



## EUROPEAN CENTRAL BANK

DIRECTORATE GENERAL STATISTICS

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S/STC/ETS/LOANVALUE

### REVIEW OF INTERNATIONAL STATISTICAL STANDARDS VALUATION AND RECOGNITION OF LOANS<sup>\*</sup>

- 1) *The measurement of non-performing loans has been included among the issues for discussion in the context of the update of the SNA93, and related international statistical standards. In particular, it is expected that the Advisory Expert Group (AEG), which was set up to monitor this updating process, will give consideration to this topic at its forthcoming meeting in November 2004.*
- 2) *Discussions on this issue were initiated in December 2001 by an IMF Working Paper by Bloem/Gorter, which proposed to set up an IMF Electronic Discussion Group (EDG) on this subject, focusing in particular on: (a) the definition of a bad or a non-performing loan and the possible extension of the approach also to deposits and trade credits; (b) the appropriate treatment in SNA; (c) the criteria when a loan is non-recoverable or completely written off; (d) the valuation of loans (nominal or market); (e) consequently, the write-off of bad loans as a price change or an other volume change; (f) the treatment of interest accrued on impaired loans; and (g) the inclusion of the different types of losses for the purpose of defining an income concept.*
- 3) *The IMF disseminated, in early June 2004, a note summarising the debates and proposing four options regarding the valuation method for loans. A straw poll questionnaire was circulated in June to gather views on these four options.*
- 4) *In parallel, an issue note was drafted and first presented to the Statistics Committee of the European System of Central Banks (STC) in its May 2004 thematic meeting in Toulouse. Based on the STC comments, the present ECB note has been prepared. It makes an assessment of most of the conclusions mentioned in the Bloem/Gorter paper.*
- 5) *The main proposals put forward in this note may be summarised as follows:*
  - *Valuation and recognition of loans in financial balance sheets: The recording of loans at nominal value is confirmed, and should be applied as the one and only valuation method in the accounts (for loans as financial assets and their counterpart liabilities). In addition, information by creditors on*

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<sup>\*</sup> Comments by the members of the Statistics Committee of the European System of Central Banks are gratefully acknowledged.

*expected loan losses should be added as a memorandum item in order to better capture the case of impaired loans prior to failure or renegotiation (the latter cases being covered in SNA by write-offs and debt cancellation respectively).*

- *Write-offs (derecognition<sup>1</sup>) and write-downs of loans: The current provisions concerning debt (loan) cancellation / debt (loan) forgiveness should be kept separate from those related to write-offs and write-downs of non-performing loans, as only the former are classified as financial transactions. Concerning write-offs of loans, the decision of the creditor to delete the loan from its accounts is seen as the best criterion to be applied. Concerning write-downs, they should be recorded on a gross basis under K.10 (other volume changes in financial assets and liabilities), as in ESA95. This is in line with our preference to record all loans at nominal value.*
- *Accrued interest on impaired loans: The treatment depends on that of "expected loan losses", which should apply not only to the arrears of principal but also to the corresponding interest. Should impaired loans be measured at nominal value as favoured above, consistency suggests to record accrued interest even if it is in arrears. In terms of additional information to be provided, consideration might be given to compiling a memorandum item on the amount of all accrued interest on impaired loans, in addition to (and similar to) the memorandum item on "expected loan losses".*

*6) The following issue would have to be further investigated:*

- *Given the differences in the definitions of nominal value contained in the relevant manuals (see annex 2), an effort should be made towards, ideally, a single definition within the SNA and related manuals.*

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<sup>1</sup> I.e. the exclusion of the debt/claim from the accounts of the debtor and of the creditor.

## **1. Introduction**

1. As put forward by the IMF in the background information to the EDG set up on non-performing loans, the financial crises that affected several countries since the mid-1990s have led to renewed interest in the question of how macroeconomic statistics should account for non-performing loans. The current treatment of loans in the SNA93 and related Manuals has resulted in many cases where the national accounts reflect the existence of non-performing loans neither in the flow accounts nor in the balance sheets<sup>2</sup>. This has, in turn, triggered a reflection on whether (and how) non-performing loans should be taken into account in macroeconomic statistics.
2. Furthermore, as highlighted by parallel developments in banking supervision (capital accord) and international accounting standards, the potential recording of information on non-performing loans in macroeconomic statistics may be seen as part of a wider issue on the valuation of loans.
3. These considerations, as well as questions raised by various countries on related issues, e.g. whether interest on non-performing loans should be accrued, or when loans should be written off, have justified the inclusion of the treatment of loans in the issues to be further studied when reviewing international statistical standards.
4. This remainder of this note is structured into two sections. Section 2 deals with the valuation and the recognition of loans. Section 3 refers to the recording of the corresponding interest on loans, focusing on the specific case of accrued interest on impaired loans.
5. It may be noted from the start that the use of accounting terminology (e.g. "non-performing loans", "provisions") is seen as potentially misleading when dealing with statistical concepts. In this context, while a detailed description of this accounting terminology is provided in Annex 1, this note intends to avoid such references, and, where available, sticks to statistical terms and concepts, as described in Annex 2. Annex 3 summarises the recent developments in the assessment of credit risk by banks' supervisors, and Annex 4 provides a detailed bibliography.

## **2. Valuation and recognition of loans**

### **2.1 General principles for the valuation of loans and the application to non-performing loans**

#### **2.1.1 Current standards**

6. As described in the SNA93 paragraph 12.107, the monetary value of cash, deposits, loans, advances and credits remains constant over time (except when denominated in foreign currency). "The 'price' of such an asset is always unity, and the nominal holding gains on such assets are always zero".

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<sup>2</sup> However, in the flow accounts, item K.10 "other volume changes in financial assets and liabilities" include the counterpart of write-offs and write-downs related to all financial instruments, i.e. not only loans.

Moreover, SNA93 defines nominal value as "the amount of principal that the debtor is contractually obliged to repay the creditor when the loan matures" (see paragraph 14.51). As a result, Bloem and Gorter (2001, page 15) conclude that, for the purpose of loans valuation, "the SNA93 appears to have adopted an "all-or-nothing" approach: the loss of the full claim is entered if and when the creditor recognises that the claim can no longer be collected".

7. In line with this approach, the SNA indicates that write-offs and write-downs of loans are foreseen only under specific circumstances. In particular, paragraph 11.23 distinguishes between, on one side, bilateral agreements such as debt forgiveness/cancellation, debt assumption or rescheduling, which are treated as financial transactions. On the other side, it states that all other changes in claims resulting from (unilateral) write-offs and write-downs are excluded from the financial accounts. Impaired assets may be removed from the balance sheet and the corresponding loss can be recorded in the other changes in volume account.
8. However, no further guidance is provided on the latter case, in particular concerning the appropriate timing of unilateral write-offs and write-downs. Moreover, SNA is ambiguous as it uses indistinguishably the terms "write-downs" and "write-offs". However, SNA only covers the case of an asset that may be removed from the balance sheet when it can no longer be collected, hence it covers only the case of write-offs. It is difficult to foresee a situation where a write-down of a loan is permitted. While write-downs that reflect actual market values of financial assets should be accounted for in the revaluation account, it is explicitly stated that write-downs or write-offs that are imposed solely to meet regulatory or supervisory requirements and do not reflect the actual market values should not be recorded in the SNA. Moreover, paragraph 10.140 clarifies that provisions for bad loans do not appear in SNA.
9. The treatment described in the European System of Accounts (ESA95) is relatively close to that of SNA93. However, ESA95 paragraph 6.27.d explicitly recognises that write-downs of bad debt should be recorded in the other volume changes in financial assets (K.10). Moreover, the IMF Manual on Balance of Payments (BPM5) has given rise to diverging interpretations. The general principle stated in paragraph 467 is clear: "In principle, all financial assets and liabilities should be measured at current market prices as of the dates involved (beginning or end of reference period)". However, this paragraph also recognises that there might be some departures. Paragraph 471 contains more specific references to loans (deposits) and reckons that "loans are recorded in the i.i.p. at nominal or face value", to the extent that "in general, that value is an acceptable proxy for market value". While this paragraph clearly states that values recorded in the position should be based on secondary market quotations, it also acknowledges that the use of market values on the creditor side and nominal values on the debtor side results in an asymmetry between debtor and creditor positions.
10. The IMF Monetary and Financial Statistics Manual (MFSM) recommends in paragraphs 205-207 to record loans at "book value", covering both the outstanding principal amount (i.e. nominal values in SNA93 terminology: see Annex 2) and any accrued interest. However, the MFSM also requires additional memorandum items on (i) interest arrears on loans and (ii) expected loan losses (paragraph

390). Furthermore, Paragraph 179 of the MFSM indicates that provisions for loan losses should be recorded in other items receivable/payable.

### ***2.1.2 Concerns raised by the current standards***

11. Bloem and Gorter stress (page 8) that the SNA93 treatment of loans in general is "markedly different" from the treatment of those loans that have become negotiable de facto, which are classified as "securities other than shares", and therefore valued at current market prices. Given that the market value may vary gradually depending on all factors affecting the price at which the asset may be sold, the SNA93 treatment results in a strong asymmetry between a very rigid "all-or-nothing" valuation for some assets, and a very "fluid" one for others, depending on whether the instruments are "marketable" or not. However, between these two extreme cases, there may be a number of situations where loans are traded, but not sufficiently often to be considered as "marketable"<sup>3</sup>.
12. Several contributors to the IMF EDG on non-performing loans have stressed the need to reflect the risk of non-repayment (credit risk) in the national accounts. This risk is described through the term "non-performing loans": e.g. Santos (referring specifically to bank supervisors); Cullen; Krueger. While this term may be somewhat confusing<sup>4</sup>, the MFSM (paragraph 390) refers to the "expected realisable value" of loans and corresponding "expected loan loss". Should the likelihood of obtaining the reimbursement of the loan at the expected repayment date decline, due e.g. to a deterioration in the financial health of the debtor, the expected realisable value of the loan will be reduced: this decrease in turn being described as the "expected loan loss".
13. This issue for statistical standards is accompanied by related discussions in both the banking supervision and international accounting standards. The "new Basel Capital Accord" being prepared by the Basel Committee on Banking Supervision gives a strong emphasis to a detailed assessment of the credit risk attached to banking loans<sup>5</sup>. Furthermore, as described in Annex 2, the draft International Accounting Standard for the valuation of financial instruments, IAS39 goes further by proposing, as an option, to value any asset or liability (including loans) at "fair-value", i.e. to take into account not only the credit risk but also the market risk (in particular the interest rate risk) in the measurement of loans for accounting purposes.

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<sup>3</sup> Regarding the borderline between loans and securities, paragraph 11.75 of the SNA93 mentions that "loans that have become negotiable de facto should be classified under securities other than shares", and Bloem and Gorter note that "the SNA93's treatment largely rests on the criterion of "marketability". This criterion is somewhat arbitrary because, often, loans that are not traded on a regular basis can, nevertheless, be sold". Similarly the DAO states in paragraph 5.8 f/ that "loans that have become traded will be classified as securities under certain conditions, as stated in the Debt Guide paragraph 3.29. It will be noted that many loans are traded but not sufficiently to become securities". The exact criterion for defining the borderline between loans and securities may be further debated in the process of the review of international statistical standards. See also ESA95, paragraphs 5.77 - 5.80.

<sup>4</sup> This term may be understood as referring only to loans for which repayments of principal and/or interest have been interrupted, while the value of a loan may be reduced even before or only after this may occur.

<sup>5</sup> See "Overview of the New Basel Capital Accord", third consultative paper dated April 2003, and a summary of the proposed amended rules for the assessment of credit risk in Annex 3.

### ***2.1.3 Possible solutions for valuation of loans under SNA***

14. As envisaged by a number of analysts, between the two extreme options which may be considered in this context, i.e. (i) sticking to nominal values or (ii) recording all loans at "fair value", one intermediate solution would be to use nominal values, but to reduce their values according to the "credit risk" which they bear, or in other words, deducting only the corresponding "expected loan losses". As mentioned above, given the SNA ambiguity on the use of write-offs and write-downs, there is a need to provide further guidance on the scope and timing of these adjustments. Other proposals have involved the recording of statistical corrections for fair values only by international institutions, when trying to reconcile national data (Kozlow, 2003); or the recording of alternative values as memorandum items, e.g. by recording assets and liabilities at fair values, but with nominal amounts as a memo item regarding liabilities, where the fair value in times of financial stress may not be sufficient for users (see e.g. Australian Bureau of Statistics, 2003), or even useful to them.
15. The quadruple entry system of national accounting, which allows for the vertical (i.e. by sector) and horizontal (i.e. by instrument) consistency of the accounts may be regarded as inconsistent with the concept of "expected loan losses": while the former implies the use of consistent valuation methods by debtors and creditors, the latter refers to an expectation of loss, i.e. a unilateral assessment by the creditor. Only if these expected loan losses could be accurately proxied by fully objective criteria, known by both the debtor and the creditor, would a practical reconciliation between the two concepts become possible.
16. In general, (observed) nominal values are more reliable than (compiled) market values for loans. Moreover, nominal values for loans are essential for many user areas, in particular for monetary policy analysis and fiscal analysis. For example, the analysis of loan developments would be hampered by valuation changes due to credit risk. It may be added, in line with comments by the Australian Bureau of Statistics (2003), that while financial stability and wealth/indebtedness analysis may require in some cases a fair or market valuation of assets, these analyses also require some information on the nominal value of debts. Ridgeway (2001) went even further by stressing that "the data on allowances<sup>6</sup> themselves are a valuable source of information", as they provide "a measure of imbalance in the financial markets". Of course, this may raise the issue of why analysts have no concern with the market valuation of debt securities in liabilities<sup>7</sup>.
17. *From a compiler's point of view*, the introduction of fair values as an option for the accounting of loans in the International Accounting Standards coupled with the mandatory application of the IAS within the EU, at least for the consolidated accounts of listed companies<sup>8</sup>, might also eventually make

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<sup>6</sup> Concept similar to the changes recorded in the value of the loans in order to reflect "expected loan losses". However, this requires collecting information on both nominal values and expected loan losses.

<sup>7</sup> This need for nominal values [though defined as the discounted value of cash flows related to the loan: see Annex 1] also for debt securities in liabilities is recognised in particular in the External Debt Statistics Guide, in paragraph 2.31. Of course, a debtor may buy back debt securities on the market if they are offered there at a lower price, but (i) he needs to have some cash available for this, and (ii) it is not warranted that the full debt will be offered on the market.

<sup>8</sup> Decisions in this respect are however still outstanding.

the collection of such data for statistical purposes easier than in the past. However, it seems clear that fair value will by no means be applied by all companies, so that the nominal value is likely to remain much easier (and more reliable) to compile or in other words, related costs of obtaining nominal values would remain much lower. The recording of "expected loan losses" may nevertheless be feasible, given that this valuation method is systematically applied in accounting terms. Of course, such data are available in accounting books only regarding assets.

18. As regards the criterion to be applied to measure "expected loan losses", reliance on very precise common rules would in principle have a positive impact on data comparability. This has been also an objective of the reform of international accounting standards: paragraph 58 of the draft IAS 39 states that "an entity shall assess at each balance sheet date whether there is any *objective* evidence that a financial asset [...] is impaired". However, the list of events provided in paragraph 59 of the same draft IAS 39 which should trigger impairment includes under item d) the fact that it becomes "probable that the borrower will enter bankruptcy or other financial reorganisation", which appears to require once more some *subjective* judgement by the creditor. This suggests that defining systematic and fully objective criteria would be also difficult to statisticians, while the reliance on accounting standards may anyway result in more harmonised data, given the process of harmonisation currently under way in international accounting standards<sup>9</sup>.
19. Nevertheless, as described by Freeman (2003), the Institute of International Finance (IIF) has proposed some categories to be used for a world-wide consistent reporting, including "doubtful" claims, where full repayment 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", and "loss", i.e. "when management considers the facility to be virtually uncollectible and/or when interest or principal or both are overdue more than one year". While these definitions make clear that, also for the IIF, the impairment of a claim is defined with reference with the creditor's assessment, it would be possible to take a slightly different approach, by adopting a specific convention depending only on arrears, e.g. that a claim in arrears for more than 180 days should have an expected realisable value of 50% of the nominal, while arrears of more than 1 year would lead to an expected realisable value of zero.
20. The latter approach would have the advantage of allowing for a consistent reporting by both the debtor and the creditor. However they would produce only a proxy of the requested information, i.e. the expected loan losses: unless some practical studies were to prove that this is a reasonable proxy, this option may not produce the information requested by users. Given for instance the existence of collateral, and taking into account the sophistication of banks' models to assess credit risk, it is very uncertain that the two approaches would give a similar outcome.
21. In this respect, it should also be noted that the use of market values for traded instruments (e.g. debt securities) implies that both the creditor risk and the market risk are taken into account in the System.

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<sup>9</sup> This reliance of the judgement of the creditor is in line with the specific nature of a loan, which is based on a bilateral relationship in which the creditor usually has access to detailed information about the situation of the debtor.

The two types of risks cannot be easily isolated. However, this is possible and desirable for non-traded instruments such as loans. In particular, the above-mentioned memorandum item should cover only the credit risk since the interest-rate risk is of less relevance for items to be held until maturity.

#### ***2.1.4 Proposed treatment for valuation of loans under SNA***

22. In this context, a tentative conclusion may be that:

- Nominal values for loans are necessary to meet various needs. They should therefore be maintained in the SNA;
- The usefulness of the application of fair values for loans is disputed: the application of fair values to non-traded instruments, covering for both creditor and market risk, may not be meaningful. Furthermore, this method may raise strong practical difficulties for compilers.
- Nevertheless, a clear need for additional information on the loss of value of loans connected with a reduction in creditworthiness of the debtor has been identified<sup>10</sup>. One possibility to meet this demand could be the collection of a compulsory memorandum item referring only to assets/creditors. Clearly, comparability of statistics would make it advisable to define clear criteria for a coherent measurement of these losses of value. In general, the concept of "expected loan losses" and the privileged relationship which usually prevails between the debtor and the creditor suggest that the best available estimate of "expected loan losses" would have to come from the creditors<sup>11</sup>. Developments in accounting and supervisory standards may increase the analytical meaningfulness of corresponding accounting data by ensuring greater consistency in the identification of expected loan losses based on harmonised principles.
- In the longer run, the possible generalisation of fair value accounting triggered by the wider application of IAS might allow to add further memorandum items, which might be added to those on "expected loan losses", but it is too early to assess whether and when this might occur.

## **2.2 Criteria determining the recognition and derecognition of loans**

23. In principle, a loan is recognised as soon as the corresponding contract has been paid, and should continue to be recorded until it has been repaid. In case part of the funds are never repaid, as noted by Bloem and Gorter (2001), the SNA93 does not provide strict criteria to decide at which state exactly a non-performing loan should be "de-recognised". There are three possibilities for the derecognition of a loan in the System: repayment; debt cancellation/forgiveness and write-off/write-downs.
24. If fair values or losses on bad loans were recorded, the [net] value of loans no longer expected to be paid back should anyway be brought back to zero within the accounts. However, if a gross value were

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<sup>10</sup> The treatment of further specific cases (e.g. loans granted by the government with an interest rate below the market rate or special conditions waiving the need for repayment) is not covered in this note, but may be worth studying in more detail.

<sup>11</sup> In principle, the creditor's internal judgement, which in general would be identical to that in its accounting books.



still recorded, or if the SNA93 were to stick to nominal values for assessing loans, they should be cancelled/de-recognised at some stage.

25. The decision of the creditor to unilaterally delete the loan from its accounts may be the best criterion to determine that the loan has no chance of being paid back, and therefore that it should no longer be recorded for statistical purposes<sup>12</sup>.

### **3. Accrued interest on impaired loans**

26. The treatment of accrued interest on impaired loans is also within the list of items to be discussed in the review of international statistical standards. The key questions here are whether interest arrears should be recognised and classified in the same way as accrued interest on standard loans or not and whether a separate entry for interest arrears is needed.
27. According to SNA 93 11.101 interest accruing on loans may be recorded - following national practices - by capitalising it in the underlying asset or recording it under accounts receivable/payable. This applies independent on whether or not the accrued interest is paid when due. Therefore, no separate entry for arrears is needed.<sup>13</sup> In line with this and in line with our position regarding the treatment of "expected loan losses" we see indeed an advantage of treating accrued interest on impaired and non-impaired loans identical. In order to fulfil additional information requirements by users, all interest accrued on impaired loans could be shown as memorandum item. Although this approach is not in line with international accounting standards<sup>14</sup>, it seems to be compatible with the approach of the MFSM, which states in paragraph 238/239 that the (book<sup>15</sup>) value of loans should include interest that is overdue for payment (and paragraph 207 requires the recording of expected loan losses as a memorandum item regarding the book value of the loan, i.e. including accrued interest). In addition the MFSM requires that data on interest arrears should also be shown as memorandum items.
28. Indeed, if loans are shown at their nominal value, as favoured above, both consistency and the need for symmetry between the recording by debtors and creditors would suggest to book the corresponding accrued interest, even though it may be unlikely to be paid. The claim on the debtor would therefore increase as interest accrues, which may be recorded as an increase of the same loan

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<sup>12</sup> Writing-down or writing-off of bad debt are not classified as financial transactions. By contrast, the cases of debt assumption and debt cancellation/forgiveness are classified as financial transactions (see ESA 5.16)

<sup>13</sup> By contrast, BPM5, External debt Guide, and GFSM use the due-for-payment date basis involving imputation of transactions that the liability has been repaid and replaced by a short-term debt.

<sup>14</sup> The draft IAS 39 proposes that "once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is thereafter recognised using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss". In other words, once there is objective evidence of impairment, the loan will be written down to reflect the corresponding loss, by an amount equal to the difference between the (remaining value of the) loan and the present value of future capital and interest payments discounted at the original effective interest rate. Obviously, the concepts under discussion regarding international accounting standards do not require maintaining symmetry between the accounts of the debtor and those of the creditor.

<sup>15</sup> See Annex 2.

or as an increase in other accounts payable<sup>16</sup>. At the same time, the additional information provided by the memorandum item helps to assess the financial position of a certain sector or country.

29. It should be noted that recording interest in arrears as a separate claim on the debtor under the category loans may have the advantage of avoiding raising doubts among users whether an increase in loans to a sector or country in a difficult financial situation would reflect additional loans or just the accruing of (possibly unpaid) interest. However, it would be useful to separately identify interest on arrears only if impaired loans and expected loan losses were to be singled out in the accounts<sup>17</sup>. This may imply some substantial additional burden for reporters.

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<sup>16</sup> This recording would apply only to loans not giving rise to a debt rescheduling, or any new agreement between the creditor and the debtor. In practice, a number of loans in arrears may give rise to such agreements.

<sup>17</sup> The MFSM, para. 390, requires only memorandum items (disaggregated by sector) for 1) interest arrears on loans and 2) expected loan losses.

## ANNEX 1 - ACCOUNTING FRAMEWORK FOR FINANCIAL INSTRUMENTS

The accounting standards in the European Union are being reformed. Of particular interest is the attempt to harmonise the accounting treatment of financial instruments. As the trading and capital market-related activities of banks has grown, the accounting framework has been modified to permit market valuations for all the instruments held for trading purposes. The coexistence in banks' financial statements of items valued at historical cost and others at market values ("marked-to-market") would be viable only if banks were managing the two components of the portfolio in a totally segregated manner. But this is not the case, as trading instruments are increasingly used to hedge the interest rate risk in the banking book. More importantly, the increased reliance of financial institutions on derivatives contracts, which in most jurisdictions are recorded as off-balance-sheet items, has contributed to a growing misalignment between the information contained in financial statements and the true risk profiles of reporting entities.

The crucial standard for the valuation of financial instruments is IAS39, however this standard has not yet been endorsed by the EU Commission. The debate on this standard is still very contentious, in particular regarding the issues of macro-hedging and the fair value option<sup>18</sup>. The European Commission's interest in the harmonisation of accounting standards in the EU is reflected in the strong political commitment to endorse the standards issued by the IASB. In May 2003 the EU Council approved a Directive<sup>19</sup> which removed any inconsistencies between the existing Accounting Directives and the IAS, and complemented a Regulation of July 2002<sup>20</sup> that requires all listed EU companies (including banks) to prepare consolidated accounts in accordance with IAS from 2005 onwards. In July 2003 the Commission welcomed the endorsement of the IAS by the Accounting Regulatory Committee<sup>21</sup> (ARC), and in September 2003 adopted a Regulation<sup>22</sup> endorsing the IAS, with the exception of IAS 32 and IAS 39 pending the finalisation of these standards by the IASB. The Commission therefore has a strong interest that the main issues of concern raised with reference to the wider use of fair values for financial instruments are satisfactorily dealt with, in order to move to full endorsement of the IAS.

The current draft version of IAS39 permits that several components of the banking book (in particular, loans) can continue to be carried at amortised cost, whilst introducing an irrevocable option allowing financial institutions to measure any financial asset or liability at fair value through profit and loss at inception, the "fair value option". Financial assets such as loans that are not carried at fair value through profit and loss are subject to an impairment test.

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<sup>18</sup> The latest proposal of the Commission is, in fact, to "carve out" from IAS 39 the provisions concerning the fair value option and the hedging of core deposits.

<sup>19</sup> Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings, published in OJ L 178 of 17 July 2003.

<sup>20</sup> Regulation (EC) No 1606/2002.

<sup>21</sup> Committee composed of representatives of the EU Member States and headed by the European Commission. The committee has a regulatory function and provides opinions on Commission proposals to adopt international accounting standards.

<sup>22</sup> Regulation (EC) No 1725/2003.

A financial asset or group of assets is impaired and impairment losses are incurred only if there is objective evidence as a result of one or more events that occurred after the initial recognition of the asset. An entity is required to assess at each balance sheet date whether there is any objective evidence of impairment. If any such evidence exists, the entity is required to make a detailed impairment calculation to determine whether an impairment loss should be recognised.

The following definitions are used in the framework of the International Accounting Standards<sup>23</sup>:

#### Definitions [IAS 39.9]

Financial instrument: A contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial asset: Any asset that is:

- cash;
- an equity instrument of another entity;
- a contractual right:
  - to receive cash or another financial asset from another entity; or
  - to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; or
- a contract that will or may be settled in the entity's own equity instruments and is:
  - a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or
  - a derivative that will or may be settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose the entity's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments.

Financial liability: Any liability that is:

- a contractual obligation:
- to deliver cash or another financial asset to another entity; or
- to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or
- a contract that will or may be settled in the entity's own equity instruments

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<sup>23</sup> Source: Deloitte Touche Tohmatsu

A derivative is a financial instrument:

- Whose value changes in response to the change in an underlying variable such as an interest rate, commodity or security price, or index;
- That requires no initial investment, or one that is smaller than would be required for a contract with similar response to changes in market factors; and
- That is settled at a future date.

### **Classification as Liability or Equity**

Since IAS 39 does not address accounting for equity instruments issued by the reporting enterprise but it does deal with accounting for financial liabilities, classification of an instrument as liability or as equity is critical. IAS 32 addresses the classification question.

### **Classification of Financial Assets**

IAS 39 requires financial assets to be classified in one of the following categories: [IAS 39.45]

1. Financial assets at fair value through profit or loss.
2. Available-for-sale financial assets.
3. Loans and receivables.
4. Held-to-maturity investments.

Those categories are used to determine how a particular financial asset is recognised and measured in the financial statements.

**Financial assets at fair value through profit or loss.** This category has two subcategories:

1. Designated. The first includes any financial asset that is designated on initial recognition as one to be measured at fair value with fair value changes in profit or loss.
2. Held for trading. The second category includes financial assets that are held for trading. All derivatives (except those designated hedging instruments) and financial assets acquired or held for the purpose of selling in the short term or for which there is a recent pattern of short-term profit taking are held for trading.

**Available-for-sale financial assets (AFS)** are any non-derivative financial assets designated on initial recognition as available for sale. AFS assets are measured at fair value in the balance sheet. Fair value changes on AFS assets are recognised directly in equity, through the statement of changes in equity, except for interest on AFS assets (which is recognised in income on an effective yield basis), impairment losses, and (for interest-bearing AFS debt instruments) foreign exchange gains or losses. The cumulative gain or loss that was recognised in equity is recognised in profit or loss when an available-for-sale financial asset is derecognised.

**Loans and receivables** are non-derivative financial assets with fixed or determinable payments, originated or acquired, that are not quoted in an active market, not held for trading, and not designated on

initial recognition as assets at fair value through profit or loss or as available-for-sale. Loans and receivables for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration, should be classified as available-for-sale. Loans and receivables are measured at amortised cost. [IAS 39.46(a)]

**Held-to-maturity investments** are non-derivative financial assets with fixed or determinable payments that an entity intends and is able to hold to maturity and that do not meet the definition of loans and receivables and are not designated on initial recognition as assets at fair value through profit or loss or as available for sale. Held-to-maturity investments are measured at amortised cost. If an entity sells a held-to-maturity investment other than in insignificant amounts or as a consequence of a non-recurring, isolated event beyond its control that could not be reasonably anticipated, all of its other held-to-maturity investments must be reclassified as available-for-sale for the current and next two financial reporting years. [IAS 39.46(b)]

#### Classification of Financial Liabilities

IAS 39 recognises two classes of financial liabilities: [IAS 39.47]

- Financial liabilities at fair value through profit or loss.
- Other financial liabilities measured at amortised cost using the effective interest method.

The category of financial liability at fair value through profit or loss has two subcategories:

- **Designated.** A financial liability that is designated by the entity as a liability at fair value through profit or loss upon initial recognition.
- **Held for trading.** A financial liability classified as held for trading, such as an obligation for securities borrowed in a short sale, which have to be returned in the future.

#### **Initial Recognition**

IAS 39 requires recognition of a financial asset or a financial liability when, and only when, the entity becomes a party to the contractual provisions of the instrument, subject to the following provisions in respect of regular way purchases. [IAS 39.14]

Regular way purchases or sales of a financial asset. A regular way purchase or sale of financial assets is recognised and derecognised using either trade date or settlement date accounting. The method used is to be applied consistently for all purchases and sales of financial assets that belong to the same category of financial asset as defined in IAS 39 (note that for this purpose assets held for trading form a different category from assets designated at fair value through profit or loss). The choice of method is an accounting policy. [IAS 39.38]

IAS 39 requires that all financial assets and all financial liabilities be recognised on the balance sheet. That includes all derivatives. Historically, in many parts of the world, derivatives have not been recognised on company balance sheets. The argument has been that at the time the derivative contract was entered into, there was no amount of cash or other assets paid. Zero cost justified non-recognition,

notwithstanding that as time passes and the value of the underlying variable (rate, price, or index) changes, the derivative has a positive (asset) or negative (liability) value.

### **Initial Measurement**

Initially, financial assets and liabilities should be measured at fair value (including transaction costs, for assets and liabilities not measured at fair value through profit or loss).

### **Measurement Subsequent to Initial Recognition**

Subsequently, financial assets and liabilities (including derivatives) should be measured at fair value, with the following exceptions: [IAS 39.46]

- Loans and receivables, held-to-maturity investments, and non-derivative financial liabilities should be measured at amortised cost using the effective interest method.
- Investments in equity instruments with no reliable fair value measurement (and derivatives indexed to such equity instruments) should be measured at cost.
- Financial assets and liabilities that are designated as a hedged item or hedging instrument are subject to measurement under the hedge accounting requirements of the IAS 39.
- Financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition, or that are accounted for using the continuing-involvement method, are subject to particular measurement requirements.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. IAS 39 provides a hierarchy to be used in determining the fair value for a financial instrument: [IAS 39 Appendix A, paragraphs AG69-82]

- Quoted market prices in an active market are the best evidence of fair value and should be used, where they exist, to measure the financial instrument.
- If a market for a financial instrument is not active, an entity establishes fair value by using a valuation technique that makes maximum use of market inputs and includes recent arm's length market transactions, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis, and option pricing models. An acceptable valuation technique incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments.
- If there is no active market for an equity instrument and the range of reasonable fair values is significant and these estimates cannot be made reliably, then an entity must measure the equity instrument at cost less impairment.

Amortised cost is calculated using the effective interest method. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to the net carrying amount of the financial asset or liability. Financial assets that are not

carried at fair value though profit and loss is subject to an impairment test. If expected life cannot be determined reliably, then the contractual life is used.

### **Impairment**

A financial asset or group of assets is impaired and impairment losses are incurred only if there is objective evidence as a result of one or more events that occurred after the initial recognition of the asset. An entity is required to assess at each balance sheet date whether there is any objective evidence of impairment. If any such evidence exists, the entity is required to do a detailed impairment calculation to determine whether an impairment loss should be recognised. [IAS 39.58]

The amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated cash flows discounted at the financial asset's original effective interest rate. [IAS 39.63]

Individual assets that are individually assessed and for which no impairment exists are grouped with financial assets with similar credit risk statistics and collectively assessed for impairment. [IAS 39.64]

If, in a subsequent period, the amount of the impairment loss relating to a financial asset carried at amortised cost or a debt instrument carried as available-for-sale decreases due to an event occurring after the impairment was originally recognised, the previously recognised impairment loss is reversed through profit and loss. Impairments relating to investments in available-for-sale equity instruments are not reversed. [IAS 39.65]

### **Derecognition of a Financial Asset**

The basic premise for the derecognition model in IAS 39 is to determine whether the asset under consideration for derecognition is: [IAS 39.16]

- an asset in its entirety; or
- specifically identified cash flows from an asset; or
- a fully proportionate share of the cash flows from an asset; or
- a fully proportionate share of specifically identified cash flows from a financial asset.

Once the asset under consideration for derecognition has been determined, an assessment is made as to whether the asset has been transferred, and if so, whether the transfer of that asset is subsequently eligible for derecognition.

An asset is transferred if either the entity has transferred the contractual rights to receive the cash flows, or the entity has retained the contractual rights to receive the cash flows from the asset, but has assumed a contractual obligation to pass those cash flows on under an arrangement that meets the following three conditions: [IAS 39.17-19]

- the entity has no obligation to pay amounts to the eventual recipient unless it collects equivalent amounts on the original asset,



- the entity is prohibited from selling or pledging the original asset (other than as security to the eventual recipient), and
- the entity has an obligation to remit those cash flows without material delay.

Once an entity has determined that the asset has been transferred, it then determines whether or not it has transferred substantially all of the risks and rewards of ownership of the asset. If substantially all the risks and rewards have been transferred, the asset is derecognised. If substantially all the risks and rewards have been retained, derecognition of the asset is precluded. [IAS 39.20]

If the entity has neither retained nor transferred substantially all of the risks and rewards of the asset, then the entity must assess whether it has relinquished control of the asset or not. If the entity does not control the asset then derecognition is appropriate; however if the entity has retained control of the asset, then the entity continues to recognise the asset to the extent to which it has a continuing involvement in the asset. [IAS 39.30]

## ANNEX 2 - DEFINITIONS OF VALUATION OF LOANS IN STATISTICAL MANUALS

In this note, "nominal amount" is meant to refer to the definition in the SNA93, in paragraph 14.51, i.e. "the amount of principal that the debtor is contractually obliged to repay the creditor when the loan matures".

However, the ESA 95 definition is slightly different as it covers "the amounts of principal that the debtors are contractually obliged to repay the creditors, even in cases where the loans was traded at a discount or premium" (see paragraph 7.51).

This definition is also different from that in the IMF External Debt Statistics Guide, where the latter is called "face value", and nominal value refers to the discounted value of cash flows (cf. article 2.32 of the Guide).

The MFSM, in paragraph 205, refers to the "book value", i.e. the outstanding principal amounts plus any accrued interest. In the SNA terminology, this implies that nominal value + accrued interest (if any) = book value.

The MFSM also defines in paragraph 390 the "expected realisable value" of loans and corresponding "expected loan loss": should the likelihood of obtaining the reimbursement of the loan at the expected realisable date decline, due to a deterioration in the financial health of the debtor, the expected realisable value of the loan should be reduced: this decrease in turn being described as the "expected loan loss".

Finally, the Government Finance Statistics Manual (GFSM) provides another definition of nominal value: *"the nominal value is the amount that the debtor owes to the creditor at any moment. It reflects the value of the instrument at creation and subsequent economic flows, such as transactions, valuation changes (excluding market price changes), and other changes, such as debt forgiveness. Conceptually, the nominal value is equal to the required future payments of principal and interest discounted at the existing contractual interest rate. Nominal value is not necessarily face value, which is the undiscounted amount of principal to be repaid"* (see paragraph 3.76, footnote 8).

### ANNEX 3. CHANGES TO THE CREDIT RISK ASSESSMENT FRAMEWORK OF BANKS

Banking supervisors are discussing improvements to the credit risk assessment framework of banks. These improvements are expected as a result a revision of the Capital Adequacy framework for banks, namely the requirement to put aside a certain amount of capital to face credit risks and other banking risks, as well as a result of further discussions amongst supervisors.

The Capital Adequacy Framework (Basel 1) has been introduced in 1988. It requires the application of a solvency ratio: banks must set aside 8% of loans as own capital for prudential purposes. Supervisors are now updating this framework to better take into account differences in the creditworthiness of the debtor, and corresponding credit risk. **Under the new framework (Basel 2)**, the modifications to the capital requirements occur in the definition of risk-weighted assets (the denominator of the solvency ratio). For the calculation of credit risk, three distinct options are being introduced. A Standardised Approach, a Foundation Internal Ratings Based (IRB) Approach and an Advanced IRB Approach.

- The Standardised Approach is similar to the current Basel 1 Accord as it establishes fixed risk weights corresponding to supervisory categories. Optionally, it makes use of external ratings. Where this option is not used, the risk weight remains at 100%. An important innovation of this approach is the requirement that loans that are considered past-due be risk weighted at 150%, unless a threshold amount of specific provisions has already been set aside by the bank against the loan. This represents an incentive to set aside specific provisions. Another important development in the Standardised Approach is the expanded range of collateral, guarantees and credit derivatives that banks may recognise. The Standardised Approach also includes a specific treatment for retail exposures, especially residential mortgages and loans to SMEs.
- The IRB Approaches represent two more sophisticated approaches of increasing risk sensitivity. They differ substantially from the Standardised approach as banks' internal assessments are the key input to capital requirements' calculation. The elements of the capital calculation are determined not only by banks, but also by quantitative inputs and formulas decided by the Basel Committee. The Foundation IRB differs from the Advanced IRB primarily in terms of the source of the inputs: specified by the supervisor in the case of the Foundation IRB, determined by the bank in the case of the Advanced IRB. The IRB cover a number of portfolios. For the corporate, bank and sovereign exposures, the IRB calculation depends on four quantitative inputs: the Probability of Default (PD), the Loss Given Default (LGD), which measures the proportion of exposure that will be lost in case of default, the Exposure at Default (EAD), which for loan commitments measures the amount of the facility that is likely to be drawn in case of default, and the maturity (M). For Foundation IRB banks, the LGD values specified by supervisors reflect the presence of different types of collateral. For financial collateral, supervisors seek to ensure that banks recognise the risk that the market value of the collateral changes over time. For retail exposures, there is only a single, advanced IRB approach and

no foundation IRB alternative. For equity exposures, the use of a 90% LGD is mandatory and there are other limitations such as a minimum risk weight of 100% in many circumstances.

The implementation of IRB approaches implies that supervisors rely on internal rating systems. In order to minimise comparability issues, banks applying for IRB must meet certain minimum qualifying criteria. In particular, banks will need to be able to measure the key elements of credit risk. Banks shall either accumulate data from their own experience, or from external sources, and demonstrate the relevance of such data to their own exposures. In practical terms, banks are expected to collect, store and use loss statistics over time in a reliable manner.

**Outside the scope of Basel 2**, supervisors are also discussing the role of provisioning practices. Several supervisors, including the ECB, are concerned that Basel 2 lacks of guidance in this respect. In particular, the ECB claims that *in many instances “static” loan loss provisions - set only when assets become impaired - tend to reinforce pro-cyclicality. If banks were required to assess expected losses with due consideration to the risk profile of a loan over the entire economic cycle and set aside provisions to cover these losses, buffers in form of provisions against cyclical variations would be available. This form of “dynamic” provisioning would then contribute to attenuating the possible procyclical feature of the Accord by reducing the cyclicity of banks’ profits. There are, however, some aspects that do not facilitate the pursuance of dynamic provisioning practices. First, the general lack of tax incentives for banks to make provisions for future losses. Second, in a more forward- looking perspective, ensuring the applicability of dynamic provisioning practices within the International Accounting Standards (IAS) framework remains a challenging issue for both regulators and accounting professionals (by contrast, current accounting conventions in most of the EU countries do not represent, in principle, a major obstacle to the setting of provisions for future expected losses). The ECB recognises that the process of global harmonisation of accounting is under way, but is quite complex and cumbersome. At this stage, it may nevertheless be helpful to clarify the basic direction in which developments could go in this field. The principle could be established that in the longer term provisions would cover expected losses (including losses owing to the effect of the economic cycle), whereas capital would cover unexpected losses.*

## ANNEX 4 - BIBLIOGRAPHY

The attached list includes various notes and comments as posted on the IMF's EDG "treatment of non-performing loans", as well as some further publications.

### 1. Documents available on the IMF's EDG "treatment of non-performing loans"

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- The Treatment of Nonperforming Loans in Macroeconomic Statistics, IMF Working Paper 01/209, Adriaan Bloem and Cornelis Gorter, December 2001
- Treatment of Allowances for Loan Losses and Non-performing Loans, (BOPCOM-01/23), 2001
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- Loan valuation issues, IMF, June 2004
- The implications of the new IAS 39 on the treatment of impaired assets in the national accounts, Russell Krueger and Ana-Maria Valencia, IMF, March 2004
- The non-performing loan electronic discussion group - current situation - Russel Freeman, IMF, October 2003
- Loan Valuation - Back to Basics , Australian Bureau of Statistics, August 2003
- The Treatment of Nonperforming Loans in China, Yanfei Ye, July 2003
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- Purpose of Exercise? Derick Cullen, August 2002

## 2. Other documents

- Issue paper 3 (BOPTEG) - application of accrual principles to debt arrears, Manik Shrestha, IMF, April 2004
- Overview of the New Basel Capital Accord", third consultative paper, Basel Committee on Banking Supervision, April 2003
- Task Force on Harmonising Public Sector Account -Working Group II: SNA Review issues: item 3 - Contingent assets (including state guarantees), constructive obligations, and provisions", Jeff Golland, February 2004
- Flow of funds analysis in the experience of the Banco de España, Juan Peñalosa and Teresa Sastre, in Monetary analysis: tools and applications, edited by Kloeckers and Willeke, ECB, 2000.