Nonperforming Loans in CESEE – An Even Deeper Definitional Comparison[1]

Stephan Barisitz[2]

This study builds on two previous studies the author contributed to Focus on European Economic Integration (FEEI), namely "Nonperforming Loans in CESEE – What Do They Comprise?" (Barisitz, 2011) and "Nonperforming Loans in Western Europe – A Selective Comparison of National Definitions" (Barisitz, 2013). It draws the following conclusions from Barisitz (2013) for the analysis of nonperforming loans (NPLs) in Central, Eastern and Southeastern Europe (CESEE): The slightly revised and simplified NPL definition (primary elements: principal or interest 90 days or more overdue and/or existence of well-defined weaknesses of loan or borrower) proposed in Barisitz (2013) facilitates cross-country comparison and is fully applicable to CESEE countries. Secondary elements (treatment of replacement loans, impact of collateral and/or guarantees, recording of total loan or only part of a loan as NPL, treatment of multiple loans to one borrower) may result in upward or downward biases of individual countries' (suggested) NPL definitions. Overall, we derive NPL ratios that are roughly internationally comparable in a transparent and replicable manner. By providing a comparative overview of what NPLs constitute, this study (together with its two predecessors) hopes to make a contribution to the currently widely debated issues of uncertainty about banks' balance sheets and (lack of) comparability across banks and countries.

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1 Introduction

This study builds on a previous contribution dealing with national definitions of nonperforming loans (NPLs) in ten Central, Eastern and Southeastern European (CESEE) countries (Barisitz, 2011) and on another study focusing on national NPL definitions and related matters in nine Western European countries (Barisitz, 2013). The novelty of this (third) study is that the additional findings of Barisitz (2013) are now applied to some of the largest countries in CESEE. Both Barisitz (2011) and the present study deal with Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Slovakia and Ukraine. The overall quest is to find an analytical NPL definition that is as comparable as possible across countries in order to help make NPLs more meaningful indicators of credit quality for banking supervisors and policymakers. Moreover, this study aims to contribute to "heightened data transparency," a goal put forward by the European Banking Coordination "Vienna" Initiative of March 2012 (EBCI, 2012, p. 7), and to add to respective findings. In this sense, it aims to support efforts to ensure that banks' assets are valued correctly – a key objective highlighted by the European Banking Authority as well as the European Systemic Risk Board (EBA, 2013; ESRB, 2013).

[1] *This is a follow-up study to Barisitz, S. 2011. Nonperforming Loans in CESEE – What Do They Comprise? In: Focus on European Economic Integration Q4/11, 46–68, and to Barisitz, S. 2013. Nonperforming Loans in Western Europe – A Selective Comparison of Countries and National Definitions. In: Focus on European Economic Integration Q1/13, 28–47.*

[2] *Oesterreichische Nationalbank, Foreign Research Division, stephan.barisitz@oenb.at. This article has benefited from a large number of disaggregated CESEE NPL data compiled and presented by Zoltan Walko (OeNB). The author is grateful to Mikhail Kovrigin (Bank of Russia) and Vlad Pentilie (NBG Securities Romania) for providing precious information. Moreover, the author is indebted to the two referees Katia D'Hulster (World Bank) and David Liebeg (OeNB) for their valuable comments and expertise. Thanks also go to Markus Eller, Thomas Reininger and Doris Ritzberger-Grünwald (all OeNB) for their helpful remarks and proposals.*

The structure of this paper is straightforward. Section 2 focuses on the implications of the results of Barisitz (2013) on Western European countries for comparable NPL concepts in CESEE. On this basis, section 3 provides country-specific summaries of NPL definitions and characteristics in a comparative regional overview. Section 4 provides a quick empirical glance at recent NPL developments (end-2010 through mid-2012) and comparable NPL levels (at mid-2012), based on the above explanations, for the CESEE countries mentioned. Section 5 summarizes and provides an overall assessment.

2 How Findings on Western Europe May Help Establish Comparable NPL Concepts in CESEE

2.1 General Aspects: Refocus on the Primary Elements of NPL Definition

In Barisitz (2011), three elements were found to be of major importance for identifying loans as nonperforming[3]: first, "principal or interest 90 days or more overdue" (or "90 days+", based on the IMF Financial Soundness Indicators Compilation Guide, IMF, 2006); second, the presence of underlying "well-defined weaknesses" of loans or borrowers (commonly used, e.g. in the loan classification scheme of the IIF, see table 1); and third, certain credit quality categories (often applied, also proposed by the IIF), the weakest three of which ("substandard – doubtful – loss") typically denote NPLs. While the majority of the ten CESEE countries analyzed in Barisitz (2011) apply the credit quality categories "substandard – doubtful – loss," most of the nine Western European countries[4] dealt with in Barisitz (2013) do not provide prescriptive classification categories for NPLs.

While the above credit quality categories can frequently be found and tend to be related to national NPL definitions, they are far from universally present. Where they exist, the actual meaning behind them may differ perceptibly from country to country (see Barisitz, 2011, p. 52–54). Moreover, the definition of default applied by the Basel Committee on Banking Supervision (2004) does not refer to credit quality categories (see also Barisitz, 2013). Consequently, the "substandard – doubtful – loss" criterion may be regarded as less important for identifying NPLs than the elements "90 days+" and "well-defined weaknesses," which may therefore be referred to as "primary" elements of NPL definition.

Findings for Western Europe and further research lead us to recommend following supervisors' – or at least general – practice in the majority[5] of European countries, which appear to endorse the rule that for a loan to be nonperforming,

[3] *While in this paper the terms "nonperforming," "impaired" and "defaulted" are essentially taken to bear similar meanings, one should not overlook the fact that e.g. "impairment" originates from, and refers to, accounting concepts. According to IAS 36, an asset is impaired when its carrying amount exceeds its recoverable amount. (In somewhat simplified terms: The carrying amount is the amount at which an asset is recognized in the balance sheet after deducting past accumulated depreciation. The recoverable amount is the higher of two amounts: the asset's value obtainable from its market sale less sale costs and the asset's value obtainable from its continued use.) In contrast, the term "nonperforming loan" is predominantly, but not exclusively, used by regulators and supervisors. The definitions of "default of an obligor" applied by the Basel Committee on Banking Supervision (2004) and by the European Commission (2011) both correspond to a widespread common view of which basic elements make up NPLs (see Barisitz 2013, p. 31, 46-47; and see below). Generally, "overdue" or "past due" payments are understood to be those that have not been paid on time (e.g. "principal or interest payments 90 days overdue"). "Exposure" goes beyond impairment and typically corresponds to the amount of risk the holder of an asset or security is faced with as a consequence of holding the security or asset.*

[4] *Austria, Finland, France, Germany, Ireland, Italy, Portugal, Spain, United Kingdom.*

[5] *Namely in all the above-mentioned countries except Finland, Italy, the U.K. and Russia.*

at least one of these two primary elements (90 days+, well-defined weaknesses) has to be present. This implies that each of the two elements is given equal weight. Finally, as mentioned in Barisitz (2013), this understanding not only corresponds to the definition of default of the Basel Committee on Banking Supervision (2004) but also to the NPL definition (Article 174) contained in the draft of the EU Capital Requirements Regulation, which will probably enter into force in 2014.[6]

2.2 Specific Conclusions for Some CESEE Countries: No More Bands Necessary

This adjusted NPL definition, which is slightly refocused and simplified[7] compared to the original three-pronged approach put forward in Barisitz (2011), has consequences for the assessment of comparability of NPL concepts in some CESEE countries. While the adjustment leaves the findings for six CESEE countries essentially unchanged against Barisitz (2011), some slight modifications or simplifications follow for the findings on Hungary, Romania, Serbia and Ukraine.

In *Hungary's* case, the 90 days+ rule starts with the credit quality category "doubtful" loans, not "substandard" loans; "substandard" loans, however, already embody "elevated risks." Since the criterion "well-defined weaknesses" – which can be assumed to qualitatively correspond to "elevated risks" – is given equal weight to the 90 days+ criterion and a loan is deemed to be an NPL if at least one of these two elements is present, we now suggest to fully include substandard loans when calculating a comparable Hungarian NPL ratio instead of proposing, as in Barisitz (2011), an NPL band that spreads the breadth of the substandard category. The definition "substandard – doubtful – bad" corresponds to Magyar Nemzeti Bank's definition of NPLs (Hungary Metadata Questionnaire 2006, subsection E3.1).

Given that in *Romania,* the 90 days+ rule corresponds to the weakest credit quality category ("loss") and the well-defined weakness criterion probably also includes the second-weakest category ("doubtful"), one can assume that NPLs comprise these last two categories. Therefore, it no longer appears necessary to add the "substandard" category as an NPL band, as in Barisitz (2011). The NPL definition "doubtful – loss" is consistent with the Romanian authorities' NPL definition (Romania Metadata Questionnaire 2007, subsection E3.1).

In *Serbia,* the loan quality categories D and E correspond to loans that are more than three months overdue. Category C comprises loans that are less than three months overdue but for which the respective bank has estimated that the debtor's ability to pay has deteriorated or is not satisfactory – which can be assumed to constitute a well-defined weakness. We therefore suggest defining Serbian NPLs in a comparable way by assigning categories C, D and E to impaired loans – and

[6] *While these two primary elements indicate when a loan enters into the domain of NPLs, its exit is just as important for the compilation of NPL ratios. A loan can cease to be an NPL through restructuring or replacement (see below), through writing off or even through maturity. Regulations may determine when and how quickly a loan can be written off; write-off timing can also be linked to the legal realization of collateral and to court proceedings. Divergence across jurisdictions with regard to these NPL exit criteria can play a nonnegligible role for NPL ratios (information provided by D'Hulster).*

[7] *Particularly by omitting the substandard – doubtful – loss criterion and attributing equal status to the criteria "90 days+" and "well-defined weakness."*

not only D and E (with C functioning as an NPL band), as in Barisitz (2011). This approach seems to be in line with Narodna banka Srbije's NPL definition.

In *Ukraine,* NPLs are identified as being 90 days or more overdue, while the well-defined weakness criterion already seems to apply to the substandard category.[8] Therefore, we now opt for suggesting a comparable NPL definition that refers to the sum of the three categories "substandard – doubtful – bad" and no longer propose an NPL band encompassing the breadth of the substandard category.

3 Primary and Secondary Elements of NPL Definition in CESEE: Possible Biases across Countries

3.1 Primary Elements

The overwhelming majority of CESEE countries' NPL definitions appear to endorse the two primary elements found essential in identifying loans as nonperforming (90 days+ and/or well-defined weaknesses). Therefore, these definitions seem comparable. Russia is the only partial exception: While the Russian definitions follow the underlying logic of the two criteria and the regulations laid down by the Bank of Russia (Central Bank of the Russian Federation – CBR) correspond quite well to the well-defined weakness criterion, there is no clearly spelt-out debt-servicing deadline that indicates from when on a loan becomes delinquent (see table 1, columns 2 and 3). Therefore, in case of doubt, the CBR's NPL regulations relating to the two primary elements may, on balance, be presumed to be somewhat less strict than the common definition. Accordingly, Russia's NPL definition may have a slight downward bias with regard to the primary elements (see table 2).

[8] *See Ukraine Metadata Questionnaire 2009, subsection C4.1.b and E3.1, "(...) credit exposure is substantial and can further increase; there is a probability of late payment of the full amount (...)."*

Table 1

Outline of Features of National NPL Definitions

Country and source	Essential features of NPLs (at least one of the following two features should be present):		Categories of credit quality classification (customary categories according to the IIF: standard – watch – substandard – doubtful – loss; last three: NPL)	Classification of restructured/ replacement loans	Existence of collateral/ guarantees considered in determining classification of loan	Full outstanding value of loan recorded as NPL (or only overdue installments or amount estimated as non-recoverable)	Downgrade requirement (a bank is required to downgrade all loans to a given debtor if any of these loans are classified as impaired)
	Principal or interest payments 90 days overdue (90 days+)	Well-defined weaknesses of borrower or loan					
Bulgaria Source: **Bulgarian National Bank:** Ordinance No. 9 of 3 April 2008 on the Evaluation and Classification of Risk Exposures of Banks and the Allocation of Specific Provisions for Credit Risk (amended on March 31, 2009); **Coordinated Compilation Exercise (CCE) for Financial Soundness Indicators (FSIs):** Answers to Bulgaria's Metadata Questionnaire (February 2007)	Yes	Yes (exposures for which available information points to debtors' unstable or substantially deteriorated financial state or current and anticipated proceeds are insufficient for full repayment of their obligations)	Risk exposures: standard – watch – nonperforming – loss *(the last two categories should define NPLs)*	Classified as nonperforming	–	Yes	Yes
Croatia Source: **Hrvatska narodna banka:** Decision on the classification of placements and off-balance sheet liabilities of credit institutions (published in the Official Gazette, entry into force March 2010); **CCE FSIs:** Answers to Croatia's Metadata Questionnaire (January 2007); **IMF Financial Soundness Indicators (IMF FSIs):** Croatia Metadata Tables (2010 Quarterly)	Yes	Yes (evidence of partial or total impairment)	Risk categories: A/fully recoverable claims – B/partly recoverable claims (B1 – B2 – B3) – C/irrecoverable claims *(categories B and C should define NPLs)*	If a credit institution carries out loan restructuring owing to debtors' deteriorated financial position, debtors are deemed not to be meeting their obligations in a timely manner. Possible impairment losses should be determined by estimating future cash flows and discounting them by the terms of the initial contract	Yes (collateral can impact loan classification if debtors start to settle their obligations irregularly and banks take appropriate and effective legal action in order to collect their claims by activating the available collateral instruments; however, if the value of collateral falls, this can negatively affect the classification of the loan)	Yes (however, specific provisions are deducted from full value of loan)	No (amount of loss is calculated for each claim that is individually significant, i.e. whose carrying value is greater than the amount set for the portfolio of small loans; exceptionally, all claims to a single debtor against whom bankruptcy proceedings have been initiated may be measured on a group basis)
Czech Republic Source: **Česká národní banka:** Decree No. 123 (2007), as amended by Decree No. 282 (2008), Part Six: Rules for the Acquisition, Financing and Assessment of Assets; **CCE FSIs:** Answers to the Czech Republic's Metadata Questionnaire (November 2006)	Yes	Yes (weakness of financial and economic situation of debtor)	Receivables: standard – watch – substandard – doubtful – loss *(according to Česká národní banka, the last three categories define NPLs – this corresponds to our suggestion)*	Restructured loans must initially be classified as nonperforming, i.e. at least as substandard. After six months they may be reclassified in other categories according to the related risk	Yes (if a receivable is supported in full by a high-quality security)	Yes	Yes

Source: Author's compilation from various sources.

Note: With the exception of footnotes and source, text in italics indicates author's suggestions or comments. "–" indicates that no information could be found on this particular issue.

Table 1 continued

Outline of Features of National NPL Definitions

Country and source	Essential features of NPLs (at least one of the following two features should be present): Principal or interest payments 90 days overdue (90 days+)	Essential features of NPLs: Well-defined weaknesses of borrower or loan	Categories of credit quality classification (customary categories according to the IIF: standard – watch – substandard – doubtful – loss; last three: NPL)	Classification of restructured/ replacement loans	Existence of collateral/ guarantees considered in determining classification of loan	Full outstanding value of loan recorded as NPL (or only overdue instalments or amount estimated as non-recoverable)	Downgrade requirement (a bank is required to downgrade all loans to a given debtor if any of these loans are classified as impaired)
Hungary Source: Government Decree on Special Provisions Regarding the Annual Reporting and Bookkeeping Obligations of Credit Institutions and Financial Enterprises (No. 250/2000), Annex 7; **CCE FSIs:** Answers to Hungary's Metadata Questionnaire (December 2006)	Yes	Yes (risks are elevated or high, loss of more than 10% of amount due can be expected and is not covered by collateral)	Categories: problem-free – special watch – substandard – doubtful – bad *(according to Magyar Nemzeti Bank, the last three categories define NPLs – this corresponds to our suggestion)*	Restructured troubled loans are not allowed to be treated as problem-free. At least quarterly reviews are required.	Yes (guarantees and collateral, including the liquidity and enforceability of claims on collateral, are taken into consideration in determining whether exposure is impaired)	Yes	Yes
Poland Source: Regulation of the Minister of Finance No. 1589 (December 16, 2008), published in Dziennik Ustaw (Official Gazette) 2008, No. 235; **CCE FSIs:** Answers to Poland's Metadata Questionnaire (January 2007)	Yes	Yes (economic and financial situation of debtor may jeopardize timely repayment)	Credit exposures: normal – under observation – below standard – doubtful – lost *(the last three categories should define NPLs)*	Restructured credits (replacement loans or exposures whose repayment terms have been adjusted as a result of the signing of new contracts) may be moved to another exposure category with lower risk, but only after full recovery of debtors' creditworthiness and not earlier than after three months of timely debt service)	Yes (highest-quality security, i.e. cash, government and central bank securities, may be taken into account in loan classification)	Yes	Yes
Romania Source: **Banca Naţională a României (BNR):** Regulation No. 3/2009 on the Classification of Loans and Investments, and the Establishment, Regularization and Use of Specific Credit Risk Provisions (as amended and complemented by BNR Regulations Nos. 7/2009 and 18/2009); **CCE FSIs:** Answers to Romania's Metadata Questionnaire (January 2007); **IMF FSIs:** Romania Metadata Tables (2008 Annual)	Yes	Yes (financial performance of debtor has deteriorated or legal proceedings have been initiated in view of recovering claims)	Categories: standard – watch – substandard – doubtful – loss *(according to Romanian authorities, the last two categories should define NPLs – this corresponds to our suggestion)*	Classified as nonperforming (moreover, credit institutions shall classify replacement loans by evaluating the financial performance of debtors using more stringent standards than those used prior to the replacement operation and by adequately reviewing factors based on updated information)	Guarantees or collateral securing the principal of loans classified as "loss" and in respect of which legal proceedings have been started and/or in respect of which 90 days or more have elapsed since the loan became due are eligible to be taken into account (up to 25%) as credit risk mitigation factors	Yes	Yes

Source: Author's compilation from various sources.

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Table 1 continued

Outline of Features of National NPL Definitions

Country and source	Essential features of NPLs (at least one of the following two features should be present):		Categories of credit quality classification (customary categories according to the IIF: standard – watch – substandard – doubtful – loss; last three: NPL)	Classification of restructured/replacement loans	Existence of collateral/guarantees considered in determining classification of loan	Full outstanding value of loan recorded as NPL (or only overdue installments or amount estimated as nonrecoverable)	Downgrade requirement (a bank is required to downgrade all loans to a given debtor if any of these loans are classified as impaired)
	Principal or interest payments 90 days overdue (90 days+)	Well-defined weaknesses of borrower or loan					
Russia Source: **CBR:** Regulation No. 254-P on the Procedure for Making Loan-Loss Provisions and Provisions for Loan Debts and Similar Liabilities by Credit Institutions (March 26, 2004); **CBR:** Summary Methodology to "Review of the Banking Sector of the Russian Federation" (17th Issue, 2010); **CCE FSIs:** Answers to the Russian Federation's Metadata Questionnaire (January 2007); **IMF FSIs:** Russia Metadata Tables (2011 Quarterly)	No (not explicitly, but quality of debt service dependent on length of payment overdue is important criterion)	Yes (weakness of economic or financial situation of debtor)	Loan quality categories: standard – substandard – doubtful – problem – bad *(the last three categories should define NPLs)*	Replacement loans are not classified as NPLs unless the debtor's financial conditions are weak and there are (renewed) overdue payments. After three months the loan is reclassified on the basis of up-to-date information	–	Yes	Yes
Serbia Source: **Narodna banka Srbije:** Decision No. 106 on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items (December 28, 2007, as amended)	Yes	Yes (debtor's financial position is not satisfactory or indicates serious problems, bank assesses that debtor's ability to repay has deteriorated)	Categories: A – B – C – D – E *(the last three categories should define NPLs)*	Restructured receivables shall not be regarded as being in default if borrowers settle their obligations pursuant to the new repayment schedule with a delay of no more than 30 days	Classification of receivables is also based on assessment of collateral quality	Yes	Yes
Slovakia Source: **Národná banka Slovenska:** Decree No. 4/2007 on Banks' Own Funds of Financing and Banks' Capital Requirements and on Securities Dealers' Own Funds of Financing and Securities Dealers' Capital Requirements (March 13, 2007); **CCE FSIs:** Answers to Slovakia's Metadata Questionnaire (January 2007); **IMF FSIs:** Slovakia Metadata Tables (2008 Annual)	Yes	Yes (significant perceived decline in credit quality or obligor files for bankruptcy or seeks restructuring proceedings)	Loan categories: standard – special mention – substandard – doubtful – loss *(according to Národná banka Slovenska, the last three categories define NPLs – this corresponds to our suggestion)*	Restructured loans have to be classified according to the loss expected from these loans	–	Yes	Yes

Source: Author's compilation from various sources.

Note: With the exception of footnotes and source, text in italics indicates author's suggestions or comments. "–" indicates that no information could be found on this particular issue.

Table 1 continued

Outline of Features of National NPL Definitions

Country and source	Essential features of NPLs (at least one of the following two features should be present): Principal or interest payments 90 days overdue (90 days+)	Essential features of NPLs: Well-defined weak-nesses of borrower or loan	Categories of credit quality classification (customary categories according to the IIF: standard – watch – substandard – doubtful – loss; last three: NPL)	Classifi-cation of restructured/ replacement loans	Existence of collateral/ guarantees considered in determining classification of loan	Full outstanding value of loan recorded as NPL (or only overdue install-ments or amount estima-ted as non-recoverable)	Downgrade requirement (a bank is required to downgrade all loans to a given debtor if any of these loans are classified as impaired)
Ukraine Source: **National Bank of Ukraine:** Regulation on Reserve Formation and Usage to Recover Possible Losses on Banks' Credit Transactions (No. 279 of July 6, 2000, as amended); **CCE FSIs:** Ukraine's Metadata Questionnaire (December 2009)	Yes	Yes (weak financial condition of borrower or low level of loan col-lateral)	Categories: standard – watch/ under control – substandard – doubtful – bad/nonperform-ing *(according to the National Bank of Ukraine, the last two categories should define NPLs; for purposes of international comparability it is suggested to regard loans in the last three categories as NPLs)*	Replacement loans have to be classified as substandard, doubtful or bad	Yes	Yes	Yes
Memorandum item							
Institute for International Finance (IIF) Source: **IMF:** Financial Soundness Indicators Compilation Guide (March 2006), Appendix VI	Yes	Yes (loan shows well-defined weaknesses that could lead to loss if not corrected; collection or liquidation of loan in full is determined by bank management to be im-probable due to current conditions)	Standard – watch/special men-tion – substandard – doubtful – loss/write-off (last three: NPL)	Replacement loans/restruc-tured loans are those for which the lender grants concessions that would not otherwise be granted because of the debtor's financial difficulty. Restructured loans are often treated identically with impaired as-sets until a record of payment is established, after which they can be upgraded	Overall interna-tional practice: Most jurisdictions do not consider condition of col-lateral or guaran-tees in classifying loans; moreover, declines in the value of collateral or guarantees are predominantly not taken into account as a basis for classifying a loan as impaired	Yes	–

Source: Author's compilation from various sources.

Note: With the exception of footnotes and source, text in italics indicates author's suggestions or comments. "–" indicates that no information could be found on this particular issue.

3.2 Secondary Elements

In this subsection we focus on the so-called secondary elements, which do not constitute immediate defining components of NPLs (see Barisitz, 2013) but which may have an upward or downward impact on individual countries' NPL definitions and data.[9] These secondary elements are:

(a) the question whether restructured loans or replacement loans are classified as NPLs or performing loans[10] (see in table 1, column 5);

[9] *This may cause individual countries' NPL definitions to be stricter or less strict than a benchmark (see below).*

[10] *Actually, there is a broad range of national definitions of restructuring and refinancing. These may e.g. include postponement of interest, renegotiation of interest, deferral of principal and/or of fees, additional grace periods, interest-only periods, repossession of part of collateral and partial write-offs. These differences also impinge on the level of NPLs (information provided by D'Hulster).*

(b) the question whether the existence of a collateral or guarantee is taken into account in grading loans in the sense that the quality of a loan deemed to suffer serious weaknesses is upgraded to "performing" thanks to the presence of a high-value collateral (table 1, column 6);
(c) the question of what is actually recorded as nonperforming: the full outstanding value of the loan in question or just the sum of overdue installments or an amount gauged by the credit institution to be irrecoverable (which might only be a fraction of the full amount) (table 1, column 7); and
(d) the question whether a bank is required to downgrade all loans to a given debtor if any of these loans is/are classified as impaired (downgrade requirement for multiple loans, or NPL customer view) – or not (NPL product view) (table 1, column 8).

Considering international approaches as well as average European or common practices, Barisitz (2013) proposed the following comparability benchmarks for the above-mentioned secondary elements:
(a) restructured and/or replacement loans are classified as NPLs (at least for an initial period of a couple of months until a record of payment is established);
(b) the quality of a loan is judged in its own right independent of collateral or guarantees;
(c) the total gross value of a loan is recorded as nonperforming (not just the amount overdue or an amount deemed by the bank to be irrecoverable);
(d) a bank is not required to downgrade all loans to a given debtor if any of these loans is/are classified as impaired (NPL product view).[11]

The specific rules and practices prevailing in the CESEE countries with regard to the secondary elements can now be assessed against these benchmarks (for a systematic overview, see tables 1 and 2).

Bulgaria applies the downgrade requirement for multiple loans (or practices the NPL customer view), which generates an upward bias vis-à-vis the above benchmark. Regarding other secondary elements, Bulgaria either does not have a specific position (collateral or guarantees) or hits the benchmark (restructured and/or replacement loans, total value). We therefore assign Bulgaria an upward bias with regard to the secondary elements which, combined with the fact that the country does not display a bias with respect to the primary elements, may produce an overall slight upward bias. To be internationally comparable, therefore, Bulgaria's NPL data may need a slight downward adjustment.

In *Croatia,* while debtors of a restructured loan are "deemed not to be meeting their obligations in a timely manner" (see table 1), this does not necessarily mean that the respective restructured loan is classified as nonperforming. Croatian collateral and/or guarantees do have a possible impact on loan classification – in both ways.[12] Given that deviation from the benchmark in this case can explicitly go

[11] *This last benchmark is chosen for reasons of consistency with the respective comparability benchmark explained in Barisitz (2013), although the majority of CESEE countries (but not the majority of European countries) apply the downgrade requirement and although from a general supervisory viewpoint (notwithstanding lack of guidance from the FSI Compilation Guide or the IIF) it would be preferable to adopt the stricter NPL customer view (downgrade requirement) as a benchmark.*

[12] *More precisely, if a bank takes appropriate and effective legal action to collect its claims by activating available instruments of collateral, the respective loan that has become impaired can be reclassified. Inversely, the grading of a loan can also be negatively affected if the value of collateral falls (see table 1).*

both upward and downward, impacts might be mutually exclusive. However, the principle of prudence, like in the case of primary elements with respect to Russia above, would suggest a minor downward bias for the Croatian rule on collateral. According to Croatian regulations, it is not exactly the full gross value of a loan that is recorded as nonperforming, but the net value (after deduction of specific provisions). Together with the lack of a downgrade requirement, this combination of somewhat weaker rules than our benchmarks results in a clear downward bias with respect to the secondary elements. Combined with the fact that Croatia does not display a bias in terms of the primary elements, this results in an overall slight downward bias in Croatia's NPL definition, implying that the country's NPL data would need to be corrected somewhat upward to be internationally comparable. An attempt to quantify the respective Bulgarian and Croatian biases would require a detailed investigation into the country-specific practices relating to the secondary elements, which unfortunately cannot be undertaken here.

The *Czech Republic's* rules also allow collateral and/or guarantees to have an impact on the classification of a loan "if a receivable is supported in full by a high-quality security" (table 1). This corresponds to a slight negative bias, given that the opposite option of downgrading a loan through loss of collateral value is not mentioned. This stance on the one hand and the country's NPL customer view on the other appear to largely offset each other. Together with the fact that no bias can be detected with regard to the other secondary elements and the primary elements, this would suggest that overall the Czech Republic's NPL definition is unbiased (see table 2).

As regards the treatment of restructured loans, *Hungary* is comparable to Croatia in stating that "restructured troubled loans are not allowed to be treated as problem-free." This does not necessarily imply that such loans are graded as impaired. Hungary's rule on the consideration of collateral does not essentially differ from the Czech Republic's approach and is more lenient than the benchmark. Hungary's somewhat weaker stances in the above two respects on the one hand and its stricter approach to the downgrade requirement for multiple loans on the other may possibly have offsetting effects, which means that no biases can be found with respect to the secondary and primary elements and, overall, Hungary's NPL definition does not display a bias, either.

Poland's very small downward bias with regard to collateral (i.e. only highest-quality collateral may be recognized in loan classification) combined with its adherence to the NPL customer view can be interpreted as producing a slight upward bias with regard to the secondary elements. Applying the principle of caution and given Poland's unbiased stance on the primary elements, overall, the country's NPL definition does not appear to be biased.

Romania's approach to restructured and/or replacement loans is even marginally more restrictive than our benchmark (which identifies them as NPLs) since "the financial performance of debtors [is to be evaluated] using more stringent standards than those used prior to the replacement operation" (table 1). Then again, similar to the practice in other CESEE countries, if with differing particular stipulations, Romania takes into account guarantees or collateral as credit risk mitigation factors. Combined with these unequal opposing influences, Romania's downgrade requirement for multiple loans yields a slight upward bias with respect to the secondary elements. The principle of caution and the fact that no bias can be found with respect to the primary elements suggest that overall, the Romanian NPL definition is not biased.

Russia's treatment of replacement loans appears slightly less rigorous than our benchmark in the sense that replacement loans are not regarded as nonperforming automatically, but only if overdue payments are renewed. This minor downward distortion is contrasted by Russia's NPL customer view, which produces a slight upward bias with respect to the secondary elements. This, in turn, contrasts with Russia's slight downward bias with respect to the primary elements. Thus, both movements might (possibly) cancel each other out, which suggests that overall, Russia's NPL definition does not appear to display a bias (table 2).[13]

Serbia is a bit more lenient than the benchmark with respect to replacement loans and the consideration of collateral, while it is stricter than the benchmark on the downgrade requirement. Taken together, these two possibly offsetting approaches may confirm the country's unbiased position with respect to the primary elements.

Finally, *Slovakia's* and *Ukraine's* leniency regarding the treatment of restructured loans, respectively collateral, combined with their rigorous positions (NPL customer view) on the downgrade requirement do not suggest a perceptible bias with regard to the secondary elements. In combination with both countries' balanced stances on the primary elements, this yields NPL definitions that do not display a bias vis-à-vis the benchmark and are therefore internationally comparable.

Table 2

Qualitative Assessment of the International Comparability of National NPL Definitions

Country	Primary elements of NPL definition and ratio (90 days+, well-defined weakness)	Secondary elements that influence NPL ratio (classification of replacement loans, role of collateral in grading credit quality, part of loan recorded as NPL, existence of downgrade requirement)	Resulting overall assessment of NPL definition and ratio in light of international comparability[1]
Bulgaria	No bias (comparable)	Upward bias	Slight upward bias
Croatia	No bias (comparable)	Downward bias	Slight downward bias
Czech Republic	No bias (comparable)	No bias (comparable)	No bias (comparable)
Hungary	No bias (comparable)	No bias (comparable)	No bias (comparable)
Poland	No bias (comparable)	Slight upward bias	No bias (comparable)
Romania	No bias (comparable)	Slight upward bias	No bias (comparable)
Russia	Slight downward bias	Slight upward bias	No bias (comparable)
Serbia	No bias (comparable)	No bias (comparable)	No bias (comparable)
Slovakia	No bias (comparable)	No bias (comparable)	No bias (comparable)
Ukraine	No bias (comparable)	No bias (comparable)	No bias (comparable)

Source: Author's assessment and compilation.

[1] *A downward (upward) bias of the NPL definition and ratio compared to widespread practice would imply the need for an upward (downward) correction of data to enhance their international comparability.*

Note: Shades of blue indicate degree of bias (ranging from white = upward to dark blue = downward).

[13] *This recalls some similarities with the case of Finland as described in Barisitz (2013).*

4 Snapshot of NPL Development in CESEE from End-2010 through End-2012

We now take a comparative look at NPL development in the ten analyzed CESEE countries in the period from end-2010 to end-2012. This links up to the statistical observations in section 3 of Barisitz (2011, pp. 54–57), which had covered the period from end-2005 to end-2010. As regards the conclusions of these observations, not much has changed. As chart 1 shows, overall NPL levels have not decreased in the countries analyzed. Serbia and Ukraine remain saddled with very high NPL risks, followed by Bulgaria, Croatia, Hungary, Romania and Russia with medium-level to elevated risks. Finally, the Czech Republic, Poland and Slovakia continue to record the relatively lowest risks. Given the large relative size of Croatia's credit volume, which substantially exceeds 100% of GDP,[14] the chart depicting Croatia's credit quality is scaled somewhat larger than all other charts and is presented separately as chart 2.

The only country whose credit volume rose substantially (by a total of more than 5 percentage points of GDP) over the course of 2011 and 2012 was Russia. Bulgaria, the Czech Republic, Poland, Serbia and Slovakia recorded more modest credit growth (by less than 5 percentage points of GDP). Croatia, Hungary, Romania and Ukraine had to contend with obviously crisis-linked contractions of their credit volume-to-GDP ratios. These contractions were most pronounced in Hungary and Ukraine.

The share of NPLs in total loans[15] and/or the ratio of NPLs to GDP increased during the observation period in Bulgaria, Croatia, Hungary and Romania. It remained more or less steady in the Czech Republic, Poland, and Serbia, while it declined in Russia and went down slightly in Slovakia and Ukraine.

Whereas up to end-2008 (largely in the pre-crisis period), NPLs in most CESEE countries had not exceeded 5% of total loans and/or GDP (exceptions: Russia, Serbia, Ukraine), as of end-2012, the exceptions in a way became the rule, with only the Czech Republic, Poland and Slovakia still recording NPL levels that were below the 5% threshold. As of end-2012, ratios of NPLs to total loans and/or GDP of around 10% or more were commonplace in the majority of CESEE countries analyzed (i.e. in Bulgaria, Croatia, Hungary, Romania, Russia, Serbia and Ukraine). High levels of 20% or above were more widespread than before (end-2012: Romania, Serbia, Ukraine), as shown in charts 1 and 2.

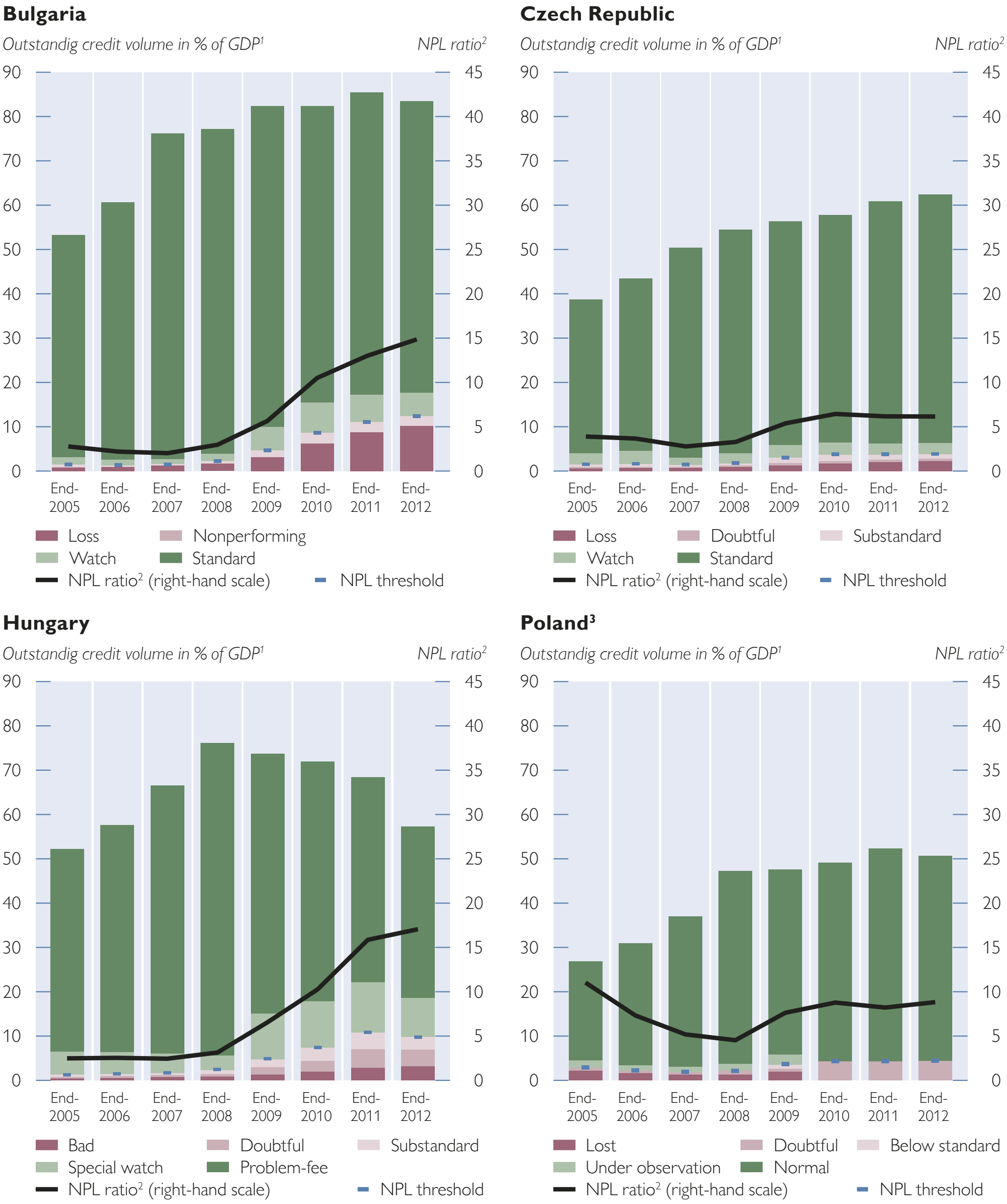
Based on the above definitions, conclusions and the available data, Serbia's and Ukraine's NPL ratios may give rise to particular concern. Serbia's share of NPLs in total loans remains above 30% and has hardly budged despite a spurt of loan growth in the first half of 2012. The Ukrainian NPL level is even higher (end-March 2012: 39% of total loans), while the country's overall credit volume has contracted. Chart 1 illustrates that in both cases, the NPL-to-GDP ratio is very high at about 25%.

[14] *Croatia's credit-to-GDP ratio is, however, substantially lower than the euro area average, and Croatia's GDP per capita is higher than that of most of its regional peers.*

[15] *One should bear in mind that comparisons of NPL ratios, i.e. the ratio of NPLs to total loans, do not only depend on the numerator but also on the denominator – the volume of total loans – which can diverge. This is likely for the countries analyzed here. Therefore, notwithstanding the quest to make the content of NPL definitions as comparable as possible, the comparison of NPL ratios has to be assessed with caution. This problem can be partly circumvented by looking at the ratios of NPLs to GDP (see above), although this indicator is, of course, somewhat different in nature. See also the note at the bottom of chart 1.*

Chart 1

Development of Credit Volume and Credit Quality in Nine CESEE Countries (2005–12)



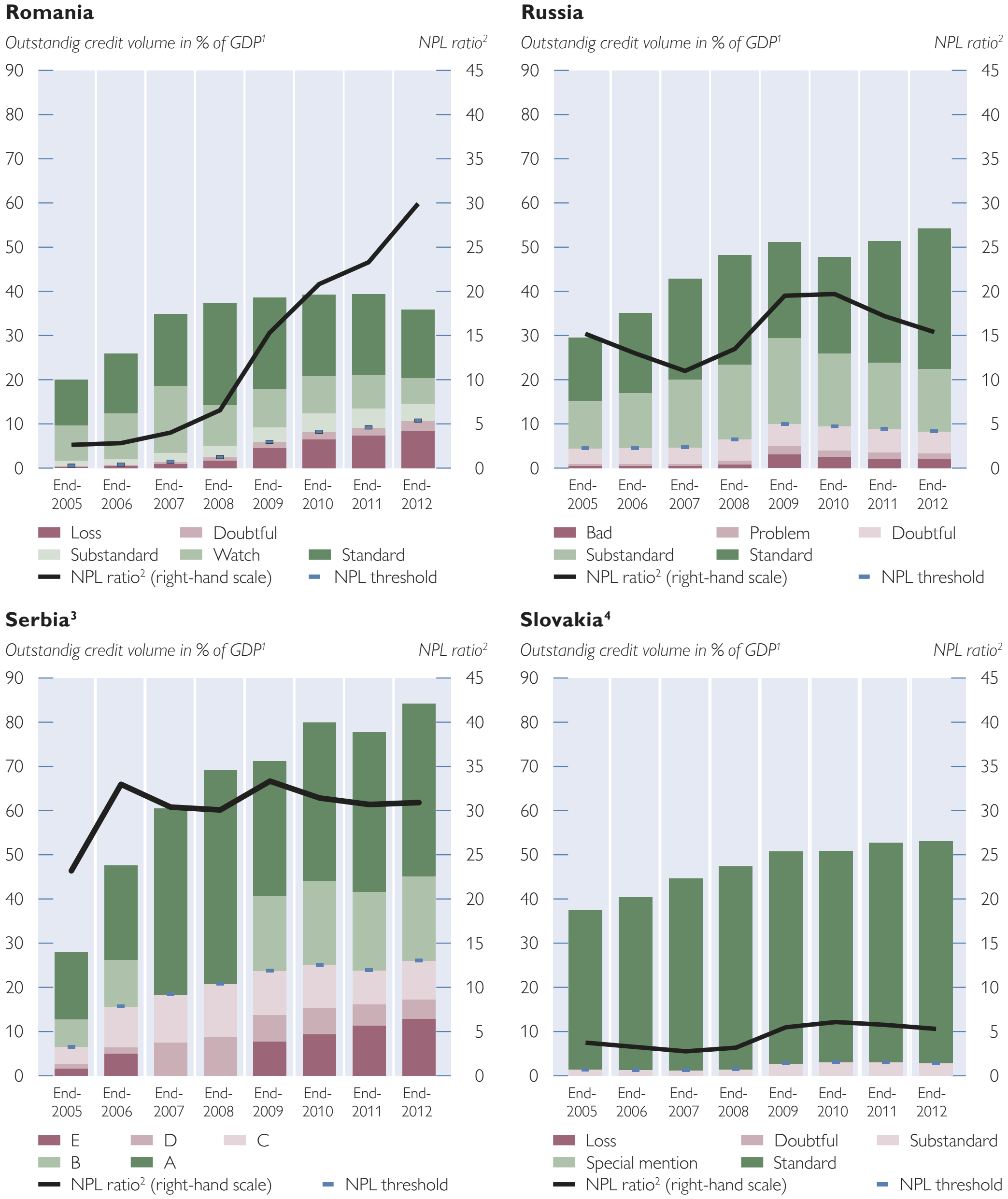
Source: National central banks, Eurostat. For Hungary: Hungarian Financial Supervisory Authority (PSZAF), Eurostat. For Russia and Ukraine: National central banks, national statistical offices.

[1] Broken down by credit quality categories.
[2] Ratio of NPLs to total loans.
[3] For end-2010 to end-2012, doubtful loans represent all NPLs (impaired loans) and normal loans also include loans under observation.

Note: Total credit aggregates correspond to national definition.

Chart 1 continued

Development of Credit Volume and Credit Quality in Nine CESEE Countries (2005–12)



Source: National central banks, Eurostat. For Hungary: Hungarian Financial Supervisory Authority (PSZAF), Eurostat. For Russia and Ukraine: National central banks, national statistical offices.

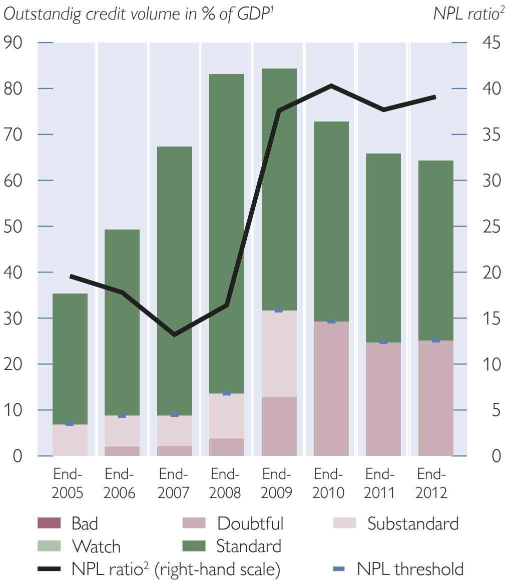
[1] Broken down by credit quality categories.
[2] Ratio of NPLs to total loans.
[3] Asset classification rules were substantially changed in the fourth quarter of 2006 and the third quarter of 2008. For end-2007 and end-2008, category A loans include those of category B and category D loans include those of category E. For end-2007 the breakdown of NPLs into categories D and C, and for end-2008 the level of C loans, had to be estimated.
[4] Standard loans here include special mention loans; doubtful loans represent all default category loans or NPLs (i.e. including loss and substandard).

Note: Total credit aggregates correspond to national definition.

Chart 1 continued

Development of Credit Volume and Credit Quality in Nine CESEE Countries (2005–12)

Ukraine[3]



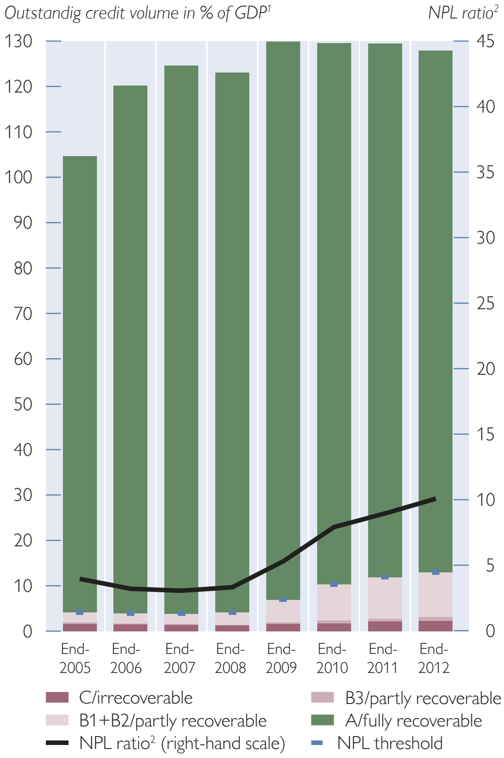
Source: National central banks, Eurostat. For Hungary: Hungarian Financial Supervisory Authority (PSZAF), Eurostat. For Russia and Ukraine: National central banks, national statistical offices.

[1] Broken down by credit quality categories.
[2] Ratio of NPLs to total loans.
[3] End-2005: Substandard loans represent all NPLs. End-2006 to 2009: Doubtful loans as depicted in this chart include bad loans and substandard loans not timely serviced. End-2010 to 2012: Doubtful loans additionally include timely serviced substandard loans.

Note: Total credit aggregates correspond to national definition.

Chart 2

Development of Credit Volume and Credit Quality in Croatia (2005–12)



Source: NBC, Eurostat

[1] Broken down by credit quality categories.
[2] Ratio of NPLs to total loans.

Note: Total credit aggregate corresponds to national definition.

5 Summary and Assessment

This article builds on a previous study dealing with national definitions of nonperforming loans (NPLs) in ten CESEE countries (Barisitz, 2011) and on a subsequent study focusing on the same issues, in more detail, with respect to nine Western European countries (Barisitz, 2013). The present study points out implications of the findings of Barisitz (2013) for the assessment of NPL definitions in CESEE. The overriding quest is to find an analytical NPL definition that is as comparable as possible across countries in order to help rendering NPLs a more meaningful credit quality indicator for banking supervisors and governments. This study recommends a more streamlined basic definition of NPLs and adds a more systematic survey of (primary and secondary) elements of national NPL definitions to enhance cross-country comparability. The countries dealt with in Barisitz (2011) and in the present study are some of the largest of the CESEE region: Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Slovakia and Ukraine.

Barisitz (2011) found three elements of importance in identifying loans as nonperforming: "principal or interest 90 days or more overdue," "well-defined weaknesses of loans or borrowers" and the three weakest credit quality categories "substandard – doubtful – loss." Since this last element is far from being universally used in Western Europe, its actual meaning may differ perceptibly from one country to another and it is not present in the definition of default by the Basel Committee on Banking Supervision (2004), we regard "substandard – doubtful – loss" as less important than the other two (primary) elements. Findings for Western Europe and further research lead us to suggest that the presence of either of the two primary elements should be regarded as sufficient to classify a loan as impaired. As pointed out in Barisitz (2013), this notion also corresponds to the NPL definition contained in the draft of the EU Capital Requirements Regulation, which will probably enter into force in 2014.

The slightly refocused and simplified NPL definition proposed here leaves findings for six CESEE countries essentially unchanged from those of Barisitz (2011), yet somewhat revises and simplifies the results for Hungary, Romania, Serbia and Ukraine. In all of these four cases, NPL bands are no longer needed to make NPL data as comparable as possible.

Apart from the two primary elements mentioned above, the following secondary elements may cause an upward or downward bias in individual countries' NPL definitions or data (Barisitz, 2013): (a) the way restructured loans are classified – as NPLs or not, (b) the question whether collateral or guarantees are considered in the classification of a loan or not, (c) the question whether the full outstanding value of a loan is recorded as nonperforming or not, and (d) the question whether a bank is required to downgrade all loans to a given debtor if any of them are classified as impaired (NPL customer view) or not (NPL product view).

Looking at both primary and secondary elements and relating to widespread approaches and benchmarks, the majority of NPL definitions and ratios of the CESEE countries analyzed would seem comparable. Only in the case of Bulgaria do we find a slight upward bias, and in the case of Croatia a slight downward bias, in terms of international comparability. To be internationally comparable, therefore, Bulgaria's and Croatia's indicators would need to be corrected slightly downward and slightly upward, respectively. The reader should note that these findings are of a qualitative nature, as a quantification is currently not feasible due to lack of adequate specific data.

Based on these specifications, a look at the development of comparative NPL data in the ten analyzed countries in the period from end-2010 to end-2012 mainly corroborates the findings for the period from end-2005 to end-2010 presented in Barisitz (2011). Overall, NPL levels in these countries have not decreased. At end-2012, seven out of ten countries recorded NPL levels of around or above 10% of total loans (sometimes far above this level). Serbia and Ukraine remain saddled with very high NPL risks, followed by Bulgaria, Croatia, Hungary, Romania and Russia with medium-level to elevated risks. Finally, the Czech Republic, Poland and Slovakia continue to record relatively modest risks.

While the present CESEE data render valuable insights into comparative NPL dimensions and dynamics, for analytical purposes it would be helpful to have more precise information for most countries on additional elements like the currency composition of NPLs or the share of restructured or replacement loans in total NPLs.

Given the challenges of establishing comparability of NPL definitions and data and given the importance of this quest in the face of the lingering economic crisis and high NPLs in various European countries, the adoption of a common EU NPL definition and the harmonization of secondary elements of national NPL definitions could help enhance transparency and make economic policy more effective. European convergence in the regulation of prudential provisions and asset classification would also work to this effect. Moreover, there is hope that many non-EU countries would begin to apply harmonized definitions if these existed.

Future research could try to shed more light on the denominator (total loans) of NPL ratios to raise the indicator's accuracy in international comparison. The various exit avenues for NPLs could also be studied in more detail, as could the range of national definitions of restructuring and refinancing loans and the panoply of provisioning regimes. Another task would be to attempt to quantify the biases and divergences of NPL definitions and data from the benchmarks this study identified.

Together, the author's previous two NPL studies (Barisitz, 2011; Barisitz, 2013) as well as the present one aim to derive NPL ratios that are roughly internationally comparable in a transparent and replicable manner. We thereby hope to make a background contribution to improving the understanding of a crisis-relevant, complex and sometimes cloudy matter of banking supervision and economic policy.

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In addition to the above sources, various national regulatory announcements, guidelines, annual reports, reviews and other publications as well as information provided by national experts have been taken into account.