Nonperforming loans in CESEE — a brief update on their definitions and recent developments

Stephan Barisitz¹

This study is a brief update of a previous contribution (2013) on national definitions of nonperforming loans (NPLs) in ten relatively large economies in Central, Eastern and Southeastern Europe (CESEE), i.e. Bulgaria, Croatia, Czechia, Hungary, Poland, Romania, Russia, Serbia, Slovakia and Ukraine. Against the background of the recent emergence (2013/2015) of internationally harmonized standards of the European Banking Authority (EBA), the present study explores how these national definitions have evolved in the past five years (2013-2018) and whether there has been a tendency toward definitional convergence. We find that some convergence toward EBA/international NPL standards has definitely taken place in recent years. All CESEE EU Member States covered in this study have adopted or confirmed their use of the EBA NPL definition ("90 days+" and/or "unlikeliness to pay") or of a corresponding stipulation. Serbia and Ukraine have also further approached internationally accepted standards, while Russia's definition seems to remain somewhat less strict. In any case, none of the countries observed have moved away from international standards. That said, more specific issues related to e.g. the treatment of restructured loans and collateral apparently still give rise to some differences. All observed countries – apart from Russia and Ukraine – boast declining NPL ratios in 2013-2018.

JEL classification: G12, G21, G33

Keywords: bank lending, CESEE, credit quality, credit risk, financial soundness indicators, nonperforming loans, NPL standards

This study is a brief update of a previous contribution on national definitions of non-performing loans (NPLs) in ten Central, Eastern and Southeastern European (CESEE) countries (Barisitz, 2013b). It also builds on a presentation the author gave at the 81st East Jour Fixe of the Oesterreichische Nationalbank (Barisitz, 2017). NPLs are of particular interest in the CESEE region due to the fact that NPL ratios are on average substantially higher than in Western Europe. Against the background of the recent emergence of internationally harmonized standards of the European Banking Authority, this study explores how national NPL definitions have evolved in the past five years and whether there has been a tendency toward definitional convergence. Readers are also brought up to date on the actual comparative development of NPL ratios in ten relatively large CESEE countries.² The structure of this paper is straightforward: In section 1, traditional components of CESEE NPL definitions are recalled, section 2 presents EBA standards as a new benchmark for NPL definitions (since 2015), sections 3 and 4 go into more detail with

Oesterreichische Nationalbank (OeNB), Foreign Research Division, stephan.barisitz@oenb.at. Opinions expressed by the authors of studies do not necessarily reflect the official viewpoint of the OeNB or the Eurosystem. The author is indebted to an anonymous referee as well as to Peter Backé, Markus Eller, Doris Ritzberger-Grünwald and Julia Wörz (all OeNB) as well as to Jan Frait and Tomaš Holub (both Česká národní banka) for their valuable comments and suggestions.

² Specifically, these comprise the largest four (in terms of population) in Central Europe (Poland, Czechia, Hungary and Slovakia), the largest four in Southeastern Europe (Romania, Bulgaria, Serbia and Croatia) and the largest two in Eastern Europe (Russia and Ukraine).

respect to how specific definitional aspects of NPLs are treated in different CESEE countries. Based on these findings, a tentative assessment of definitional comparability is made (section 5), which shows that CESEE NPL definitions have recently converged, at least partly, toward EBA/international NPL standards. Section 6 wraps up the study with a comparative empirical snapshot of NPL ratios in 2013—2018, which have been on the decline in most observed countries.

1 Elements of NPL definitions in CESEE

Hitherto, data on NPLs have often been of limited use because it is difficult to compare them across countries (Barisitz, 2013a, pp. 28–29; Bholat et al., 2016, pp. 22–23).

The basic quantitative NPL criterion recommended by the IMF in its compilation guide on Financial Soundness Indicators (IMF, 2006) is: "principal or interest 90 days or more overdue" (or "90 days+"). Focusing on European countries, we find another frequently used qualitative NPL yardstick: "existence of well-defined weakness of loan or borrower as assessed by the lending bank" ("well-defined weakness" or "unlikeliness to pay"). A third possible definitional method for capturing NPLs that is often encountered in CESEE countries, emerging markets and/or economies with relatively high NPL levels, is using a selection of credit quality categories (ECB, 2017, pp. 8–9). Typically, the trio "substandard – doubtful – loss" (within the five-range asset classification system proposed by the Institute of International Finance: standard – watch – substandard – doubtful – loss) is applied (Barisitz, 2013b, p. 68). However, the three mentioned categories in many cases essentially comprise elements which more or less correspond to the first two criteria above.

In recent years, we have witnessed a welcome tendency toward more strongly harmonized NPL definitions in a number of CESEE countries, essentially on the basis of standards established by the European Banking Authority (see section 2).

2 EBA standards as benchmark for NPL definitions

Spurred by the establishment of the Single Supervisory Mechanism in 2014, the European Banking Authority (EBA) was at the forefront of the endeavor to facilitate comparability and enhance policy relevance of NPL data, as D'Hulster emphasizes (2018, p. 1). In 2013, the EBA published Implementing Technical Standards on supervisory reporting on forbearance and nonperforming exposures under Article 99 (4) of the EU Capital Requirements Regulation (No. 575/2013). The corresponding Commission Implementing Regulation (European Commission, 2015), which entered into force in July 2015, provides for the following definition (comprising what one could call formal definitional criteria or "primary elements" of NPLs):

Nonperforming exposures are "those that satisfy any of the following criteria:

- material exposures which are more than 90 days past due;
- the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due." (p. 605). (The latter corresponds to the abovementioned well-defined weakness.)

This definition is consistent with the Basel Committee on Banking Supervision's definition of default and with the Institute for International Finance's credit quality classification (see also Barisitz, 2013a, p. 31).

EBA standards also cover some "secondary elements" which are non-defining in a strict sense but have a non-negligible, and in some cases, even appreciable, impact on the content of NPLs (European Banking Authority, 2013, pp. 13–14; European Commission, 2015, pp. 605–607):

- When forbearance measures (e.g. the restructuring of a loan) are extended to nonperforming exposures, the exposures may be considered to have ceased being nonperforming only when among other conditions one year has passed since the forbearance measures were granted. In other words: Restructured loans are classified as NPLs (more precisely, as "nonperforming forborne") at least for a one-year probation or cure period also to avoid, as far as possible, any concealment of evergreening activities before they may be reclassified as "performing forborne" (D'Hulster, 2018, pp. 3, 6).³
- NPLs will be categorized without taking into account the existence of any collateral or guarantee.
- NPLs will be categorized based on their full outstanding amount (not net of provisions, collateral, the performing amount or other items).
- When a debtor accounts for on-balance sheet exposures that are past due by more than 90 days and their gross carrying amount represents 20% of the amount of all on-balance sheet exposures to this debtor, then all on- and off-balance sheet exposures to this debtor shall be considered nonperforming. Put differently: This corresponds to a downgrade requirement for multiple loans to a single borrower if at least 20% of these (the so-called pulling factor) are classified as impaired.⁴

A number of CESEE countries have either already adopted or approached EBA standards for their nonperforming loan definitions.

3 Validity of primary elements of NPL definitions in CESEE

Table 1 below indicates to what degree the NPL definitions used in the ten observed countries correspond to the two above-explained primary elements ("90 days+" and/or "well-defined weakness") of nonperforming loans in accordance with the EBA Implementing Technical Standards or similar principles. As sources of information we use IMF Financial Soundness Indicators (FSIs) Country Metadata Questionnaires (2007–2009), IMF FSIs Country Metadata: Additional Relevant Information (IMF, 2018b), as well as various national regulatory guidelines, annual reports, reviews and other publications.

The table shows that NPL definitions correspond to the EBA benchmark in all countries except for Russia, which has a slightly weaker definition. All EU member

³ Forbearance measures may have an important material impact on NPL ratios, notably in countries with weak credit quality.

It may be interesting to relate this EBA standard to the risk management principles of the so-called NPL customer view versus the NPL product view (D'Hulster, 2014, pp. 6, 25). The NPL customer view or debtor approach is that, in case of multiple loans to the same borrower, if one of these loans turns nonperforming, the entire loan portfolio of the bank to this borrower will be downgraded to nonperforming. If one applies the NPL product view or transaction approach, on the other hand, multiple loans to the same borrower are each treated separately, and therefore, if a loan turns nonperforming, this is not seen to have an implication for the bank's other loans to this borrower. Thus, the EBA technical standard on multiple loans actually amounts to a hybrid of NPL customer and product view.

Primary elements of NPL definitions and EBA benchmarks

CESEE		BG	HR	CZ	HU	PL	RO	RU	RS	SK	UA	EBA (benchmark)
Primary elements	90 days + Well-defined	✓	✓	✓	✓	✓	✓	√x	✓	✓	✓	✓
	weakness	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: IMF FSIs and related metadata as well as other sources (see immediately above), author's compilation.

Note: Information retrieved and checked in December 2018. Assessment of country-specific regulations against benchmark:
✓ corresponds to benchmark, ✓x slightly weaker than benchmark, x weaker than benchmark.

countries adopted the EBA benchmark under the EU Capital Requirements Regulation of 2015. Why is Russia's NPL definition considered slightly weaker than the benchmark? While the Russian NPL definition follows the underlying logic of the two criteria, the Central Bank of Russia (CBR) uses a matrix comparing varying combinations of the two criteria that does not clearly spell out a debt-servicing deadline indicating when a loan becomes delinquent. Therefore, in case of doubt, the CBR's NPL regulations may, on balance, be presumed to be somewhat less strict than the common definition. ⁵

4 Treatment of "secondary elements" (vis-à-vis EBA benchmark) in CESEE

Table 2 deals with the secondary elements of NPL comparability (as enumerated in section 2) and how they are treated with respect to the EBA benchmark. We use the same sources of information referred to in the first paragraph of section 3. It should be noted that information on these relatively specific secondary elements is not always easy to come by. While the author has screened all sources of information mentioned above, these sources themselves may not always be fully comprehensive or up-to-date in every respect.

Focusing on some interesting details: In Russia, replacement loans are not classified as NPLs unless the debtor's financial conditions are weak and there are (renewed) overdue payments. Likewise, restructured loans are not downgraded for one year⁶ in Croatia, the Czech Republic, Hungary, Poland, Serbia and Slovakia. In Croatia, possible impairment losses are determined by estimating future cash flows, in Hungary and Poland restructured loans may be upgraded after a positive quarterly review, in Czechia they may be reclassified according to the related risk after six months. In Serbia, restructured receivables are not regarded as being in default if a new repayment schedule is observed with a delay of no more than one month. In Slovakia, restructured loans have to be classified according to the loss expected from these loans.

In contrast to IMF FSI data for Russia, which consider NPLs to comprise only loans in the credit quality categories "problem" (problemny) and "loss" (beznadezhny), we feel that those in the category "doubtful" (somnitelny) should also be included under NPLs in the interest of comparability with NPL data of other CESEE countries. We are in favor of including doubtful loans in the case of Russia because they i.a. comprise loans characterized by "weak financial conditions of the debtor" or "weak quality of debt service" (not further specified). Doubtful loans in Russia also require a minimum provisioning level of 21%, which corresponds to a level that typically (in the observed CESEE countries) flags a threshold of NPLs (without being a defining element of the latter) (IMF, 2007–2009; Barisitz 2013b, p. 65; IMF, 2018b).

 $^{^6}$ A downgrade for one year would correspond to EBA standards (see section 2).

Table 2

Secondary elements and EBA benchmarks **CESEE** RO RU RS **EBA** (benchmark) Secondary Treatment of elements restructured loans X Consideration of collateral Share of loan recorded as nonperforming Multiple loans

Source: IMF FSIs and related metadata as well as other sources (see section 3), author's compilation.

Note: Information retrieved and checked in December 2018. Assessment of country-specific regulations against benchmark:

 \checkmark corresponds to benchmark, \checkmark x slightly weaker than benchmark, x weaker than benchmark

In most CESEE countries, collateral apparently continues to weigh on loan classification: For example, in Croatia, collateral may have an impact if debtors start to settle their obligations irregularly and banks take appropriate and effective legal action to collect their claims. In Czechia, collateral is considered if a receivable is supported in full by a high-quality security. In Hungary, collateral, including liquidity and enforceability of claims, is taken into consideration in determining whether an exposure is impaired. In Poland, highest-quality securities, i.e. cash, government and central bank securities, may be considered. In Romania, under certain conditions, guarantees or collateral securing the principal of loans may be taken into account (up to 25%) as a credit risk-mitigating factor. In Serbia and Ukraine, classification of receivables may also be based on assessment of collateral quality.

As regards the share of a loan recorded as nonperforming: In Croatia specific provisions are deducted from the full value of the loan. Looking at multiple loans to one debtor: In Croatia, the amount of loss is calculated for each claim that is individually significant. Exceptionally, all claims to a single debtor against whom bankruptcy proceedings have been initiated may be measured on a group basis.

5 Tentative assessment of definitional comparability: some CESEE convergence toward EBA/international NPL standards

Aggregating primary and secondary elements — while keeping in mind the greater weight of the former as definitional criteria — we arrive at a tentative assessment of the comparability of CESEE NPL definitions (in an extensive interpretation).

One can infer that all observed countries' NPL definitions are (largely) comparable, except perhaps for Russia's and Croatia's definitions, which are both (somewhat) downward biased, implying that the latter would need to be (slightly) corrected upward in order for NPL ratios in these countries to be effectively comparable with other countries' ratios. As mentioned above, looking at Russia, the bias is on the side of primary elements, as one of the two benchmarks is not fully met in Russia. With respect to Croatia, an elevated number of secondary elements do not (fully) correspond to the benchmarks.

Nonetheless, overall, a degree of convergence toward EBA/international NPL standards has definitely taken place in recent years. All EU member countries have adopted or confirmed their use of the EBA NPL definition ("90 days+" and/or "well-defined weakness") or a similar stipulation. Serbia enacted a new NPL definition largely complying with EBA standards in 2016; and Ukraine approached internationally accepted standards in 2017. While secondary elements as stipulated by the EBA do not appear to be uniformly applied (yet), none of the observed countries seem to have moved away from these standards.

6 Empirical snapshot of recent NPL developments in CESEE (2013-2018)

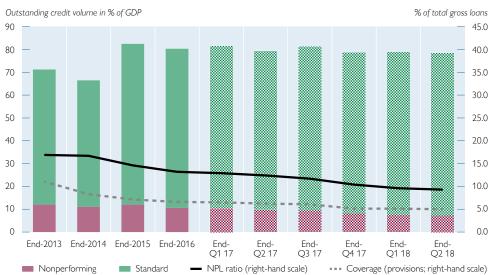
The ten charts below (which are based on IMF Financial Soundness Indicators) cover the period from end-2013 to mid-2018 for each of the ten countries under review. The charts combine overall credit volumes (deposit takers' total gross loans), including their nonperforming parts, measured on the left vertical axis as a percentage of GDP, and NPL ratios as well as provisions, plotted on the right vertical axis as a percentage of total gross loans. However, as a note of caution, one should point out that changes in national NPL definitions do not necessarily immediately impact the measured statistical time series. At least we do not have evidence of that in all instances. Like in the previous studies (Barisitz, 2013a and 2013b), the charts below are an attempt to choose national time series (as far as different series are available) that show the greatest possible degree of comparability. §

⁷ Ukraine is an example of a country where we do have such evidence. The Ukrainian NPL definition was substantially tightened in early 2017, and this promptly had an impact on the time series as of end-March of that year.

Finally, some possible remaining technical differences as to the precise content of the national NPL time series compared here could be due to various reasons, including different consolidation concepts and/or reporting populations, counterparties or instruments.

Chart 1

Bulgaria: credit quality



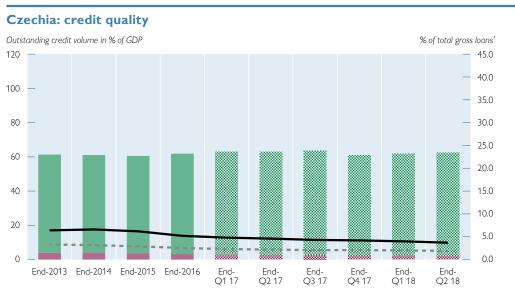
Source: National central bank, IMF Financial Soundness Indicators, Eurostat.

Chart 2

Croatia: credit quality



Source: National central bank, IMF Financial Soundness Indicators, Eurostat.



NPL ratio (right-hand scale)

Source: National central bank, IMF Financial Soundness Indicators, Eurostat.

Nonperforming

¹ Total gross loans (data series) updated by Česká národní banka in April 2019.

Standard

Chart 4

--- Coverage (provisions; right-hand scale)



Chart 5

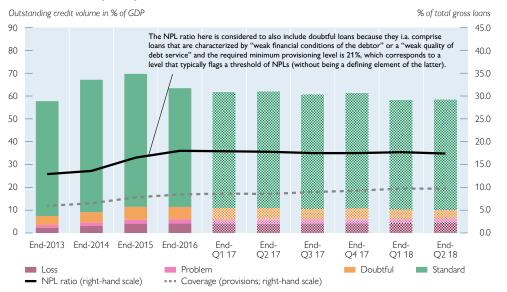
Poland: credit quality Outstanding credit volume in % of GDP % of total gross loans 90 45.0 80 40.0 35.0 70 30.0 60 50 25.0 20.0 40 30 15.0 10.0 20 10 5.0 0 0.0 End-Q1 17 End-Q4 17 End-2013 End-2014 End-2015 End-2016 End-End-End-End-Q2 17 Q3 17 Q1 18 Q2 18 Nonperforming Standard NPL ratio (right-hand scale) Coverage (provisions; right-hand scale)

Source: National central bank, IMF Financial Soundness Indicators, Eurostat.

Chart 6

Romania: credit quality Outstanding credit volume in % of GDP % of total gross loans 90 Q4/2015: slightly tightened definition (essentially compliant with EBA standards) 80 40.0 70 35.0 60 30.0 50 25.0 20.0 40 30 15.0 20 10.0 10 5.0 0 0.0 End-Q2 17 End-Q3 17 End-Q1 18 End-Q2 18 End-2013 End-2014 End-2015 End-2016 End-Q1 17 End-Q4 17 NPL ratio (right-hand scale) Coverage (provisions; right-hand scale) Nonperforming Standard Source: National central bank, IMF Financial Soundness Indicators, Eurostat.

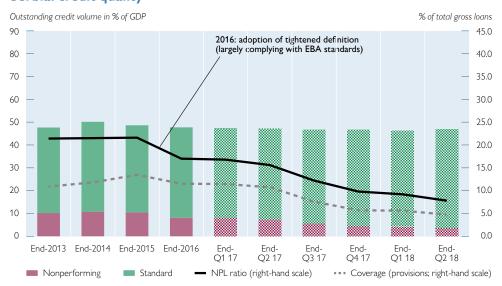
Russia: credit quality



Source: National central bank, IMF Financial Soundness Indicators.

Chart 8

Serbia: credit quality



Source: National central bank, IMF Financial Soundness Indicators.

Chart 9

Slovakia: credit quality Outstanding credit volume in % of GDP % of total gross loans 90 45.0 80 40.0 70 35.0 30.0 60 25.0 50 20.0 40 30 15.0 10.0 20 10 5.0 0 0.0 End-2013 End-2014 End-2015 End-2016 End-Q1 17 End-Q2 18 End-Q2 17 End-Q3 17 End-Q4 17 End-Q1 18

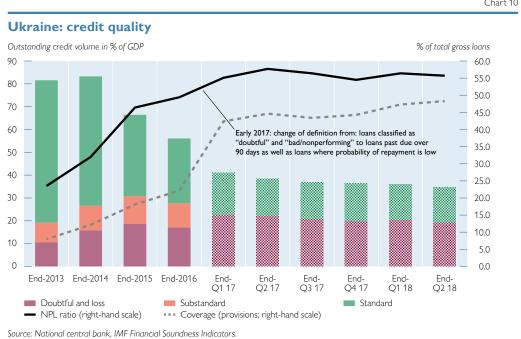
NPL ratio (right-hand scale)

Standard Source: National central bank, IMF Financial Soundness Indicators, Eurostat.

Nonperforming

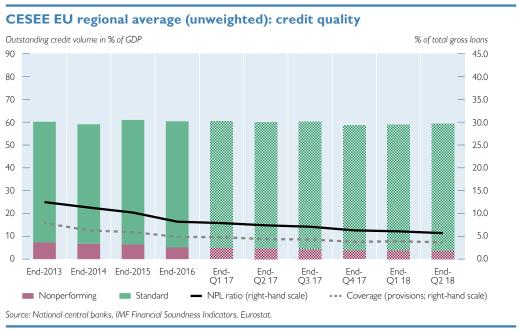
Chart 10

--- Coverage (provisions; right-hand scale)



Regional average (unweighted): credit quality Outstanding credit volume in % of GDP % of total gross loans 90 45.0 80 40.0 70 35.0 30.0 60 25.0 50 40 20.0 30 15.0 20 10.0 10 5.0 0.0 0 End-Q4 17 End-2013 End-2014 End-2015 End-2016 End-End-End-End-Q1 17 Q2 17 Q3 17 Q1 18 Q2 18 Nonperforming Standard NPL ratio (right-hand scale) ••• Coverage (provisions; right-hand scale) Source: National central banks, IMF Financial Soundness Indicators, Eurostat.

Chart 12



All examined countries — apart from Russia and Ukraine — have witnessed partly substantial declines of their NPL ratios in the five years under review. Still, the regional average (unweighted; see chart 11) remains in the very low double digits or, more specifically, at 12 % in mid-2018 (without Russia and Ukraine: only 6.0 %!). If we take the regional EU average (without Serbia, Russia and Ukraine, unweighted; see chart 12), we have an impressive decline of the average NPL ratio from 12.5 % at end-2013 to 5.7 % in mid-2018. In the Visegrád Four, bad loans have shrunk to levels of 2 % to 4 %, which is comparable to levels in western Europe. While the post-crisis economic recovery in CESEE plays an important role, stricter write-off policies and improved NPL resolution have also contributed to favorable developments. Sales of bad loans to asset management companies or hedge funds have gained momentum in a number of economies recently (Cloutier and Schwaiger, 2018, pp. 2–3, 17). These latter shares of NPL stocks disappear from the banking system, but of course not (immediately) from the economy.

Bulgaria and Croatia still record NPL ratios of around 10%, while Russia's and Ukraine's stocks of bad loans are not only high or very high, but have even substantially increased. Ukraine remains in a class of its own, featuring more NPLs than performing loans. In both cases, the worsening of indicators is linked to a legacy of high or very high levels of connected lending, to recessions in both countries in 2014–2015 (triggered by geopolitical crisis and sanctions (since 2014), and in the case of Russia, by the oil price slump), and to the strengthening of regulatory stances in recent years. Overall, the average coverage ratio (provisions/NPLs) has been steadily increasing in the observed countries from above 50% to above 70%.

References

- **Barisitz, S. 2013a.** Nonperforming Loans in Western Europe A Selective Comparison of Countries and National Definitions. In: Focus on European Economic Integration Q1/13. OeNB. 28–47.
- **Barisitz, S. 2013b.** Nonperforming Loans in CESEE An Even Deeper Definitional Comparison. In: Focus on European Economic Integration Q3/13. OeNB. 67–84.
- **Barisitz, S. 2017.** NPLs in CESEE: Snapshot of their definitions and recent development. Presentation at the 81st East Jour Fixe of the OeNB: Nonperforming loans in CESEE: macroeconomic dimension and resolution strategies. September 18.
- **Bholat, D., R. Lastra, S. Markose, A. Miglionico and K. Sen. 2016.** Non-performing loans: regulatory and accounting treatments of assets. Bank of England Staff Working Paper No. 594. April.
- Cloutier, E. and A. Schwaiger. 2018. Vienna Initiative NPL Monitor for the CESEE region. H1 2018. D'Hulster, K. 2018. Regulatory and supervisory developments for non-performing loans. Policy Brief. World Bank Group – Financial Sector Advisory Center (FinSAC).
- **D'Hulster, K., R. Letelier, V. Salomao-Garcia. 2014.** Loan classification and provisioning: current practices in 26 ECA countries overview paper. Financial Sector Advisory Center (Fin-SAC) working paper series. World Bank Group. August.

At the same time, Ukrainian banks have successfully built up provisions since 2017, which somewhat reduces macrofinancial concerns.

- **European Banking Authority. 2013.** EBA Final draft Implementing Technical Standards on Supervisory reporting on forbearance and non-performing exposures under article 99(4) of Regulation (EU) No 575/2013.
- **EUROPEAN COMMISSION. 2015.** Commission Implementing Regulation (EU) 2015/227 of 9 January 2015 amending Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0227&from=EN
- **IMF. 2006.** Financial Soundness Indicators: Compilation Guide. https://www.imf.org/external/pubs/ft/fsi/guide/2006/index.htm
- **IMF. 2007–2009.** Coordinated Compilation Exercise (CCE) for Financial Soundness Indicators (FSIs). Country Metadata Questionnaires (Bulgaria: February 2007, Croatia: January 2007, Czechia: November 2006, Hungary: December 2006, Poland: January 2007, Romania: January 2007, Russia: January 2007, Slovakia: January 2007, Ukraine: December 2009).
- IMF. 2018a. Financial Soundness Indicators. http://fsi.imf.org.
- IMF. 2018b. Financial Soundness Indicators (FSIs). Country Metadata: Additional Relevant Information (Bulgaria, Croatia, Czechia, Hungary, Poland, Romania, Slovakia, Russia, Ukraine). http://data.imf.org/regular.aspx?key=61404865