TASK FORCE ON HARMONIZATION OF PUBLIC SECTOR ACCOUNTING—FINAL REPORT

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I. INTRODUCTION

1. This document reports on the work of the Task Force on Harmonization of Public Sector Accounting (TFHPSA) as the TFHPSA is coming to closure with its last meeting in March 2006. The Task Force is chaired by the IMF with the OECD providing the Secretariat. It was created at OECD Headquarters in October 2003, following on a meeting initiated by the Public Sector Committee of the International Federation of Accountants (IFAC-PSC—now reconstituted as the International Public Sector Accounting Standards Board—IPSASB) in June 2003. The Task Force held six meetings between October 2003 and March 2006.

2. The TFHPSA comprises senior statisticians and senior accounting policy officials from various countries, as well as representatives of international and regional organizations. The membership was initially constituted on the basis of letters of invitation circulated by the Chair on November 2003 to statistical institutions, as well as communication in the accounting community through the OECD Senior Budget Officials. Members also joined informed by the posting of the TFHPSA agenda, proceedings, papers and attendance of the meetings on the IMF website (http://www.imf.org/external/np/sta/tfhpsa/index.htm) and the OECD internet via a code. The strategy[2] adopted by the Task Force consisted of organizing its work of through two Working Groups (WGs) with specific deliverables identified for each WG over the period 2004–2006.

3. WG I, led by the IPSASB, focused on harmonization issues between the statistical guidelines and accounting standards for the public sector, where appropriate.[3] The Task Force is a first initiative at the worldwide level in attempting to harmonize these two reporting systems. WG I focused on the International Public Sector Accounting Standards

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[1] by Lucie Laliberté, Chair of the TFHPSA, Paul Sutcliffe, and Jean-Pierre Dupuis, Chairs, respectively, of the TFHPSA WG I, and II. The authors thank Rob Edwards, Keith Dublin, and Sagé De Clerk for their inputs, and assume the responsibility of errors. The views expressed in this document are those of the authors and do not necessarily represent those of their respective organizations, nor these organizations' policies (IMF, IPSASB, and OECD, respectively). An earlier version of this paper that focused on the harmonization between the statistical and accounting systems was presented at the Colloque of Comptabilité Nationale, January, 2006.

[2] Updated March 8 2004, see http://imf.org/external/np/sta/tfhpsa/2004/030804.pdf.

[3] Accounting and statistical bases of reporting have different objectives and focus on different reporting entities and treat some transactions and events differently. However, they also have many similar requirements for the recognition and measurement of financial information and deal with similar transactions. Given differences in objectives, full harmonization of requirements may not be appropriate. The TFHPSA is concerned to ensure that divergence in requirements arises only where intended, and to promote harmonization where possible and appropriate.

(IPSASs)[4] and the IMF's *Government Finance Statistics Manual 2001 (GFSM 2001),* while also considering harmonization issues in respect of the *1993 System of National Accounts (1993 SNA)* and *1995 European System of Accounts* (*1995 ESA*) and *ESA 95 Manual on government deficit and debt* to the extent possible. The IPSASs, which are developed by the IPSASB, include accounting standards that are based on the private sector International Financial Reporting Standards (IFRSs)[5] to the extent that the requirements of those standards are appropriate for public sector entities—where they are not, the IPSASs include requirements to deal with public sector circumstances. While not necessarily currently adopted by a majority of countries for reporting by governments and other public sector entities (although the EC, OECD, NATO and IFAC adopt IPSASs for their financial reports and a high level committee of the UN has recommended that IPSASs be adopted by UN agencies), the IPSAS are increasingly used as a benchmark of international best practice and to provide input for countries developing their own accounting standards. The IFRSs are adopted for reporting by business entities in many countries (the EU has adopted the IFRS for listed companies) and/or as the basis for national requirements. The relevance of the IFRSs for financial reporting in statistical bases is further confirmed because they are increasingly referred to in the statistical guidelines that have recently or are being developed (e.g., *Compilation Guide on Financial Soundness Indicators* and the *Guide to the Monetary and Financial Statistics*). WG I presented its work as it evolved to the various meetings of the IPSAS Board.

4. WG II, led by the OECD, focused on the development of government finance issues and their harmonization among the *GFSM 2001* and the *1993 SNA* as well as the *1995 ESA*. Its work consisted in developing (a) five priority issues (private/public/government sector delineation, tax revenues, government transactions with public corporations, privatization/restructuring agencies and special purposes vehicles (SPVs), and guarantees/provisions/contingent assets); (b) introducing a chapter on government/public sector for the rev. 1 *SNA 1993*; and (c) being briefed on developments in other fora that are relevant to the work in points a) and b). The Task Force presented its work to the four meetings held by the Advisory Expert Group on National Accounts on the rev. 1 *1993 SNA* (February 2004; December 2004; July 2005; January/February 2006).

5. This paper first provides an overall view of the achievements of the TFHPSA. The presentation intermingles the results of WG I and WG II highlighting that the participation of statisticians and accountants within each WG provided for a valuable cross-fertilization across these two systems. The subsequent section discusses further areas for potential

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[4] As included in the International Federation of Accountants, *Handbook of International Public Sector Accounting Pronouncements* The Handbooks are issued annually by IFAC, New York, and is referred to throughout the text as IPSAS.

[5] Developed by the International Accounting Standard Board, IASB.

harmonization between statistical guidelines and accounting standards (with Appendix I providing an overview of recent years' developments that act as driving forces for such harmonization). A last section concludes.

II. TFHPSA Achievements

6. The TFHPSA achieved substantial progress in nine areas: (A) tracking and documenting differences between the two accounting and statistical systems; (B) promoting the development of an accounting standard for disclosure of financial information about general government that adopts the statistical government reporting unit, (C) delineating the private/public/government sectors based on a definition of control in statistics similar to that in accounting standards; (D) clarifying the notion of restructuring agency and special purpose entity for statistical purposes; (E) clarifying debt and debt restructuration; (F) further clarifying how taxes and tax credits are recognized; (G) recognizing certain types of guarantees in statistical standards; (H) clarifying how to account for transactions of government with its public corporations in statistics; (I) through a chapter on government and public sector in the update SNA, promoting a public sector reporting unit in statistics that is a near-equivalent of the whole of government reporting unit in accounting standards. These areas are elaborated on below.

A. Extensive documentation on the International Public Sector Accounting Standards (IPSAS) and Government Statistical Guidelines

7. A major challenge for WG I was to gather systematically the massive amount of information contained in the accounting and statistical systems in order to compare them. WG I successfully accomplished the task, with the results published by the IPSASB in the Research Report *International Public Sector Accounting Standards (IPSAS) and Statistical Bases of Financial Reporting: An Analysis of Differences and Recommendations for Convergence*.[6]

8. Central to the Report is an extensive matrix that identifies key issues and their treatment, as at June 2004, in the **accounting base** IPSASs (and in IFRSs where the IPSASs do not deal with the specific issue), and in the **statistical base** as reflected in requirements of the *GFSM 2001* (and in *1995 ESA/EMGDD/1993 SNA* where possible). The matrix groups the requirements, under 10 general categories (see Appendix II) that broadly reflect the decision process adopted in developing financial statements for an entity. These categories pertain to: identification of the boundary of the reporting entity (category 1); decisions about definition, recognition and measurement of the elements of financial statements (categories 2, 3, 4, 5, and 6); and presentation of financial statements and treatment of a range of specific

[6] See http://www.ifac.org/Store/Details.tmpl?SID=110719768348077. The work was carried out by Robert Keys (Australian Accounting Standard Board), Betty Gruber (IMF) and Paul Sutcliffe (IPSASB).

issues (categories 7 and 8). The final two categories identify terminology, definitions and fundamental concepts (category 9) and matters that have been considered and were found not to, or are expected not to cause a difference. They identify matters that are anticipated to emerge and develop as convergence activities develop and reporting requirements in IPSASs and statistical bases further evolve. Detailed recommendations to promote convergence are provided, along with cross references to other related categories and/or to research groups involved in the update of the *1993 SNA*, as applicable. The Report is meant to be considered a long-term development plan:

> "Clearly it is not realistic to expect that all the groups identified above will be able to make all the recommended changes to their extant financial reporting requirements in the short or medium terms. As noted previously, many of these groups are already committed to a full ongoing work program. As such, these recommendations represent a roadmap and agenda for ongoing convergence over the long term" (Research Report, page 21)

B. Development of a Draft Accounting Standard on the General Government Sector

9. A further challenge met by WG I relates to the reporting entity (the IPSAS terminology) or reporting unit (statistical basis terminology). The definition of the reporting entity/unit is crucial in both statistics and accounting because it defines the coverage of the entity's economic activities in the statistical/financial statements report. However, the reporting unit of the statistical guidelines and reporting entity of the accounting standards are not always the same as they are based on criteria that differ between the two systems.

10. The reporting unit of the **statistical guidelines** is defined by sector. Each sector comprises an institutional unit or a group of institutional units. An institutional unit is a resident (economic) entity that is capable, in its own right, of owning assets, incurring liabilities, and engaging in economic activities and in transactions with other entities, and that has or could compile a complete set of accounts (*1993 SNA*, par. 4.2). Residency is defined according to the economy, that is, the territory over which a national government has jurisdiction and provides for the laws under which the economic activities are carried out. The delineation of resident sectors (i.e., groupings of institutional units) is based on their principal functions, behaviors, and objectives. The national accounts report on five mutually exclusive sectors: general government, non-financial corporations, financial corporations, nonprofit institutions serving households (NPISHs), and households.

11. For **accounting standards**, the reporting entity consists of an individual entity or an economic entity (defined as a group of entities comprising the controlling entity and all the entities under its control). The notion of control is key to determining the reporting entity and, hence, which economic activities and resources are reported in the entity's financial statements. For instance, the government reporting entity covers the "whole of government," that is, the fully consolidated economic activities of the government and its controlled entities

for each level of government, such as central government, state government, territory government, or local government). Controlled entities include government business enterprises (GBEs).[7] The economic activities of the controlling entity are fully consolidated with those of controlled entities in accounting reporting. In addition, accounting standards requires either proportional consolidation or equity accounting of most jointly controlled entities.

12. As such, the two systems have a different reporting entity for the government, with the "general government" sector of the statistical system being effectively a subset of the "whole of the government" reporting entity of accounting standards. Acknowledging the needs for information about the general government sector for statistical purposes, the IPSASB with the assistance of WG I developed the Exposure Draft 28 *Disclosure of Financial Information About the General Government Sector*. [8] The draft allows the disclosure of financial information about the general government sector (GGS) as defined in statistical bases of financial reporting in whole of government general purpose financial statements (GPFS) prepared in accordance with IPSASs, and specifies rules to be followed by a government electing to disclose GGS information.

C. Private/Public/Government Statistical Sector Delineation Based on a Definition of Control Closer to that of Accounting

13. The two systems recognize the notion of control, but define and apply it for different purposes. The **accounting standards** use control to define what is included in the reporting entity, whereas the **statistical guidelines** use other notions for defining units. The statistical reporting units are institutional units that are (resident) centers of legal responsibility, that is, have legally independent holdings of assets and liabilities. The statistical guidelines give preference to institutional units ("autonomous decision centers") legally holding assets/liabilities over other units, "because it provides a better way to organize the collection and presentation of statistics even if its usefulness is limited in some cases" (*1993 SNA,* par. 2.19).

[7]A GBE is defined in IPSASs as an entity that (1) has the power to contract in its own name; (2) has been assigned the financial and operational authority to carry on a business; (3) sells goods and services, in the normal course of its business, to other entities at a profit or full cost recovery; (4) is not reliant on continuing government funding to be a going concern (other than purchases of outputs at arm's length); and (5) is controlled by a public sector entity. This definition seems to broadly fit that of public corporations in statistical guidelines although "economically significant prices" (public corporations) would not be necessarily equivalent to "at a profit" (GBEs).

[8] See http://www.ifac.org/Guidance/EXD-Details.php?EDID=0050. Paul Sutcliffe was actively involved in the production of the document, with valuable inputs from various members of both the statistical and accounting communities.

14. At the same time, the statistical guidelines recognize that units controlled by other units may not be centers of decision-making for all aspects of economic life. In fact, these guidelines use similar terms as the accounting standards to characterize these relationships, defining subsidiaries as entities controlled by another corporation (generally evidenced by 50 percent or more equity ownership or the right to appoint/remove a majority of the directors) and associates as influenced by another corporation (generally between 10 percent to 50 percent share ownership). (*1993 SNA*, par. 4.32 and 4.34). In addition, the statistical system does not provide for cases where control is shared equally by two units, namely in joint ventures, and will always require a decision about majority control; the accounting environment, however, provides that these joint control relationships are accounted for by proportional consolidation.

15. In the accounting standards, control of an entity is defined as "the power to govern the financial and operating policies of another entity so as to benefit from its activities." Guidance on the application of this definition is provided in IPSAS 6 *Consolidated Financial Statements and Accounting for Controlled Entities* (paragraphs 26–38). However, the IPSAS also explains:

> Whether an entity controls another entity for financial reporting purposes is a matter of judgment based on the definition of control in this Standard and the particular circumstances of each case. Definition includes powers (to govern the financial and operating policies of another entity) and benefits (from the activities of another entity) (IPSAS 6, para 26).

16. While the need for information about entities and resources which are "controlled" remain specific to each system, the TFHPSA recommended that the statisticians be guided by the more systematic approach of the IPSAS definition of control. The recommendations applied to both public corporations and quasi corporations as well as to certain nonprofit institutions, i.e. institutional units in their own right but that are controlled by government.[9] The January/February 2006 AEG meeting agreed with the TFHPSA recommendation to use a decision tree to delineate private/public/government units (with further elaboration needed on quasi-corporations); and to use a list of indicators to determine control (with indicators to be used in conjunction with each other rather than any one of them necessarily being definitive in its own rights).

17. Furthermore, the AEG agreed with the TFHPSA guidance set out to determine what constitutes "economically significant prices" to delineate among government and public

[9] See Government/Public Sector/Private Sector Delineation Issues, http://unstats.un.org/unsd/nationalaccount/aeg.htm. John Pitzer, Betty Gruber, Tulsi Ram, and Graham Jenkinson were actively involved in the production of the document, with valuable inputs from various members of both the statistical and accounting communities.

corporations. The AEG felt the SNA should avoid being too prescriptive in relation to the use of a specific numerical threshold (such as the *1995 ESA* 50% rule.)

D. Special Purposes Entities and Restructuring Agencies

18. Concerning Special Purpose Entities and Restructuring Agencies, the TFHPSA presented its recommendations to the AEG meeting of February/March 2006 under the broader umbrella "Units in the 1993 SNA" paper that was managed by the United Nations Statistical Division. Of the 16 recommendations in this paper, six related to SPEs (recommendations 6 to 11) and three to restructuring agencies (recommendations 12 to 16).

19. The recommendations on SPEs presented to the AEG were as follows: "SPEs should be treated as institutional units when they satisfy the criteria for qualifying as institutional units and their output should be valued at cost if not market valuation method are used. (rec. 6); the unit classification of SPEs are to be determined on a case by case basis depending upon their activities (rec. 7); the term securitization vehicles should be used for institutional units that undertake securitization of assets only and such institutional units should be classified as other financial intermediaries (rec. 8); all flows and stock positions between the general government and the nonresident SPEs should be recorded in the general government and SPE accounts when they occur (rec. 9); and if securitization is based on future stream of general government revenue it is not the sale of an asset, but a borrowing transaction of the government. The economic substance of the transaction is best accounted for by imputing general government borrowing from the nonresident SPEs for the same value and at the same time that the SPE incurs a liability (rec. 10); when government creates non-resident units, such as SPEs, to undertake government borrowing and/or incurring government outlays abroad with no economic flows, between the government and the SPEs related to these fiscal activities, transactions should be imputed in the accounts of both the government and the nonresident entity to reflect the fiscal activities of the government (rec. 11)."

20. The AEG agreed with the broad thrust of recommendation 6, though it felt it would be better expressed as: "Resident SPEs should not be treated as institutional units unless they satisfy the criteria for…." Rec. 7 was agreed upon. The AEG agreed that securing an asset against future revenues constituted borrowing by the owner of the SPE (rec. 8). It also indicated that this is a sufficiently common form of SPE that they should be termed securitization vehicles and classified within miscellaneous financial institutions. The AEG agreed with rec. 9. As for rec. 10, the AEG agreed on its aim, but felt it would be useful to separate the statement of principle and the application of that principle, and that it will be applied only for nonresident SPEs created by government. The AEG also agreed with the aim of rec. 11, and felt it would be useful to separate the statement of the principle and the application of the principle.

21. The recommendations on Restructuring agencies presented to the AEG were as follows: " If the restructuring agency acts only to implement pre-specified government policy

and bears no risk in the transformation of financial instruments connected with the restructuring, the agency is regarded as non-market unit and part of the general government sector (rec. 12); if the restructuring agency puts itself at risk in the transformation of the assets and liabilities of the units in difficulty and if it can determine the costs it can charge for the restructuring activity, it is treated as financial corporations. Whether it is publicly controlled or purely private financial corporation is determined using the usual criteria. (rec. 13). When government uses a restructuring agency to channel funds to a unit in financial difficulties and the restructuring unit derives its main resources form activities other than acting as an agent of government, these funds should be shown as payable and receivable by the government and unit concerned directly and not routed via the restructuring agency. (rec. 14). "

22. The AEG agreed with rec. 11, 12 (but with the qualification that it needs to be made clear that a public sector unit cannot put itself "at risk" in the same sense that a private sector unit can) and 13.

E. Debt and Debt Reorganization

23. The TFHPSA presented an overview of recording debt liability, taking into account the statistical and accounting viewpoints (presented at the March 2006 meeting of the TFHPSA). This document provided a broader context to the paper "Debt reorganization",[10] of which the first part deals with government debt reorganization (presented by the TFHPSA) and the second part with Highly Indebted Poor Countries (presented by the IMF Balance of Payments Committee).

24. The "Debt reorganization" paper clarified the treatment of different forms of debt reorganization, including debt forgiveness, debt restructuring and rescheduling, and debt conversions, such as debt prepayments and buybacks as well as debt assumption, and debt payments, on behalf of others. It stated a basic principle in the statistical treatment of debt reorganization is that any debt instrument, whose terms and conditions have been changed by agreement between the creditor and debtor, should be considered extinguished and a new debt instrument created reflecting the new terms and conditions. The difference between the values of the new instrument compared with the old instrument is recorded as a capital transfer, if agreed debt forgiveness is involved.

25. At its January/February 2006 meeting, the AEG did not have the time to discuss debt reorganization. However, it discussed debt concessionality (cases of loans with concessional interest rates), a topic that is not addressed adequately in the SNA. It advised that debt concessionality should be handled via supplementary items. It preferred to record

[10] http://unstats.un.org/unsd/nationalaccount/AEG/papers/m4DebtReorganization.pdf by Richard Shepherd and Andrew Kitili.

concessional debt in nominal value but to account for the difference between the market interest rate and the contractual interest rate as an ongoing current transfer. It agreed that debt concessionality be put on the long-term research agenda.

F. Tax Revenue and Tax Credit

26. The TFHPSA presented proposals[11] to clarify and improve the present *1993 SNA* on the recording of taxes. It also proposed to introduce guidance on tax credits—a topic that is not covered in *1993 SNA*. Three parts were presented: (1) the definition of tax revenue (coverage of taxes and borderline cases); (2) the accrual recording of taxes (acceptable methods for accruals); and (3) the recording of tax credits, and they resulted in 12 recommendations.

27. The definition of tax revenue includes the coverage of taxes and some borderline cases, like the case of fees to be recorded as sale of a service rather than as tax. The accrual recording of taxes, which involves both the time of recording and the amounts to be recorded. The paper defines the acceptable methods for implementing the accrual principle, avoiding an over-estimate of the tax revenue and of the net borrowing/net lending of the general government: the time-adjusted cash method, the coefficient method (net recording of taxes, using an adjustment through a coefficient) and the capital transfer method (gross recording of taxes with an adjustment through a capital transfer). In the case of tax credits, and in particular of the controversial case of payable tax credits. The general recommendation was that, under certain conditions, tax credits are to be recorded as reducing tax, except for the element that may be actually paid to the beneficiary in the case of "payable tax credits." This element must be recorded as government expenditure. Payable tax credits may be in totality recorded as expenditure in certain cases where social benefits having the character of income substitutes are allocated through the tax administration.

28. The AEG, at its July 2005 meeting, agreed with most of the proposals, recommending not to be too prescriptive in terms of practical guidelines. In the case of payable tax credits, the AEG supported an orientation in favour of the gross recording of the tax revenue, all payable tax credits being expensed in the national accounts.

29. The discussions that led to the recommendations were held at the same time as those on a proposed IPSASB Exposure Draft (ED) *Revenue from Non-Exchange Transactions (comprising Taxes and Transfers)*.[12] Hence, these proposals allow for the best possible harmonized recording of these transactions with the ED.

[11] See Tax Revenue and Tax Credits, http://unstats.un.org/unsd/nationalaccount/AEG/papers/m3Taxes.pdf. Jean-Pierre Dupuis authored the document, with valuable inputs from various members of both the statistical and accounting communities.

[12] See http://www.ifac.org/Guidance/EXD-Details.php?EDID=0030.

G. Guarantees

30. In both the statistical and accounting systems, a financial guarantee refers to the contractual right of the guarantee holder to receive cash from the guarantor and a corresponding obligation of the guarantor to pay the lender if the borrower defaults. Furthermore, where an entity provides guarantees in exchange for a fee, both systems recognize revenue/payments that were made.[13]

31. However, the two systems treat guarantees differently. Except for tradable guarantees (e.g., financial derivatives),[14] the **statistical system** presently does not recognize a guarantee as a liability unless the obligatory event has activated the guarantee; this is because guarantees are viewed as contingencies that the statistical guidelines do not recognize. More specifically, "Guarantees of payments by third parties are contingencies since payment is only required if the principal debtor defaults" (*1993 SNA*, par. 11.25) since the lender's ability to exercise its right and the requirement for the guarantor to perform under its obligation are both contingent on a future act of default by the borrower.

32. In IPSASs, provisions are defined as liabilities of uncertain timing and amount and are recognized when recognition criteria are satisfied (see IPSAS 19, para 18). The accounting standards make a distinction between provisions,[15] which may be recognized as liabilities in the financial statements and contingent liabilities that are not recognized. Financial guarantees that satisfy the definition of a provision and meet the recognition criteria (see IPSAS 19 para 22) are recognized as provisions in the accounting financial statements:

- An entity has a present obligation[16] (legal or constructive) arising from a past event. (A legal obligation is enforceable by law. A constructive obligation arises to the extent that the obligating events create valid expectations in other parties that the entity will discharge the obligation and the entity has no realistic alternative to

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[13]IPSAS 9 Revenues from Exchange Transactions (IPSAS, pp. 253–279) and IFAC Public Sector Committee's "Revenue from Non-Exchange Transactions," Invitation to Comment, New York, January 2004. "Any payments of fees related to the establishment of contingent arrangements are treated as payments for services" (*1993 SNA*, par. 11.26).

[14] *1993 SNA* , par. 11.8.

[15] IPSAS 19 Provisions, Contingent Liabilities, and Contingent Assets (IPSAS, pp. 593-649). Provisions here do not refer to entries, such as depreciation, impairment of assets, and doubtful debts, that are adjustments to existing assets (IPSAS, p. 603).

[16] Where it is more likely than not that a present obligation exists, a provision is recognized (if the recognition criteria apply); where it is more likely that no present obligation exists, a contingent liability may be disclosed.

settling that obligation.[17]) IPSAS 19 explains that because an obligation always involves a commitment to another party, it follows that a decision does not give rise to a constructive obligation unless it has been communicated before the reporting date to those affected in a way to raise a valid expectation (IPSAS 19, para 28). The IPSAS also explains that obligations, legal and constructive, arising from past events have to exist independently of an entity's future actions (that is, the future conduct of activities) to be recognized as provisions. (IPSAS 19, para 26)

- It is probable that an outflow of resources will be required to settle the obligation. (see IPSAS 19, para. 610).

- A reliable estimate can be made of the amount.

33. In a nutshell, in the **accounting system**, a provision is recognized when the past event giving rise to a present obligation has occurred, it becomes probable that an outflow of economic resources will occur and a reliable estimate of the amount of the outflow can be made, although the timing and the amount of the outflow may be uncertain. The accounting system does not recognize contingent liabilities/assets because the existence of a present obligation will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity, or because it is not probable that there will be an outflow of resources or that the amount of the obligation cannot be reliably estimated.

34. The TFHPSA proposed a number of recommendations concerning the statistical treatment of guarantees.[18] At its January/February 2006 meeting, the AEG agreed to distinguish the three types of guarantees as recommended by the TFHPSA. It agreed to treat as financial derivatives the guarantees that meet the derivative definition, with such types of guarantees to be specified as a sub-category of financial derivatives.

35. As for standardized guarantees, the AEG agreed and clarified that they should be treated in the same way as insurance in respect of output, property income and the recording of premiums and claims (Standardized guarantees to reflect the "full-blown" nature of an insurance process, e.g., premium-like payments that are sufficient to raise the technical reserves to meet expected defaults, technical reserves should be invested to produce "premium supplement", appropriate estimate of "expected defaults"). A new sub-category of

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[17] While the other party may not always be identified, a provision always involves an obligation to another party (IPSAS, p. 607).

[18] See http://unstats.un.org/unsd/nationalaccount/aeg/papers/m4Guarantees.pdf. Jeff Golland, Reimund Mink, Pierre Sola, and Manik Shresta were actively involved in the production of the document, with valuable inputs from various members of both the statistical and accounting communities. Robert Kilpatrick made extremely valuable contributions to the development of the paper on guarantees.

insurance technical reserves should be created and identified as "standardized guarantees." The AEG agreed that the category of insurance technical reserves, now to be called "insurance technical provisions" should be extended to be "provisions of insurance claims and calls under standardized guarantees" with an optional breakdown to distinguish insurance reserves from provisions for calls on standardized guarantees. Finally, the AEG specified a number of aspects under this question flowing from the decision to treat standardized guarantees as insurance: the assets of those benefiting from the guarantees are those matching the liability and not the itemized assets of the guarantor; the consumption item is attributed to the unit taking out the guarantee, the creditor or the debtor as appropriate; if the guarantee is taken out by the debtor, all transactions with the guarantor are recorded as being with the debtor up until the call is paid to the creditor. It was agreed that a new reworking of tables were to be prepared and checked for any remaining questions for discussion.

36. Finally, for the one-off guarantees, the AEG concurred that they were not to be part of the core SNA accounts. The AEG preferred that they be treated as memorandum item rather than having a set of supplementary accounts. Valuation should be at nominal value and on an expected net present value, if possible. The AEG also agreed that a sufficient prominent status should be given to this information to ensure that it is reported in practice. When the guarantee is activated, the AEG agreed, with the qualification that the guarantor always makes a capital transfer or has a financial claim, and that it should be treated as capital transfer unless there is a genuine financial claim. Finally, the AEG agreed that some guidance should be provided on how to record in the standard accounts one-off guarantees given to corporations in certain well-defined financially distressed situations.

H. Transactions of Government with its Public Corporations

37. While attention was given to the more general treatment of transactions between public corporations and government, a main issue was the statistical treatment of transactions of dividends (losses) between corporations (quasi-corporations) and the government as controlling shareholders.[19]

38. At its January/March 2006 meeting, the AEG was attracted to the "reinvested earnings approach" that would consist for the government to recognize the earnings/losses of public corporations (including quasi-corporations) as they occur, with the portion not distributed recorded as financial transactions (equivalent to equity consolidation in accounting standards). In fact, the AEG agreed that the text of the updated SNA should mention the possibility of referring to this approach when considering what transactions

[19] See http://unstats.un.org/unsd/nationalaccount/aeg/papers/m4uperDividends.pdf. Philippe de Rougemont, Brooks Robinson, and Timothy Dobbs were actively involved in conducting and documenting the proposals, with Jean-Pierre Dupuis preparing the document for the AEG presentation.

should actually be recorded between the government and 100 percent owned public corporations. It was also agreed that this issue should be put on the SNA short-term research agenda starting from the direct investment treatment and seeing how far these principles could be applied directly to publicly controlled enterprises.[20]

39. The AEG agreed to record exceptional payments by public corporations to government funded from accumulated reserves or sales of assets as withdrawal of equity. The AEG agreed to record exceptional payments by government to public corporations and to public quasi-corporations intended to offset accumulated losses-or as investment grants- as capital transfers. The AEG agreed to record exceptional payments by government to public corporations and to public quasi-corporations for commercial reasons (new issuance of shares and valid expectations of dividends) and leading to increases in government's claims on shares or other equity in the unit as addition to equity.

I. Chapter on Government and Public Sector

40. In **statistical guidelines**, general government and government controlled business enterprises (public corporations) are presented in different sectors. General government includes nonprofit institutions controlled and mainly financed by the government (*SNA 1993*, par. 4.62). The general government is exposed to the risks and rewards that emanate from these entities and the TFHPSA proposed that the updated SNA introduces a chapter on the government and public sectors[21] that will give preeminence to the general government sector and its special relationships with public corporations, as well as to the nonprofit institutions that are treated as part of the government sector.

41. At its January/February 2006 meeting, the AEG noted the developments and the proposals set out in the partial first draft chapter.[22] The AEG will be provided with a copy of the full draft chapter and encouraged to provide detailed comments. After incorporating these comments as well as those from TFHPSA members, including the five TFHPSA priority issues, the revised draft of the chapter will be provided to the SNA Editor.

42. By giving more emphasis to the public sector in statistical guidelines, the proposed chapter also paves the way for a further harmonization with the **accounting standards** "whole of government" reporting entity that is a close equivalent of the public sector in statistical guidelines. The only difference would stem from the treatment of non-resident units controlled by the general government. To the extent that such units are controlled, they

[20] An AEG team will work with the ISWGNA to support the research; volunteers for the team were Peter Harper, Jacques Magniez, Brent Moulton, and Peter van de Ven.

[21] See The General Government and Public Sectors http://unstats.un.org/unsd/nationalaccount/AEG/papers/m3delineationOutline.pdf.

[22] John Pitzer and Jean-Pierre Dupuis are the authors of the chapter.

are fully consolidated as part of the economic unit in accounting standards, and accounted for on an equity basis in the statistical guidelines. As for non-resident units owned but not controlled, they are and will continue to be accounted for on an equity basis in both systems.

III. Areas for Further Harmonization

A. Performance Reporting

43. The creation, transformation, exchange, transfer, and extinction of assets are reported as *flows*. As such, the stocks of assets are the outcome of flows which can explain changes of assets in balance sheets between two periods. Differences between the two systems arise on two counts. First, to the extent that the economic activities recognized by each system differ, and therefore the *flows* that purport to capture such activities also differ. Second, the statistical guidelines clearly and comprehensively define, and present separately in the financial statements, flows that arise from "transactions" from those that are due to "other changes". While the accounting standards deal with certain "other changes", the definition, treatment and presentation of these is not as well developed, and therefore not as comprehensive or clear as in statistical standards.

Recognition of flows

44. In statistics, flows are made up of transactions and other changes. Transactions (see Box 1) involve interactions between institutional units by mutual agreement and, to a lesser extent, actions within an institutional unit that are treated like transactions often because the unit is operating in two different capacities (*1993 SNA*, par. 3.12). Other changes comprise "revaluations" and "other changes in volume."

Box 1. Types of Transactions

Description	Units involved	Valuation	Examples
1. Observable in value terms	2	Monetary transactions	Purchase of goods or services
2. Observable but not immediately valued	2	A value in monetary terms is attributed	Barter of goods, education services provided free by government
3. Physically observable	1	A value in monetary terms is attributed	Own account, such as consumption of fixed capital

45. The accounting standards also record transactions and, increasingly, also recognize other events. In the past, with few exceptions the cash basis of accounting was adopted for

financial reporting by public sector entities, as such financial reports only recognized value changes arising from cash transactions with other units. This is changing. Firstly, public sector accounting is increasingly adopting the accrual basis of accounting. Secondly, in national standards in many jurisdictions and in the international standards transactions and events are increasingly being measured at fair value (or other current value) rather than on the historical cost basis which was extensively used in the past by private sector entities which adopted the accrual basis. The increasing use of fair value in accounting standards for certain assets but not for others leads to questions about the role of the income statement and the "message" it conveys. For instance, changes in valuation of some assets are required and will be recognized in the income statement as they occur (for example, certain financial instruments), while certain value changes in other assets are only recognized in the income statement when realized such as certain capital gain upon sales of the assets, that is, when transactions with other units occurred. In addition, certain value increments in, for example, property, plant and equipment which are recognized prior to realization will be recognized in an asset revaluation reserve in the balance sheet rather than in the income statement.

46. The "other flows" reported in statistics, being conceptually based, are more encompassing than the "other events" in accounting. This has led to proposals to supersede the current "income statement" reporting with a broader notion of performance reporting.

Reporting of flows

47. In terms of reporting statements, a major difference[23] between the two systems results from the statistical standards clearly delineating in separate reporting statements transactions from other changes, whereas both transactions and other events are intermingled in the income statement (referred to as a Statement of financial performance in the IPSAS) compiled in accordance with the accounting standards.

48. The accounting income statement includes revenue/expense activities that resulted from ordinary activities (part of an entity's service delivery or trading activities, inclusive of activities incidental to, or arising from these activities); as well as extraordinary activities ("events or transactions that are not expected to recur frequently or regularly and are outside the control or influence of the entity") (IPSAS 1, para. 101). Certain other events that may be considered to give rise to revenues/expenses are reported as part of the net assets/equity (e.g., revaluation surplus on physical assets, and gains/losses from the conversion of financial statements of a foreign entity). Other events, which do not satisfy criteria for recognition as

[23]As noted earlier, other differences stem from the current account, including internal transactions, whereas the transformation within the unit is not recognized in the income statement. These differences in reporting are not treated here, and the reader is referred to Appendix 3 of *GFSM 2001* for more information between the current account and the income statement.

revenues and expenses in the income statement or balance sheet can, however, be explained in the notes to financial statements.[24]

49. WG1 has recommended that performance reporting in accounting be further developed to distinguish more clearly the transactions from revenues and expenses arising from other events in the economy, such as increases in prices. Such reporting could provide for a comprehensive income statement that would consist of two columns: one that would distinguish between income and expenses other than "remeasurements," and the other that would be remeasurements. The reporting would then include the change in equity (net asset) from transactions and other events and circumstances from non-owners' sources. The comprehensive income concept would facilitate integrating valuation adjustments (e.g., foreign currency transactions) and other economic events (e.g., restructuring). It would provide more flexibility in delineating operations from the financing and the revaluation of the accounts. Finally, but importantly, such a presentation would mirror closely the concepts used in statistical guidelines.

50. The IASB has been progressing a "performance reporting" project, and the IPSASB has been monitoring developments at the IASB with a view to actioning its own project for the public sector as resources allow. These projects, if and when implemented, would bring the two systems closer.

B. Accrued Earnings from Equity Investment

51. As noted in the previous section under "Transactions of government with public corporations", the TFHPSA presented the case that income be recognized on an equity basis between related institutional units that are classified in different sectors and where such relationship entails significant influence, rather than on the basis of transactions, e.g., income received.[25] Currently, the **statistical guidelines** record all financial equity investment in different sectors at market or market-equivalent values in the balance sheet; the income from such investment is recorded on a dividends-declared basis, except for foreign direct investment. The income from direct investment equity, defined as conferring influence in the

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[24]The *1993 SNA* provides for few memorandum items (consumer durables and direct foreign investment, par. 13.84); supplementary information (as for contingencies, par. 11.26); and satellite accounts (to expand the analytical capacity of national accounting, par. 21.4). In the review of the IMF's *Balance of Payments Manual*, fifth edition, Washington, D.C., 1993, memorandum items will be considered part of the standard components, whereas supplementary information will be treated as options that may be considered.

[25] See Philippe de Rougemont (Jeff Golland), *Accrual of Earnings on Equity in the SNA*, September 2004; Brooks B. Robinson, and D. Timothy Dobbs, *Accrual of Earnings on Equity Stakes of General Government in Public Corporations: A Proposal for an Updated SNA*, October 2005.

management of the nonresident entity in which the investment is made, is recorded on an equity basis.[26]

52. In **accounting standards**, however, the valuation used, the class of financial equity assets recognized, and the treatment of income vary, depending upon whether the equity investment confers control, equally shared (joint) control, significant influence, or is simply an investment which does not give rise to control or significant influence over the entity because these factors determine.[27]

53. The rationale for adopting the "reinvested earnings" in statistical guidelines is that units that operate in different sectors and are related to one another have an economic behavior that differs from that of entities that are unrelated. Recognizing such relationship is consistent with the treatment of direct investment in the *Balance of Payments Manual*, thereby extending harmonization with that internationally recognized standards. The "related relationship" is especially important where there is a public sector relationship:

> The recognition of revenue on the basis of distributions received may not be an adequate measure of the revenue earned by an investor on an investment in an associate because the distributions received may bear little relationship to the performance of the associate. In particular, where the associate has not-for-profit objectives, investment performance will be determined by factors such as the cost of outputs and overall service delivery. As the investor has significant influence over the associate, the investor has a measure of responsibility for the associate's performance and, as a result, the return on its investment. The investor accounts for this stewardship by extending the scope of its consolidated financial statement to include its share of net surplus or deficits of such an associate and provides an analysis of earning and investment from which more useful ratios can be calculated. As a result, the application of equity method provides more informative reporting of the net asset/equity and net surplus/deficit of the investor (IPSAS, p. 224).

54. The AEG at its February/March 2006 agreed for the treatment of "reinvested earning" to be put on the short-term agenda of the SNA.

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[26] "The retention of some or all of the earnings of a foreign direct investment enterprise within that enterprise can be regarded as a deliberate investment decision by the foreign owners. Accordingly, the retained earnings are rerouted in the System by showing them as first remitted to the foreign owners as property income and then reinvested in the equity of the direct investment enterprises." (*1993 SNA*, par. 3.27). It should be noted that rerouting is a "rearrangement" of transactions as opposed to an "imputation." Imputation applies to internal transactions (e.g., own consumption or capital formation) where values are imputed, though the goods and services themselves are not imputed (*1993 SNA*, par. 1.73).

[27] IPSAS 7 Accounting for Investments in Associates (IAS 27); IPSAS 6 Consolidated Financial Statement and Accounting for Controlled entities; IPSAS 15 Financial Instruments: Disclosure and Presentation (IAS 32 and 39).

C. Provisions and Contingent Liabilities

55. Both systems recognize flows, albeit with differences in definitions. As discussed in section II, contingent assets and contingent liabilities are not recognized in the statistical system; nor are they in the accounting system, though many "provisions" as defined in the accounting system would be classified as a contingent liability under statistical bases and not recognized (provisions are recognized in the accounting system if they satisfy recognition criteria). The following reviews the contingencies in the two systems with a view to pursue Francois Lequiller's proposal in the "The treatment of provisions in national accounts"[28] for the SNA to recognize "the provisions and impairment of assets that are recognized by business accounting standards."

56. In the *1993 SNA,* "contingent assets or liabilities are recognized as financial assets and liabilities only if the claim or liability is unconditional to both parties and/or the arrangement has an observable value because it is tradable" (SNA 1993 par. 13.22). However, the system recognizes attenuating circumstances. First, it recognizes that certain conditional financial arrangements may be recognized as "the arrangement itself has value because it is tradable" (SNA 1993, par. 11.28). Second, the system also recognizes cases where the liability can be recognized though no funds have been exchange providing the example of a banker's acceptance (par. 11.27). Third, the system recognizes "Country practices in determining which instruments are considered contingent from actual assets recorded in the balance sheet. Flexibility in the application of this recommendation will be required to take national practices and variations in the nature of these instruments into account" (*SNA 1993*, par. 11.27).

57. The *1993 SNA* identifies externalities as an example of contingencies. Externalities refer to certain economic actions carried out by institutional units that cause change in the conditions or circumstances of other units without their consent. (*1993 SNA*, par. 3.51).

> It is necessary to consider, however, whether values should be assigned to such externalities. Economic accounts have to measure economic functions such as production or consumption in the context of a particular legal and socio-economic system within which relative prices and costs are determined. *Some countries, at least at certain points in their history, may choose to frame their laws so that some producers are permitted to reduce their private costs by polluting with impunity* (italics added) This may be done deliberately to promote rapid industrialization, for example. The wisdom of such a policy may be highly questionable...but it does not follow that this is appropriate for economic accounts to try to correct for presumed

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28 See Lequiller Francois, "The treatment of provisions in the national accounts: elements for the review of the SNA" http://www.oecd.org/dataoecd/53/49/33740137.pdf.

> institutional failures of this kind by attributing costs to producers that society does not choose to recognize (*1993 SNA,* par. 3.52).

58. As noted earlier, the accounting system distinguishes provisions (that are recognized in the system) from contingent liabilities (that are not recognized) (IPSAS 19).

59. Recognizing in the statistical system provisions as defined in the accounting standards could help, depending upon the circumstances, to provide quantitative information on significant problem areas such as environmental remediation liabilities (e.g., restoration of strip mines after mining is completed; removal of toxic waste caused by production; decontamination of site when a nuclear power plant is decommissioned), litigation, expropriation and self-insurance.

60. Two reasons could be advanced to consider such inclusion. First, the accounting standards are increasingly delineating risk from uncertainty, and are accounting for risk on the basis that it is measurable and can be expressed in terms of probabilities. Uncertainty, on the other hand, cannot be measured because it depends on too many unknown and unpredictable factors. Second, legal property rights evolve as shown by units that can be made accountable to assume obligations:

> The failure of markets to allocate resources efficiently should, *(Ronald)* Coarse argued, ... be attributed to ... the absence of clearly defined property rights. If property rights were clearly defined, markets could develop that would ensure efficient use of resources. For example, if the rights over the use of a river were clearly established, a factory owner wishing to pollute the river and fisherman with an interest in clean water could negotiate over the amount of pollution that would be allowed. If the factory owner held rights over the river, fishermen could pay him or her to limit pollution; if fisherman held the rights, the factory owner could buy the right to pollute. The results of these perspective was that Coarse saw a much greater scope for the market...”[29]

61. The AEG at its January/February 2006 meeting noted that the question of provisions should be put on the research agenda of the SNA. The OECD agreed to take the lead on the research, taking into account the practices of insurance companies and international accounting standards.

D. Other Areas

62. The IPSASB has developed international accounting standards for financial reporting by public sector entities that converge with the private sector standards where appropriate and develop public sector specific requirements in other cases. There are differences in the

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[29] Backhouse Roger, *The ordinary business of life*. Page 283.

public and operating and institutional environments of public and private sector entities, and in the transactions they enter into and the other economic events that impact their financial performance and financial position. These differences may translate into some differences in accounting requirements in the public and private sectors. However, there is also much common ground. The TFHPSA is of the view that the approach of the IPSASB in converging IPSASs with the IASs/IFRSs where the requirements of the IASs/IFRSs are appropriate for the public sector rather than introducing unnecessary differences reinforces the potential for, and benefits to the community of prepares and users of, harmonization of accounting and statistical bases of financial reporting. Furthermore, the TFHPSA supports the IPSASB project to update IPSASs to deal with prior period adjustments in a manner which more closely reflects statistical (and IFRS) requirements.

63. Public/ private partnerships (PPPs) are currently not covered in statistical guidelines. At the January/February 2006 meeting, the AEG agreed that the PPPs are sufficiently important to be described in the revised SNA. It also agreed that a list of indicators would be useful to help determine the economic owner of the fixed assets associated with a PPP but that it was necessary to examine arrangements on a case-by-case basis. An annex on PPP will be included in the SNA, with an understanding to keep abreast of developments in international accounting standards.

64. Unlike the statistical guidelines, the accounting standards recognize the joint ownership of unincorporated joint ventures. This is not the case for guidelines. The AEG, at its January/February 2006 meeting, considered that it did not have sufficient information on which to base a conclusion on how to deal with joint ventures in statistics. Recognizing the importance of consistency with accounting standards, the AEG suggested to further explore the issue, though outside the context of the update of the SNA.

IV. Conclusion

65. Research in national accounts statistical methodology has advanced since the fourth SNA revision.[30] Among other things, it took into account the continuing evolution of financial sectors (e.g., the work on derivatives and on financial soundness indicators) and institutional developments (e.g., extensive research by the European Union in the application of the statistical guidelines for regulatory purposes). With the upcoming fifth revision planned for 2008,[31] research has intensified, with a number of forums established to deal with specific issues of the revision, including the TFHPSA.

[30] An overall review of such research is provided by André Vanoli, "La comptabilité nationale face aux transformations de la finance et de la comptabilité," *Revue d'économie financière,* Association d'Economie Financière, Paris, Autumn 2004.

[31] Please refer to "Towards SNA 1993, Rev. 1" http://unstats.un.org/unsd/nationalaccount/snarev1.asp.

66. The TFHPSA launched a major part of its work program on the acknowledgement that, in the recent past developments in accounting standards and statistical bases of reporting provide the opportunity for further convergence and harmonization. (see Appendix I for more details). As documented in this paper, the TFHPSA has succeeded in narrowing some of the differences between the two systems, though it recognizes that there are other areas that could be further harmonized.

67. The need for convergence will continue to intensify to develop analytical, monitoring, and assessment tools that require comparable data across countries, but also at a level of detail that requires a tighter link between the accounting of the micro-unit and the macro-aggregates. Developments in information technology, specifically with regards to source data systems and the transfer of information, can accommodate such requirements. At the same time, there will be further calls to enhance the efficiency and effectiveness of statistical production, notably by limiting respondent burden. This could be enhanced through further harmonization of statistical standards with accounting standards that often provide the data sources on which statistics are produced:

> The continuing development of International Accounting Standards and their endorsement by government bodies inside and outside the European Union open up the prospect of a simultaneous decrease of the statistical reporting burden and an improvement of the quality of statistics.[32]

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[32] Quoted from Dr. A.H.E.M. Wellink, "Business Accounting Standards and Statistical Standards," Introduction to the Round Table Discussion, Second ECB Conference, Frankfurt, April 22-23, 2004.

Developments Leading to Harmonization[33]

1. Emerging developments in recent years opened the doors for harmonizing the statistical and accounting data systems. They include the internationalization of accounting standards, greater adoption of fair value of assets in accounting standards, advances in the research on fundamentals of asset valuation, and analytical economic frameworks that now provide links between macro and micro economics.

A. Internationalization of Accounting Standards

2. Unlike national accounts that have long been recognized worldwide,[34] accounting standards vary across countries in aspects of recognition, timing, and measurement, although they draw from broadly common principles. The resulting diversity of accounting standards among countries has been precluding any serious attempts at harmonization with statistical guidelines.

3. However, the creation of multinational industrial and financial enterprises and the increasingly global portfolio capital markets have prompted a need for more common accounting standards at the worldwide level. Corporate accounting and governance scandals in recent years also added to the impetus for a greater harmonization in the accounting world.

4. In the early 1970s, the International Accounting Standard Committee (IASC) was set up—replaced in 2001 by the International Accounting Standards Board, IASB. The International Accounting Standards, now known to as IFRSs, developed by this organization, have emerged as a rival source of accounting standards to countries' specific standards.

5. In the same vein, the IPSASB of the International Federation of Accountants has developed international standards for the public sector. These comprise 21 core accrual-based standards, which are based on IFRSs where the latter requirements are applicable to the public sector and, otherwise, deal with financial reporting issues specific to public sector, and one comprehensive standard on the cash basis of accounting. These standards are referred to as International Public Sector Accounting Standards (IPSASs).

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[33] Extracted from Lucie Laliberté, *Strengthening the Links Between Macroeconomic Statistical Guidelines and Accounting Standards*, IMF, Working Paper**,** International Monetary Fund (amended version presented at the meeting of the Inter Secretariat Working Group on National Accounts (ISWGNA) August 2004, December 2004.

[34] The work on national accounts, which was launched officially after World War I with the National Bureau of Economic Research and Simon Kuznets, was given a major impetus with World War II. "Branching off from Keynes were the national accounts, starting with Stone's and Meade's National Income and Expenditure (1944) and culminating after four painful revisions, with the *1993 SNA*, the binding rules for measuring economic value all over the world" (Reich, 2001, p. 127).

6. As candidates for "world generally accepted accounting principles," the IFRS/IPSAS provide a framework for exploring harmonization with statistical guidelines.

B. Increased Use of Fair Value of Assets in Accounting

7. The historical cost valuation in accounting is increasingly challenged as costs fail to reflect the true financial situation. This is leading accounting standards to a shift from historical cost to fair value, also referred to as fair valuation. This shift from a retrospective valuation of assets (historical cost) to a more prospective view (fair valuation) narrows the main fundamental conceptual difference with the statistical systems that use market valuation. In accounting, fair valuation, which was initially only applicable on traded financial assets, is now gradually being extended to other financial and non-financial assets in certain circumstances.

C. Research in the Fundamentals of Economic Value

8. Intensive research in finance, accounting, and economics in recent years greatly enhanced the knowledge on the fundamentals of value, providing for promising cross-fertilization among these three fields.

9. In *finance*, studies of relevant interest concern the impact of accounting information on financial markets, notably the capital asset pricing model (CAPM) and the hypothesis of efficient market. The CAPM characterizes the relationship between a common stock's price and its expected return and risk (based on the rate of return of the stock, that of the market, and the beta that measures the co-movement of that firm's returns with those of the market). It was supplemented with developments in financial analysis where accounting variables are used to derive financial ratios for comparing the risks and returns of firms and to model asset pricing.

10. Under the efficient market hypothesis, "a market is efficient if asset prices fully reflect the information available." This theory initially undermined the fundamental analysis based on accounting variables; however, the theory has been challenged by its inability to explain the volatility that characterizes the stock market. This further reinforced the idea that the availability of information, such as financial data, helps to make the markets more efficient; as evidenced by the development of the Financial Sector Assessment Program, along with the Standards and Codes initiatives, that were established at the international level.[35] Concurrently a greater awareness of the importance of not only the availability of information, but also the quality of the information, evolved.

[35] See http://www.imf.org/external/np/fsap/fsap.asp.

11. Partly influenced by developments in finance, research in *accounting* also evolved in recent years. Three phases can be tracked.[36] First, under the classical approach to accounting, the reality would be a given that accounting standards purport to capture. This approach, which still underlies much of existing accounting standards, consists of deducing correct accounting methods from a set of concepts, principles, and objectives. Second, this is to be contrasted with the subsequently developed market-based approach to accounting; that approach reflects advances in finance theory where the primary focus is on the market reaction to the release of accounting data. Third, according to yet another approach, the accounting theory approach, the environment of a firm would include not only financial markets, but also other "environments" that are conditioned by the firm's contractual arrangements, such as management compensation and debt agreements with creditors. The firm is viewed as a "nexus of contracts." Under that approach, for instance, management, in allocating resources, compensating management, and so on, would take into account the financial information effects in making their decisions and in their choice of accounting methods.

12. Concurrently, *economic theory* evolved, including attempts to link/extend the notion of value, traditionally developed in microeconomy to a macroeconomic setting.[37] An instance of analytical work that integrates the micro and macro economics, and that is relevant to national accounts, is John Commons's approach that views transactions as the basic unit of analysis, with the focus mainly on the joint evolution of and interaction between legal and economic processes.

> "Commons conceived of human activity as embodied in the idea of transaction...Transactions are entered into by individuals but also especially in the modern industrial economy, by enterprise seen as going concerns. The going concern is a legal entity (entity with legal existence and rights) but also a decisional process that organizes the activity of many individuals. As the participants in the going concerns, each with their individual purposes, operate within the working rules imposed by law and established within the concerns, a collective will and collective purpose of concern emerges or is revealed. Firms are going concerns, as is the government itself.... Going concerns are typically reckoned in terms of assets and liabilities, each of which is governed by changing judicial conceptions of liberty and property, and therefore of immunity and exposure. …He repeatedly speaks against the fallacy of attributing to collectives an existence separate from that of the individuals whose activities make them up." p. xvii).

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[36] Summarized from Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried in The Analysis and Use of Financial Statements, second edition, John Wiley and Sons, New York, 1997.

[37] Reich, 2001.

13. The 1970s, with the waning of Keynesian, saw a further narrowing of differences in the various fields of economics with core economics becoming increasingly based on rigorous rational-choice foundations. The emphasis on methodological individualism (the doctrine that economic theories should be based on theories about individual behavior), and on the view of individuals making choices in response to the prices and opportunities they faced led to markets being increasing viewed as a means of disseminating information in a changing, uncertain world.

> "The new economic based on rational assumptions ... modeling of individual behavior in terms of optimization –assuming that firms maximized profits and individuals maximized utilities..... One result of this was that the distinction between microeconomics, dealing with the behavior of individual firms, and households, and macroeconomic dealing with economic as a whole was broken down**."**[38]

[38] Backhouse Roger, The ordinary business of life, page 301

DIFFERENCES AND CONVERGENCE BETWEEN STATISTICS AND ACCOUNTING STANDARDS

1.	Reporting entity scope	Boundary, consolidation of, and accounting for, controlled entities, and disclosures, in each system
2.	Equity ownership in reporting entity	Presentation (including classification) and valuation of the relationships between the entity and its owners in each system. This category includes minority interest, contribution from and distribution to owners
3.	Recognition of non-financial assets	Capitalization policies in each system, including R&D, other intangible assets, exploration and evaluation in extractive industries, defence weapons, public/private partnership
4.	Counterparty/symmetry and recognition	Emphasis by each system on the existence of counterparty to a transaction and the accounting adopted for recognized asset/liability. Covers provisions, decommissioning/restoration cost, tax effect accounting, employee stock option.
5.	Measurement of assets/liabilities	Measurement covers specific issues such as interests in other units, inventories, leases, investment property, and financial instruments. Covers impaired non-financial assets, transaction costs, nonperforming loans, low interest loans, inventory, investment in associates, in quoted shares, biological assets, exploration, evaluation, development and production in extractive industries.
6	Financial instruments	Covers debt cancellation, debt rescheduling, debt defeasance, securitization undertaken by SPEs, currency on issue/seigniorage.
7.	Time series	Covers prior period adjustments, provisions, social benefits, employers' pension schemes, social security and assurance, and guarantees.
8.	Financial statements	The form and content of the financial statements published by the two systems, including the format and presentation, of the cash flow statement, the statement of financial position, and of the statement of financial performance. Covers repurchase premiums and discounts on debt securities, pension schemes, holding gains and losses, investment property, financial instruments, cultivated assets, other naturally occurring assets not acquired or donated that previously were not known to exist, and that were known to exist but could not be measured, depreciation and impairment of revalued assets,

		bad and doubtful debt, excess of acquirers' interest in the net fair value of acquirees assets over cost, interest on defined benefits, swap interest, and tax credits.
9	Terminology and definition	Covers current value, correction of error/change in estimate, tax, materiality, net asset/net worth, financial assets.
10.	Items considered and found not to or not expected to be a cause of difference	Covers uncollectible taxes, purchased goodwill, privatization, borrowing costs, land under roads, subscription to international organizations, non-cash generating assets, transaction costs, lease liabilities, initial recognition of found/discovered non-financial assets, depreciation versus consumption of fixed capital, Special Drawing Rights, prior period adjustment, time of recording revenues.

V. Bibliography

Backhouse Roger, *The ordinary business of life*.

Commission of the European Communities, 1993, IMF, OECD, United Nations, and World Bank, *System of National Accounts 1993 (1993 SNA)*, (Brussels).

Eurostat, 1996, *European System of Accounts (1995 ESA), (*Luxembourg).

Grossman, Sanford J., and Merton H. Miller, 1988, "Liquidity and Market Structure," *Journal of Finance*, Vol. 43 (July), pp. 617-33.

Handa, Puneet, and Robert Schwartz, ,1996, "How Best to Supply Liquidity to a Securities Market," *Journal of Portfolio Management*, Vol. 22 (Winter), pp. 44-51.

International Accounting Standards Board, 2002, *International Financial Reporting Standards,* London.

International Public Sector Accounting Standards Board of the International Federation of Accountants*:*.

———,

IPSAS 1 "Presentation of Financial Statements" New York 200
IPSAS 9 "Revenue from NonExchange Transactions," Invitation to Comment, Public Sector Committee, January, (New York 2001).
IPSAS 19 "Provisions,. Contingent Liabilities and Contingent Assets" (New York 2002)
PSC Invitation to Comment " Revenue from Non-Exchange transactions (Including Taxes and Transfers)" New York 2004

International Monetary Fund, 2000, *Monetary and Financial Statistics Manual,* (Washington, D.C.).

———, 2001a, *Government Finance Statistics Manual 2001,* (Washington, D.C.).

———, 2003a, *External Debt Statistics: Guidelines for Compilers and User,* (Washington, D.C.).

———, 2004, *Compilation Guide on Financial Soundness Indicators,* (Washington, D.C.), forthcoming.

Laliberté, Lucie, 2004, "The relationship between statistical and accounting standards," IMF Working Paper 04/XXX, International Monetary Fund, (Washington, D.C.).

Lequiller, François, 2004, *The treatment of provisions in the national accounts: elements for the review of the SNA*, National Accounts and Economic Statistics, OECD, STD/NAES (2004)7

Reich, Utz-Peter, 2001, *National Accounts and Economic Value: A Study in Concepts,* Palgrave, (New York).

Reilly, Frank, and Keith Brown, 2000, *Investment Analysis and Portfolio Management*, 6th ed., Dryden Press, (Fort Worth).

Vanoli, André, "La comptabilité nationale face aux transformations de la finance et de la comptabilité," *Revue d'économie financière,* 2004, Association d'Economie Financière, (Paris).

Wellink, A.H.E.M., 2004, "Business Accounting Standards and Statistical Standards," Introduction to the Round Table Discussion, Second ECB Conference, (Frankfurt), April 22-23.

White, Gerald I., Ashwinpaul C. Sondhi, and Dov Fried, 1997, "The Analysis and Use of Financial Statements", 2nd ed., John Wiley & Sons, (New York).