## The ESRB and macroprudential policy in the EU

Since its establishment, the European Systemic Risk Board (ESRB) has undertaken important work in fostering a coherent macroprudential framework for the EU and in helping make it operational. The groundwork for such a framework was laid by setting up national macroprudential authorities in all EU Member States and spelling out their mandate and tasks. The next step consisted in making the concept of macroprudential supervision more precise by identifying intermediate objectives of macroprudential policy and designating macroprudential instruments. Initially, the ESRB focused on the banking sector but, over the past few years, considerable work has also been undertaken on nonbank financial sectors. One of the very first areas the ESRB dealt with was systemic risk resulting from lending in foreign currencies, an area particularly relevant for countries in Central, Eastern and Southeastern Europe (CESEE). Some CESEE Member States have also been most active in implementing macroprudential policies in the EU.

Francesco Mazzaferro, Frank Dierick<sup>1</sup>

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This article presents the European Systemic Risk Board (ESRB) and its role in the development of macroprudential policy in the EU. The article is structured as follows: Section 1 discusses the establishment, mandate and workings of the ESRB. Section 2 reviews the main ESRB recommendations that provide the basis for the macroprudential policy framework in the EU. Section 3 investigates in more detail how the policy framework is put into practice for the major categories of macroprudential instruments, showing that some Central, Eastern and Southeastern European (CESEE) countries have been particularly active in adopting macroprudential measures. Section 4 concludes.

#### 1 The ESRB and its mandate

In response to the financial crisis that had erupted in 2008, the EU established the ESRB² that started its operation in January 2011. The ESRB is an independent body responsible for the macroprudential oversight of the EU's financial system. Its aim is to identify and mitigate risks that may threaten the stability of the financial system and could damage the real economy. The ESRB has a broad remit covering banks, insurers, asset managers, shadow banks, financial market infrastructures and other financial institutions and markets.

The ESRB brings together all the central banks and financial supervisors of the European Economic Area (EEA), the European Commission and the Economic and Financial Committee (EFC) as well as the three European Supervisory Authorities (ESAs)<sup>3</sup> involved in financial regulation and supervision. This makes it a unique forum for discussing financial stability issues in an EU-wide context.

As a response to potential systemic risks, the ESRB may issue warnings and recommendations on how to mitigate systemic risks to financial stability in the EU. It can address such communications to the EU as a whole or individual EU Member

<sup>&</sup>lt;sup>1</sup> Head of the ESRB Secretariat, francesco.mazzaferro@esrb.europa.eu, adviser in the ESRB Secretariat, frank.dierick@esrb.europa.eu. Opinions expressed by the authors of studies do not necessarily reflect the official viewpoint of the Oesterreichische Nationalbank (OeNB), the European Systemic Risk Board or the Eurosystem. The authors would like to thank Alexander Trachta (OeNB) for helpful comments and valuable suggestions.

<sup>&</sup>lt;sup>2</sup> Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board.

The European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA).

States, the ESAs or national authorities. Although ESRB recommendations are not legally binding, the addressees are subject to an "act or explain" mechanism.

#### 2 Developing the macroprudential policy framework

Soon after its establishment, the ESRB adopted two recommendations that laid the groundwork for the macroprudential policy framework in the EU. The recommendation on the macroprudential mandate of national authorities<sup>4</sup> calls upon EU Member States to designate an authority to conduct macroprudential policy in their legislation, with the aim of safeguarding financial stability. This authority should have sufficient powers to pursue macroprudential policy and the necessary independence to fulfill its tasks. The central bank should play a leading role in macroprudential policy. A national authority with a well-defined, clear mandate is a necessary precondition for ensuring effective macroprudential policy, especially since the ESRB does not have the power to implement macroprudential instruments directly and can only issue nonbinding warnings and recommendations.

The next milestone was the adoption of a recommendation on intermediate objectives and instruments of macroprudential policy<sup>5</sup>. This recommendation elucidated the relatively new concept of macroprudential supervision by identifying intermediate objectives of macroprudential policy and designating macroprudential instruments. The intermediate policy objectives are an operational specification of macroprudential policy's ultimate objective of safeguarding financial stability. The five intermediate objectives relate to addressing (1) excessive credit growth and leverage, (2) excessive maturity mismatch and market illiquidity, (3) exposure concentration, (4) the systemic impact of misaligned incentives with a view to reducing moral hazard, and to (5) strengthening the resilience of financial infrastructures. The next step was to select instruments that can be used to pursue these intermediate objectives on the basis of their effectiveness (the degree to which objectives can be achieved) and efficiency (the achievement of objectives at minimum cost). The recommendation includes an indicative list of macroprudential instruments according to the five intermediate objectives.

#### 3 Operationalizing the macroprudential policy framework

Once the broad elements of the macroprudential policy framework were in place, attention shifted toward implementing it. While initially this work was very much focused on the banking sector, more recently the ESRB has also undertaken policy work on other financial sectors, such as asset management, insurance companies and financial infrastructures.

#### 3.1 ESRB work

The new prudential rules for banks in the EU (CRD IV<sup>6</sup>/CRR<sup>7</sup>), which entered into force on January 1, 2014, gave authorities in the EU a new set of legal instruments

<sup>&</sup>lt;sup>4</sup> Recommendation of 22 December 2011 on the macro-prudential mandate of national authorities (ESRB/2011/3).

<sup>5</sup> Recommendation of 4 April 2013 on intermediate objectives and instruments of macro-prudential policy (ESRB/2013/1)..

<sup>&</sup>lt;sup>6</sup> Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms ("CRD IV").

Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 ("CRR").

for conducting policies to safeguard financial stability, which are commonly referred to as "macroprudential policy tools." To assist the authorities in using these instruments, the ESRB published a flagship report and a handbook on macroprudential policy in the banking sector. While the flagship report (ESRB, 2014a) gives a first overview of the new macroprudential policy framework, the handbook (ESRB, 2014b) provides further details on individual instruments and a number of cross-cutting topics (e.g. the selection of instruments, the role of guided discretion, communication, cross-border issues).

One of the key macroprudential instruments introduced by the new prudential rules for banks was the countercyclical capital buffer (CCyB) designed to help counter some of the procyclicality in the financial system. The EU rules give the ESRB a mandate to provide guidance to macroprudential authorities on setting CCyB rates. To this end, the ESRB adopted a recommendation to ensure that authorities pursue a sound approach to relevant financial cycles and to promote sound and consistent decision making across Member States<sup>8</sup>. This was followed by a recommendation on recognizing and setting CCyB rates for exposures to third (i.e. non-EEA) countries to ensure a coherent approach and avoid regulatory arbitrage<sup>9</sup>. When a third country has not set a CCyB, or the CCyB is deemed insufficient to address the risk of excessive credit growth in that country, national authorities have the right to set a CCyB rate that domestic banks must apply with regard to the respective exposures in such third country. Moreover, the ESRB may recommend setting a CCyB rate for such third country.

Finally, in order to enhance public knowledge about macroprudential policy, the ESRB publishes, and regularly updates, information about macroprudential measures adopted by the national authorities in Europe<sup>10</sup>. This includes, for example, detailed information on the quarterly setting of the CCyB rate for all EEA countries.

#### 3.2 The countercyclical capital buffer

The CCyB is the macroprudential tool provided for by the CRD IV/CRR to address cyclical systemic risks resulting from general credit developments. Six Member States (the Czech Republic, Denmark, Lithuania, Slovakia, Sweden and the United Kingdom), as well as Iceland and Norway, maintained or introduced a positive buffer rate between 0.5% and 2% in the course of 2017 and the first quarter of 2018. With the exception of Denmark, Lithuania and the United Kingdom, the positive rate in these eight countries came into effect in 2017 (see chart 1).

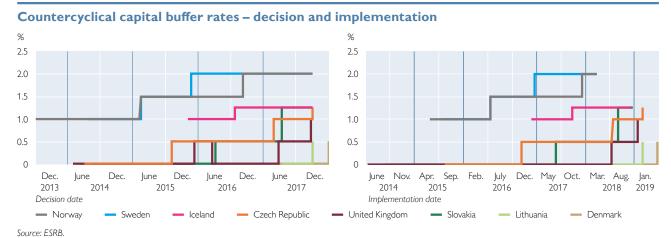
The credit-to-GDP gap is the reference indicator for setting the CCyB rate. According to the guidance by the Basel Committee on Banking Supervision (BCBS), a positive CCyB rate should be set when the gap is more than 2 percentage points. However, on average, the ratio of credit to GDP is still highly negative (although becoming less so over time) for EEA countries, even for the Member States that introduced a positive buffer rate.

Recommendation of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1).

Recommendation of 11 December 2015 on recognising and setting countercyclical buffer rates for exposures to third countries (ESRB/2015/1).

 $<sup>^{10}\</sup> See\ http://www.esrb.europa.eu/national\_policy/html/index.en.html.$ 

Basel Committee on Banking Supervision (2010): Guidance for national authorities operating the countercyclical capital buffer, December.



Note: The United Kingdom decided to increase the buffer rate to 0.5% in March 2016, but reduced it to 0% in June 2016, before the earlier decision was due to take effect

This illustrates the limitations of this particular metric and also the risk of over-reliance on a single reference indicator for macroprudential policy making. Indeed, the indicator has a number of well-known undesirable statistical properties. The long-run trend on which the indicator is based gives undue weight to the period before the financial crisis and might therefore be biased downward; the opposite situation of an upward bias might occur for developing economies like some of the countries in CESEE (Lang and Welz, 2017). This is why countries often use other indicators in addition to the credit-to-GDP gap to reflect country specificities. The ESRB's recommendation allows this practice, which is also in line with the principle of "guided discretion" that governs the use of this instrument.

#### 3.3 Real estate measures

The real estate sector is an important area of macroprudential policy making, not least because risks and vulnerabilities in this sector have often been the cause of banking crises. Around 70% of the EU Member States have at least one measure in place that targets the residential real estate sector; for the commercial real estate sector, the corresponding figure is less than 40%. From its very beginning, the ESRB has devoted a lot of attention to the real estate sector. Initiatives include a separate chapter on the use of real estate instruments in the Handbook on Macroprudential Policy in the Banking Sector (ESRB, 2014b), the publication of two reports on residential and commercial real estate and financial stability in the EU (ESRB, 2015), a recommendation on closing real estate data gaps<sup>12</sup> and warnings addressed to eight EU Member States on medium-term vulnerabilities resulting from the residential real estate sector<sup>13</sup>. The very first recommendation the ESRB adopted related to lending in foreign currencies, which often takes the form of mortgage loans (see section 3.6).

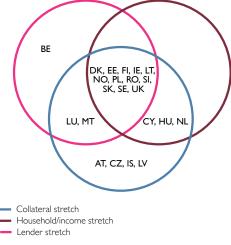
<sup>&</sup>lt;sup>12</sup> Recommendation of 31 October 2016 on closing real estate data gaps (ESRB/2016/14).

<sup>13</sup> The ESRB addressed these warnings to Austria, Belgium, Denmark, Finland, Luxembourg, the Netherlands, Sweden and the United Kingdom and supported them by an analytical report entitled "Vulnerabilities in the EU residential real estate sector," which it published in November 2016.

Chart 2

A helpful methodology for grouping real estate instruments is the classification into a household stretch (e.g. limits on loan-to-income, debt-to-income and debt service-to-income ratios), a collateral stretch (e.g. limits on loan-to-value ratios) and a lender stretch (e.g. risk weights). Most Member States that address vulnerabilities originating from the residential real estate sector have a combination of instruments in place (see chart 2). Different stretches cover different risk channels and combining instruments may make them more effective. In practice, there may be situations when instruments are used for macroprudential, microprudential and/or consumer protection reasons, and it is not always easy to distinguish between these motivations. The Member States that have activated these instruments are located primarily in northern and central Europe.

# Use of residential real estate instruments according to the stretches typology



Source: ESRB.

Note: The chart refers to instruments active in 2018 but they may have been implemented earlier. Amortization requirements are included in both the household/income stretch and the collateral stretch.

#### 3.4 The buffer for systemically important institutions

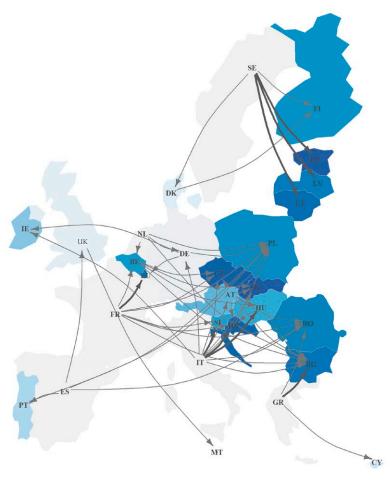
There are around 200 systemically important institutions in the EEA. Of these, 12 have been identified as global systemically important institutions (G-SIIs). Other systemically important institutions (O-SIIs) are identified at the national level. 77 of them are part of larger cross-border banking groups, where the controlling entity is an O-SII or a G-SII located in another Member State (see chart 3). We identified 26 such cross-border O-SII or G-SII groups. UniCredit, Raiffeisen, Erste, KBC and Société Générale are among the groups with a particularly strong cross-border presence, controlling many SIIs in particular in CESEE Member States.

SIIs are subject to O-SII and G-SII capital buffers, which are capped under Union law. The O-SII buffer is subject to a 2% cap. Moreover, the O-SII buffer rate for subsidiaries of EU G-SIIs or O-SIIs (at the ultimate EU parent level) is subject to an additional cap. Their O-SII buffer rate cap is the higher of either 1% or the G-SII or O-SII buffer rate applicable to the group at the highest EU consolidated level. Some countries perceive the O-SII buffer caps as being too low to mitigate the risk some SIIs pose to their financial system and have therefore used the systemic risk buffer as alternative to the O-SII buffer or to "top up" the O-SII buffer (see section 3.5).

The option to exercise supervisory judgment and the lack of detailed guidance on O-SII buffer calibration have led to large differences in national approaches. However, no matter which approach a country adopts, the buffers for O-SIIs need to be commensurate with the systemic risk they pose. Actual differences in buffer levels and the use of alternative instruments instead, or on top of the O-SII buffer

Chart 3

### Cross-border links between Member States through the presence of SIIs



Source: ESRB and SNL (ownership and total assets).

Note: An arrow between two countries indicates the link between the home country of Slls and another country (host country) in which they control Slls. The thickness of the arrow is proportionate to the number of such links. The color of a country reflects the share of its banking market controlled by foreign-owned Slls (the darker the color, the larger the share based on total assets).

suggest that this may not always be the case. It is also important to prevent unequal treatment of O-SIIs across the EU as this could jeopardize both financial stability and a level playing field.

#### 3.5 The systemic risk buffer

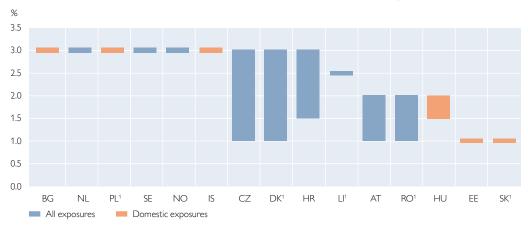
The systemic risk buffer is the macroprudential tool provided for by the CRD IV/CRR to address long-term noncyclical systemic risks. It is one of the most frequently used macroprudential instruments in Europe, in particular in some CESEE countries, not least because of its great flexibility. There are now 12 EU Member States plus Norway, Iceland and Liechtenstein that have a systemic risk buffer in place (see chart 4). Considerable differences across countries exist regarding the level, range and calculation basis of the buffer. This divergence reflects the wide variation in noncyclical risks that national authorities can address with this tool. The buffer has, for instance, been applied to mitigate risks originating from structural features of domestic economic and financial systems as diverse as external dependency, interconnectedness, sectoral concentration and the role of systemically important institutions.

As mentioned earlier, the CRD IV/CRR puts quantitative limits (caps) on the buffers for systemically important institutions. Some EU Member States therefore resort to using the systemic

risk buffer to target risks stemming from O-SIIs. In these countries, the O-SII buffer is often perceived as being too low to mitigate the risk some institutions pose to the domestic financial system. The ESRB (2017a) is of the view that the two types of structural buffers should be delineated and clearly separated. This is only possible if the policy purpose of both instruments is clear and if they are sufficiently flexible to fully address the underlying systemic risks. To this end, the ESRB proposed to change the present framework of structural buffers.

Chart 4

Main features of the systemic risk buffer in the EU and EEA (including decisions approved until end-2017; level refers to fully phased-in buffers)



Source: ESRB

Note: Refers to the fully phased-in buffer rate according to the most recent notification.

#### 3.6 Foreign currency loans

The very first recommendation the ESRB adopted dealt with lending in foreign currencies<sup>14</sup>. Foreign currency lending, often in Swiss francs or euro, has been most prevalent in some CESEE countries. High levels of such lending may entail systemic risks, which could trigger negative cross-border spillover effects. In some cases, foreign currency lending has contributed to amplifying credit cycles, potentially affecting asset prices. For unhedged borrowers, credit risk includes market risk, as installments increase because of exchange rate depreciation. Moreover, dependence on parent banks for funding and reliance on foreign currency swap markets constitute an additional layer of liquidity and refinancing risk, with the high level of integration between financial groups creating another channel for cross-border contagion.

The ESRB's recommendations cover new foreign currency loans. To tackle credit risk, the ESRB recommends, among other things, increasing borrowers' awareness of risks embedded in such lending and ensuring that new foreign currency loans are extended only to borrowers that are creditworthy and capable of withstanding severe shocks to the exchange rate. In this respect, the use of debt-to-income and loan-to-value ratios is encouraged. To tackle the mispricing of risks associated with foreign currency lending, authorities should require institutions to fully incorporate these risks into their internal risk pricing and capital allocation, and to hold adequate capital. Furthermore, authorities should closely monitor — and, if necessary, consider imposing limits on — funding and liquidity risks associated with foreign currency lending.

While the recommendations were successful in stemming the flow of new foreign currency loans, a number of countries continued to have sizeable stocks of outstanding foreign currency loans, in particular in Swiss francs. Several of these

<sup>&</sup>lt;sup>1</sup> Refers to new or changed systemic risk buffers, including changes to the methodology. A range of buffer levels is represented, where applicable, by a bar although in practice only certain values within the bar apply (i.e. there is only a limited number of discrete buffer levels). For countries in which the systemic risk buffer is applied to all banks, but subject to meeting a certain minimum threshold, a 0% default rate may be applicable.

<sup>&</sup>lt;sup>14</sup> Recommendation of 21 September 2011 on lending in foreign currencies (ESRB/2011/1).

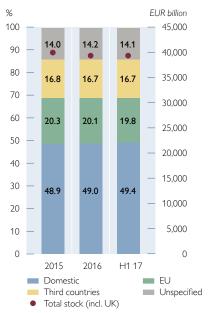
countries took measures targeting the stock problem, especially following the decision of the Swiss National Bank in January 2015 to unpeg the Swiss franc from the euro. One set of initiatives aimed at enabling the conversion of foreign currency loans into local currency; another set of measures related to stricter capital and/or risk management requirements for banks holding such loans.

#### 3.7 Cross-border banking and reciprocity

Cross-border lending is important for the originating EU Member States: half of the exposures of EU banks are on average held outside the originating Member State (see chart 5). In other words, originating banks, i.e. domestic banks and subsidiaries of foreign banks, hold about 49% of their exposures in the Member State in which they reside ("domestic exposures"), whereas 20% are exposures to other Member States and 17% to third countries. These shares have been quite stable over the last three years.

Chart 5

## Average geographical breakdown of EU banks' credit exposures, 2015–2017



Source: ECB Consolidated Banking Data, ESRB calculations.

Note: The data include total original exposures for credit, counterparty credit and dilution risks, equity exposures and free deliverables. The data are reported at the highest level of consolidation in the EU for the absolute figures at the top of the bars and at the level of Member States for the shares indicated within the bars. This chart shows the shares of bank exposures to (1) the Member State in which the bank resides ("domestic"), (2) any other EU Member States ("EU"), (3) countries outside the EU ("third countries"), and (4) an unspecified residual, as a percentage of total exposures of EU banks.

These EU figures mask great heterogeneity across originating Member States. Foreign exposures range from as low as (almost) 0% in Romania and Poland to as high as about 50% in Spain and Sweden, and 63% in Luxembourg. Banks incorporated in eight Member States hold close to or more than 40% of their exposures abroad. These exposures are mostly held in other Member States. The overall exposure of EU banks is concentrated in a few third countries<sup>15</sup>, although banks in individual Member States are exposed to a multitude of third countries. In light of the ESRB's responsibilities in the area of setting CCyB rates for third countries (see section 3.1), an agreement has been reached between the ESRB, Member States and the ECB on sharing the responsibility for identifying and monitoring material third countries<sup>16</sup>.

Given the importance of cross-border lending in the EU, reciprocity is important to ensure that national macroprudential policies targeted at certain exposures are effective. Macroprudential measures taken by EU Member States generally apply only to domestic

<sup>&</sup>lt;sup>15</sup> Third countries that are material for the EU banking sector according to a methodology established by the ESRB include the United States, Hong Kong, Singapore, Switzerland, China, Brazil, Turkey, and Russia in descending order of exposures for the EU banking sector.

<sup>&</sup>lt;sup>16</sup> Decision ESRB/2015/3 on the assessment of materiality of third countries for the Union's banking system in relation to the recognition and setting of countercyclical buffer rates.

banks and subsidiaries of foreign banks but not to branches of foreign banks or to services that are provided directly across borders. As a result, the same risk exposure in a particular country may be subject to different (macro)prudential requirements. Reciprocity may address this regulatory loophole, which means that a Member State applies the same or an equivalent macroprudential measure that has been set by another Member State to its own institutions. Reciprocity thereby extends the application of measures in one Member State to branches of foreign banks and banks providing services directly across borders.

As the EU legal framework relies mostly on voluntary reciprocity, the ESRB adopted a framework in December 2015 to promote greater use of reciprocation<sup>17</sup>. This framework foresees the reciprocation of exposure-based measures taken by Member States and covers both banking and nonbanking measures within the EU. At the request of the Member State that activates a macroprudential measure, the ESRB recommends the measure for reciprocation to all other 27 Member States if deemed justified<sup>18</sup>. These Member States then reciprocate ideally with the same measure, or if this is not possible, with an equivalent measure, or they explain their inaction under the general "act or explain" mechanism. Member States have the option to exempt an individual financial service provider if the latter has no material exposures to the Member State requesting reciprocation ("de minimis principle").

In 2017, the ESRB amended its reciprocity framework to further harmonize the application of materiality thresholds under the de minimis principle<sup>19</sup>. At the same time, the ESRB's existing mandate in the area of reciprocity was broadened with the new task of validating the materiality threshold. This, still fairly new, framework might evolve further as more experience with its practical use is gained.

#### 4 Summary and conclusions

The ESRB has been successful in contributing to safeguarding EU financial stability and developing the EU macroprudential framework, as for example reflected in the high compliance rate for its recommendations. Proposals made recently by the European Commission for creating a stronger and more integrated European financial supervision likewise attest to the ESRB's impressive track record. With regard to the ESRB, these proposals include only targeted adjustments to its composition and organization, and its coordination with EU bodies and institutions following recent institutional developments, such as the establishment of a banking union and efforts to build a capital markets union<sup>20</sup>. The ESRB's achievements so far are remarkable, given that it does not have any hard legal powers but has to rely on soft powers instead, such as the "act or explain" mechanism, moral suasion, the quality of its work and external communication. Major steps have also been taken at the national level. However, significant differences across countries are evident

<sup>&</sup>lt;sup>17</sup> Recommendation of 15 December 2015 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2015/2).

<sup>&</sup>lt;sup>18</sup> Up to now, the ESRB has recommended the reciprocation of three national measures (from Belgium, Estonia and Finland).

Recommendation of 20 October 2017 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2017/4).

<sup>&</sup>lt;sup>20</sup> European Commission, Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 1092/2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board, COM(2017) 538 final, 20 September 2017.

in terms of the use of macroprudential instruments. This article shows that some CESEE countries have been particularly active in this respect. National differences might be due, inter alia, to divergent views on the role of macroprudential policy and to the fact that countries are in different phases of the financial cycle.

Since the European economy is still very much bank based, the ESRB's initial work focused on the banking sector, as illustrated in this article. The financial system is constantly evolving, however, with the nonbank financial sector playing an increasingly important role. In 2014, total financial assets of the EU nonbank sector for the first time exceeded those of the EU banking sector. Over the past few years, the ESRB has therefore also undertaken considerable work on nonbank financial sectors. Examples include the development, and annual publication, of an EU shadow banking monitor, the adoption of a recommendation on liquidity and leverage risks of investment funds<sup>21</sup>, an investigation into the macroprudential use of margins and haircuts (ESRB, 2017b) and the development of a macroprudential perspective on recovery and resolution for the EU insurance sector (ESRB, 2017c). An important ongoing work stream relates to the use of data on derivatives contracts for macroprudential purposes that have become available to the ESRB under the European Market Infrastructure Regulation (EMIR).

Work on the banking sector likewise continues, with two recent work streams relating to cross-border banking and nonperforming loans. As a number of large cross-border banking groups have decided to transform some of their subsidiaries into branches, the ESRB will continue to support further work on how to effectively conduct macroprudential policy in a more branch-based environment. The ESRB (2017d) already conducted work on nonperforming loans, but has been requested by the ECOFIN Council to develop, by the end of 2018, macroprudential approaches to preventing the emergence of system-wide NPL problems (ECOFIN Council, 2017).

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<sup>&</sup>lt;sup>21</sup> Recommendation of 7 December 2017 on liquidity and leverage risks in investment funds (ESRB/2017/6).