1. INTRODUCTION

The financial sector plays an important role in a modern economy by ensuring financial intermediation, i.e. the channelling of funds from savers to investors. A sound and efficient financial sector encourages accumulation of savings and enables their allocation to the most productive investments, thus supporting innovation and economic growth. In Europe, banks are the main financial intermediaries in all countries.

Banking credit is also used to finance the needs of households, in particular to smooth out their consumption pattern over time and help them invest in real estate. An excessive growth of credit for house purchases may cause price bubbles in the real estate market. The subsequent bursting of such a bubble may be very destabilising for the financial sector and the economy as a whole.

Given the risk of credit-driven asset price bubbles, in particular in the real estate segment, monitoring the soundness of the banking sector is a crucial part of assessing the stability of national financial systems. The Member States are pursuing various policies to contain potential risks.

2. CHALLENGES

2.1. Banking sector soundness

In 2016, post-crisis adjustment of the banking sector was still continuing in the EU. In 21 out of 28 Member States, the banking sector was shrinking, illustrated by falling total bank assets relative to GDP. This so called ‘deleveraging trend’ continued despite the improving conditions in the economy and for banks.

Liquidity conditions remained benign for the banking sector in general. Across Europe, banks were building up their capital buffers to comply with the new EU regulatory requirements and many made progress on resolving the stocks of non-performing loans.

The soundness of banks can be assessed through such indicators as the ratio of non-performing loans to total loans (the NPL ratio), the capital adequacy ratio (CAR) and the average return on equity (RoE ratio):

- The NPL ratio relates the nominal value of non-performing loans to all loans. The EU definition of a non-performing loan is one whose instalments are not paid for over 90 days. The ratio shows the extent of deterioration of the quality of loans granted by the banks. The higher the ratio, the worse the quality of the assets, and consequently the higher the expected losses.

- The capital adequacy ratio (CAR) shows the solvency of banks. It relates the value of regulatory capital, i.e. capital instruments recognised by the banking regulation, to risk-weighted assets. It is an indicator of banks' capacity to absorb losses. The higher the ratio, the more the banks can absorb losses without endangering their solvency.

- The RoE ratio relates banks' net income (i.e. profits after tax) to total capital. It is an indicator of banks'
overall profitability. A high profitability suggests that banks are in a favourable position to increase their capital buffer in the immediate future, namely through retained earnings.

Generally, European banks’ asset quality improved in 2016. Banks that suffered most in the financial crisis continued to repair their portfolios. The exceptions are Cyprus and Greece: in both countries, slightly over one third of all loans were still not being paid back regularly. In 2016, the NPL ratio further deteriorated in Greece, but improved in Cyprus.

In five countries the NPL ratio was above 10%. This group consisted of Italy, Portugal, Bulgaria, Ireland and Croatia. All of them, however, managed to lower their NPL ratios in 2016. So did almost all other Member States. Slovenia, Hungary and Romania made major progress on NPLs, all moving below the 10% benchmark.

**Figure 1 — Non-performing loans as % of total loans, 2016**

![Figure 1](image)

Source: ECB

The capital adequacy ratio (CAR) further improved in most EU countries. All countries had an average CAR of at least 12%, much above the regulatory minimum of 8%.

In half of the Member States the CAR was above 19%. The median moved up by one percentage point from the previous year. The highest ratio was observed in Estonia (34%), followed by Sweden and Ireland. Lithuania recorded the biggest drop in 2016, although the CAR there still remained at a high level. This was caused by one of the country’s largest banks, which paid out dividends at the beginning of the year. Dividends are paid from the retained earnings, which make up part of a bank’s capital.

The overall sufficient capitalisation hides differences between countries and banks. The capitalisation of some banks is still sub-optimal in countries such as Portugal, Italy and Spain, hampering new lending.
Figure 2 — Capital adequacy ratio: regulatory capital as 77% of risk-weighted assets, 2016

Source: ECB

Bank profitability improved in most markets, despite the low interest rate environment. In 2016, half of Member States had a return on equity (RoE) of at least 8%. The median RoE improved by one percentage point from the previous year. Countries in central and northern Europe are the most profitable EU banking markets.

Average profitability soared in three countries. The biggest jump happened in Greece, although its average RoE remained still in negative territory. Croatian and Hungarian banks also improved their profitability a lot.

Profitability deteriorated most in Italy and Portugal. Next to Greece, those were also the only banking markets in Europe making losses in 2016. Making cash provisions for non-performing loans was the main reason for this.
2.2. Credit growth

Credit growth can be gauged by the year-on-year percentage increase in the stock of bank loans to the private sector. The faster bank credit expands, the higher the risk of an asset bubble. Excessive mortgage lending driving up house prices and private debt is a typical example of such a situation.

On the other hand, negative credit growth is likely correlated with difficulties for businesses’ access to credit, especially for SMEs. Ideally, loans to the private sector should grow enough to provide sufficient finance for investment, but not excessively, so as to prevent the emergence of asset price bubbles.

Lending for house purchases stepped up in most Member States. The median mortgage credit growth rate increased from 1.5% in 2014 to 3.8% in August 2016 and further to 4.4% in June 2017.

In seven countries, Slovakia, Romania, the Czech Republic, Belgium, Lithuania, Malta, Luxembourg and Sweden, it exceeded the benchmark\(^1\) considered by the Commission as a trigger for closer examination of risks.

High lending to households, especially for house purchases, is driving up house prices and private indebtedness in several countries. This creates concerns, especially in countries where private debt is already high, such as Belgium, Sweden and the Netherlands.

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\(^{1}\) 6.5% year-on-year growth, according to the Macroeconomic Imbalances Procedure Scoreboard.
Lending to companies increased in the vast majority of Member States.

The median credit growth rate increased from -0.2% in August 2015 to 2.3% in August 2016 and to 3.8% in June 2017. Six countries (Malta, Hungary, Slovenia, Romania, Bulgaria and Croatia) moved from negative to positive growth.

The discrepancy between countries with the strongest credit growth (17% in Luxembourg, 10% in Slovakia) and those with the biggest credit contraction (-6% in the Netherlands, -3% in Portugal) also diminished compared to the previous year.

The divergent credit growth trends in the EU indicate differences in businesses’ investment opportunities.

In countries with high economic growth, business expansion stimulates investment and demand for credit (e.g. in central European countries like Slovakia, Poland, Hungary and the Czech Republic).

In other countries, like the Netherlands, Portugal and Ireland, the accumulated debt in many firms often hampers their access to finance.
The funding structure of a bank tells us how its business, primarily lending, is financed. Typically, banks collect deposits to finance loans they grant. Hence, the loan-to-deposit ratio (LTD ratio) is a common indicator that helps assess whether banks have stable funding. The LTD ratio relates total loans granted by banks to total deposits they received from their customers. In other words, it shows the share of the loan book that is covered by deposits, presumed to be a stable funding source.

Banks that find themselves in trouble often ask for help from their central bank. The share of borrowing from the central bank in total bank liabilities shows the extent to which banks had to rely on such support. In other terms, it indicates a shortage of private funding and is therefore something that needs to be kept under surveillance. Central bank liquidity should only constitute a significant share of commercial bank liabilities in exceptional, temporary circumstances.

In 2016, the EU banks' funding structure remained broadly stable. The LTD ratio was above 100% in only five countries. These included Denmark, with its unique mortgage banking model\(^2\), and also Sweden, the Netherlands, France and Italy.

Deposits grew at a slightly higher pace than loans in most countries. The median LTD ratio for 28 Member States went down slightly from about 99% in 2014 to 96% by August 2016 and 89% in June 2017 (Figure 6).

Since the financial crisis, a new funding model has emerged in the banking markets of central, eastern and south-eastern Europe. Previously, the foreign owned bank subsidiaries in the region financed their lending to a large extent by loans from their parent banks based, for

\(^2\) In Denmark, the mortgage loans are granted by specialised mortgage banks that fund loans with corresponding mortgage bonds. This system is regarded as very safe in terms of funding structure.
example, in Austria, Italy, Sweden or Germany. After the crisis, the bank subsidiaries gradually replaced the parent bank funding with local deposits. In 2016, deposits fully covered the loan portfolios in all of the central and eastern Europe banking sectors.

**Figure 6 — Loan-to-deposit ratio (%), 2016**

![Graph showing loan-to-deposit ratio for different countries in 2015 and 2016.](source: ECB)

Benign market conditions and low interest rates allowed for a further reduction in central bank financing across the EU. In 2016, most national banking sectors borrowed little from the central bank, with a share in total liabilities below 2%.

Greece stood out as the country with the highest share of central bank borrowing, amounting to one quarter of the banking sector balance sheet. Nevertheless, Greece, followed by Cyprus, significantly reduced their central bank reliance in 2016.

On the other hand, Italy and Spain increased the use of central bank credit, while Finnish and Belgian banks increased their reliance on central bank funding.

**3. POLICY RESPONSES IN THE MEMBER STATES**

Member States' common policy objectives are to preserve financial stability and to support economic growth. A sound banking sector and capital markets that fulfil smoothly their role as financial intermediaries help to achieve this.

Member States' policy measures focus on:

- enhancing access to finance by cleaning the bank balance sheets of non-performing loans;
- removing barriers to development and integration of capital markets;
- addressing deficiencies in national supervisory and regulatory frameworks and improving corporate governance in some institutions;
- addressing specific risks related to credit exposures in foreign currency;
- containing imbalances in some housing markets fuelled by private debt growing at an excessive pace.
3.1. Resolving NPL stocks

The large stock of bad debts may explain the sluggish credit growth in some countries. NPLs are a burden on banks' balance sheets and impair banks' profitability by causing lost revenues. They also lock up part of banks' capital, thus diminishing banks' ability to grant new loans.

A boost to new lending requires further progress on cleaning up banks' balance sheets and restoring adequate capital buffers. The amount of NPLs is still large in many EU countries and runs into double digits in Greece, Cyprus, Italy, Portugal, Bulgaria, Ireland and Croatia.

Banks strive to achieve viable loan restructuring or the foreclosure of non-performing assets. However, this needs to be supported by a functioning legal framework for debt enforcement and asset foreclosure. Many countries are working on improving their insolvency frameworks and the functioning of the judiciary to ensure more rapid debt restructuring. For example, Greece has introduced electronic auctions for collateral sales. Another way forward is through out-of-court restructuring solutions, based on voluntary cooperation of banks and debtors.

If loan restructuring fails, banks may consider getting rid of the impaired assets. NPLs could be sold on specialised secondary markets, either as they are or as securitised products. National authorities are making efforts to support such markets by removing regulatory obstacles, adjusting tax regimes, offering dedicated NPL management platforms and providing state guarantees for senior tranches of securitised loans (the latter for example in Italy).

To deal with the legacy of NPLs, some countries have set up asset management companies (AMCs), also known as 'bad banks', so that banks can transfer their portfolios of NPLs to them. This is done at a cost, but it allows banks to unburden their balance sheets and give out new loans. NAMA in Ireland, BAMC in Slovenia and SAREB in Spain have helped to achieve significant reductions in NPL ratios. Support for NPL sales may also be organised by the banking sector itself (with the help of state guarantees, such as is the case with the Atlante scheme in Italy).

The role of national supervisors and regulators is fundamental when it comes to resolving the NPL stocks. Such bodies regularly check the quality of banks' assets, monitor resolution of arrears and impose adequate loan-loss provisions and capital buffers.

3.2. Developing alternative sources of funding for companies

To improve access to finance also through non-bank sources, Member States are taking various actions to develop their capital markets. At EU level, these initiatives are encouraged by the Action Plan on implementing Capital Markets Union, adopted in September 2015 and updated by the Mid Term Review in June 2017. Targeted technical support is offered to national authorities by the Commission's Structural Reform Support Service. Especially those countries where capital market development lags behind (many of them in central and eastern Europe) are currently taking a broad set of measures to support their equity and bond markets, private equity and venture capital funds, and modern approaches to securitisation.

National authorities are also taking specific measures to support the development of local capital markets. Some have designed comprehensive national strategies to tackle this issue (Bulgaria, Latvia, Lithuania, the Czech Republic, Poland).

3 All loans and other assets held by a bank generate specific a capital requirement, i.e. the amount of capital that the bank must hold as a buffer for unexpected losses.

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4 National Asset Management Agency.
5 Bank Assets Management Company.
6 'Sociedad de Gestión de Activos procedentes de la Reestructuración Bancaria' (Company for the Management of Assets proceeding from Restructuring of the Banking System).
Such strategies promote development of local niche markets (e.g. fintech, private equity) by favourable regulation and create regulatory incentives for local institutional and retail investors (e.g. new instruments, favourable tax treatment). They offer various forms of support for SMEs interested in accessing the capital market (e.g. co-financing of listing costs). Last but not least, the strategies put in place appropriate financial education programmes.

Some countries also undertake cross-border initiatives. One example is the work on a harmonised legal framework for covered bonds and securitisation in the Baltic States. Another project aims to facilitate clearing and settlement of securities between stock exchanges that are members of the SEE Link platform. This includes Slovenia, Croatia and Bulgaria, as well as non-EU countries FYROM7, Serbia, Montenegro, Bosnia and Herzegovina. In addition, Bulgaria is creating opportunities for domestic issuers and investors to access other EU markets through the creation of 'Bulgarian Stock Exchange International', a dedicated market on the local stock exchange.

3.3. Strengthening bank supervision, regulation and corporate governance

The strong increase in NPLs during the crisis highlighted some cases of inadequate supervision or regulation. Weaknesses were revealed also in credit risk assessment and the corporate governance of many financial institutions.

Some countries are pursuing an overhaul of their financial supervision. Examples include:

- comprehensive reforms of banking and non-banking supervision in Bulgaria;
- integration of insurance and pension fund supervision in Cyprus;
- improving supervision of international businesses of banks in Malta.

Countries are also investing in enhancing supervisors' skills, for instance through technical support: this is the case for capital market supervision in Romania.

Some other countries launched reforms of corporate governance in particular segments of their financial sector. Italy is pursuing corporate governance reform of the large cooperative banks and small mutual banks, which is key to streamlining the banking system. Slovenia is taking measures to consolidate and restructure its banking sector, improve the governance of state-owned banks and ensure proper governance of BAMC, its bank asset management company. Croatia, meanwhile, is carrying out an asset quality review of the Croatian Bank for Reconstruction and Development (HBOR) by independent auditors. This may lead to changes in HBOR’s regulatory framework and governance structures.

3.4. Tackling the risks related to loans in foreign currency

The strengthening of the Swiss franc once again emphasised the risks of lending in foreign currency ('FX lending'). The turbulence caused by the strong appreciation of the Swiss franc was most prominent in Croatia, Hungary and Poland. In Romania, where most FX loans are in EUR, the impact was smaller. The countries concerned have already adopted various measures to aid FX borrowers, sometimes imposing substantial costs on banks.

In Poland, the relevant proposals are still being fine-tuned in discussions between the relevant authorities (the President’s Office, the Ministry of Finance, the financial supervisory authority and the central bank), pending adoption by Parliament. Taking into account the experiences of other markets, policymakers are seeking a balance between helping indebted households and preserving the financial soundness of banks and financial stability in the country as a whole. Social justice arguments are another aspect of the debate.

3.5. Addressing housing market-related vulnerabilities through macro-prudential policy

Financial stability risks related to real estate markets in the EU have
materialised in the past and are still a potential problem in a number of countries. Overvaluation in property prices tends to go hand in hand with high private sector debt. Banks’ exposure to mortgage credit often surges in line with loosening lending standards. Low interest rates and continued competition between banks for new loans increase the pressure.

Several Member States have actively used macro-prudential policy, i.e. policy aimed at preserving stability of the whole financial system, to address vulnerabilities stemming from the real estate sector. Their primary objective is to dampen the pro-cyclical dynamics between property lending and housing prices. They also aim to enhance the resilience of the banking and household sectors to financial shocks. Macro-prudential measures can take the form of bank-based measures or borrower-based measures.

Measures targeting banks typically aim at ensuring appropriate capital requirements. Some of the buffers target economy-wide systemic risk. But others can be directly related to exposures to real estate, for instance by aligning the risk weights for mortgage loans on banks' balance sheets with the risk profiles. More specific capital add-ons for mortgage portfolios have been introduced in a number of Member States (e.g. Austria, Belgium, Estonia, Slovakia and Sweden) amid heightened real estate-related vulnerabilities. Finland will introduce an institution-specific risk-weight floor for mortgages on houses on its territory as of January 2018. In March 2017 Denmark's Systemic Risk Council recommended the limitation of housing loans at a variable rate and/or with deferred amortisation for the Copenhagen and Aarhus regions if the borrower's total debt exceeds 400% of income before tax.

The evidence to date suggests that while bank-based measures have strengthened financial-sector resilience in a number of Member States, increased capital requirements have been insufficient to stem soaring housing prices in some countries such as Denmark, Luxembourg and Sweden.

In addition to bank-based instruments, national authorities have implemented lending restrictions under national law that target borrowers. Among such borrower-based measures the most frequently used include limits on loan-to-value (LTV), loan-to-income (LTI) or debt-to-income (DTI) and debt-service-to-income (DSTI) ratios. Other instruments in the toolbox include loan maturity restrictions and requirements for amortisation.

Borrower-based instruments directly target lending standards at origination (i.e. the standards that apply to borrowers when they first apply for a loan). Especially if implemented in a well-designed package of mutually supporting actions, borrower-based instruments are effective in restricting risky lending practices across a wide number of jurisdictions. Apart from reducing vulnerabilities to property price-related shocks on households' balance sheets, they can also increase bank resilience. Their design is flexible and allows for parameters to be adjusted to influence housing and credit market conditions. The complementarity of borrower-based tools with capital-based macro-prudential instruments is particularly pertinent during the upswing of credit cycles. At such times, measures which directly target lending standards at origination can reduce banks' incentives to engage in riskier (high-LTV/high-LTI) lending.

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8 Regulatory ratios indicating how much capital banks have to hold for each type of asset in their portfolio.

9 Additional capital requirements, above the standard regulatory minimum.

10 Minimum standard risk weight, that may be higher than the risk weight calculated by a bank in its internal capital adequacy model.

11 Loan including a period where the borrower pays back only interest and not part of capital.