Nonperforming Loans in CESEE – What Do They Comprise?

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This study attempts to shed comparative light on nonperforming loans (NPLs) by analyzing the loan classification systems in ten Central, Eastern and Southeastern European (CESEE) countries, namely Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Slovakia and Ukraine. Comparing NPL data across countries is often found to be difficult. Three approaches are used to identify a loan as nonperforming. First, the most widely known NPL definition, which is based on the IMF Financial Soundness Indicators (FSIs) Compilation Guide, is simple and clear: "principal or interest 90 days or more overdue." The IMF strives to present cross-country comparative time series of NPL and other prudential indicators on the FSI website. With respect to nonperforming loans, the FSI website as yet lacks comprehensive data coverage, and comparability is in fact restrained. Therefore, we propose to take stock of national definitions, for which more extensive time series of data are available. Second, national supervisors' NPL definitions mostly relate to the commonly used credit quality categories proposed by the Institute of International Finance (IIF), whose weakest three categories ("substandard – doubtful – loss") are typically identified as nonperforming loans. Third, NPL definitions of CESEE and other countries regularly refer to the existence of a "well-defined weakness" of the loan or the borrower in addition to some other factors. Based on these criteria, with priority given to the 90days+ rule, we arrive at an NPL threshold, which includes in some cases NPL bands. We hope this threshold is applicable in such a way that it enables meaningful cross-country comparisons. Finally, the study takes a rough comparative snapshot of the development of NPLs (based on the derived threshold) in the CESEE countries from 2005 to 2010.

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1 Introduction

Every so often in surveys or studies including data on nonperforming loans (NPLs) for different countries, we see remarks or references pointing out that the respective NPL information is incomparable, in particular as regards NPL levels.[2] In this study, in an attempt to overcome this obstacle at least up to a point, we strive to perform an analytical stocktaking exercise with respect to NPLs in Central, Eastern and Southeastern Europe (CESEE). Another motive is to look at credit developments before, during and after the crisis from a comparative NPL viewpoint. Given their swift and steep increase, nonperforming loans had turned into one of the focal points of attention during the crisis and have since remained relatively high or have only been declining at a slow pace. Coming to terms with the non-

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[2] *Some recent examples of such findings: ECB (2010, p. 91); Nkusu (2011, p. 9); Pann, Seliger, Übeleis (2010, p. 68); Schreiner et al. (2010, p. 16). More generally, forbearance appears to be a problem not only in the CESEE area, but also in the United Kingdom (Bank of England, 2011, pp. 24–26) and probably in other Western countries as well, and therefore would require more research.*

performing loans problem appears essential, given that NPLs may compromise financial stability and macroeconomic recovery simultaneously.[3]

Section 2 presents the international NPL definition recommended by the IMF FSI Compilation Guide plus FSI data, and national NPL definitions plus national data as can be found in ten of the largest CESEE economies. Given that national NPL definitions, as will be shown, are not substantially at variance with international guidelines and given the still inadequate range and depth of data based on the international definition, it is decided here to concentrate further on available national NPL data series, which are essentially based on national credit quality classification schemes. This, however, should not be taken as lack of support for any attempts (already at the national level) at further harmonizing standards for the reporting of asset quality (and in particular NPLs) on the basis of binding international norms and definitions. On the contrary: Doubtlessly, there are caveats involved in trying to derive comparable NPL indicators from data reflecting differing national loan classification schemes, as is also acknowledged in this study. Where it appears necessary in the interest of comparability, we suggest adjustments of a given NPL definition to be able to carry out the comparison exercise in a more effective way.

In section 3, we undertake such a comparison exercise, providing a brief descriptive overview and discussion of the evolution of NPLs and some subcategories in Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Slovakia and Ukraine from 2005 to 2010. Section 4, finally, presents a summary of the study and an assessment of its results.

2 Definitions, Data Availability and Comparability of Nonperforming Loans

2.1 International Definition of NPLs – Simple and Clear, but Available Data Not Yet Comprehensive

The most widely known international definition of nonperforming loans was developed by the IMF in the framework of the Financial Soundness Indicators (FSIs) endorsed by the IMF Executive Board. The FSI Compilation Guide of March 2006 (IMF, 2006, p. 46) "recommends that loans (and other assets) should be classified as NPL when (1) payments of principal and interest are past due by three months (90 days) or more, or (2) interest payments equal to three months (90 days) interest or more have been capitalized (re-invested into the principal amount), refinanced, or rolled over (i.e. payment has been delayed by arrangement). The 90-day criterion is the time period that is most widely used by countries to determine whether a loan is nonperforming. (…) Indeed, the Guide regards the guideline of 90 days past due as an outer bound and does not intend to discourage stricter approaches."

Apparently in an attempt to further facilitate cross-country comparability of measurement, "the series 'nonperforming loans' are redefined" in the updated November 2007 version of the Compilation Guide (IMF, 2007, p. 6) "on the basis of a uniform criterion of 'principal or interest payments 90 days overdue'. (…)

[3] *Most recently, the revaluation of the Swiss franc has aggravated the NPL problem or threatens to aggravate the problem via foreign exchange-denominated credits that, for unhedged borrowers, became more difficult to repay. The governments of countries particularly affected (e.g. Hungary and Croatia) have resorted to measures to counter the danger.*

Table 1

FSI Website Coverage of NPLs in CESEE (International Definition)[1]

Country	Availability of NPL Data[2]
Bulgaria	Yearly from 2005 to 2010; end-June 2011
Croatia	Yearly from 2005 to 2010; end-March 2011
Czech Republic	Yearly from 2005 to 2010; quarterly from end-March 2007 to end-June 2011 (some inconsistencies between quarterly and annual data)
Hungary	Yearly from 2005 to 2010; quarterly from end-March 2009 to end-March 2011
Kazakhstan	Semiannually in 2008, then yearly until end-2010; quarterly from end-March to end-June 2011 (minor inconsistency)
Poland	Yearly from 2005 to 2010; quarterly from end-2008 to end-September 2009 (minor inconsistency); end-June 2011
Romania	Yearly from 2005 to 2010; quarterly from end-March to end-September 2010; end-June 2011
Russia	Yearly from 2005 to 2010; semiannually from end-2008 to end-2009; quarterly from end-March to end-September 2010; end-May 2011
Serbia	Yearly from 2008 to 2010; end-June 2011
Slovakia	Yearly from 2005 to 2010; end-March 2011
Slovenia	Yearly from 2005 to 2009; end-November 2010 (some inconsistencies between FSI database and GFSR FSI annual data)
Ukraine	Yearly from 2005 to 2010; quarterly from end-2005 to end-June 2011 (some inconsistencies between quarterly and annual data)

Source: IMF FSI website (http://fsi.imf.org).

[1] *Includes the FSI database (the country data tables comprise annual and, if available, quarterly data) and Global Financial Stability Report (GFSR) FSI tables (http://fsi.imf.org/fsitables.aspx, comprise annual data). The data are, however, not totally consistent with each other (see also table A1 in the annex of this study).*

[2] *As at mid-September 2011.*

This implies that the amended definition would not include, as the previous one in the Guide, stricter approaches."

A major advantage of this definition is that it provides a simple, clear and uniform yardstick to which national practices may further converge in the future. Also, the cross-country comparative presentation of NPL time series (and of time series of a number of other prudential data) on the FSI website (http://fsi.imf.org) brings more international transparency into financial soundness indicators that are pivotal to assessing economic developments in a financially not so stable world.

However, the NPL data presented on the FSI website are not yet comprehensive, and time series are limited to five years, and in the case of Serbia, to three years. As is evident from table 1, only annual data are available, save the most recent data entry for 2011, for a number of countries (Bulgaria, Croatia, Serbia, Slovakia and Slovenia). Even where quarterly data are found, they cover less than a year (Poland, Romania and Russia) or up to four years (Czech Republic and Hungary). Moreover, the FSI website consists of two NPL data subsources, the FSI database (http://fsi.imf.org) with country data tables and the GFSR FSI tables (http://fsi.imf.org/fsitables.aspx), which are mostly – but not entirely – consistent with each other. Nonnegligible discrepancies in annual NPL data between the two subsources show up for the Czech Republic, Slovenia and Ukraine (see table A1 in the annex). Subcategories of NPLs (e.g. doubtful or loss, NPLs relating to retail or wholesale credits) are not available. Finally, despite the fact that the reporting countries are encouraged to follow the guidelines laid out in the FSI Compilation Guide,

compilation practices may vary across countries, which limits cross-country comparability (Babihuga, 2007, p. 6; IMF, 2011b). Here, the FSI database might be made more user-friendly by identifying more clearly data adjustments made to national sources.

It therefore seems more promising to give a detailed look at national definitions of NPLs. This is not to suggest that the scrutiny of existing national NPL data is the optimal path. It would rather appear to be a second-best solution as long as no consensus on the introduction of binding international (or at least regional) norms and definitions for the reporting – also at the national level– of asset quality (and in particular nonperforming loans) has been reached. Any initiatives in this direction (e.g. the Vienna Initiative Working Group on NPLs) should be welcomed. In this vein, this study could make a contribution to indicating aspects that may be in need of international harmonization. If and when international reporting standards will be established and applied, there will still be the need to address the data previously reported.

2.2 National Classifications and Definitions: Comparability in Need, but Sufficient Data to Work with

In practically all IMF member countries, the financial supervisory agency has the legal authority to issue prudential regulations regarding the classification of loans. Such lower-level legislation is liable to change relatively frequently, thus making the full consistency of time series uncertain. While not devoid of statistical breaks and other possible problems, time series based on national definitions are evidently longer and much more extensive than what is available on the FSI website. As can be seen from table 2, most national definitions relate to the commonly used loan quality classification (standard – watch – substandard – doubtful – loss), whose weakest three categories (substandard – doubtful – loss, in the following called: "s-d-l")[4] are typically identified as a nonperforming loan (see e.g. IMF, 2005, p. 396). But the concept of NPLs goes much beyond adding up subcategories published by supervisory authorities.

NPL definitions based on national credit quality classifications of CESEE countries[5] largely appear to be comparable: First, they bear important similarities to the above-mentioned international definition: As can be gleaned from table 3 as well as from its immediate source, table A2 in the annex, the majority of the NPL definitions of the countries dealt with in this study are based on the 90-day-past-due (in the following called: "90days+") criterion and no national definition is contradictory to this yardstick. Second, another common characteristic is reference to the existence of "well-defined weaknesses" or a similar formulation as a trait of a nonperforming loan or borrower. The NPL definitions of practically all countries analyzed here include this element in one way or another. A kind of model classification was drawn up by the Institute for International Finance (IIF, see table A2). Some other criteria also play a role (e.g. the downgrade

[4] *The number of categories of loan quality classification is not necessarily always five and not in all countries do they have the wording "standard-watch-substandard-doubtful-loss," which corresponds to the classification of the Institute of International Finance (IIF, see table A1 in the annex).*

[5] *The sources of national credit quality classifications and ensuing NPL definitions as discussed in further detail below are ordinances or regulations of national supervisors (in most cases, central banks) and are indicated for each analyzed country in table A2 in the annex under the column "NPL definition; source."*

Table 2

National Credit Quality Classifications Underlying NPL Definitions[1]

Country	Credit Quality Classification	Data Availability (as at mid-September 2011)		
		NPL data	Provisions/reserves data	Specific features/ disaggregated data
Bulgaria	Standard risk exposure – watch – nonperforming – loss	Up to end-2010	Up to end-2010	–
Croatia	Risk category A (fully recoverable claims) – risk categories B (partly recoverable claims B1 – B2 – B3) – risk category C (irrecoverable claims)	Up to end-2010	Up to end-2010	–
Czech Republic	Standard receivables – watch – substandard – doubtful – loss	Up to end-2010	Up to end-2010	Households, nonfinancial corporations
Hungary	Problem-free category – special watch – substandard – doubtful – bad	Up to end-June 2011	Up to end-June 2011	Households, nonfinancial corporations
Poland	Credit exposure normal – under observation – below standard – doubtful – loss	Up to end-June 2011	Up to end-2009	Households, nonfinancial corporations; local and foreign currency NPLs
Romania	Standard category – watch – substandard – doubtful – loss	Up to end-June 2011	Up to end-June 2011	–
Russia	Standard quality – substandard – doubtful – problem – bad	Yearly until end-2008, then quarterly to end-June 2011	Yearly until end-2008, then quarterly to end-June 2011	Overdue claims on nonfinancial corporations, individuals in local and foreign currency
Serbia	Category A – B – C – D – E	Yearly until end-2008, then quarterly to end-2010	Yearly until end-2006, then quarterly to mid-2008	–
Slovakia	Standard loan category (standard provision criterion – special mention) – default loan category (substandard provision criterion – doubtful – loss)	Up to end-June 2011	Up to end-June 2011	Households, nonfinancial corporations
Ukraine	Standard category – watch/under control – substandard – doubtful – bad/nonperforming	Yearly until end-2006, then quarterly to end-September 2010	Yearly until end-2006, then quarterly to mid-2009	–

Source: National statistics, table A2 in the annex of this study, data compiled by the OeNB from national central banks and/or national supervisory authorities.

[1] *As from January 1, 2000; quarterly if not stated otherwise.*

requirement and the treatment of restructured loans, as explained in the next subsection).

2.3 Deriving NPL Series as Comparable as Possible

Given the above-mentioned reasons, we decide to opt for NPL data series based on national definitions/loan quality classifications in order to arrive at NPL time series that are as comparable as possible. Thus, we aim at carefully gauging regulatory stipulations and their details. As shown in subsection 2.2 (table 2) and table A2 in the annex, all analyzed countries' regulations define categories of credit quality classification, and partly, provisioning. In most cases, there are five categories, in one case (Bulgaria), there are four.[6]

In line with the international NPL definition, the most important criterion (threshold) we apply for identifying nonperforming loans is the 90days+ rule (see

[6] *Austria's Financial Market Authority also identifies four categories (see table A2, memorandum item).*

also Balás, 2009, p.1). In several cases (Czech Republic, Poland and Slovakia), the 90days+ rule is in line with the s-d-l rule. Where the two rules clash (Croatia, Hungary and Serbia), we suggest that 90days+ overrides s-d-l (at least for deriving a narrowly defined NPL volume), depending on the intermittent variability of content that can fill up categories of loan classification from country to country. Where reference to 90days+ is not explicitly made (Romania, Russia and Ukraine), the s-d-l criterion is retained, supported by reference to the "well-defined weakness" criterion, where applicable.

Two other issues worth discussing are the downgrade requirement and the treatment of restructured loans. The former relates to whether a bank is required to downgrade all loans to a common debtor if any of these loans is classified as impaired – or not. The IMF FSI Compilation Guide gives no recommendation in favor or against a downgrade requirement, which, however, exists in all analyzed countries, except in Croatia and Hungary. In Croatia, the amount of loss for each claim that is "individually significant" is calculated. In Hungary, treatment of nondowngraded loans to the same debtor must be justified by corresponding risks (see also below and table A2).[7]

The treatment of restructured loans/replacement loans focuses on the issue whether these assets should be classified in the same quality category as prior to restructuring – or not; and if not, which treatment should be afforded. The IMF FSI Compilation Guide does not express a clear preference here, either (see again table A2). While treatment of restructured loans is not uniform across CESEE countries, one can observe a tendency that after a transition period of a year, six months, three months or less, a restructured loan would be classified like a nonrestructured loan. So it appears to be predominantly an issue of the length of the transition phase. Whether this variation is substantial enough to appreciably impact possible NPL thresholds over time is unclear.

Table 3

NPL Thresholds in CESEE

NPL Indicator	Existence in National NPL Definition/Loan Classification (+), Nonexistence (–)												
	BG	HR	CZ	HU	PL	RO	RU	RS	SK	UA	Memorandum items:		
											Austria	U.S.A.	IIF
90days+	+	+	+	+	+	–	–	+	+	–	–	–	+
Substandard – doubtful – loss	–	–	+	–	+	+	+	–	+	+	–	+	+
Well-defined weaknesses or similar	+	+	+	+	+	+	+	+	+	+	+	+	+
Reduced value of collateral	–	+	–	+	–	–	–	–	–	+	–	+	+
Memorandum item:													
Minimum level of provisions (%)[1]	50	1.2	20	11–31	20	20–50	21	20–40	20	20–50	–	–	–

Source: Table A2 in the annex of this study, national government or central bank credit quality classification regulations.

[1] *In % of contracted loan that is identified as an NPL according to national classifications.*

Note: Based on national NPL definitions and/or credit quality classification regulations.

[7] *Austria does not have such a requirement to downgrade, either.*

Bulgaria (Българска народна банка – Bulgarian National Bank), as already mentioned, identifies only four categories of classification: standard, watch, nonperforming and loss. Given that only the last two categories comprise 90days+ as well as "significant weaknesses," these last two categories are regarded as covering NPLs.

Croatia (Hrvatska narodna banka) defines five categories, but NPLs are seen as encompassing four of these five (categories B1, B2, B3 and C) because the 90days+ threshold already includes category B1 and because evidence of "partial impairment" is identified for all B categories. Moreover, given that in the case of Croatia, specific provisions are deducted from the full value of NPLs and that the downgrade requirement is not valid without qualification, the border between A and B1 may be suggested to constitute a lower bound for NPLs in this country.

The *Czech Republic's* (Česká národní banka), *Poland's* and *Slovakia's* (Národná banka Slovenska) NPL definitions essentially fit the standard s-d-l definition or the IIF model (see table 4).

While loans in *Hungary* are also assigned to five quality categories, in this case, due to the 90days+ criterion, only the two weakest (doubtful and bad) can be labeled as nonperforming, although already in the substandard category "risks are elevated" (which presumably corresponds to a "well-defined weakness") and possible losses are "not covered by collateral." Therefore, while the 90days+ criterion provides a clear threshold, one might argue in favor of substandard–doubtful–bad as a second NPL indicator or rather, an upper bound. As noted in table 4, this could produce an NPL "band," besides the 90days+ ratio, for Hungary. Furthermore, the lack of a (systematic) downgrade requirement in Hungary would even suggest attaching more weight to the upper than to the lower bound.

Romania's (Banca Națională a României) five credit quality categories literally follow the standard–watch–substandard–doubtful–loss scheme, and criteria of debt service history as well as of the financial performance of the debtor are applied. However, the 90days+ rule is not explicitly referred to in connection with the above categorization. A Romanian s-d-l definition of NPLs therefore appears to provide some leeway. Taking into account that doubtful and loss categories in Romania tend to comprise loans that are more than three months overdue and that the substandard category likely refers to loans that are less than this period overdue but that may be saddled with a weak financial standing of the debtor, it would seem advisable to propose an NPL band also for Romania – namely the breadth of the substandard category.

Russia's (the Central Bank of the Russian Federation) credit quality categories are comparable to those of Romania, but indications appear somewhat more detailed. In Russia's case, too, there is no explicit reference to 90days+; however, the Bank of Russia uses a matrix combining varying assessments of two criteria: the quality of debt service (depending on the length of payment overdue) and the economic/financial situation of the debtor. Assuming that both "low" and "medium" quality of debt service imply at least 90 days overdue, a large part of "doubtful" loans has to be considered NPLs under the 90days+ rule. This would point to assigning the three weakest categories (doubtful, problem and bad) to the sphere of NPLs.

Applying the 90days+ rule, only the two weakest of *Serbia's* (Narodna banka Srbije – NBS) loan quality categories (D and E) qualify as nonperforming.

Table 4

Elements of Potentially Comparable NPL Definitions

Country	Credit Quality Classification, Including NPLs (highlighted in blue)[1]	State of Loan Servicing	Well-Defined Weakness of Borrower/Loan, Other Salient Features
Bulgaria	Standard risk exposure – watch – **nonperforming – loss**	More than 90 days past due	Significant weakness of exposure/debtor or obligations become uncollectible
Croatia	Risk category A (fully recoverable claims) – **risk categories B (partly recoverable claims B1 – B2 – B3) – risk category C (irrecoverable claims)**	Overdue at least 90 days	Placements for which evidence of (partial) impairment is identified and value of collateral is reduced/eliminated; NPLs reported net of specific provisions; no downgrade requirement
Czech Republic	Standard receivables – watch – **substandard – doubtful – loss**	More than 90 days past due	Given financial and economic situation of obligor, full repayment of receivable is uncertain or impossible
Hungary	Problem-free category – special watch – ***substandard* – doubtful – bad**	Overdue (less than) at least 90 days	Risks are elevated to very high, potential/ expected loss is not covered by collateral; no downgrade requirement
Poland	Credit exposure normal – under observation – **below standard – doubtful – loss**	Overdue in excess of three months	Economic and financial situation of debtor may jeopardize or permanently prevent (timely) repayment
Romania	Standard category – watch – ***substandard* – doubtful – loss**	–	Simultaneous use of criteria of debt service history and of financial performance of debtor
Russia	Standard quality – substandard – **doubtful – problem – bad**	–	Comprehensive assessment of two criteria: quality of debt service and economic/financial situation of debtor
Serbia	Category A – B – *C* – **D – E**	Payment obligations met with delay of (61/) 91 days or more	Financial situation of borrower is not satisfactory or borrower operates with losses or is insolvent/ in bankruptcy proceedings
Slovakia	Standard loan category (standard provision criterion – special mention) – **default loan category (substandard provision criterion – doubtful – loss)**	More than 90 days past due	Obligor is unlikely to pay his/her obligations to bank, e.g. if he/she enters bankruptcy proceedings
Ukraine	Standard category – watch/under control – ***substandard (timely serviced)* – substandard (not timely serviced) – doubtful – bad/nonperforming**	There is probability of late payment or nonpayment of debt	Credit exposure is substantial or worse; criteria taken into account: financial condition of borrower, state of loan servicing, and level of loan collateral
Memorandum items:			
Austria	Standard risk category – watch/special mention – **nonperforming – loss**	–	Repayment of loan is partly or fully jeopardized or credit loss has become certainty; NPLs reported after deduction of value adjustments; no downgrade requirement
U.S.A.	Standard/pass credit grading category – special mention – **substandard – doubtful – loss**	–	Loans show well-defined weaknesses or are considered uncollectible; worth of collateral pledged in doubt
IIF	Standard category – watch/special mention – **substandard – doubtful – loss (write-off)**	More than 90 days overdue	Well-defined weaknesses or asset impaired or virtually uncollectible; diminished collateral

Source: Table A2 in the annex of this study, national government or central bank credit quality classification regulations.

[1] *Suggested comparable NPL definitions comprise credit quality categories which are set in blue (in most cases based on the 90days+ rule). In some cases, there may be arguments for including further categories in the interest of cross-country comparability; these latter arguments are less clear cut (since they do not correspond to the 90days+ rule) but may appear justified by drawing from wider information; therefore, these additional categories are in blue and italics.*

However, according to the NBS, NPLs comprise all loans that are overdue more than 90 days as well as loans overdue less than 90 days if the bank assesses that the debtor's ability to repay has deteriorated. Given that category C refers to "receivables from a borrower whose financial position is not satisfactory" (see table A2), we probably have a situation comparable to Hungary and Romania. This, and the NBS's NPL definition, might suggest a second alternative which would consist in adding category C loans to NPLs (see table 4). Thus, for Serbia, too, we could arrive at an NPL band.

Ukraine (the National Bank of Ukraine) makes no explicit reference to the 90days+ rule, but in other essential respects its credit quality categories appear to be in line with the IIF's loan classification model. Until end-2007, according to Ukraine's central bank, nonperforming loans included the categories under control, substandard, doubtful and bad; then two categories were removed from the central bank's NPL definition: from 2008, NPLs only comprised doubtful and bad loans. For the above-mentioned reason (large degree of correspondence of Ukrainian loan classification with the IIF model, apart from the absence of the 90days+ rule) and in order to avoid a statistical break, we suggest opting for a standard s-d-l definition of NPLs in Ukraine's case. Taking into account that substandard loans, according to Ukrainian statistics, also include part of those loans that are serviced in a timely manner, and which therefore in other countries might be classified as "watch" or "special mention" loans, it appears advisable to treat the sum of bad, doubtful and not timely-serviced substandard loans as (narrowly defined) NPLs and to add timely-serviced substandard loans as a band to reach an upper bound for Ukrainian NPLs.[8] Such a band between broadly and narrowly defined nonperforming loans would also correspond to the IMF's practice of assessing Ukrainian NPLs (IMF, 2010, p. 39).

3 Rough Outline of Evolution of Possibly Comparable NPLs in Ten CESEE Countries from 2005 to 2010

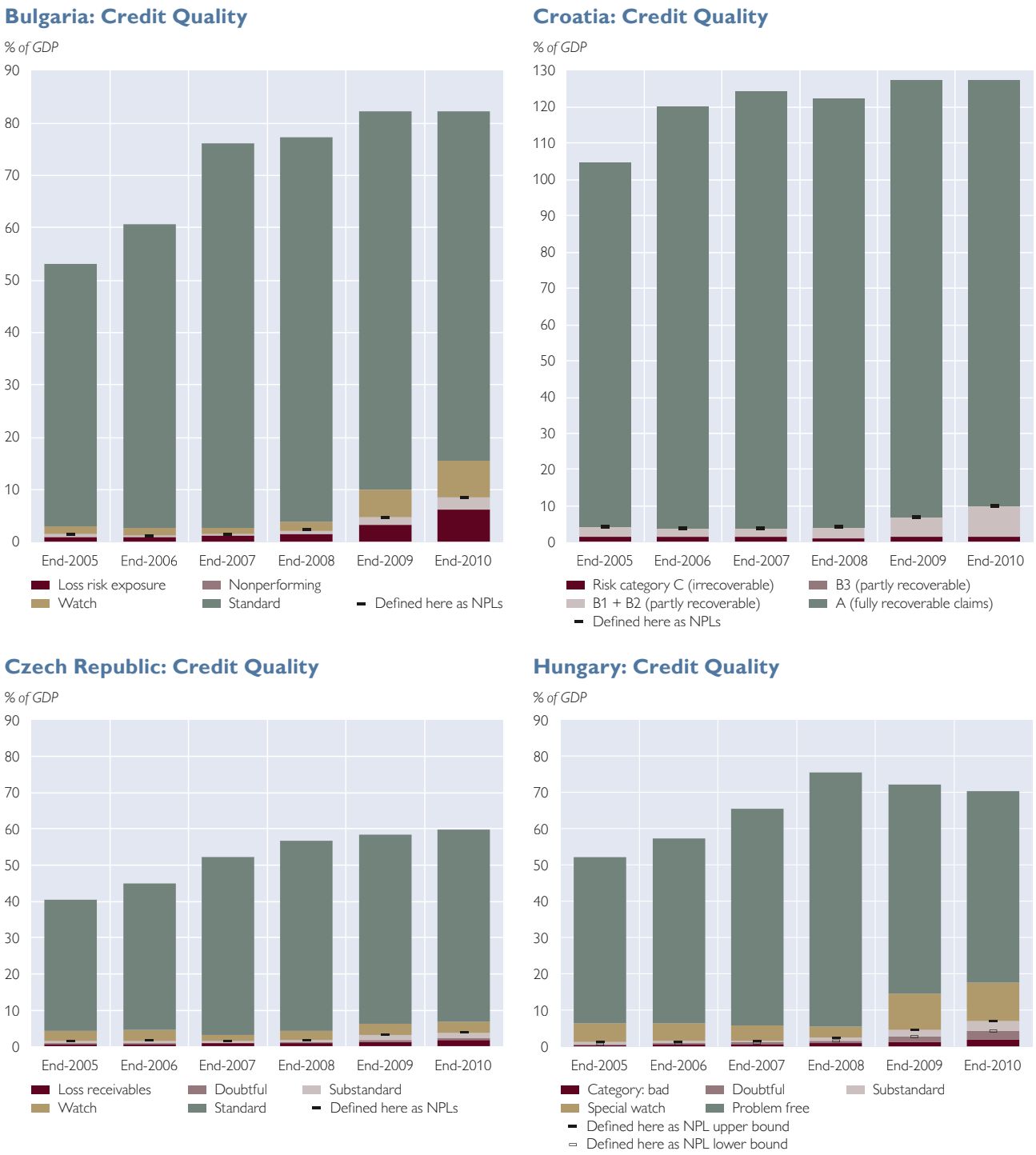
In the following, we take a quick comparative look at the development of NPLs as a share of total loans and as a ratio to GDP in the ten analyzed countries from end-2005 to end-2010. As shown in chart 1, we thus apply the above-explained and discussed national credit quality classifications and (suggested) comparable NPL definitions, including – where deemed necessary – NPL bands instead of lines.

In this sense, the ten countries can be distinguished according to two dimensions, related to two periods: the relative size of their NPLs (over total loans and GDP, respectively, in the credit boom phase from 2005 to 2007 and in the financial crisis phase from 2008 to 2010), and the dynamics of their NPLs. A number of countries feature relatively low NPLs, which, albeit higher than before the crisis, have remained in manageable proportions up to end-2010: Bulgaria, Croatia, the Czech Republic, Hungary, Poland and Slovakia. Romania and Russia clearly have to cope with higher NPLs, while Serbia and Ukraine are saddled with the highest levels, which certainly gives rise to concern. A small majority of the countries have witnessed a leveling-off (or a strong deceleration of growth) of their NPLs in 2010: the Czech Republic, Poland, Russia, Serbia, Slovakia and Ukraine. In contrast, nonperforming loans have continued to swell in Croatia, Hungary and Romania, and particularly in Bulgaria.

Pulling the two dimensions (level and dynamics of NPLs) together produces the following picture (see table 5): The "Central European trio" (the Czech Republic, Poland and Slovakia) seems to be best positioned (low NPLs leveling off in 2010). Intermediary risk levels are borne by Croatia and Hungary (low but still substantially expanding NPLs), and by Russia (medium level but

[8] *Of course, even timely-serviced loans could be categorized as nonperforming if other serious weaknesses of the borrower or the collateral were perceptible.*

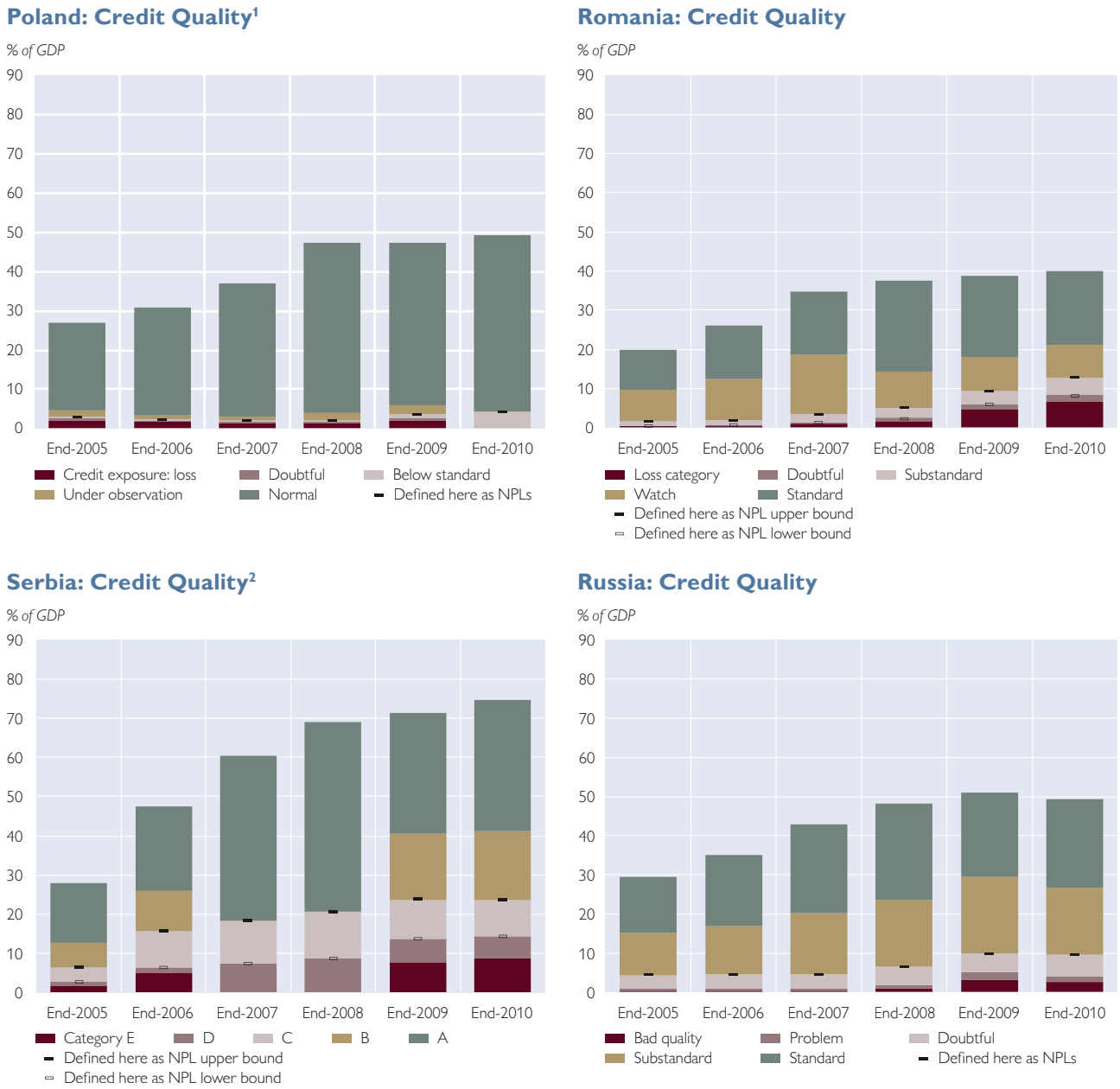
Chart 1



Source: National central banks, Eurostat, Hungarian Financial Supervisory Authority.

stagnant NPLs following crisis-triggered uptick). Bulgaria, Romania, Serbia and Ukraine appear to be saddled with rather high if heterogeneous risks (of course it also depends on the weights attached to the types of risk): While Bulgaria still features a comparatively modest level of NPLs, these have not stopped expanding

Chart 1 continued



Source: National central banks, Eurostat, national statistical office (Russia).

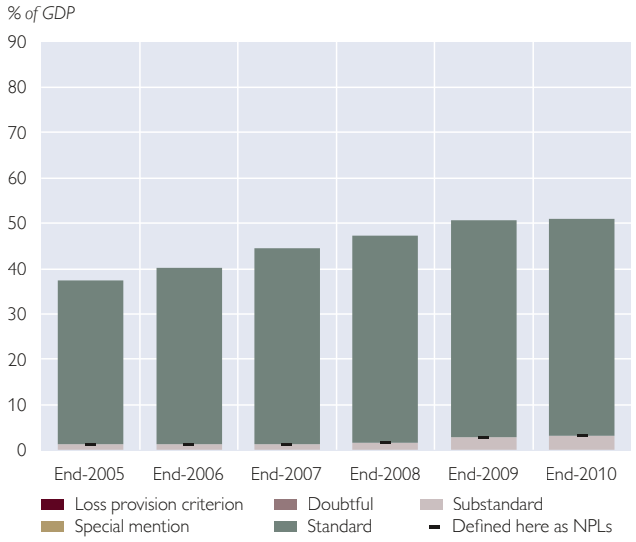
[1] For end-2010, "below standard" loans represent all NPLs (impaired loans) and "normal" loans also include "under observation" loans.

[2] Asset classification rules were substantially changed in Q4 2006 and in Q3 2008. For end-2007 and end-2008, category A loans include those of category B and loans of category D 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.

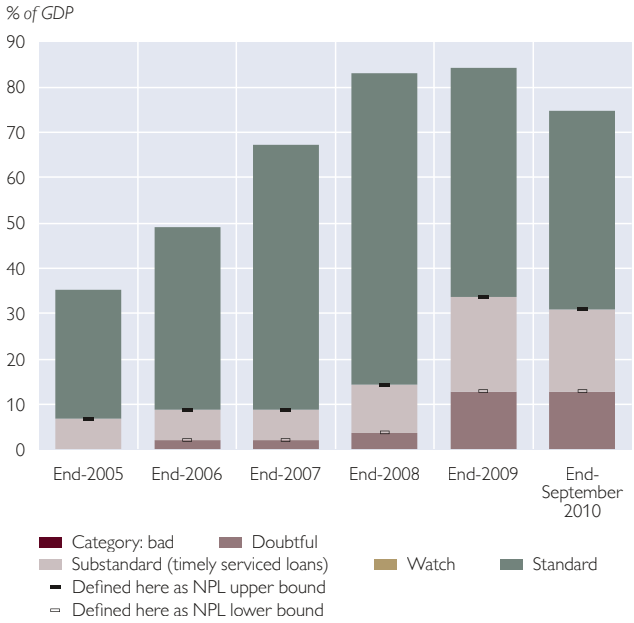
very swiftly through end-2010. Romania's nonperforming loans are at a considerably higher level, but their growth, while still important, has somewhat slowed down. Serbia and Ukraine, finally, are burdened with the highest levels of nonperforming loans, which have been receding in 2010, though. For the ten analyzed countries one could therefore conclude that NPL problems – where they exist – relate either to high levels of bad credits or to persistently high rates of increase of bad credits; fortunately, both instances have not been observed simultaneously.

Chart 1 continued

Slovakia: Credit Quality[3]



Ukraine: Credit Quality[4]



Source: National central banks, Eurostat, national statistical office (Ukraine).

[3] Standard loans include special mention loans, substandard loans represent all default category loans/NPLs (i.e. including loss and doubtful).

[4] Doubtful loans as depicted in this chart include bad loans and substandard loans not timely serviced. Substandard loans as shown include only timely-serviced substandard loans. For end-2005, substandard loans represent all NPLs.

Table 5

Comparative NPL Qualitative Risk Snapshot[1]

		Relative Size of NPLs from End-2008 to End-2010		
		Low	Medium[2]	High[3]
NPL development in 2010	Growth leveling off	CZ, PL, SK	RU	RS, UA
	Continuing expansion[4]	HR, HU	RO	
	Continuing strong expansion[5]	BG		

Source: National statistics, table A2 in the annex of this study, data compiled by the OeNB from NCBs and/or national supervisory authorities.

[1] Color shading indicates vulnerability.

[2] 2008–2010: Average (in case of band: medium value) above 12% of total loans or 7% of GDP.

[3] 2008–2010: Average (in case of band: medium value) above 20% of total loans or 12% of GDP.

[4] 2010: Average year-on-year growth of NPL share of total loans and of NPL ratio to GDP above 25% (in case of band: growth of medium value).

[5] 2010: Average year-on-year growth of NPL share of total loans and of NPL ratio to GDP above 80% (in case of band: growth of medium value).

4 Summary and Assessment

Since data on nonperforming loans are often found to be difficult to compare from country to country, this study has attempted to take stock of and look in more detail at NPL definitions in ten relatively large CESEE countries (Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Slovakia and Ukraine). The most widely-known international definition of nonperforming loans is given in the IMF Financial Soundness Indicators Compilation Guide: "principal or interest 90 days or more overdue" (90days+). The advantage of this definition is that it provides a simple, clear and uniform yardstick. Moreover, the

FSI website makes an important contribution in presenting cross-country comparative time series of NPL and other prudential indicators. However, the NPL data presented on the FSI website are not yet comprehensive and comparability is de facto limited.

It therefore seemed more promising to take a detailed look at national definitions of NPLs. This is not to suggest that the scrutiny of existing national NPL data is the optimal path. It would rather appear to be a second-best solution as long as no consensus on the introduction of binding international (or at least regional) norms and definitions with respect to standards for the reporting (already at the national level) of asset quality (and in particular nonperforming loans) has been reached. All currently running initiatives in this direction (e.g. the Vienna Initiative Working Group on NPLs) should be welcomed. Accordingly, this study could make a contribution to indicating aspects that may be in need of international harmonization. Moreover, if and when a consensus on the introduction of binding international norms will have been reached and implemented, there will still be the need to follow such a second-best approach for data reported up to this point in time.

National definitions (as a rule contained in regulations promulgated by the competent national supervisory agencies) relate to the commonly used loan quality classification (standard – watch – substandard – doubtful – loss), whose weakest three categories (substandard – doubtful – loss, or s-d-l) are typically identified as a nonperforming loan. National classification schemes are, however, not always made up of five elements, nor do they necessarily have precisely the same wording as above. In the ten analyzed CESEE countries, the national definitions are not substantially at variance with the international guidelines. Moreover, an important characteristic of NPLs in all these countries is the existence of a "well-defined weakness" of the loan or the borrower. On the basis of the national definitions, sufficiently numerous and disaggregated data are available. Therefore, we decided to concentrate on the available national NPL data series.

We derived NPL series with a high degree of comparability by carefully evaluating national loan quality classifications. In line with the international NPL definition and in the interest of comparability, the most important threshold we applied for identifying nonperforming loans in the ten analyzed countries is the 90days+ rule. In several cases (Czech Republic, Poland, Slovakia), the 90days+ rule is consistent with the s-d-l rule. Where the two rules clash (Croatia, Hungary, Serbia), we suggest that 90days+ overrides s-d-l, depending on the intermittent variability of content that can fill up categories of loan classification from country to country. Given that "serious weaknesses" in the cases of Hungary and Serbia already show up in categories featuring less-than-90-day overdue loans, we propose to use an NPL "band" covering the "substandard" category (Hungary) or the "C" category (Serbia).

In Croatia and Hungary – in contrast to the other CESEE countries – a bank is not required to downgrade all loans extended to a common debtor if any of these loans is classified as impaired, although risk-oriented treatment is prescribed in both cases. Where reference to 90days+ is not explicitly made (Romania, Russia, Ukraine), the s-d-l criterion is retained, supported by reference to the "well-defined weakness" criterion. In the cases of Romania and Ukraine, however, there are indications that loans that are less than 90 days overdue or that are serviced

timely may be combined with a weak financial performance of the debtor, which would also merit an NPL band comprising the "substandard" category (in both cases).

Applying the above-derived comparable NPL definitions, we take a quick look at the development of nonperforming loans as a share of total loans and as a ratio of GDP in the ten CESEE countries from end-2005 to end-2010 (national data compiled by the OeNB from NCBs/national supervisory authorities). The Czech Republic, Poland and Slovakia seem to be best positioned (all three feature relatively low NPLs that increased during the crisis but leveled off in 2010). Intermediary risks are borne by Croatia and Hungary (low, but persistently expanding NPLs), and by Russia (medium level, but stagnant NPLs following crisis-triggered uptick). Bulgaria, Romania, Serbia and Ukraine appear to be saddled with rather high if heterogeneous risks (from high levels of nonperforming loans to swift and continuing increases of NPLs – though fortunately none features both phenomena simultaneously). Further detailed research is planned to focus on the comparative survey and analysis of NPL dynamics in CESEE.

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Annex

Table A1

Overview and Comparison of NPL Data Coverage in FSI Database and GFSR FSI Tables

		GFSR FSI Tables, September 2011	FSI Database (as at September 15, 2011)			Memorandum Item: National Data
		Bank nonperforming loans to total loans	Nonperforming loans to total ***gross*** loans	Nonperforming loans	Total gross loans	NPLs as a share of total domestic loans to nonbanks
		%	%	*NCU million*	*NCU million*	%
Bulgaria	2005	2.2	×	×	×	2.8
	2006	2.2	×	×	×	2.2
	2007	2.1	×	×	×	2.0
	2008	***2.5***	2.4	1,206	50,183	3.0
	2009	6.4	6.4	3,369	52,451	5.7
	2010	11.9	×	×	×	10.5
Croatia	2005	6.2	×	×	×	4.0
	2006	5.2	×	×	×	3.2
	2007	4.8	×	×	×	3.1
	2008	4.9	×	×	×	3.3
	2009	7.8	×	×	×	5.3
	2010	11.2	×	×	×	7.8
Czech Republic	2005	3.9	×	×	×	2.8
	2006	3.7	×	×	×	2.9
	2007	***2.7***	2.4	51,850	2,191,041	2.4
	2008	***3.2***	2.8	69,610	2,481,224	2.8
	2009	***5.2***	4.6	115,374	2,520,218	4.6
	2010	***6.2***	5.4	142,354	2,643,008	5.4
Hungary[1]	2005	2.3	×	×	×	2.5
	2006	2.6	×	×	×	2.5
	2007	2.3	×	×	×	2.4
	2008	3.0	3.0	603,534	20,230,475	3.1
	2009	6.7	6.7	1,265,765	18,873,087	6.5
	2010	9.7	9.7	1,850,748	19,080,102	10.1
Poland	2005	11.0	×	×	×	11.0
	2006	7.4	×	×	×	7.3
	2007	5.2	×	×	×	5.2
	2008	***4.5***	2.8	20,714	733,988	4.5
	2009	8.0	last available value: Q3 2009			7.6
	2010	8.8	×	×	×	8.8
Romania[2]	2005	1.4	×	×	×	2.6
	2006	1.8	×	×	×	2.8
	2007	2.6	2.6	3,740	144,671	4
	2008	***2.8***	2.7	5,260	191,500	6.6
	2009	7.9	7.9	15,257	193,326	15.3
	2010	11.9	last available value: Q3 2010			20.8
Russia	2005	2.6	×	×	×	15.2
	2006	2.4	×	×	×	13.0
	2007	2.5	×	×	×	11.0
	2008	3.8	3.8	768,289	20,206,891	13.5
	2009	9.5	9.5	1,931,797	20,267,236	19.5
	2010	8.2	8.2	1,872,530	22,740,548	19.7

FSI database, annual data frequency.

FSI database, quarterly frequency; the values presented above are for Q4.

Source: IMF FSI website, national data.

[1] *Hungary: Substandard + doubtful + bad loans*

[2] *Romania: Doubtful + loss.*

Note: Words/data highlighted in bold italics denote conceptual and/or data differences between GFSR FSI tables and the FSI database, indicated in the GFSR FSI tables. (Highlighted data differences do not refer to places where one dataset might fill in a void of the other but to where both datasets show figures which differ).

Table A1 continued

Overview and Comparison of NPL Data Coverage in FSI Database and GFSR FSI Tables

		GFSR FSI Tables, September 2011	FSI Database (as at September 15, 2011)			Memorandum Item: National Data
		Bank nonperforming loans to total loans	Nonperforming loans to total ***gross*** loans	Nonperforming loans	Total gross loans	NPLs as a share of total domestic loans to nonbanks
		%	%	*NCU million*	*NCU million*	%
Serbia[3]	2005	×	×	×	×	9.2
	2006	×	×	×	×	13.6
	2007	×	×	×	×	×
	2008	11.3	×	×	×	×
	2009	15.5	×	×	×	19.3
	2010	16.9	×	×	×	19.1
Slovakia	2005	5.0	×	×	×	3.7
	2006	3.2	×	×	×	3.3
	2007	2.5	×	×	×	2.8
	2008	2.5	2.5	1,033	41,654	3.2
	2009	5.3	5.3	1,745	32,973	5.5
	2010	5.8	5.8	2,016	34,534	6.1
Slovenia	2005	2.5	×	×	×	4.8
	2006	2.5	×	×	×	4.2
	2007	1.8	×	×	×	3.1
	2008	***1.8***	4.2	1.706	40.464	2.8
	2009	***2.3***	5.8	2.494	43.069	4.9
	2010	last available value: Nov. 2010	8.2	3.600	43.821	8.0
Ukraine[4]	2005	***5.6***	58.0	90.509	156.078	×
	2006	***4.0***	59.8	160.317	268.283	×
	2007	***3.0***	48.1	233.791	485.866	×
	2008	3.9	3.9	30.626	788.556	3.9
	2009	13.7	13.7	105.521	770.349	13.7
	2010	15.3	15.3	120.386	788.564	15.3

FSI database, annual data frequency.
FSI database, quarterly frequency; the values presented above are for Q4.

Source: IMF FSI website, national data.

[3] *Serbia: D+E.*
[4] *Ukraine: Doubtful + bad.*

Note: Words/data highlighted in bold italics denote conceptual and/or data differences between GFSR FSI tables and the FSI database, indicated in the GFSR FSI tables. (Highlighted data differences do not refer to places where one dataset might fill in a void of the other but to where both datasets show figures which differ).

Table A2

Comparative National NPL Definition and Credit Quality Classification

Country/ Institution	NPL Definition; Source	Categories of Credit Quality Classification[1]; Provisioning				
Bulgaria	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising nonperforming risk exposures as well as loss risk exposures (see columns to the right). In case a loan becomes impaired, the *entire* loan is assigned as nonperforming, not only the overdue part *(completeness requirement)*. A bank is required to downgrade all loans to a given debtor if any of his/her loans are classified as impaired *(downgrade requirement)*. *Restructured loans* shall be classified in the classification group corresponding to their indications of deterioration before restructuring. **Source:** 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, issued by the Bulgarian National Bank, amended 31 March 2009; Coordinated Compilation Exercise (CCE) for Financial Soundness Indicators (FSI): Answers to Bulgaria's Metadata Questionnaire (February 21, 2007)	**Standard risk exposure:** Risk exposures which are serviced, and information on the debtor's financial state gives no ground to assume that the debtor will not repay in full his/her debts. Moreover, the principal or interest is repaid in accordance with the contractual agreement terms, or payments on them have been *past due up to 30 days*, provided the delay is justified or accidental. **Provisioning:** at the bank's discretion based on previous experience	**Watch:** Exposures where insignificant weaknesses exist with respect to their servicing, or there is a possibility of deterioration in the debtor's financial state which may question the full repayment of the obligation; or one of the following conditions obtains: principal or interest arrears payments have been *past due 31 to 90 days*, or the debtor uses the loan for purposes other than those specified in the loan arrangement. **Provisioning:** at least 10% of exposure	**Nonperforming:** Exposures where significant weaknesses exist with respect to their servicing, or the available information points to the debtor's unstable or substantially deteriorated financial state, or current and anticipated proceeds are insufficient for the full repayment of his/her obligations; or principal or interest arrears payments have been *past due 91 to 180 days*. **Provisioning:** at least 50%	**Loss:** Exposures where as a result of the debtor's deteriorated financial state it is expected that his/her obligations will become uncollectible, even though they have partial recovery value and may be realized in the future; or one of the following conditions obtains: principal or interest arrears payments have been *past due over 180 days*, or the debtor has been declared bankrupt or is in a liquidation procedure or other conditions provide grounds to consider that the risk exposure is jeopardized by nonrepayment. **Provisioning:** 100%
Croatia	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising risk categories B1 to B3 and C *(see columns to the right)*. In case a loan becomes impaired, the entire loan is assigned as nonperforming, not only the overdue part *(completeness requirement)*. However, specific provisions are deducted from the full value of the loan. A bank is not required to downgrade all loans to a given debtor if any of his/her loans are classified as impaired *(no downgrade requirement)*. The 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. If a credit institution carries out *loan restructuring* owing to a debtor's deteriorated financial position, the debtor is not deemed to be meeting his/her obligations in a timely manner. **Source:** Decision on the classification of placements and off-balance sheet liabilities of credit institutions, issued by the Croatian National Bank (published in the Official Gazette, entry into force in March 2010); CCE/FSI: Answers to Croatia's Metadata Questionnaire (January 8, 2007)	**Risk category A/ fully recoverable claims** (formerly called "standard"): These are placements for which no evidence of impairment is identified. All of the following conditions need to be met: the present financial position of a debtor and the estimated future cash flows do not threaten his/her future operation and settling of current and future liabilities; the debtor settles his/her liabilities toward the credit institution within the contractual time limits, and only exceptionally and occasionally, after the due date; placements are secured by eligible instruments of collateral for receivables of a credit institution. **Level of provisioning (value adjustment):** 0.85%–1.2%	**Risk categories B/partly recoverable claims:** Placements for which evidence of partial impairment is identified: Due to a debtor's deteriorated creditworthiness, delinquency in settling liabilities toward a credit institution and reduced value of eligible instruments of collateral, there is evidence of the existence of loss, and it is assessed that principal and interest could not be collected in the contractual amount. A credit institution shall classify partly recoverable placements, according to the amount of the identified loss, into the following risk subcategories:			**Risk category C/ irrecoverable claims** (formerly called "loss"): Placements for which evidence of impairment is identified: They correspond to a bank's receivables acquired on a disputable legal basis and other receivables for which, due to especially poor material and financial position of a debtor and a lack of any eligible instrument of collateral, no cash flows can be expected for settling a debtor's liabilities toward a bank. Impairment loss of these placements amounts to 100% of their carrying amount. Reclassification of placement graded A into this subcategory is effected if a debtor has *overdue liabilities for more than 365 days*. **Level of provisioning (value adjustment):** 100%
			Risk category B1 (formerly called "watch"): if identified loss does not exceed 30% of carrying amount of placement. Reclassification of placement graded A into this subcategory is effected if a debtor has *overdue liabilities from more than 90 to 180 days*. **Level of provisioning (value adjustment):** up to 30%	**Risk category B2** (formerly called "substandard"): if identified loss is between more than 30% and 70% of carrying amount of placement. Reclassification of placement graded A into this subcategory is effected if a debtor has *overdue liabilities from more than 180 to 270 days*. **Level of provisioning (value adjustment):** 31%–70%	**Risk category B3** (formerly called "doubtful"): if identified loss is between more than 70% and less than 100% of carrying amount of placement. Reclassification of placement graded A into this subcategory is effected if a debtor has *overdue liabilities from more than 270 to 365 days*. **Level of provisioning (value adjustment):** 71%–99%	

Source: Authors's compilation.

[1] *Categories assessed to be corresponding to a cross-country comparable quality of nonperforming loans are presented in cells shaded in darker blue.*

Note: Not every detail is shown, but all elements deemed essential are included. Unless explicitly mentioned otherwise, the conjunction "and" is used in the category descriptions in the sense of "as well as"; "or" is used in the sense of referring to at least one of the elements presented.

Table A2 continued

Comparative National NPL Definition and Credit Quality Classification

Country/ Institution	NPL Definition; Source	Categories of Credit Quality Classification[1]; Provisioning				
Czech Republic	Česká národní banka regards **nonperforming receivables** (receivables with obligor default) as including the categories substandard, doubtful and loss receivables (see columns to the right). *Completeness requirement* (see above). *Downgrade requirement* (see above). *Restructured loans* must initially be classified as nonperforming, i.e. at least as substandard. However, after six months they may be classified also in other categories according to their risk. **Source:** CNB Decree No. 123 (2007), as amended by Decree No. 282 (2008), Part Six: Rules for the Acquisition, Financing and Assessment of Assets; CCE/FSI: Answers to the Czech Republic's Metadata Questionnaire (November 8, 2006)	**Standard receivables:** A receivable is regarded as standard if there is no reason to doubt that it will be repaid in full. Principal, interest and fees are being duly paid, *none* of them being *more than 30 days past due.* None of the receivables toward the obligor has been restructured in the last two years due to a deterioration of its financial situation.	**Watch:** Given the obligor's financial and economic situation, the receivable is likely to be repaid in full. Principal, interest and fees are being paid with some problems, but *none* of them is *more than 90 days past due.* None of the receivables toward the obligor has been restructured in the last two years due to a deterioration of its financial situation. **Allowance for receivable:** 1%–19%	**Substandard:** Given the financial and economic situation of the obligor, full repayment of the receivable is uncertain, but partial repayment is highly likely. A receivable is also regarded as substandard if principal, interest and fees are being paid with some problems but *none* of them is *more than 180 days past due.* **Allowance for receivable:** 20%–49%	**Doubtful:** Given the financial and economic situation of the obligor, full repayment of the receivable is highly unlikely, but partial repayment is possible and likely. Principal, interest and fees are being paid with some problems but *none* of them is *more than 360 days past due.* **Allowance for receivable:** 50%–99%	**Loss:** Given the financial and economic situation of the obligor, full repayment of the receivable is impossible. The expectation is that such a receivable will not be repaid or will only be repaid in part in a very small amount. Principal, interest and fees are *more than 360 days past due.* A receivable toward an obligor who has been declared bankrupt is also regarded as a loss. **Allowance for receivable:** 100%
Hungary	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising the categories doubtful and bad (due to the fact that the "90 days overdue" criterion is assigned to the category doubtful). Alternatively, the substandard category could also be added (given that it includes loans whose risks are elevated, see main text). *Completeness requirement* (see above). A bank is not required to downgrade all loans to a common debtor if any of these loans are classified as impaired *(no downgrade requirement).* However, such treatment must be justified by corresponding risks. *Restructured* troubled loans are not permitted to be treated as problem free. **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/FSI: Answers to Hungary's Metadata Questionnaire (December 7, 2006)	The content of the five categories (problem-free, special watch, substandard, doubtful and bad) are essentially similar to that of the IIF (see below). The main difference compared to the IIF scheme is that 90-day overdue loans are classified as doubtful, not substandard.				
		Problem-free category: This relates to loans whose collectability without loss is probable. Credits are *not overdue more than 15 days* (in terms and interest and principal payments); household loans are not overdue more than 30 days. Possible losses linked to arrears are covered by available collateral.	**Special watch:** On available information, a minimal loss (of up to 10% of amount due) can be expected. Therefore, **provisions** are prescribed at a range of 0%–10%.	**Substandard:** Risks are elevated, a loss of up to 30% of the amount due can be expected and is not covered by collateral. **Provisions:** 11%–30%	**Doubtful:** Risks are high, a loss of up to 70% of the amount due is expected. Credits are *overdue at least 90 days* and are not covered by collateral. **Provisions:** 31%–70%	**Bad:** Risks are very high, a loss of more than 70% of the amount due is expected. Notwithstanding repeated requests, the debtor does not fulfill his obligations, and the expected loss is not covered by collateral. The debtor may have entered bankruptcy procedures. **Provisions** are to exceed 70%.

Source: Authors's compilation.

[1] *Categories assessed to be corresponding to a cross-country comparable quality of nonperforming loans are presented in cells shaded in darker blue.*

Note: Not every detail is shown, but all elements deemed essential are included. Unless explicitly mentioned otherwise, the conjunction "and" is used in the category descriptions in the sense of "as well as"; "or" is used in the sense of referring to at least one of the elements presented.

Table A2 continued

Comparative National NPL Definition and Credit Quality Classification

Country/ Institution	NPL Definition; Source	Categories of Credit Quality Classification[1]; Provisioning				
Poland	For purposes of international comparability it is here suggested to regard **nonperforming loans** as referring to credit exposures "at risk" (according to Narodowy Bank Polski), i.e. comprising the categories: below standard, doubtful and lost. *Completeness requirement* (see above). *Downgrade requirement* (see above). *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 a lower risk, but only after a full recovery of a debtor's creditworthiness and not earlier than after three months of timely debt service. **Source:** Regulation of the Minister of Finance No. 1589 (16 December 2008), published in Dziennik Ustaw (Gazette) 2008, No. 235; CCE/FSI: Answers to Poland's Metadata Questionnaire (January 23, 2007)	**Credit exposures "normal":** These include exposures where the delay in the repayment of principal or interest shall not exceed one month, and the economic and financial situation of the debtor does not raise concerns.	**Under observation:** These include exposures where the delay in the repayment of principal or interest is more than a month but does not exceed three months, and the economic and financial situation of the debtor does not raise concerns; or the exposure – because of regional, country, industry, customer group or product group risks – requires special attention. **Minimum required provision:** 1.5% of exposure	**Below standard:** These include exposures where the delay in the repayment of principal or interest is in excess of three months but does not exceed six months, and the economic and financial situation of the debtor may jeopardize the timely repayment. **Minimum required provision:** 20% of exposure	**Doubtful:** These include exposures where the delay in the repayment of principal or interest is in excess of six months but does not exceed twelve months, and the economic and financial situation of the debtor is much worse, especially when losses incurred materially affect their capital (net assets). **Minimum required provision:** 50% of exposure	**Lost:** These include exposures where the delay in the repayment of principal or interest exceeds twelve months and the economic and financial situation of the debtor has deteriorated in a manner that permanently prevents repayment of the debt; or bankruptcy or liquidation proceedings have been launched against the debtor. **Required provision:** 100% of exposure
Romania	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising the categories substandard, doubtful and loss. Alternatively, given that the 90days+ rule tends to focus on doubtful and loss loans, NPLs could also be understood to be limited to these two categories (see main text). *Completeness requirement* (see above). *Downgrade requirement* (see above). Credit institutions shall classify *replacement loans* by evaluating the financial performance of the debtor using more stringent standards than those used prior to the replacement operation and by adequately reviewing qualitative and quantitative factors based on updated information. **Source:** Regulation No. 3/2009 on the Classification of Loans and Investments, and the Establishment, Regularization and Use of Specific Credit Risk Provisions, issued by the National Bank of Romania (as amended and complemented by NBR Regulations No. 7/2009, 13/2009, and 18/2009); CCE/FSI: Answers to Romania's Metadata Questionnaire (January 23, 2007); IMF: Romania – First Review Under the Stand-By Arrangement and Request for Modification of Performance Criteria, June 9, 2011	Credit institutions generally have to assess the quality of loans on the basis of **internal norms,** previously approved by the Supervision Department of the NBR. **Loan quality** is classified as standard, watch, substandard, doubtful, loss, using simultaneously the criteria of the debt service history (the number of past-due days from the maturity date), financial performance of the debtor, and the possible commencement of legal proceedings against the debtor. Doubtful and loss categories generally comprise loans that are more than 90 days overdue (although this is not explicitly stipulated in NBR regulations). The substandard category likely refers to loans that are less than 90 days overdue, which, however, may be combined with a weak financial performance of the debtor.				
		Standard category: **Minimum provision:** 0% of loan	**Watch**: **Minimum provision:** 5% of loan	**Substandard:** **Minimum provision:** 20% of loan	**Doubtful:** **Minimum provision:** 50% of loan	**Loss:** Provision: 100% of loan

Source: Authors's compilation.

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Note: Not every detail is shown, but all elements deemed essential are included. Unless explicitly mentioned otherwise, the conjunction "and" is used in the category descriptions in the sense of "as well as"; "or" is used in the sense of referring to at least one of the elements presented.

Table A2 continued

Comparative National NPL Definition and Credit Quality Classification

Country/ Institution	NPL Definition; Source	Categories of Credit Quality Classification[1]; Provisioning				
Russian Federation	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising the categories doubtful, problem and bad. *Completeness requirement* (see above). *Downgrade requirement* (see above). Debt service of *restructured loans* is generally ranked as "good," however after three months a new classification of the loan is made on the basis of up-to-date information. **Source:** Regulation No. 254-P On the Procedure for Making Loan Loss Provisions and Provisions for Loan Debts and Similar Liabilities by Credit Institutions, issued by the Central Bank of the Russian Federation (March 26, 2004); CBR: Summary Methodology to "Review of the Banking Sector of the Russian Federation" (17th Issue, 2010); CCE/FSI: Answers to the Russian Federation's Metadata Questionnaire (January 19, 2007)	Banks carry out classification of the quality of their loans on the basis of their **professional judgment.** The **loan quality** categories are: standard, substandard, doubtful, problem and bad. Loans are assigned to these categories based on the comprehensive assessment of two criteria (matrix based, see below): the quality of debt service (dependent on the length of payment overdue), and the economic or financial situation of the debtor.				
		Standard quality: good quality of debt service + good financial conditions of debtor	**Substandard:** good quality of debt service + medium financial conditions of debtor, or medium quality of debt service + good financial conditions of debtor; **Provisioning level** (required by the CBR): 1%–20% of principal	**Doubtful:** good quality of debt service + weak conditions of debtor, or medium quality of debt service + medium conditions of debtor, or low quality of debt service + good conditions of debtor; **Provisioning level:** 21%–50% of principal	**Problem:** medium quality of debt service + weak conditions of debtor, or low quality of debt service + medium conditions of debtor; **Provisioning level:** 51%–100% of principal	**Bad**: low quality of debt service + weak conditions of debtor; probability of repayment is equal to zero **Provisioning level:** 100% of principal
Serbia	Narodna banka Srbije regards **nonperforming loans** (see NBS Banking Supervision – First Quarter Report 2010, section NPLs) as loans for which the payment of either principal or interest are past due by 90 or more days; or for which payments are less than 90 days overdue, but the bank has estimated that the debtor's ability to repay has deteriorated. For purposes of international comparability it is here suggested to regard NPLs as comprising the categories D and E (see columns to the right). Alternatively, category C could also be added (given that this category includes receivables from a borrower whose financial situation is not satisfactory; see main text). *Completeness requirement* (see above). *Downgrade requirement* (see above), except for receivables secured by prime or adequate collateral. *Restructured receivables* shall not be regarded as in default if the borrower settles his/her obligations pursuant to the new repayment schedule with a delay of not more than 30 days. **Source:** Decision No. 106 on the Classification of Bank Balance Sheet Assets and Off-Balance Sheet Items, issued by the NBS (December 28, 2007, as amended)	**Category A:** These are receivables from a borrower with whom no collection-related problems are expected, based on the assessment of his/her financial position and creditworthiness, or receivables from a borrower who serves his/her obligations on time, or by way of exception, with a delay of *less than 30 days*; or receivables secured by prime collateral in the secured amount. **Special reserve for potential losses:** 1%–2% of receivables	**Category B:** These are receivables from a borrower whose financial position is not entirely satisfactory due to certain problems in operation, which are not likely to deteriorate significantly in the future, though; or receivables from a borrower meeting his/her payment obligations with a delay *of 31 to 60 days*. **Special reserve for potential losses:** 5%–10% of receivables	**Category C:** These are receivables from a borrower whose financial position is not satisfactory, primarily with respect to adequacy of cash flow in terms of settling obligations, and who suffers maturity mismatch between certain elements of assets and liabilities; or receivables from a borrower meeting his/ her payment obligations with a delay of *61 to 90 days*. **Special reserve:** 20%–35% of receivables	**Category D:** These are receivables from a borrower whose financial position indicates significant problems in operation – primarily receivables from a borrower operating with losses or from illiquid or insolvent borrowers; or receivables from a borrower meeting his/her payment obligations with a delay of *91 to 180 days*. **Special reserve:** 40%–75% of receivables	**Category E:** These are doubtful or disputable receivables; or receivables from a borrower in liquidation or bankruptcy proceedings; or from a borrower meeting his/her payment obligations with a delay of 181 days and longer. **Special reserve:** 100% of receivables

Source: Authors's compilation.

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Table A2 continued

Comparative National NPL Definition and Credit Quality Classification

Country/ Institution	NPL Definition; Source	Categories of Credit Quality Classification[1]; Provisioning				
Slovakia	According to Národná banka Slovenska, the defaulted loan category is seen as **nonperforming.** *Completeness requirement* (see above). *Downgrade requirement* (see above). *Restructured loans* have to be classified according to the expected loss from these loans. **Source:** 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, issued by the NBS (March 13, 2007); CCE/FSI: Answers to Slovakia's Metadata Questionnaire (January 23, 2007)	**Standard loan category:** Credit risk low or not substantial, or obligor past due less than 90 days.		**Defaulted loan category:** A default shall be considered to have occurred with regard to a particular obligor when: the bank considers that the obligor is unlikely to pay his/her obligations to the bank (due e.g. to a significant perceived decline in credit quality, or the obligor seeking or entering bankruptcy or restructuring proceedings) or the obligor is past due more than 90 days on an obligation to the bank.		
		Standard provision criterion if claims are *past due no more than 30 days.*	**Special mention** provision criterion if claims are past due *more than 30 days but no more than 90 days:* 1%–20% of net values of loans (adjusted by collateral)	**Substandard** provision criterion if claims are past due *more than 90 days but no more than 180 days:* 20%–50% of net values of loans	**Doubtful** provision criterion if claims are past due *more than 180 days but no more than 360 days:* 50%–95% of net values of loans	**Loss** provision criterion if claims are past due for *more than 360 days:* 100% of net values of loans
Ukraine	Until end-2007, according to the National Bank of Ukraine, nonperforming loans included under control, substandard, doubtful and bad credit operation categories; starting in 2008, nonperforming loans only included doubtful and bad loans; For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising substandard, doubtful and bad loans. Alternatively, those substandard loans that are serviced timely could be excluded from NPLs (see main text). *Completeness requirement* (see above). *Downgrade requirement* (see above). *Replacement loans* have to be classified as substandard, doubtful or bad. **Source:** Regulation on Reserve Formation and Usage to Recover Possible Losses on Banks' Credit Transactions, issued by the National Bank of Ukraine (No. 279 of July 6, 2000, as amended); CCE/FSI: Answers to Ukraine's Metadata Questionnaire (December 31, 2009); IMF: Ukraine – First Review Under the Stand-By Arrangement, December 10, 2010	In order to classify loans and create loan loss provisions, the following criteria are taken into account: financial condition of the borrower or counterparty, the state of loan servicing by the borrower or counterparty for principal and interest payments, and the level of loan collateral.				
		Standard category: Credit operations for which exposure is not substantial. **Provisioning ratio:** 1%–50% of exposure	**Watch/under control:** Credit exposure is not substantial, but can increase due to a situation unfavorable for the borrower. **Minimum provisioning ratio:** 5% of exposure	**Substandard:** Although loans may or may not be serviced in a timely manner, credit exposure is substantial and can further increase. There is a probability of late payment of the full amount. **Minimum provisioning ratio:** 20% of exposure	**Doubtful:** Full payment of debt by the borrower or counterparty is doubtful or probability of full payment of loan is low. **Minimum provisioning ratio:** 50% of exposure	**Bad/ nonperforming:** there is actually no probability of payment by the borrower or bank's counterparty. **Provisioning ratio:** 100% of exposure

Source: Authors's compilation.

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Table A2 continued

Comparative National NPL Definition and Credit Quality Classification

Country/ Institution	NPL Definition; Source	Categories of Credit Quality Classification[1]; Provisioning				
Memorandum items						
Austria	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising the nonperforming risk category as well as the loss risk category (see columns to the right). In case a loan becomes impaired, the entire loan is assigned as nonperforming, not only the overdue part *(completeness requirement)*. However, cumulative value adjustments are deducted from the full value of the loan. No *downgrade requirement* (see above). *Restructured loans* may be classified according to the discretion of the credit institution, following the principle of caution. Source: Oesterreichische Nationalbank: Ausweisrichtlinie zur Meldung der Anlage zum Prüfungsbericht (AP), based on Regulation No. 298 of the Austrian Financial Market Authority (September 15, 2010); CCE/FSI: Answers to Austria's Metadata Questionnaire (January 11, 2007)	**Standard risk category:** No particular credit risk visible. **Corresponding rating** (according to S&P's or Moody's; can assist bank or examiner in assigning risk volumes to AP risk categories): "investment grade"	**Watch/special mention:** These are loans that do not yet suffer immediate danger of nonservicing, but merit intensive scrutiny due to various circumstances, e.g. visible negative economic developments, a weakening of the economic situation of a specific sector of the economy, weak capitalization of borrower, deterioration of borrower's profitability, disparity between collateral and risks, sluggish payment practices of borrower. **Corresponding rating:** "speculative grade"	**Nonperforming:** These are loans whose repayment of interest or principal appears partly or fully jeopardized. Therefore, such (dubious) loans are at least partly revalued. **Corresponding rating:** "watchlist"	**Loss:** With this category, credit loss has become a certainty, therefore such claims or parts of claims are, if necessary, fully written off. **Corresponding rating:** "default"	
U.S.A.	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising substandard, doubtful and loss credit grading categories (these three categories are also identified as "classified" loans by the Federal Reserve System; see columns to the right). *Completeness requirement* (see above). *Downgrade requirement* (see above). A *restructured credit* should be assigned special mention or "classified" status if, after the restructuring, potential or well-defined weaknesses persist. **Source:** Board of Governors of the Federal Reserve System (October 2010): Commercial Bank Examination Manual; CCE/FSI: Answers to the United States' Metadata Questionnaire (January 19, 2007)	**Standard/pass credit grading category:** Loans in this category are performing and have sound fundamentals. (Fundamentals include the borrower's overall financial condition, resources and cash flow, credit history, and character.)	**Special mention:** Loans in this category are performing but have potential weaknesses that, if left uncorrected, may weaken the loan's quality. Examples are credits that the lending officer is unable to properly supervise, an inadequate loan arrangement, uncertainty on the condition of the collateral, economic or market conditions that may unfavorably affect the borrower in the future.	**Substandard:** Loans in this category have well-defined weaknesses, where the current sound worth and paying capacity of the obligor or of the collateral pledged is not assured. Moreover, orderly repayment of debt is in jeopardy.	**Doubtful** loans exhibit all the characteristics of substandard loans, with the added characteristic that collection in full is highly questionable and improbable. The possibility of loss is extremely high, but because of certain important pending factors that may work to the advantage of the credit, its classification as "loss" is deferred until its more exact status may be determined. Pending factors may include a proposed merger or acquisition, liquidation proceedings, capital injection, additional collateral, or refinancing plans.	**Loss** loans are considered uncollectible and of such little value that their continuance as bankable assets is not warranted. This classification does not mean that the credit has absolutely no recovery or salvage value, but rather that it is not practical or desirable to defer writing off this basically worthless asset even though partial recovery may be effected in the future.

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Table A2 continued

Comparative National NPL Definition and Credit Quality Classification

Country/ Institution	NPL Definition; Source	Categories of Credit Quality Classification[1]; Provisioning				
Institute for International Finance (IIF)	For purposes of international comparability it is here suggested to regard **nonperforming loans** as comprising substandard, doubtful and loss (write-off) categories. **Source:** IMF FSI Compilation Guide (March 2006), Appendix VI	**Standard category:** Credit is sound and all principal and interest payments are current. Repayment difficulties are not foreseen under current circumstances, and full repayment is expected.	**Watch/special mention:** Credit is subject to conditions that, if left uncorrected, could raise concerns about full repayment. Such credit requires more than normal attention by credit officers.	**Substandard:** Full repayment is in doubt due to inadequate protection (e.g. on account of diminished collateral), and/or interest or principal or both are *more than 90 days overdue.* These assets show well-defined weaknesses that could lead to probable loss if not corrected.	**Doubtful:** Assets for which collection or liquidation in full is determined by bank management to be improbable due to current conditions, and/or interest or principal or both are *overdue more than 180 days.* Assets in this category are considered impaired (implying that there are doubts over whether all amounts due will be paid) but are not yet considered total losses because some pending factors may strengthen the asset's quality (merger, new financing, or capital injection).	**Loss (write-off):** An asset is downgraded to loss when management considers it to be virtually uncollectible, and/or principal or interest or both are *overdue more than one year.*
IMF Financial Soundness Indicators Compilation Guide (amended November 2007)	**Nonperforming loans** are (re)defined on the basis of a uniform criterion of *"principal or interest payments 90 days overdue."* This implies that the amended definition would not include, as the previous one in the Guide, stricter approaches. The 90-day criterion is the time period that is most widely used by countries to determine whether a loan is nonperforming. The amount of loans (and other assets) recorded as nonperforming should be the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue. As opposed to performing loans, NPLs are often suggested (see e.g. IMF Financial Sector Assessment – A Handbook, September 29, 2005, D.3.3 Credit Risk) to comprise the categories substandard, doubtful and loss. In case a loan becomes impaired, the *entire* loan is assigned as nonperforming, not only the overdue part *(completeness requirement).* *No recommendation* in favor or against a *downgrade requirement.* *Replacement loans* (restructured loans) include loans arising from rescheduling or refinancing the original loans and/or loans provided to make payments on the original loan. These loans may be granted on easier-than-normal commercial terms, provided the debtor complies with the terms and conditions of the replacement loan. Subject to national supervisory guidance, the loan may no longer be classified as NPL. However, there is strong support among experts about identifying the share of replacement loans within total loans.					

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