and commission income in euro area banks

Box 7 Euro area banks and leverage ratio requirements

Box 8 Macro-prudential aspects of the SSM Regulation

Box 9 Recent evidence on taxing financial transactions

May 2013

1. Macro-financial and credit environment

Box 1 Developments in Cyprus and their impact on financial stability in the euro area

2. Financial Markets

Box 2 Financial stability implications of reference rates and key requirements for the next generation of benchmarks

Box 3 The network structure of the credit default swap market and its determinants

3. Euro area financial institutions

Box 4 Evaluating differences in banks' credit risk weights

Box 5 Deleveraging by euro area banks

Box 6 Measuring systemic risk contributions of European banks

Box 7 Financial stability and bancassurance groups – lessons from the euro area experience during the financial crisis

Box 8 Modelling the joint dynamics of banking, sovereign, macro and corporate risk

December 2012

1. Macro risks

Box 1 Recent trends in global portfolio flows amid sovereign tensions in the euro area

2. Credit risks

Box 2 The financial crisis and external financing of euro area non-financial corporations

3. Financial Markets and global financial institutions

Box 3 Main findings of the Euro Money Market Survey 2012

4. Euro area financial institutions

Box 4 Developments in the price-to-book ratios of large and complex banking groups

Box 5 Gauging the potential for sovereign and banking sector spillovers in the euro area

Box 6 Central clearing for derivatives

June 2012

1. Macro risks

Box 1 Measuring international financial spillovers

Box 2 Extracting fiscal risk signals from sovereign credit default swap spreads

2. Credit risks

Box 3 Is disintermediation by euro area corporates with respect to their external financing possible if banks reduce the supply of loans?

3. Financial Markets and global financial institutions

Box 4 Assessing stress in interbank money markets and the role of unconventional monetary policy measures

Box 5 The impact of the longer-term refinancing operations on money market options

4. Euro area financial institutions

Box 6 What does stock lending data tell us about investors' sentiment towards euro area large and complex banking groups?

Box 7 Asset encumbrance at euro area large and complex banking groups

Box 8 Systemic Risk Measure – A portfolio probabilistic perspective on measuring default risk

December 2011

1. Downside risks to real activity in the United States: the role of disagreement in expectations in determining macroeconomic vulnerability
2. What are the consequences of the downgrade of the United States' sovereign debt?
3. Assessing equity and property prices in selected large emerging market economies
4. Financialisation of commodities
5. Firms' liquidity management during periods of financial stress
6. Indicators for detecting possible value misalignments in commercial property markets
7. Public debt sustainability: expanding the toolbox
8. The EUR/USD basis swap as an indicator of stress in money markets
9. A credit default swap-based measure of government bond market impairments in the euro area
10. The euro area government debt securities lending market
11. How do bank risk and sovereign risk interact? A CDS market-based analysis

12. A reflection on recent developments in the operational risk management frameworks in the banking industry
13. Credit risk protection by insurance companies
14. Beyond the stress testing of individual banks: how shock propagation throughout the economy may multiply initial losses

June 2011

1. Is the narrowing of global imbalances since the financial crisis cyclical or permanent?
2. What do option risk-neutral density estimates tell us about the euro/dollar exchange rate?
3. Tools for detecting a possible misalignment of residential property prices from fundamentals
4. Government financial assets and net government debt in the euro area
5. Common trends in euro area sovereign credit default swap premia
6. Tracking bond and stock market uncertainty using option prices
7. Exchange-traded funds
8. The impact of the financial crisis on banks' deposit margins
9. Bank capital ratios and the cost of market funding
10. US dollar funding needs of euro area banks and the role of US money market funds
11. Lending by insurers

December 2010

1. US government-sponsored enterprises: outlook and risks
2. Capital flows to emerging markets
3. Have euro area banks been more discriminating against smaller firms in recent years?
4. Government measures to safeguard financial stability in the euro area
5. Comparison of the US, UK and EU macro-prudential frameworks
6. Main findings of the Euro Money Market Survey 2010

7. Sensitivity of euro area banks' interest income to changes in short-term market rates
8. Assessment of the risks of EU banks' exposures to sovereign debt as revealed in the exercise undertaken by the Committee of European Banking Supervisors (CEBS)
9. Evolution of euro area banks' customer funding gap
10. Using data on MFIs' statistical revaluations to gauge information on changes in banks' trading-book valuations

June 2010

1. Interest rate risk and the Federal Reserve's tightening cycle: Comparison with the events of 1994
2. Asset price booms, credit bubbles and future financial stress – Assessing systemic risks in emerging markets
3. Risks stemming from the US commercial property sector
4. Asset sales by hedge funds and conventional open-end investment funds at the height of the crisis
5. Macroeconomic and financial system uncertainty during the latest recession
6. Financial stability implications of the increase in property sale and leaseback activity
7. Households' financial distress and unemployment
8. Fiscal policies and financial stability: analytical framework
9. Public debt, sovereign risk and corporate financing costs: possible spillover channels
10. Are conditions in the market for euro credit portfolio risk back to normal?
11. Estimate of potential future write-downs on securities and loans facing the euro area banking sector
12. Government measures to support banking systems in the euro area
13. Measuring the contribution of individual sectors to systematic risk during the recent financial crisis
14. Separating banking and securities business: Glass-Steagall revisited
15. Using provisional ECB statistics for insurers and pension funds to analyse their investment risks and linkages

16. Are low risk-free interest rates good or bad for insurance companies?

December 2009

1. A global index of financial turbulence
2. Housing price cycles in the United States
3. Stress tests conducted in EU Member States in central and eastern Europe
4. Deleveraging via a decline in international bank lending during the global turmoil
5. Access to finance for non-financial corporations in the euro area
6. Property companies in the euro area
7. Measuring credit risk in the euro area household sector
8. Main findings of the euro money market survey 2009
9. Developments in the euro area covered bond market
10. Estimate of potential future write-downs on securities and loans facing the euro area banking sector
11. Public measures to support banking systems in the euro area
12. Credit default swaps and counterparty risks for EU banks
13. Assessing insurers' investment risks
14. ESCB-CESR recommendations for securities settlement systems and central counterparties in the European Union

June 2009

1. Links between governments' and banks' CDS spreads in the euro area in the periods before and after the failure of Lehman Brothers
2. Securitisation and the conditions for its restoration
3. Counterparty credit risk in the credit default swap market
4. The current macroeconomic cycle: A comparison with previous banking crises
5. Corporate defaults: A likely source of further financial system stress
6. Debt servicing ratio and household characteristics in the euro area
7. Money market intermediation and liquidity insurance

8. Indicators of liquidity in the euro money market
9. The bond-CDS basis and the functioning of the corporate bond market
10. The impact of short-selling restrictions on equity markets
11. Government measures to support banking systems in the euro area
12. The composition and quality of bank capital
13. Elasticity of banks' interest income vis-à-vis recent changes in short-term market rates
14. Estimating potential write-downs confronting the euro area banking sector as a result of the financial market turmoil
15. Assessing the resilience of euro area banks to an adverse macroeconomic scenario in the new EU Member States and emerging markets
16. Assessing the liquidity risks of insurers

December 2008

1. The US house price outlook
2. Risks to financial stability from new EU Member States
3. Transmission of US dollar and pound sterling money market tensions to the euro money market
4. A return of traditional emerging market risk?
5. Gauging risks to euro area house prices on the basis of a dynamic dividend-discount model
6. Structural trends in the euro money market
7. Funding liquidity, funding liquidity risk and its interaction with market liquidity
8. Transparency in securitisation markets
9. Restoring the balance sheets of large and complex banking groups in the euro area: dividend cuts and asset disposals
10. Measures taken by governments and central banks to preserve the stability of banking systems
11. Price of default risk as a measure of aversion to credit risk
12. Measuring the time-varying risk to banking sector stability
13. The insurance underwriting cycle in the euro area

14. T2S – Europe’s integrated securities settlement platform, and its contribution to financial stability

June 2008

1. US mortgage markets, mortgage resets scheduled in 2008, and the recent Fed interest rate cuts
2. The role of structured markets in propagating the initial sub-prime shock
3. Recent developments in Chinese equity markets
4. “Monoline” financial guarantors: the business model and linkages with financial institutions and capital markets
5. The macroeconomic environment and financial stability: evidence from past banking crises
6. How vulnerable are euro area and US firms to further tensions in credit markets?
7. Is the corporate bank lending cycle turning?
8. Year-end and quarter-end effects on money markets
9. Eurosystem standing facilities and financial stability
10. Evidence on liquidity and credit risk from deposit-OIS spreads
11. Financial stability implications of the drying-up of securitised commercial mortgage markets
12. Mark-to-market accounting and the loss figures produced by large and complex banking groups
13. Initiatives and measures that are being taken in order to restore confidence and strengthen financial system resilience
14. Leveraged loan exposures and mark-to-market write-down risks of euro area large and complex banking groups
15. Analysing the topology of the EU cross-border banking flows network
16. Stress testing: a fundamental tool for financial risk measurement
17. What are euro area reinsurers insuring and where?

December 2007

1. Sovereign wealth funds - a new class of investors

2. Causes and consequences of the recent market turmoil
3. Measuring the crowding of hedge fund trades
4. Hedge fund investor redemption restrictions and the risk of runs by investors
5. Potential implications of recent credit market stress on the euro area credit cycle
6. An overview of developments in euro area housing and mortgage markets
7. A “barometer” for financial market turmoil
8. Understanding asset backed commercial paper structures
9. Recent issues in the euro area money market: causes, consequences and proposed mitigating measures
10. Identifying large and complex banking groups for financial system stability assessment: an update
11. Assessing the impact of recent market turmoil on euro area large and complex banking groups: a stress test of potential balance sheet expansion
12. Assessing credit risk in the loan portfolios of euro area large and complex banking groups
13. The “originate and distribute” banking business model and recent credit market turmoil: some tentative lessons
14. Model risk: an overview of the issues
15. Market liquidity risk measurement
16. A market-based indicator of the probability of adverse systemic events involving large and complex banking groups
17. Euro area insurers’ direct exposures to the structured US sub-prime mortgage market
18. Terrorism insurance: who insures and who is insured
19. More than thirty years after the “Herstatt” case, foreign exchange settlement risk is still an issue

June 2007

1. Saving behaviour and global imbalances: The role of emerging economies
2. US sub-prime mortgage spillover to credit risk transfer markets
3. The impact of emerging market shocks on global equity markets

4. Carry trades in foreign exchange markets
5. Volatility and risk aversion in major currency markets
6. Hedge fund liquidations
7. Comparing the leverage of listed and unlisted corporations
8. Term spreads and floating rate lending to households and non-financial corporations in the euro area
9. Understanding financial market liquidity
10. Constant Proportion Debt Obligations
11. Variance swaps
12. Loan loss impairments: what is behind the numbers?
13. Market risk measurement, beyond value at risk
14. Decomposition of the risks faced by the banking and the insurance sectors using a factor model
15. Bank ratings and support analysis
16. The effects of global climate change on the euro area insurance sector
17. CPSS report on “New developments in clearing and settlement arrangements for OTC derivatives”

December 2006

1. Recent developments regarding China and global imbalances
2. Potential regional housing market corrections in the United States: What role for state-level spillovers?
3. Are the external positions of the new EU Member States excessive?
4. Financial market volatility – what caused the recent spike?
5. Hedge fund risk transparency
6. Vulnerabilities in open-end real estate mutual funds
7. Bank write-offs/write-downs of private sector loans in the euro area
8. Gauging the extent of credit risk transfer through credit derivatives
9. Implications for credit market liquidity of credit risk transfer instruments
10. Recovery swaps

11. Combining information on bank performance
12. Credit portfolio management practices and their implications
13. Banks' hybrid capital instruments: financial stability implications
14. Hedging longevity risk
15. Overview of the financial market infrastructure
16. Key elements of business continuity management

June 2006

1. Explaining the US income balance
2. The spillover of the search for yield to non-traditional emerging market assets
3. Is corporate credit quality in the euro area nearing a turning point?
4. Assessing the quality of corporate earnings in the euro area
5. Global and euro area corporate default rates
6. Structural trends in the euro money market
7. The widening of the collateral pool for secured lending in the euro area
8. Developing market solutions to improve the functioning of credit derivatives markets
9. How risk-tolerant are investors?
10. Assessing the financial stability implications of recent findings from the ECB bank lending survey
11. Survey on EU banks' perception of the future EU banking landscape
12. Survey on EU banks' large exposures to single-name corporates
13. Downside risk in euro area bank stocks
14. Subordinated debt issues by euro area banks
15. Rating triggers in the reinsurance sector
16. Asymmetry and fat tails of the density of the euro area insurance and banking stock indices
17. The global search for yield and funding liquidity risks for hedge funds

December 2005

1. The recent surge in US share buybacks: causes and possible financial stability implications
2. Falling savings and rising debt in the household sector: a financial stability risk?
3. Credit developments in the new non-euro area EU Member States
4. The reform of the renminbi exchange rate regime
5. Sectoral profit and leverage developments of euro area listed non-financial corporations: evidence based on micro data
6. Corporate earnings and sectoral exposure at risk in the euro area
7. The influence of mortgage product innovations on risks to household debt sustainability
8. Structural trends in the euro money market
9. Developments in the European credit derivatives markets
10. Financial conditions of large euro area banks
11. Assessing financial stability implications of recent findings from the ECB Bank Lending Survey
12. Survey on major EU banks' perception of risks in the year ahead
13. The syndicated loan market in the euro area matures into a distinct asset class
14. Large EU banks' exposures to hedge funds
15. A decomposition of euro area bank stock volatility
16. Ageing population and longevity risk
17. Low interest rates and balance sheet vulnerabilities of life insurance companies and pension funds
18. The oversight of SWIFT: objectives, scope and structure
19. The oversight of retail payment systems
20. The CPSS-IOSCO Recommendations for Central Counterparties

June 2005

1. US current account: interaction with the international investment position and adjustment channels

2. Hedge funds and the crowding of trades
3. US government-sponsored enterprises and systemic risk
4. Interest rate sensitivity of debt raised by non-financial corporations in the euro area
5. The external financing conditions of small and medium-sized enterprises in the euro area
6. Household debt ratios in the euro area from an international perspective
7. The narrowing of bid-offer spreads in money market instruments
8. The extension of the euro yield curve to ultra-long maturities
9. Corporate bond spreads and default expectations in the euro area
10. Assessing financing conditions with the ECB Bank Lending Survey
11. Financial stability implications of the new International Financial Reporting Standards
12. Measuring the interest rate risk of euro area banks using an asset pricing model
13. Options-based indicators of future risks in euro area bank stock prices
14. Distance to default as a measure of banking sector fragility
15. The reinsurance market and catastrophe bonds
16. The core principles for systemically important payment systems
17. Clearing of over-the-counter (OTC) derivatives transactions
18. ESCB-CESR standards for securities settlement systems

December 2004

1. Turbulence in the Russian banking sector
2. Bond market developments and speculative positioning in the futures markets
3. Factors underlying recent declines in implied volatilities across financial markets
4. Macro-financial risks associated with rising oil prices
5. Hunt for yield and corporate bond issuance
6. Assessing the interest rate sensitivity of household mortgage debt in the euro area
7. Structural trends in euro money markets

8. Structural trends in euro bond markets
9. Financial conditions of 50 large euro area banks
10. The Bank Lending Survey
11. Net interest income and non-interest income in euro area banks
12. A framework for macro-prudential analysis
13. Interbank linkages in the euro area
14. The distribution and management of prepayment risk in European mortgage markets
15. Credit derivatives markets continue to grow rapidly
16. Solvency and balance sheet restructuring in the euro area life insurance sector
17. The impact of Florida's hurricanes on the euro area insurance sector
18. Sources of risk in payment systems
19. Business continuity in payment systems
20. CPSS-IOSCO Recommendations for securities settlement systems