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The Treatment of Nonperforming Loans

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The Treatment of Nonperforming Loans

Clarification and Elaboration of Issues Raised by the December 2004 Meeting of the Advisory Expert Group of the Intersecretariat Working Group on National Accounts

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Contents **Page**

Executive Summary..4

I. Background..6

II. Market-equivalent Value...7

III. The Definition of Nonperforming Loans...7

IV. Arrears 9

V. The Nature of the Proposed Memorandum Items...10

VI. Example of Recording the Memorandum Items in the Accounts and Balance Sheets 11

VII. Should interest arrears on NPLs have an impact on FISIM? 14

VIII. Should the Proposed Treatment Extend to Other Sectors and Instruments? 15

Executive Summary

- The December 2004 Advisory Expert Group (AEG) Meeting discussed the final report of the Nonperforming Loans Electronic Discussion Group (EDG). This report recommended the *System of National Accounts 1993* (*1993 SNA) rev. 1* continue to measure loans at nominal value, but show mandatory memorandum items on both the market-equivalent value of loans, and interest arrears on nonperforming loans (NPLs). It also recommended a future review—once accounting standards on fair valuation have stabilized—to decide if the accounts proper should also use the market-equivalent value of loans. The AEG agreed with the main proposals, but asked for clarification of some of the issues.

- Most importantly, this concerns specifying the nature of the memorandum items and defining NPLs. Further, the AEG asked for clarification on the implications on financial intermediation services indirectly measured (FISIM), and whether to also apply the proposals to other financial instruments.

- The proposals of the EDG imply two **memorandum items**, one on the balance sheets, and the other in the flow accounts of the national accounts. The first proposed memorandum concerns the **market-equivalent value of loan assets**. This item is a balance sheet item and it allows a more accurate assessment of the true financial position of an entity than when loans are at nominal values. In principle, this item should show the fair value of loans.

- However, in practice, the market-equivalent valuation of loans will be a mixture of various valuation methods since fair valuation recording of loans has not found general acceptance. Information on NPLs and loan impairment is, however, usually available. It is therefore suggested, as an alternative, to show nominal value minus expected losses as a memorandum item.

- The definition of NPLs—adapted from the one given in the Financial Soundness Indicators Guide—is: A loan is **nonperforming** when payments of interest and/or principal are past due by 90 days or more, or interest payments equal to 90 days or more have been capitalized, refinanced, or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons—such as a debtor filing for bankruptcy—to doubt that payments will be made in full. After a loan is classified as nonperforming, it (and, possibly, replacement loan(s)) should remain classified as such until written off or payments of interest and/or principal are received.

- The second proposed memorandum item affects the flow accounts and concerns **interest arrears on NPLs**. The *1993 SNA*'s guidelines imply accruing interest arrears on loans—according to the terms of the contract—irrespective of their status, and the

AEG has recommended to retain this recording. This memorandum item would appear on the *Allocation of Primary Income Accounts*.

- Both the symmetry of the national accounts and the valuation of output at market values imply the national accounts should continue recording **FISIM** related to interest arrears. Because it is uncertain to which extent interest arrears on NPLs will eventually be recovered, it should be considered to also include a memorandum item showing this part of FISIM in the production accounts.

- Preferably, the accounts should include the memorandum items for all institutional sectors but at the minimum—mandatory—for the financial corporations and government sector as creditors.

- The national accounts should cover nonperformance on **other types of financial assets and liabilities**—such as trade credits—in the same way as proposed for NPLs.

What are the AEG's views on the clarifications provided in this paper?

I. BACKGROUND

At the December 2004 Advisory Expert Group Meeting, the final report of the Nonperforming Loans Electronic Discussion Group[1] (NPL EDG) was presented to participants. This report recommended that:

- The *1993 SNA Rev 1* continue to measure loans at nominal value in the accounts;
- The updated *1993 SNA* show as memorandum items (i) the market-equivalent value of loans and (ii) interest arrears on nonperforming loans;
- In order for this solution to work, the memorandum items should be regarded as mandatory;
- After experience has been gained in presenting the market-equivalent value of loans as memorandum items, and after stabilization of the accounting standards' position on fair valuation, a review should determine the appropriateness of recording loans at market value in the accounts proper;
- Attention should be given to the further harmonization of the terminology and definitions used by the international macroeconomic statistics manuals concerning loan and interest accrual.

The participants requested clarification on a number of issues relating to these recommendations. This paper addresses these issues (see Box 1).

Box 1: Issues for Clarification

a. Clarify the definition of nonperforming loans
b. Specify the exact nature of the memorandum items
c. Provide a worked example of the accounts showing the memorandum items
d. Show the implications of the recommendations for the recording of FISIM
e. Discuss whether the treatment should be extended to other financial instruments such as trade credit

In addition, the AEG requested that the conclusions relating to the application of accrual principles to debt arrears be incorporated in the discussion. This paper focuses on the subset of loans which are nonperforming. While the issues of NPLs and debt in arrears are linked, there are also differences, which are laid out in the following sections. Also, the debt arrears

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[1] Refer www.imf.org/forum/Message2.asp?forumid=9&messageid=428&threadid=428

issue raises additional questions as discussed in the paper on this topic prepared for the December 2004 meeting.

II. Market-equivalent Value

The *1993 SNA* uses market valuation as a general principle, and the description that comes closest to a definition is in paragraph 2.68: "Transactions are valued at the actual price agreed upon by the transactors. Market prices are thus the basic reference for valuation in the System." The discussion of the EDG on NPLs used the term **market-equivalent value** to indicate that—in principle—loans should be measured at market values. However, as loans are generally not traded, there are no market prices so some equivalent value should be used.

The closest approximation to market value is **fair value**. This term is defined in the IMF's *Monetary and Financial Statistics Manual* (paragraph 219) as "the value that approximates the value that would arise from a market transaction between two parties." Paragraph 220 of the *Manual* then goes on to explain that fair value can be established using transactions in comparable instruments, or using the discounted present value of cash flows from nontraded assets and liabilities.

In practice, countries will only be able to provide this information to the extent that the fair valuation of loans becomes part of their accounting practices. In the absence of fair value data, the memorandum item will have to use a **second-best approach** to market-equivalent valuation and show nominal value less expected loan losses.[2]

The term market-equivalent value generated in the EDG's discussion encompasses these two valuation methods. This term reflects best practice, which in reality would be a mixture of fair value and nominal value minus expected losses.

III. The Definition of Nonperforming Loans

The *1993 SNA* normally defines principles for countries to follow, rather than making specific recommendations for country accounting standards. The principle on nonperforming loans is to identify loans for which it is probable that contractual payments will not be

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[2] Note that expected losses are not necessarily the same as the level of loan provisions as these can be based on standard factors prescribed by national regulators, rather than the financial corporation's own estimate of expected losses. The term "expected losses" allows only for credit risk and not for gains or losses as a result of interest rate changes since the inception of the loan.

made—that is, are **impaired**[3]—and to identify the potential losses of both income and capital, on such loans.

Box 2. Impairment and Nonperformance.

International accounting and banking standards refer to loans being ***impaired*** rather than ***nonperforming***. **IAS 39** (paragraphs 58-70) says that objective evidence is required for a loan to be impaired and that the carrying amount of assets should be reduced for ***impairment losses***.

The **Basel Committee on Banking Supervision,** Sound Practices 7 and 11, refer also to loan ***impairment*** occurring when it is probable that all amounts due on a loan will not be collected. The amount of this impairment should be recognized by reducing the carrying amount of the loan through an allowance, which will be reflected in the income statement of the bank. Thus, in effect, interest is not accrued on such loans and will only be shown on a cash basis.

Thus, for countries following the above standards, interest **will not accrue on impaired loans** in the accounts of banks and other loan providers. This is contrary to the *1993 SNA* approach, which implicitly entails recording loans on the balance sheets at their nominal value and accruing interest on them as long as they are outstanding. Only when loans fail or are negotiated does the *1993 SNA* provide explicit recommendations for dealing with the effects. For the discussion in this paper, we equate loan impairment and nonperformance as being synonymous, but individual country definitions of the term ***nonperformance*** may differ, and cause these terms to be different.

There is no single definition of a **nonperforming loan**. Country definitions differ, and it is recognized that it is possible that what is appropriate in one country may not be so in another. There is, however, some convergence of opinion on this issue.[4] A **definition** of such loans, summarized from paragraphs 4.84-4.85 of the IMF's *Compilation Guide on Financial Soundness Indicators 2004 (Guide)* is:

> A loan is **nonperforming** when payments of interest and/or principal are past due by 90 days or more, or interest payments equal to 90 days or more have been capitalized, refinanced, or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons[5]—such as a debtor filing for bankruptcy—to doubt that payments will be made in full.
>
> After a loan is classified as **nonperforming**, it (and/or any replacement loans(s)) should remain classified as such until written off or payments of interest and/or principal are received on this or subsequent loans that replace the original.

[3] Impairment is a specific term used in the International Accounting Standard 39 and by the Basel Committee on Banking Supervision. When a loan is impaired, it should be placed on *non-accrual* status i.e. interest should not be accrued on such loans in the income statement of the lender. (Refer Box 2)

[4] This convergence is around the point of loans being 90-days overdue. Refer: *Loan Review, Provisioning and Macroeconomic Linkages.* Cortavarria, Dziobek, Kanaya and Song, IMF WP/00/195. December 2000.

[5] These should include all economic events which cause the loan to be placed on non-accrual status

The 90 days overdue criterion is commonly—but not universally—used. The second part of the definition ensures that NPLs cannot be reclassified as "performing" simply by replacing them with new loans.

Because the 90-day criterion is not universal, any international comparisons relating to NPLs require metadata relating to national practices.

The *Guide* also recommends that **assets other than loans** should be classified as **nonperforming** using the same criteria. While this information is not used in calculating financial soundness indicators, it allows a complete picture of deposit-takers' nonperforming assets to be observed and hence supports macroprudential analysis.

It is important also to recognize what the term **nonperforming** does and does not mean. It essentially means that the 'orderly repayment of the debt is in jeopardy'[6] and it follows from this that some losses are probable. However, this impairment does not in all cases mean that losses will occur or are even necessarily expected from a particular loan as an NPL could be adequately covered by collateral.

NPLs should continue to be accounted for in the national accounts as long as a liability/asset exists. Interest should also be accrued according to the terms of the loan contract.

IV. Arrears

Arrears are defined as amounts that are past due for payment and are unpaid (from *External Debt Statistics* paragraph 3.36). Arrears include principal and interest. Arrears are specified as items in the *Balance of Payments Manual and External Debt Statistics*. Data on arrears are commonly monitored by bank regulators.

In relation to the 90-day definition proposed for nonperforming loans, the potential for impairment would be identified earlier, but possibly at the expense of identifying many minor and temporary cases. In contrast to NPLs, only the amounts due for payment are included in measures of arrears. Thus, if interest payments on a loan lag for more than 90 days, the full amount of that loan would be recorded as NPL, whereas arrears would only include interest and amortization payments past due.

Arrears are already shown as items in some standard datasets. They are shown in the analytic presentation in *Balance of Payments Manual* when they relate to exceptional financing for balance of payments purposes (as shown in Appendix IV). They are also included as subheadings under particular instruments in *External Debt Statistics* (see Table 4.1). Arrears are a memorandum item in the *Government Finance Statistics Manual* (para. 7.144).

[6] The *Compilation Guide on Financial Soundness Indicators 2004*, footnote to Paragraph 4.80.

It should be noted that interest arrears on NPLs are not the same as all loan interest in arrears, as they exclude arrears less than 90 days overdue, unless the loan is considered impaired for reasons other than overdue payment.

V. The Nature of the Proposed Memorandum Items

The NPL EDG recommended that two memorandum items— the market-equivalent value of loans and interest arrears on NPLs—be added to the national accounts. The next two sections clarify the implications of these recommendations.

The market-equivalent value of loan assets.

Objective: The addition of the market-equivalent value of loan assets as a memorandum item allows for a more accurate analysis of the *true* financial position of an entity, compared with the financial position shown when all loans are recorded at nominal values. There was agreement in the December 2004 AEG Meeting to include this information because the lack of it was recognized as a serious deficiency in the System. It was also recognized that it would be more feasible to capture this memorandum item on the asset side of creditors' balance sheets, because there this information was more often available.

Measurement: As mentioned in Section II, the closest approximation to the market value is fair value. Fair value incorporates the effects of both expected losses as result of credit risk and variations in market interest rates since the inception of the loan. Thus, ***in principle***, the memorandum item representing the market-equivalent value of loans should show these loans at fair value.

In practice, countries will only be able to provide fair value data to the extent that their accounting practices allow. In the absence of fair value data, the memorandum item will have to use a second-best approach and show the nominal value of loans less expected losses. These include losses of both interest and principal and would—by the NPL definition—relate to loans classified as nonperforming.

Location: This item will affect the **opening and closing assets on sectoral balance sheets**, and will be of particular interest for two sectors: **financial corporations and government**.

Interest arrears on nonperforming loans.

Objective: Information on interest arrears on NPLs will be useful for more detailed analysis of the financial corporations' transactions and income generating capacity.

Measurement: Interest arrears on NPLs can be looked at from the perspective of both stocks and flows. From the perspective of stocks, accumulated interest arrears are part of the underlying NPLs which are taken care of through the proposals above. From the perspective of flows, at issue are the interest flows in the current period as shown in the flow accounts. To measure these interest flows, two problems have to be solved.

Firstly, the measure of interest arrears on NPLs relevant to the flow accounts excludes financial intermediation services indirectly measured (FISIM) on NPLs. The primary data[7] received from financial corporations on NPL interest arrears will need to be adjusted for FISIM.

Secondly, financial corporations following the Basel Committee on Banking Supervision (BCBS) recommendations on sound practices[8] will not include interest on NPLs in their income statements. Thus, their reporting for statistical purposes may exclude interest arrears on NPLs. If this is the case, an adjustment needs to be made, either by adjusting the reporting[9] or by using extra information. Such information should be available in financial corporations' accounts.

Location: The memorandum item on "pure" interest in arrears on NPLs is included in the *Allocation of Primary Income Account.*

VI. Example of Recording the Memorandum Items in the Accounts and Balance Sheets

The two agreed memorandum items for NPLs are (i) a memorandum item reflecting the interest arrears on NPLs, and (ii) a memorandum item reflecting the effect of NPLs on the value of loan assets. The memorandum item on interest arrears on NPLs would show up in the allocation of primary income account. This account can include this item as an "of which" item in the way the example below shows. The interest arrears on NPLs item in this income account does not reflect the interest as recorded by the financial corporations but the "pure" interest, excluding FISIM[10].

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[7] Under *1993 SNA* guidelines, interest accrues on all loans both performing or nonperforming. As mentioned in Box 2, this is contrary to standard accounting treatment, so the primary data provide an important link between business accounting and the national accounts.

[8] As outlined in "Sound Practices for Loan Accounting and Disclosure" BCBS, Basel, July 1999. Sound Practice

[9] The standardized report forms used by the IMF for the collection of monetary statistics have included a broader measure—interest arrears on loans—since the beginning of 2005.

[10] As the basic data will relate to interest including FISIM, FISIM on NPLs will need to be estimated. Compilers could use the reference rate approach, which the 1993 SNA rev1. is going to recommend. For this approach, compilers would need to have data on the nominal value of NPLs and on interest rates. Financial institutions usually have data on the nominal value of NPLs. As for interest rates, the assumption could be made that they are the same as for other loans.

II.1.2: Allocation of primary income account

Uses			Resources		
D.4	Property income	167	B.2	*Operating surplus*	45
D.41	Interest	106	D.4	Property income	141
D.42	Distributed income of corporations	36	D.41	Interest	106
D.421	Dividends	36	D.411	(of which interest arrears on NPLs	10)
D.422	Withdrawals from income of quasi-corporations	0	D.42	Distributed income of corporations	25
D.43	Reinvested earnings on direct foreign investment	0	D.421	Dividends	25
D.44	Property income attributed to insurance policyholders	57	D.422	Withdrawals from income of quasi-corporations	0
D.45	Rent	0	D.43	Reinvested earnings on direct foreign investment	0
			D.44	Property income attributed to insurance policyholders	7
			D.45	Rent	3
B.5	*Balance of primary incomes*	19			

As discussed in section II the memorandum items reflecting NPLs in the balance sheets should be fair value or nominal value less expected losses. The fair value of loans would show up in the balance sheets of the national accounts as an extra line below the tables. If fair value is not available, the balance sheets should show a memorandum item for expected losses, which could show up in the balance sheets as an "of which" item. The example below shows both choices.

IV.1: Opening balance sheet

Assets			Liabilities and net worth		
AN	Nonfinancial assets	144	AF	Liabilities	3 384
AN.1	Produced assets	104	AF.2	Currency and deposits	1 281
AN.11	Fixed assets	99	AF.3	Securities other than shares	1 053
AN.12	Inventories	0	AF.4	Loans	0
AN.13	Valuables	5	AF.5	Shares and other equity	715
AN.2	Nonproduced assets	40	AF.6	Insurance technical reserves	335
AF.7	Financial derivatives	0	AF.7	Financial derivatives	0
AN.21	Tangible nonproduced assets	37	AF.8	Other accounts payable	0
AN.22	Intangible nonproduced assets	3			
AF	Financial assets	3 508			
AF.1	Monetary gold and SDRs	690			
AF.2	Currency and deposits	0			
AF.3	Securities other than shares	950			
AF.4	Loans[1]	1 187			
AF.41	(Of which: nominal value less expected losses[2] 1035)				
AF.5	Shares and other equity	651	B.90	*Net worth*	268
AF.6	Insurance technical reserves	30			
AF.7	Financial derivatives	0			
AF.8	Other accounts receivable	0			

[1]**Memorandum**: Fair value of loans = 968 (Alternative 1—EDG recommendation)
[2] Alternative 2—if fair value not available.

IV.2: Changes in balance sheet

Assets Total changes in assets			Liabilities and net worth Total changes in liabilities		
AN	Nonfinancial assets	1	AF	Liabilities	285
AN.1	Produced assets	-1	AF.2	Currency and deposits	130
AN.11	Fixed assets	1	AF.3	Securities other than shares	87
AN.12	Inventories	0	AF.4	Loans	0
AN.13	Valuables	-2	AF.5	Shares and other equity	30
AN.2	Nonproduced assets	2	AF.6	Insurance technical reserves	38
AF.7	Financial derivatives	0	AF.7	Financial derivatives	0
AN.21	Tangible nonproduced assets	1	AF.8	Other accounts payable	0
AN.22	Intangible nonproduced assets	0			
AF	Financial assets	294			
AF.1	Monetary gold and SDRs	17			
AF.2	Currency and deposits	15			
AF.3	Securities other than shares	80			
AF.4	Loans	163			
AF.5	Shares and other equity	19			
AF.6	Insurance technical reserves	0	B.10	*Changes in net worth*	10
AF.7	Financial derivatives	0			
AF.8	Other accounts receivable	0			

IV.3: Closing balance sheet

Assets			Liabilities and net worth		
AN	Nonfinancial assets	145	AF	Liabilities	3 669
AN.1	Produced assets	103	AF.2	Currency and deposits	1 411
AN.11	Fixed assets	100	AF.3	Securities other than shares	1 140
AN.12	Inventories	0	AF.4	Loans	0
AN.13	Valuables	3	AF.5	Shares and other equity	745
AN.2	Nonproduced assets	42	AF.6	Insurance technical reserves	373
AF.7	Financial derivatives	0	AF.7	Financial derivatives	0
AN.21	Tangible nonproduced assets	38	AF.8	Other accounts payable	0
AN.22	Intangible nonproduced assets	3			
AF	Financial assets	3 802			
AF.1	Monetary gold and SDRs	707			
AF.2	Currency and deposits	15			
AF.3	Securities other than shares	1 030			
AF.4	Loans[1]	1 350			
AF.41	(Of which: nominal value less expected losses[2] 1183)				
AF.5	Shares and other equity	670	B.90	*Net worth*	278
AF.6	Insurance technical reserves	30			
AF.7	Financial derivatives	0			
AF.8	Other accounts receivable	0			

[1]**Memorandum**: Fair value of loans = 1,142 (Alternative 1—preferred)
[2] Alternative 2—if fair value not available.

The memorandum to the balance sheets affects the opening and closing balance sheet only, as it is possible to derive changes to the items. If a country does not publish balance sheets, then both opening and closing memorandum items should be appended to the financial account.

VII. SHOULD INTEREST ARREARS ON NPLS HAVE AN IMPACT ON FISIM?

The question has come up whether the doubts surrounding interest on NPLs should have an effect on FISIM or—in other words—whether there should be FISIM from these flows. However, as NPLs will show up in the national accounts through memorandum items rather than by changing the flows and stocks, it follows from the logic of the national accounts they should also include FISIM on these interest flows.

Beyond the logic of the national accounts, there are two important arguments underpinning this. The first argument is that FISIM is an indirect measure of the output of the financial corporations sector’s subsector other depository corporations. This output is from services delivered to users, both creditors and debtors. The institutions in this subsector continue providing these services, even when there is no payment for it—as is the case for NPLs. One can compare FISIM with any other outputs delivered but not paid for, which the accounts include at their full market price.

The second argument draws from the fact that NPLs may become performing again after some time. In addition, though creditors may have to exclude interest arrears on NPLs from the profit and loss accounts and reflect these NPLs on their balance sheets, they may continue to accrue them on the individual debtors’ accounts. They would also seek to recuperate the accrued interest and principle—for instance, from collateral. For these reasons, it would not make sense to assume banking services stop once a loan has the label nonperforming.

However, because of the doubts on eventual payment of the interest arrears on NPLs, one could consider to show the FISIM on these loans in the production account of the financial corporations. The following account shows how to do this.

I : Production account

Uses			Resources		
P.2	Intermediate consumption	29	P.1	Output	102
			P.11	Market output	102
			P.111	(of which FISIM on interest arrears on NPLs	2)
B.1g	*Value added, gross*	73	P.12	Output for own final use	0
K.1	Consumption of fixed capital	10			
B.1n	*Value added, net*	63			

VIII. SHOULD THE PROPOSED TREATMENT EXTEND TO OTHER SECTORS AND INSTRUMENTS?

The NPL EDG recommended compulsory memorandum items. Data for these are readily available from financial corporations following BCBS principles. The NPL EDG discussion also suggested that it would be useful to record data on nonperforming government loan assets. Thus, the proposal is that the memorandum items be also compulsory, for the government sector. They would be recommended, but not compulsory, for the other sectors.

As mentioned on Page 8 above, the *Guide* notes that in principle, the term nonperformance can apply to other instruments, for example trade credit and deposits. However, it is possible that under some country accounting practices nonperforming trade credits and nonperforming deposits will be reclassified as (nonperforming) loans. If the original trade credit agreement is not met, or the deposit is no longer accessible, then the nature of the original instrument has changed to a loan, albeit an involuntary one.

Either way, if data on expected losses on assets other than loans are available from country accounting practices, nominal value less expected losses should also be included as recommended, but not compulsory, memorandum items.