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Issue 44 Financial assets classification

# CLASSIFICATION AND TERMINOLOGY OF FINANCIAL ASSETS AND LIABILITIES IN THE UPDATED SNA

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# Classification and terminology of financial assets and liabilities in the updated SNA<sup>1</sup>

Paper to be presented at the fourth meeting of the Advisory Expert Group on National Accounts (AEG) at the European Central Bank in Frankfurt am Main (30 January to 8 February 2006)

# **Executive Summary**

In view of the limited treatment of the classification of and terminology relating to financial assets and liabilities in the SNA review so far, this note starts with an outline of the current classification and terminology used for financial assets and liabilities in the 1993 SNA and in the 1995 ESA (Section 2), while recognising that the Monetary Financial Statistics' Manual (MFSM) already contains some further developments.<sup>2</sup> It elaborates on the reasons for modifying the current classification and terminology in Section 3. The decisions taken and observations made so far by the AEG are described in Section 4. Various recommendations related to the classification of financial assets and liabilities and to the corresponding terminology are made in Section 5. The last sections concern proposals for boxes on money and debt (Sections 6 and 7) in the updated SNA.

- 1. The main recommendations are:
- a) To divide the category **monetary gold and SDRs**;
- *To introduce the term debt securities to replace securities other than shares;*
- c) To replace the term shares and other equity by **equity** and split it further into the sub-categories 'quoted shares', 'unquoted shares' and 'other equity';
- d) To separate investment fund shares/units from 'shares and other equity' and form a new category investment fund shares/units;
- e) To consider distinguishing various types of investment fund shares/units (e.g. money market, bond, equity, real estate, mixed fund, and perhaps hedge fund shares/units) either as an "of which" additional split (in the case of shares/units in money market funds, with a view to providing a link with monetary aggregates) or as a non-mandatory memorandum item (for the other categories of investment fund shares/units);

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In that context, the paper is also seen as a basis to 'harmonise' the classification of financial assets and liabilities between the SNA and the BPM.

- f) To consider a split of **financial derivatives** into two broad instrument groups 'forwards' and 'options', and further into risk categories;
- g) To broaden the category insurance technical reserves by introducing a sub-category **reserves for** calls on standardised guarantees;
- h) To introduce a box linking **measures of money** to the balance sheets and the financial accounts; and
- *i)* To include a box in the new SNA on **debt**.

After much deliberation, we propose to retain the separate categories 'deposits' and 'loans', but would strongly encourage further work to clarify the distinction between the categories. We would change the order of the categories so that 'loans' follow immediately on 'deposits'.

- 2. Do you agree with the analysis of the current standards as presented in Section 2 and with the reasons for changing them as outlined in Section 3? The main reasons are (i) to accommodate new developments in financial markets as triggered by financial innovation and integration; (ii) to respond to policy and analytical needs, mainly in the context of monetary policy and financial stability analysis; and (iii) to make the terminology briefer, clearer and in general more usable.
- 3. Do you agree with the recommended solutions as described above and in more detail in Sections 5, 6 and 7?

#### 1. Introduction

One of the issues to be dealt with during the current SNA update project is the classification of financial assets and liabilities. It is item 44 of the list of SNA updating issues, which is linked to several topics such as the treatment of repurchase agreements (item 1), nonperforming loans (item 4), guarantees (item 37) and to some clarification issues. A paper was prepared on that issue by the Balance of Payments Committee (BOPCOM) and forwarded to the Advisory Expert Group (AEG) meeting for decision in July 2005. Several papers linked to this issue were also presented at this AEG meeting and at the previous meeting for discussion or information. They dealt with questions like the treatment of traded loans (borderline between securities and other financial instruments), of index-linked debt instruments and the distinction between loans and deposits.

In view of the limited treatment of the financial asset and liability classification and terminology so far, this note deals with the issue in a rather broad and interrelated context. It follows the suggestion put forward in the July 2005 AEG meeting to "write a paper exploring possible options for changes in the classification of financial instruments more generally."

The note is organised as follows. It describes the current classification and terminology used for financial assets and liabilities in the 1993 SNA (and in the 1995 ESA, which differs in some respects) in Section 2 and it outlines the reasons why it is suggested to modify the current classification and terminology in Section 3. The decisions taken and observations made so far by the AEG (and other groups, notably the BOPCOM) are described in Section 4. Various recommendations related to the classification of financial assets and liabilities and to the corresponding terminology are made in Section 5. It also proposes boxes on money and debt in the updated 1993 SNA. Annex 1 is a draft new version of the annex to Chapter XIII in the SNA, revised in line with the rest of this paper.<sup>3</sup>

A general terminological point concerns the use of the term "financial assets" in the 1993 SNA (and in the 1995 ESA) to refer to both assets and liabilities. This complements "non-financial assets" and is often acceptable. Sometimes however it is clumsy and confusing: for example, paragraph 10.5 of the SNA reads "for each institutional sector, the financial account indicates the types of financial assets utilised by that sector to incur liabilities and acquire financial assets". We would prefer to use "financial assets and liabilities" unless it is clear that only assets are meant; or possibly to use a generic term that can cover both e.g. "financial instruments" (which would read better in paragraph 10.5).

The question of accommodating financial instruments issued and held by Islamic financial institutions in the proposed categories is not addressed in this paper, but we would not expect any new difficulties (see Appendix 2 to the MFSM).

# 2. Current classification and terminology of financial assets and liabilities in the 1993 SNA and in the 1995 ESA

This section deals with the current classification and terminology of financial assets and liabilities in the 1993 SNA and in the 1995 ESA. It also provides information on how contingent assets and liabilities are treated in the current statistical standards.

# 2.1 Classification schemes used in the 1993 SNA and in the 1995 ESA

The current classification of financial assets and liabilities in the 1993 SNA distinguishes eight categories, while the 1995 ESA classification comprises only seven (see Table 1).

Table 1: Classification of financial assets and liabilities in the 1993 SNA and the 1995 ESA

Monetary gold Special drawing rights (SDRs)  urities other than shares ecurities other than shares, excluding nancial derivatives Short-term Long-term Financial derivatives	F.31 F.33 F.331 F.332 F.34
urities other than shares ecurities other than shares, excluding nancial derivatives Short-term Long-term	F.12  F.3  F.33  F.331  F.332
urities other than shares ecurities other than shares, excluding nancial derivatives Short-term Long-term	F.33 F.331 F.332
ecurities other than shares, excluding nancial derivatives Short-term Long-term	F.33 F.331 F.332
Shares and other equity, excluding mutual funds shares Quoted shares Unquoted shares Other equity Mutual funds shares	F.51 F.511 F.512 F.513 F.52
F.34 above	
Per accounts receivable / payable Trade credit and advances Other Provided the state of the stat	F.7 F.71 F.79
] I	Other equity Mutual funds shares  F.34 above er accounts receivable / payable Frade credit and advances Other morandum item:

The major differences between the two schemes are in the two categories 'securities other than shares' (F.3) and 'shares and other equity' (F.5), for which the coverage is broader in the 1995 ESA than in the

1993 SNA. The 1995 ESA category 'securities other than shares' covers also 'financial derivatives' (F.34) as a sub-category, while they are shown as a separate category (F.7) in the 1993 SNA following an update of the financial asset classification some years ago. Moreover, the 1995 ESA category 'shares and other equity' is broken down into the sub-categories 'shares and other equity, excluding mutual funds shares' and 'mutual funds shares', and the first sub-category is split into the sub-items 'quoted shares', 'unquoted shares' and 'other equity.' The corresponding 1993 SNA category does not provide such a breakdown. Although the 1993 SNA does not make an explicit reference to 'mutual funds shares', they are indistinguishably covered by the category 'shares and other equity.'

It is obvious that the use of the two different classification schemes in the context of disseminating and comparing financial accounts and balance sheets may lead to inconsistencies and to misunderstandings. This refers to the coverage of the categories as well as to the diverging structure of codes.

# 3. Reasons for changing the 1993 SNA

There are three main reasons for modifying the 1993 SNA in respect to the classification and the terminology of financial assets and liabilities. First, new developments on the financial markets as triggered by financial innovation and integration (e.g. more sophisticated instruments and the increasing role of market participants with a collective structure, such as several types of investment funds or special purpose vehicles) must be accommodated. Second, developing policy and analytical needs in the monetary and financial stability areas should be taken into account. For both these reasons more, or more useful, distinctions may need to be made. Finally, we see room to make the terminology easier to use and more descriptive of the various financial assets and liabilities. As an aside, we would note that consistency between (in particular) the SNA and the ESA is highly desirable.

National accountants are confronted with the challenge how to integrate the new developments into the updated SNA. In terms of establishing new financial instruments, questions have to be answered on how to treat these instruments consistently, whether or not they are financial assets and liabilities and, if so, what are their appropriate instrument categories, sub-categories and sub-items. The ECB publication of July 2005 on the statistical classification of financial markets instruments offers one approach.<sup>5</sup>

# 4. Decisions taken so far

Some progress has already been made within the SNA review to clarifying various sub-issues of item 44 on the classification and terminology of financial assets and liabilities. Some of the topics are also covered by other items, which were discussed during the December 2004 and the July 2005 meetings of the AEG. These papers deal with (i) the classification of financial instruments; (ii) the distinction between loans and deposits; (iii) reverse transactions; (iv) traded loans (borderline between securities and other

This update of the 1993 SNA regarding the treatment of financial derivatives was adopted by the United Nations Statistical Commission in early 2000.

European Central Bank, Statistical Classification of Financial Markets Instruments, Frankfurt am Main, July 2005.

financial instruments); (v) non-performing loans; (vi) the valuation of equity; and (vii) the granting of guarantees.<sup>6</sup>

The paper discussed by the AEG on the **classification of financial instruments** followed a split into equity, debt and other instruments. It further comprised various proposals how to modify the current classification as recommended in the 1993 SNA. These proposals were: (a) with financial derivatives treated as a separate instrument in the 1993 SNA, it would be appropriate to introduce the term "debt securities" to replace "securities other than shares;" (b) all types of financial derivatives are currently treated as a single item but there is an interest in splitting derivatives into forwards and options, given their different features; (c) further consideration was given to the introduction of a separate split for employee stock options; and (d) there seemed to be renewed interest in the question of whether nonmonetary gold should be classified as a financial asset rather than under valuables in the asset classification. In turn, the paper proposed a broad classification into equity, debt securities and financial derivatives (plus a residual category).

Several members of the AEG expressed support for the use of the term "debt securities" to replace "securities other than shares" and wished to see investment fund shares/units explicitly included in the classification, but views were divided about which level. There was also support for a distinction between money market funds within investment fund shares/units. However, reservations were expressed about moving away from the present classification, based on degree of liquidity, towards the broad three-level grouping though the attraction of the link to income (and to the presentation in the balance of payments) was noted.

Different papers were already discussed on specific issues related to **deposits and loans** like (i) the distinction between deposits and loans; (ii) the treatment of reverse transactions; (iii) the treatment of traded loans; and (iv) the treatment of non-performing loans. Current international statistical standards include a **distinction between deposits and loans**. However, the criteria to make the distinction are not very clear and may require additional guidance. Furthermore, recent financial innovations raise questions about the continuing analytical usefulness of the distinction. A particular problem arises when a position between two parties, especially financial intermediaries, is seen as a deposit by one party and a loan by the other. The AEG agreed that the updated SNA should maintain a distinction between deposits and loans. But the AEG acknowledged that current international standards do not provide sufficiently clear criteria to make a distinction between loans and deposits operational. Therefore, the AEG concluded that further consultation should be carried out with experts to formulate improved operational guidelines to be set out in the updated SNA.

The note on the **reverse transactions** states that a repurchase agreement (repo) involves the provision of securities or other assets with a commitment to repurchase the same or equivalent assets at a specified

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See the notes presented at the December 2004 and July 2005 AEG meetings on: Classification of financial instruments (Document SNA/M1.05/10.1; Issue 44a); Granting of guarantees (Document SNA/M1.05/08; Issue 37); Reverse transactions (Documents SNA/M1.05/25.1 and 25.2; Issue 1); Non-performing loans (Document SNA/M1.05/21; Issue 4a+4b, 38c); Distinction between loans and deposits (Document SNA/M1.05/10.2; Issue 44a); Valuation of equity (Document SNA/M1.05/32; Issue C9); and Traded loans (borderline between securities and other financial instruments) (Document SNA/M1.05/10.3; Issue 44a).

price. The right to on-selling has become almost universal. The 1993 SNA and the BPM5 treatment of repos is similar to that of a collateralized loan or as other deposits if repos involve liabilities classified under national measures of broad money. The AEG accepted the recommendation to continue with the collateralized loan approach to reverse transactions. The AEG also agreed to keep the issue on the research agenda.

Concerning **traded loans**, the AEG decided that a loan should be reclassified as a security only if there is evidence of a market and there are quotations in the market. This change of category of financial instrument is achieved via a change in classification entry in the other change in the volume of assets account and not via transactions cancelling the loan and issuing a security. The case being addressed here is of large syndicated loans (for which a definition would be needed) and not of the securitisation of one or several loans. There was agreement not to break down loans into traded and non-traded categories and not to reclassify any debt securities which might in practice not be traded.

Concerning **nonperforming loans**, the AEG agreed already last year that loans should continue to be recorded at nominal value for both creditors and debtors. In addition, memorandum items should be shown to provide additional information on fair value accounting; these should be mandatory for at least financial institutions and government as creditors. It also decided that more clarification is required in respect of: (i) The definition of which loans are non-performing; (ii) The exact nature of the memorandum items (whether market-equivalent value or nominal value less expected provisions for impairment); (iii) A worked example of the accounts showing the memorandum items; (iv) Harmonization of terms used in various manuals; (v) The implications for the recording of FISIM; and (vi) Whether similar treatment should be extended to other financial instruments (in particular trade credits). The IMF agreed to prepare a paper addressing these issues.

At the July 2005 meeting, the AEG agreed with the definition proposed that a loan is non-performing 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 capitalised, refinanced or delayed by agreement, or payments are less than 90 days overdue but there are other good reasons to doubt that payments will be made in full. The AEG also considered that the classification of loans as non-performing should be indicative rather than prescriptive. Furthermore, the AEG agreed that the valuation basis for non-performing loans (NPLs) should be a market equivalent valuation. If a fair value figure is not available, an acceptable alternative is nominal value less expected loan losses. It also agreed that it would be desirable to have an explanatory presentation in the SNA showing how the memorandum item for stocks of loans and that for flows of interest are connected, even if in practice the memorandum items were shown without the linking information. Finally, the AEG would like further consideration of how long interest accrues and for how long FISIM is calculated for NPL. The decision made at the December 2004 AEG meeting to show as standard items NPLs for financial institutions and government as creditors was reconfirmed. They may be shown for other sectors as supplementary items. An extension of the treatment of non-performance to other instruments was considered to be conceptually correct and could be shown as a supplementary item.

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This definition is in line with the proposals made in the International Accounting Standards (IAS).

Concerning equity, there are two issues for clarification: (a) whether the breakdown of AF.5 into quoted shares, unquoted shares and other equity as in the 1995 ESA should also be adopted in the updated version of the 1993 SNA; and (b) which valuation methods for unquoted shares and other equity should be considered as acceptable in the new SNA. Expansion and clarification of equity in the SNA will pave the way for better harmonization with other standards, in particular BPM5 (in which the valuation of direct investment equity in particular poses the same problems).8

Finally, in the paper on granting of guarantees different types of guarantees and their classification were discussed. The AEG agreed that (i) guarantees should be characterised according to whether they are standardised or one-off, and whether they are tradable/offsettable or not. Guarantees which are tradable or offsettable on the market should be treated as financial derivatives. Furthermore, the granting of standardised guarantees should be regarded as a form of insurance and give rise to a liability in the accounts of the guarantor. Based on the July 2005 AEG decision, a sub-category under "insurance technical reserves" for "reserves for calls on standardised guarantees" should be created. Finally, one-off guarantees should be recorded outside the core accounts and a sufficiently prominent status should be given to ensure that one-off guarantees are recorded in practice (as for non-performing loans).

#### 5. Proposed classification and terminology of financial assets and liabilities

Based on the reasons for changes and on the decisions taken so far the following recommendations concerning the **classification and terminology** of financial assets and liabilities are proposed.

There may be advantages in following ESA 95 and the MFSM in splitting the category monetary gold and special drawing rights (SDRs).9

As suggested by the AEG, the distinction between deposits and loans is difficult to make. Nevertheless, the AEG did not want to lose it. The proposal here is to retain the distinction between deposits and loans and to introduce two categories for deposits and for loans, these being further broken down, respectively, into transferable deposits and other deposits and by (original) maturity into the sub-items 'short- and long-term loans.' Showing overnight deposits as an 'of which' position would allow the link to narrow monetary aggregates to be preserved. We would propose a reordering of categories so that 'loans' follow immediately after 'deposits', reflecting the (generally) non-negotiable nature of the two categories.

As already recommended by the AEG, it is seen as appropriate to introduce the term 'debt securities' to replace 'securities other than shares.' The new term describes what they are and removes the need for 'other than shares'.

under discussion elsewhere. In this context, the BOPCOM has decided that unallocated gold should be treated as deposits

This paper does not address the questions of a liability counterpart to SDR holdings and a category "financial gold" which are

denominated in foreign currency.

Work on this subject has been carried out by the OECD Task Force on Valuation of Equity.

'**Debt securities**' and '**equity**' (shorter than 'shares and other equity' and adequately descriptive) remain separate financial instrument categories. Debt securities are further split into short-term and long-term securities (original maturity). For equity we would propose the sub-categories 'quoted shares', 'unquoted shares' and 'other equity' as already used in the 1995 ESA, though not necessarily as a requirement of the System.<sup>10</sup>

It is proposed to separate **mutual fund shares** (as they are termed in the 1995 ESA – this paper suggests the term '**investment fund shares/units**') from 'shares and other equity'. This seems appropriate because equity and investment fund shares/units have different characteristics. Equity gives ownership rights in a corporation, whereas shares/units issued by an investment fund represent participation in a portfolio.<sup>11</sup> Moreover, a different treatment for income on investment fund shares/units is currently under discussion. Various types of investment fund shares/units might be distinguished (money market, bond, equity, real estate, and mixed and hedge fund shares/units), perhaps as a memorandum item. However, there might be no need to build them into the classification, with the exception of **money market fund shares/units**. Showing 'money market fund shares/units' as an 'of which' category of 'investment fund shares/units' would enhance the use of financial accounts for monetary policy purposes and their compatibility with monetary statistics. Other breakdowns in this category (e.g. equity, bond, real estate, mixed fund, hedge fund shares/units) might also be distinguished if national circumstances require it.

For the category 'other accounts receivable/payable', it is difficult to avoid the term 'other.' In this context we would support a stronger recommendation in the updated SNA to accrue interest in the relevant instrument category which would also cover arrears of interest and repayment, and not put interest accruals and arrears in this category, while recognising the practical difficulties.

In contrast to other financial instruments (except monetary gold and SDRs, and some elements of other accounts receivable/payable), **financial derivatives** contracts and **employee stock options** do not arise directly from borrowing and lending, though they are financial instruments. As the IMF's financial derivatives supplement to the BPM5 puts it "Financial derivatives do not represent the provision of financial capital....With financial derivatives, no capital is advanced or repaid; nor is any interest accrued." This seems to us to be a reason to put financial derivatives and employee stock options last in the list of categories, though perhaps not after insurance technical reserves and other accounts receivable/payable which will include some items (payments by borrowers of stock) which are not financial instruments at all. Since the total market value of all financial derivatives contracts outstanding may not be very informative, breakdowns by type of derivative (forwards and options) or by risk category as used in the BIS triennial central bank survey of foreign exchange and derivatives could be

enterprises and international organisations.

Equity issued by an investment fund organised as a corporation would represent ownership rights in the corporation and would be recorded in the category 'equity'.

<sup>&</sup>quot;Other equity" in the 1995 ESA (para.5.95) includes such items as proprietors' net equity in quasi-corporate enterprises, assets held in units which are notional owners of real estate abroad, and government participations in certain public

distinguished. It could also be considered to show a breakdown by type at a higher level and the risk categories as further subdivisions as illustrated in Table 2. Although these breakdowns might not need to be part of the System and – because a key feature of financial derivatives is that they are treated in the System as separate from the underlying instrument – it seems better to keep them together rather than put them in sub-categories under the corresponding financial or non-financial asset.

Following the decision taken on the recording of standardised guarantees the category 'insurance technical reserves' has to be broadened by introducing a third sub-category 'reserves for calls on standardised guarantees' in case there is agreement to incorporate standardised guarantees in the System. The proposed classification of the financial instruments is summarised in the following Table 2. It distinguishes ten categories of financial instruments following predominantly the principle of the degree of liquidity (see also Annex 1). Another important classification criterion refers to maturity. The maturity breakdowns of loans, debt securities and trade credits and advances are by original or initial maturity, because this is an important feature of the instrument. Original (or initial) maturity measures the life of the instrument at the time of issue. Residual maturity, measuring the remaining life of the instrument, may be important for financial analysis and is central to assessment of vulnerability. The value of residual maturity for some purposes could be recognised in memorandum items. For deposits, loans and debt securities, we would support a required breakdown by currency, again for both financial and stability analysis. At least a split of items denominated in domestic currency and in foreign currency could be provided (while recognising that any currency exposure may be covered by a derivatives contract).

Memorandum items for direct investment cover two components – equity and debt. This deviates from 1993 SNA which shows equity, loans and 'other'. As financial derivatives are not included in direct investment and debt includes all non-equity transactions between affiliates, the category 'other' has been dropped.

Table 2: Proposed classification of financial assets and liabilities in the new SNA:

Financial instrument	SNA code
Monetary gold and special drawing rights (SDRs)	F.1
Monetary gold	F.11
Special drawing rights (SDRs)	F.12
Currency and deposits	F.2
Currency	F.21
Deposits	F.22
Transferable deposits	F.221
Other deposits	F.222
Loans	F.3
Short-term	F.31
Long-term	F.32
Debt securities	F.4
Short-term	F.41
Long-term	F.42
Equity	F.5
Quoted shares	F.51
Unquoted shares	F.52
Other equity	F.53

Investment fund shares/units	F.6
[o/w Money market fund shares/ units]	1.0
Bond fund shares/units	
Equity fund shares/units	
Real estate fund shares/units	
Mixed fund shares/units	
Hedge fund shares/units	
Funds in funds]	
Financial derivatives and employee stock options	F.7
Financial derivatives	F.71
[Forwards and options: both o/w in terms of risk category	1.//1
Interest rate	
Equity	
Foreign exchange	
Credit-linked	
Other commodity]	
Employee stock options	F.72
Insurance technical reserves	F.8
Net equity of households in life insurance reserves and in pension funds	F.81
Net equity of households in life insurance reserves	F.811
Net equity of households in pension funds	F.812
Prepayment of premiums and reserves against outstanding claims	F.82
Reserves for calls on standardised guarantees	F.83
Other accounts receivable / payable	F.9
Trade credit and advances	F.91
Short-term	F.911
Long-term	F.912
Other	F.92
Memorandum item:	
Direct foreign investment	
Equity	
Debt	

The terms in [brackets] are seen as breakdowns provided on a voluntary basis.

The proposed classification does not explicitly show non-performing items (which may fall into several categories) because these are not instruments as such. Nevertheless we would support a standard definition of "non-performing" (90 days past due?) and required reporting where financial corporations and general government are creditors.

# 6. Proposed treatment of measures of money in the new SNA

Money is not a category in the 1993 SNA (nor in the 1995 ESA), and we do not propose that it should be one because, as the MFSM recognises, the wide variation in institutional arrangements between countries whose financial systems and markets are at different stages of development and the changes in financial markets and instruments over time make it impossible to provide precise, operational definitions of narrow or broad money which would be appropriate and analytically useful across a range of different countries and which would continue to be valid over any long period of time.

Nevertheless, it seems useful to provide a link between balance sheets and the financial accounts and measures of money, as is done in a schematic way in Annex 5.1 of the 1995 ESA.

# 7. Proposed treatment of debt in the new SNA

No guidance is provided on debt in the 1993 SNA. In the 1995 ESA it gains some prominence because of the role of general government debt (though specially defined for the purpose and consequently based on somewhat different principles) in the Excessive Deficit Procedure and Stability and Growth Pact.

In the External Debt Statistics Guide, <sup>12</sup> gross external debt is defined as "the outstanding amount of those actual current, and not contingent, liabilities that require payment(s) of principal and/or interest by the debtor at some point(s) in the future and that are owed to non-residents by residents of an economy". From the viewpoint of the system of national accounts, the definition of external debt or even debt in general is such that it includes all liabilities recognised by the 1993 SNA as financial instruments – except for equity and investment fund shares/units that are owed to non-residents in the case of external debt or to residents and non-residents in the case of a single resident sector debt. Equity and investment fund shares/units are excluded because they do not require the payment of principal or interest. The question is raised whether financial derivatives, both forwards and options, should be included or excluded. As an overdue obligation to settle a financial derivatives contract would, like any other arrears, be a debt liability because a payment is required, the issue may be subject to debate. Nevertheless, because no principal amount is advanced that must be repaid, and no interest accrues on any financial derivative instrument, we still propose excluding financial derivatives from the definition of debt. Monetary gold and SDRs are financial assets included in the 1993 SNA but are not debt instruments because they are assets without a corresponding liability.

Table 4 shows which categories of assets and liabilities are shown as components of a balance sheet in the SNA. Non-financial assets are broken down by produced and non-produced assets and further subcategories. Financial assets are shown, together with the liabilities, as the components of the financial balance sheet. They are classified according to their liquidity and their legal characteristics. Provision is made for further subdivision, in particular according to original maturity, type of instrument and counterpart sector. Equity, for instance, is broken down into quoted and unquoted shares and other equity. Debt is broadly defined in this context as liabilities excluding equity, investment fund shares/units and any liabilities arising from financial derivative contracts. Following this line of reasoning the split of financial instruments into the three broad categories equity, debt and other might be seen as a regrouping of financial instruments as it nicely reflects the needs of vulnerability analysis. This grouping is also suggested for use in the revised BPM.

Table 3: The balance sheet as a means to show assets, liabilities, net worth, debt and own funds

Assets	Assets
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Prepared by an Inter-Agency Task Force consisting of the BIS, Commonwealth Secretariat, Eurostat, IMF, OECD, Paris Club Secretariat, UNCTAD, World Bank and ECB.

Non-financial assets		
Produced assets		
Fixed assets		
Inventories		
Valuables		
Non-produced assets		
Tangible non-produced assets		
Intangible non-produced assets		
Financial assets	= Liabilities	= <b>Debt</b> (liabilities excluding equity, investment
Monetary gold and SDRs		fund shares/units and financial derivatives)
Currency and deposits	Currency and deposits	Currency and deposits
Loans	Loans	Loans
Debt securities	Debt securities	Debt securities
Equity	Equity	
Investment fund shares/units	Investment fund shares/units	
Financial derivatives	Financial derivatives	
Insurance technical reserves	Insurance technical reserves	Insurance technical reserves
Other accounts receivable	Other accounts payable	Other accounts payable
		+ Financial derivatives
		+ Own funds
	+ Net worth	.Net worth
		.Equity
		.Investment fund shares/units

Debt may be shown gross or net (debt liabilities minus corresponding financial asset categories), non-consolidated or consolidated (taking out intra-sector debt positions) or based on different valuation concepts (at nominal or at market value).

# References

Bank of International Settlements (1995), Issues of Measurement Related to Market Size and Derivatives Market Activity, Basel

Constantinides, G., M. Harris and R. Stulz (eds.) (2003), Handbook of the Economics of Finance, Chapter 6, Elsevier, North Holland

European Central Bank (2005), Statistical Classification of Financial Markets Instruments, Frankfurt am Main

Mink, R. (2005), Implicit assets and liabilities within an updated System of National Accounts, note prepared for the IMF/BEA Task Force Meeting on Pensions, 21 to 23 September 2005, Washington DC

Issing, O. (1997), Monetary Targeting in Germany: the Stability of Monetary Policy and of the Monetary System, Journal of Monetary Economics 39, pp. 67-79

# Annex 1

# Definitions of [non-financial assets and] financial assets and liabilities

# Financial assets and liabilities (AF)

AF Most financial instruments arise from borrowing and lending, and represent a claim and a corresponding liability. Holders derive economic benefit from financial assets and enjoy legal rights of ownership. Monetary gold and Special Drawing Rights are financial assets of the holder but no-one's liability. Equity and investment fund shares/units represent respectively participation in a corporation or in an investment portfolio; although not debt instruments, by convention they are treated as liabilities of the issuing corporation or investment fund to the holder. Financial derivatives represent a claim of one party and a liability of another but do not arise from a borrowing and lending operation.

# Monetary gold and SDRs (AF.1)

AF.1 Monetary gold and Special Drawing Rights issued by the International Monetary Fund are financial assets for which there is no corresponding financial liability.

# Monetary gold (AF.11)

AF.11 Monetary gold is gold owned by monetary authorities or others subject to their effective control and held as a component of foreign reserves. Other gold held by any entity (including non-reserve gold held by monetary authorities and all gold held by financial corporations other than the central bank) is not a financial asset; it is recorded in valuables or, if used in the production process, in inventories. [Treatment of unallocated gold?]

# **Special Drawing Rights (AF.12)**

AF.12 SDRs are international reserve assets created by the International Monetary Fund and allocated to its members to supplement existing reserve assets. SDRs are held exclusively by official holders, which are normally central banks.

# **Currency and deposits (AF.2)**

- AF.21 Currency comprises banknotes and coins, almost always liabilities of a central bank or government, that are commonly used to make cash payments. Their nominal value is fixed in terms of the currency in which they are denominated. Commemorative coins, which are not normally used to make payments, should be excluded.
- AF.22 Deposits are non-negotiable instruments recording (usually, and by convention) a claim on a monetary financial intermediary or on a unit of central government, or on similar institutional units abroad. (Non-negotiable instruments representing claims on other institutional units may be classified as loans in AF.3.) Deposits are recorded by non-negotiable documents, book entries, electronic records, or other evidence of deposit. Their nominal value is fixed in terms of the currency in which they are denominated.

Some deposits are exchangeable for banknotes and coins on demand at par, without penalty or restriction, and/or are freely transferable by cheque, draft, payment order, plastic card, etc, or by electronic means, and so are commonly used to make payments. Other deposits (examples include non-transferable savings deposits and term deposits) may not be used in this way for an agreed period or without an agreed period of notice. Deposits are widely accepted as a means of settling transactions, even if they are not legal tender.

Also included in AF.22 are "shares" or similar evidence of deposit issued by savings and loan associations, building societies, credit unions and the like, and claims on the International Monetary Fund that are components of international reserves, other than those evidenced by loans. Margin payments related to options or futures contracts and repurchase agreements where these are liabilities of monetary financial intermediaries are classified as deposits. [NB Further work is needed to clarify the distinction between deposits and loans]

Deposits may be subdivided between short-term and long-term, as defined below.

# Short-term (AF.221)

AF.221 Deposits with an original maturity of one year or less.

o/w Transferable deposits

. . .

# Long-term (AF.222)

AF.222 Deposits with an original maturity of more than one year.

Deposits may also be broken down by residual or remaining maturity.

# Loans (AF.3)

AF.3 Loans are non-negotiable instruments representing, by convention, the claim of a creditor on a debtor other than a monetary financial intermediary or in some cases a unit of central government. (Non-negotiable instruments representing claims on monetary financial intermediaries or units of central government are classified as deposits in AF.22.) Loans are recorded by non-negotiable documents, book entries, electronic records, or other evidence of loan. They may be backed by collateral. Although not bought or sold in the market, loans may be transferred, may be used to back negotiable securities, and may themselves be converted into security form. Included are instalment loans, hire-purchase credit, housing finance (often in the form of a mortgage), loans to finance trade credit, claims on the International Monetary Fund evidenced by loans, repurchase agreements which do not give rise to a claim on a monetary financial intermediary, and financial leases and similar arrangements. [NB Further work is needed to clarify the distinction between deposits and loans]

Loans may be subdivided between short-term and long-term, as defined below.

# Short-term (AF.31)

AF.31 Loans with an original maturity of one year or less. All loans repayable on demand should be classified as short-term even when they are expected to be outstanding for more than one year.

# Long-term (AF.32)

AF.32 Loans with an original maturity of more than one year.

Loans may also be broken down by residual or remaining maturity.

It may be useful to distinguish loans secured by mortgages from other long-term loans.

# **Debt securities (AF.4)**

AF.4 Debt securities are financial instruments in the form of a negotiable document or book entry or electronic record that is transferable by sale. Bills give the holder the unconditional right to receive a stated sum on a specified date. Bonds and debentures give the holder the unconditional right to a fixed money income or a contractually determined variable money income, and, with the exception of perpetual bonds, the unconditional right to a fixed or contractually determined sum as repayment of principal on a specified date or dates. Debt securities are normally traded in financial markets at varying prices.

Further examples of debt securities are negotiable certificates of deposit, bankers' acceptances, commercial paper, negotiable securities backed by loans or other assets, preferred stocks or shares that pay a fixed income but do not provide for participation in the residual earnings or value of a corporation, and bonds that are convertible into shares.

Debt securities may be subdivided between short-term and long-term, as defined below. A distinction should also be drawn between debt securities denominated in domestic currency and in foreign currency.

# Short-term (AF.41)

AF.41 Debt securities with an original maturity of one year or less. Debt securities with a maturity of one year or less should be classified as short-term even if they are issued under long-term facilities such as note issuance facilities.

# Long-term (AF.42)

AF.42 Debt securities with an original maturity of more than one year. Debt securities with optional maturity dates, the latest of which is more than one year away, and with indefinite maturity dates should be classified as long-term.

Debt securities may also be broken down by residual or remaining maturity.

# Equity (AF.5)

AF.5 Equity shares are financial instruments representing a claim to the profits of an incorporated enterprise, and a share in the residual value of the enterprise after all creditors have been repaid. Equity shares may be traded at varying prices on financial markets. Unlike debt securities, equity shares do not provide the right to a pre-determined income or to a fixed sum on dissolution of the incorporated enterprise. Equity includes preferred stocks or shares which provide for participation in the residual value on dissolution of the enterprise. Equity excludes shares/units in investment funds.

A distinction may be made between quoted (AF.51) and unquoted (AF.52) equity shares, and other equity (AF.53) which includes proprietors' net equity in quasi-corporate enterprises.

# **Investment fund shares/units (AF.6)**

AF.6 Investment fund shares/units are financial instruments representing the participation of the holder in the portfolio of the fund. Units may be bought and sold in financial markets, or they may be bought from or sold to the fund manager who expands or reduces the portfolio accordingly.

Investment fund shares/units may be held in funds comprising wholly or mainly money market instruments, bonds, equities, and real estate, or in mixed funds or in hedge funds.

# Financial derivatives and employee stock options (AF.7)

# **Financial derivatives (AF.71)**

AF.7 A financial derivative is a financial instrument that is linked to another financial instrument or index or commodity enabling specific risks (of changes in interest or foreign exchange rates or in prices or in credit standing, for example) to be traded in financial markets in their own right. Although the market price of a financial derivative is determined by the price of the underlying instrument, index or commodity, transactions in financial derivatives are treated as separate transactions rather than as integral parts of the values of the underlying transactions to which they are linked.

There are two broad types of financial derivative. In a *forward* contract, which is unconditional, two parties agree to exchange an amount of the underlying item at a certain price on a specified date. The contract has a positive value to one party (and is an asset), and a negative (liability) value to the other, depending on the price of the underlying item in relation to the price in the contract; the asset and corresponding liability positions may switch from one party to the other during the life of the contract. The purchaser of an *option* contract acquires from the seller of the contract the right, but not the obligation, to buy or sell the underlying item at an agreed price on or before a specified date. Under an option contract only the seller of the contract can have a liability; the contract is either an asset for the buyer (and a corresponding liability for the seller), or worthless to the buyer, depending on the price of the underlying asset in relation to the price in the contract.

Unlike most financial instruments, financial derivatives do not accrue investment income; nor are principal amounts advanced that must be repaid. Settlements under financial derivative contracts, whether during the life of the contract or on maturity, are recorded as transactions in financial derivatives.

# **Employee stock options (AF.72)**

AF.72 Options to buy the equity of the company which issued them, given to employees as a form of remuneration.

# **Insurance technical reserves (AF.8)**

AF.8 Insurance technical reserves are financial instruments representing liabilities of insurance corporations and pension funds to their policy holders and beneficiaries. Technical reserves are reserves against outstanding risks, reserves against with-profit insurance policies, and funds representing prepayment of premiums and reserves against outstanding claims. Insurance technical reserves include reserves of certain non-autonomous pension funds classified in the institutional sector that manages the funds and not in the sector insurance corporations and pension funds.

Insurance technical reserves are subdivided between net equity of households in life insurance reserves, net equity of households in pension funds, prepayment of premiums and reserves against outstanding claims, and reserves against calls on standardised guarantees.

# Net equity of households in life insurance reserves and in pension funds (AF.81)

AF.81 Reserves held against life insurance and annuity policies by insurance enterprises, whether mutual or incorporated (AF.811), and by pension funds (AF.812). These reserves are considered to be assets of the policyholders and not of the institutional units that manage them.

Life insurance and pension fund reserves consist of reserves against outstanding risks and reserves for with-profits insurance that form part of the value on maturity of with-profit endowment or similar policies.

# Prepayment of premiums and reserves against outstanding claims (AF.82)

AF.82 Insurance premiums are usually paid at the start of the period of cover or in advance of it. Reserves representing the element of prepayment are assets of the policyholders.

Reserves against outstanding claims are reserves that insurance enterprises hold in order to cover the amounts they expect to pay out in respect of claims that are not yet settled or claims that may be disputed. Reserves against outstanding claims are considered to be assets of the beneficiaries.

# Reserves for calls on standardised guarantees (AF.83)

AF.83 Standardised guarantees are guarantees, often extended by government, covering export credits or loans under special schemes to e.g. small businesses or students. The reserves against such guarantees reflect the experience of default.

# Other accounts receivable/payable (AF.9)

AF.9 Other accounts receivable/payable are financial instruments in the form of trade credit and advances; AF.9 also includes certain other items.

# Trade credit and advances (AF.91)

AF.91 Trade credit to customers, where goods and services are delivered ahead of payment; payments to suppliers in advance of delivery of goods and services.

# Short-term (AF.911)

AF.911 Credit with an original maturity of one year or less.

# Long-term (AF.912)

AF.912 Credit with an original maturity of more than one year.

# Other (AF.92)

AF.92 Accounts receivable and payable, other than those included in trade credit and advances. This category may relate for example to payments ahead of or after the due date of taxes, dividends, purchases and sales of securities, rent, wages and salaries and social contributions. It may also include attributions of income not recorded elsewhere, e.g. income arising from securities lending. Any accruals of interest that cannot be recorded in the relevant financial instrument category are included here.