

**ACCRUAL ACCOUNTING OF INTEREST ELECTRONIC DISCUSSION GROUP
REPORT OF THE MODERATOR**

Cornelis Gorter

October 2002

I. EXECUTIVE SUMMARY

1. In April 1999, the Intersecretariat Working Group for National Accounts (ISWGNA) decided to establish an electronic discussion group (EDG) to inform the working group on issues related to the recording of interest in accrual-based statistics. The background for this decision was that the ISWGNA had received requests from several sides to clarify the recommendations on the accrual of interest in the *System of National Accounts 1993 (1993 SNA)*. In addition, the ISWGNA was aware of calls for revision of the *1993 SNA* recommendations on the accrual of interest.

2. More than three years after the establishment of the EDG, the discussion has not resulted in a clear convergence of opinions among the participants. Also, because the group from which contributions were received has remained very small, the EDG did not generate a clear indication how the issue is seen by a broad group of users and compilers of statistics. Attempts to involve a broader group in the discussion (for instance, through announcement in *SNA News and Notes* and international meetings) remained largely without result. However, the EDG has resulted in a rich depository of arguments pro and contra to the two main options of recording the accrual of interest. Furthermore, a questionnaire that the IMF sent to its correspondents has yielded useful insights into the preferences of a broader group of institutions.

3. Although participants to the EDG remained strongly divided on how the *1993 SNA* should have treated the accrual of interest on debt securities given its overall framework, the moderator is of the opinion that a majority would accept that the present text probably recommends that the amount of interest on debt securities and the time path of its accrual are determined at inception of the instrument. **The moderator recommends that the ISWGNA confirm this interpretation.**

4. As indicated above, no general agreement has emerged from the EDG whether the present *1993 SNA* recommendations should be revised. Some of the contributions argued that the *SNA* (or *System*) should indeed be revised to say that interest on a debt security accrues consistent with the instrument's current market value. However, there was also strong opposition against such revision. Others argued that current market valuation would not imply a revision, and that the present text of the *1993 SNA* should be interpreted that way. This point of view was also contested. Because the number of participants in the EDG remained very small, and because a request of the IMF Committee on Balance of Payments Statistics (BOP Committee) required fulfillment, the IMF Statistics Department surveyed its

correspondents in the member states in April 2000. **The moderator concludes from both the EDG and, in particular, the responses on the questionnaire, that at this point no broad consensus exists that the 1993 SNA should be revised.**

5. The moderator also concludes that the discussion on the theoretical appropriateness of the various options to account for the accrual of interest has shown that merits can be found in recording the accrual of interest on the basis of the instrument's current market value. **The moderator therefore recommends that the ISWGNA recognize that compilers of national accounts may wish to record, in supplementary tables, the accrual of interest on the basis of current market values.**

6. Particularly in the last months before the EDG was closed, voices were heard that issues concerning the accrual accounting for interest should not be considered in isolation from the recording of other income flows in the *System*. **The moderator suggests that the ISWGNA give due recognition to this aspect, in addition to the inconclusive methodological debate in the EDG, by acknowledging that the issue of how the *System* should account for the accrual of interest may be reconsidered on the occasion of a wider discussion on the concept of income in the 1993 SNA.**

7. The moderator suggests that, if the ISWGNA adopts the above recommendations, the BOP Committee should take similar action. Specifically, the moderator suggests that the BOP Committee may wish to clarify what the principal methodology currently is to record the accrual of interest in balance of payments statistics.

II. SHORT HISTORY

8. From anecdotal evidence of experts directly involved in drafting the *1993 SNA*, it is known that the recording of accrued interest was subject to considerable discussion in the interagency committee that guided the completion of the manual. The outcome of this discussion was that the amount of interest that accrues on debt securities is determined at inception of the instrument. Thus, while changes in interest rates after inception could lead to holding gains and losses, they would not change in the accrual of the interest payable. This treatment is not presented unambiguously in all sections of the *1993 SNA*.

9. At the time of the drafting of the fifth edition of the *Balance of Payments Manual (BPM5)* the decision was made that full harmonization would be reached with the *1993 SNA* with exception of a few well-defined issues. However, the final *BPM5* text partially diverged from the *1993 SNA* regarding the measurement of interest. An outright different approach was followed in the *Balance of Payments Compilation Guide* and *Balance of Payments Textbook* although it should be noted that, in the view of the authors, this approach was fully consistent with the *1993 SNA* principles.

10. The question about the proper treatment of interest remained a thorny issue after the *BPM5* and the *1993 SNA* were published. First, the IMF Balance of Payments Committee, confronted with different recommendations, sought a definite solution. Furthermore, the

Bank of England, supported by the Australian Bureau of Statistics (ABS), proposed in various forums that the *1993 SNA* methodology be changed. In the framework of the International Accounting Standards Committee, proposals on the commercial accounting for interest were made that were analogous to these proposals. The problem gained further practical and political acuity during discussions on the need to define in detail how government interest should be calculated under the European Monetary Union excessive deficit procedure.¹

11. In April 1999, the ISWGNA, faced with the demand to clarify the recommendations of the *1993 SNA* and to give an opinion on the appropriateness of a possible change thereof, decided to establish an EDG. The EDG, which was monitored by the IMF, was to inform the ISWGNA on issues of importance to producers and users of macroeconomic statistics. Shortly after the ISWGNA's decision, the IMF initiated the EDG on its external website, presenting its own discussion document as well as three documents written by outside authors that could form the basis for the debate.

12. The interest in making contributions to the EDG turned out to be much less than hoped for. By April 2000, only three contributions had been received, mostly reflecting positions that were already well-known. The IMF therefore decided to send a questionnaire to all its correspondents in national accounts, balance of payments, government finance statistics, as well as monetary and financial statistics, asking, among other things, for their opinions on the preferred method to record interest as well as the main considerations for their choice.

13. The ISWGNA agreed to keep the Accrual of Interest EDG open until the IMF had posted a position paper. This occurred on June 10, 2002 and interested parties were invited by e-mail to make their reactions known. This resulted in the posting of an additional twelve papers or shorter responses. Since the end of September 2002, the EDG has not accepted further reactions for posting. Although it is no longer possible to post new contributions, the website will continue to be supported by the IMF for public information.

¹ The accrual of interest issue was discussed in many platforms—among others the OECD Meeting of National Accounts Experts and Financial Statistics Working Group, various Eurostat working parties, the ECB Working Group of Balance of Payments and External Reserves, and the meetings held in the context of the IMF's External Debt Statistics: Guide for Compilers and Users, to name just a few.

III. MAIN DISCUSSION ISSUES

A. Preliminaries

14. The main issues of the accrual-of-interest debate are as follows:
- The discussion in the EDG concerned the amount of interest to be recorded in the national accounts, rather than the time of recording.
 - The discussion focused mainly on the treatment of tradable debt instruments. As for the nontradables, two out of the three main recording options are either not applicable or difficult to apply in practice.
 - The main options for recording are the following:
 - The debtor approach—The amount of interest on any debt instrument is determined by the conditions set at inception of the instrument.
 - The creditor approach—The amount of interest accruing on a tradable debt instrument is determined by discount rate of future receivables implicit in the instrument's market value at any point in time.
 - The acquisition approach—The amount of interest accruing on a tradable debt instrument is determined by the discount rate implicit in the cost at which the instrument was acquired.
 - There are ways other than those mentioned above to determine the amount of interest. For instance, some commercial accountants may consider it to be the difference between amounts received (as payments by the debtor or sale value) and acquisition value.
 - The acquisition approach received little attention in the EDG, because it may result in non-equal interest amounts to be recorded for the debtor and the creditor of the instrument. However, the April 2000 IMF survey among its correspondents has shown that there is some support for the acquisition approach.

B. Summary of each paper posted on the EDG

15. The EDG started out with four basic discussion documents and posted twelve reactions at a later stage. No contribution received by the moderator was refused from posting on the EDG's website. The summary below reflects only a selection of the positions taken in the contributions; for the full texts please see website <http://www.imf.org/external/np/sta/na/interest/index.htm>.

16. The **IMF discussion document** written by Adriaan Bloem and Cor Gorter investigates the various recording options in turn. The document mentions, as one of the advantages of the debtor approach, that it distinguishes clearly between the volume accrual of interest and price effects. However, this approach has the modest disadvantage that holders acquiring the instrument after inception may not be able to distinguish the interest element within total yield. The creditor approach would have the advantage that both creditors and debtors are in principle able to compute the accrued interest. Two disadvantages, however, are that this method does not generate results that transactors recognize and that it would be at odds with some of the fundamental principles of the *1993 SNA*, namely, that price changes should not influence either transactions or volumes (interest being a transaction as well as a volume concept).

17. The basic document written by **Bob McColl** dates from 1995 and discusses both the fifth edition of the *Balance of Payments Manual (BPM5)* and the *1993 SNA*. The document favors the creditor approach (indicated as the full accrual basis) because the debtor approach would imply making entries to retain stock/flow consistency that are contradictory to the *1993 SNA* and *BPM5* frameworks as well as economic theory. If prices do not change, no holding gains or losses could be recorded. Furthermore, it would be impossible to collect or compile data for the debtor approach, whereas the compilation of data for the creditor approach would be easy. According to the document, there would be limited advantages to recording interest on a due-for-payment basis.

18. The basic document written by **Peter Hill** argues that the difference between the issue and redemption price of a deep discounted bond is not all interest. The difference would measure total return, which may include holding gains or losses. The document points at the same problem with the debtor approach that Bob McColl's paper does, namely the unexplained entries in the revaluation accounts. Peter Hill adds that it is a fallacy that holding gains and losses would cancel out over the life of an asset. This argument, used in the IMF basic document, would result from failing to distinguish changes in market value owing to the accumulation of reinvested interest from price changes.

19. The fourth basic document was written by **Eurostat** and concerned a draft methodological note to be included in a manual on the measurement of deficit and debt in the European Union. The document mentions that the treatments of deep discounted bonds and discounts or premiums on fungible bonds are indications that the current standards apply the debtor approach. It also states that the application of accrual accounting is just a matter of time adjustment (which is the case for the debtor approach only).

20. Among the reactions, the document that **Peter Harper** posted in October 1999 is a detailed response to the IMF discussion paper. The document states that the creditor approach is conceptually preferable on account of the following criteria: It (1) is consistent with the *SNA's* current cost accounting, (2) produces results that are consistent with economic behavior (because creditors may sell and debtors buy back when interest rates change), (3) does not calculate interest, which is irrelevant for secondary holders, and (4) does not generate 'unexplainable' reconciliation items. The document also states that the

creditor approach is consistent with the *1993 SNA*. Finally, it suggests that interest on an accrual basis should not necessarily be equal to interest on a cash basis because instruments may be redeemed earlier.

21. **Peter Hill's** reaction to the IMF discussion paper was first presented at the September 1999 OECD meeting and posted on the EDG in October 1999. The paper attacks in particular the entries made in the revaluation accounts under application of the debtor approach. The SNA revaluation account would not be a reconciliation account; using it as such would distort the whole system of accounts. In the author's view, the market price of a bond changes in response to an interest rate change precisely because market forces adjust the price of the bond to ensure that the interest accruing on the remaining life of the bond is equal to the new market rate. This would indicate adoption of the creditor approach. As this approach reflects current circumstances, it would also be the correct treatment from the point of view of economic theory.

22. In a paper posted in October 1999, **Lucie Laliberté** explains the procedures to accrue interest according to the debtor approach in Canada. The paper illustrates the feasibility of applying this approach in practice, thwarting arguments that such cannot be done. The described system uses a database storing a large number of characteristics of bonds issued by Canadian residents.

23. Only in June 2002, a new document is posted on the EDG. The author again is **Lucie Laliberté**, but now presenting the position of the IMF Statistics Department. The paper cites André Vanoli to underscore the basic principle that holding gains or losses must not influence the measurement of income. By analyzing the text of the *1993 SNA* on the treatment of income from contracted-out assets, the paper concludes that the debtor approach conforms to the recommended treatment of income and other benefits from assets. The creditor approach, however, would be neither consistent with the *1993 SNA* nor with accepted guidelines on fair value accounting. The paper reproaches the creditor approach of calculating income as if new arrangements were established, thus revaluing transactions rather than assets. General adoption of such principles would have major consequences for the structure of the *System* and cause, for instance, wages to be recorded at what could be earned rather than what is earned under the employment contract.

24. In August 2002, **Chris Wright** responded to the IMF position paper. He points out that the creditor approach is consistent with draft standards for fair value accounting. His reply argues that the *1993 SNA* does not contain much guidance on which approach should be used, but that the *BPM5* treatment of deep discounted bonds gives the most explicit guidance on the intended treatment (the text can be interpreted as recognizing the need to reflect the prevailing market yield). It underscores both the analytical relevance of the creditor approach and the interpretative problem of the revaluation entries made under the debtor approach. The reply says the IMF analysis is overly pessimistic regarding the consequences of adopting the creditor approach in the *System*. It also denies that such would change the treatment of wages because a wage earner would receive only the current market

wage by breaking the original contract, whereas value accrues directly to the principal in accordance with current market prices in the case of bonds.

25. Equally in August 2002, **Robin Lynch**, speaking for the Office for National Statistics, declared preference for the creditor approach on conceptual grounds. He notes that there is a need to clarify both the *1993 SNA* and *BPM5*, maintaining consistency between the two manuals. The ISWGNA should allow a full debate in the light of the currently existing major differences of view.

26. At the end of August 2002, **Lucie Laliberté** posted a reply to Chris Wright's document. She does not agree that the *1993 SNA* contains insufficient guidance: Both from texts on the recording of interest on bonds and from the treatment of income on other assets, it is clear that interest on bonds should be calculated on the basis of the underlying contract. It would be true, however, that paragraph 7.93 of the *1993 SNA* containing the definition of interest, is ambiguous and hence not helpful in addressing the issue under review. The paper illustrates the unjustifiable results from the creditor approach in situations of large increases of interest rates, which would make little economic sense when compared with the *1993 SNA* treatment of interest on loans. The reply notes that the income from the creditor approach differs from that of fair value accounting. The reply also notes that the implementation of both the debtor and the creditor approaches requires the availability of detailed information on characteristics of individual bonds.

27. The **ABS**, in a reaction posted in early September 2002, expresses the belief that any final decision by the ISWGNA should not be taken until the major differences of opinion on the issue have been resolved. It reiterates the main areas of disagreement with the debtor approach with reference to the IMF position paper. The ABS argues that the creditor approach is conceptually consistent with the *1993 SNA*, as well as with commercial accounting principles and investment behavior. Furthermore, this approach would provide symmetry in the recording of interest between debtor and creditor, would provide a meaningful reconciliation between income flows and changes in market values shown in the balance sheet, and would be easy to implement in practice. The paper briefly elaborates this point of view.

28. A document written by **Philippe de Rougemont** also posted early in September 2002, points out some arguments hitherto overlooked in the discussion. The document notes that while the debtor approach interest is inelastic to market yields, the creditor approach interest is elastic—but less so, the longer the maturity of the instrument. The 'quasi-floating rate' of the creditor approach could have dramatic and instantaneous impacts on, for instance, government deficit. The paper identifies the possibility of recording interest on what it calls the intellectually appealing basis of expected current interest instead of current yield to maturity. The paper notes among other things that the creditor approach fails to be compatible with the notion of volume of the instrument. A clear weakness of the debtor approach would be that government buybacks affect future deficits. The impact of changes in market conditions on the interest bill under the creditor approach would likely meet fierce opposition on the part of users. Application of the creditor approach to other

types of assets would involve some substantial rewriting of the *System*. The document also argues that it is unlikely that the creditor approach is easier to implement than the debtor approach. In conclusion, the document recommends sticking to the debtor approach until broad and massive use of refinancing warrants a revisiting.

29. The documents that **Anne Harrison** posted in the first half of September 2000 underscore the importance that the treatment of interest should be consistent for all types of assets throughout the accounts. A parallel is drawn with the calculation of the consumption of fixed capital, which depends on the discount rates to determine the net present value of the assets' future stream of benefits at the start and the end of the recording period. In the case of a coupon bearing bond, the return needed to keep the principal intact follows from the current interest rate. It is this return—the “par coupon”—that should be classified as income. However, the coupons that the bond actually bears may be higher or lower than the par coupon. The difference between the two coupons is directly linked with the holding gains/losses that occurred when current market interest rates changed from those prevailing at the bond's inception. The difference can be interpreted as a separate asset, which, because it disappears over time, must give rise to entries in the flow accounts. How these entries should be classified is not clear, but, according to the author, it is not all income. There are parallels with issues on how to deal with transferable contracts and leases of the mobile phone spectrum. The paper addresses various other issues, pointing out that the dramatic interest changes under the creditor approach are closely linked to the still unresolved question how to account for inflation. The paper suggests bringing all considerations together to help move the accrual of interest discussion beyond its present impasse. The author thinks it would be a serious mistake to rush to a conclusion while there is so much discussion about the correct way forward.

30. Finally, on September 30, 2002, **José Carlos Moreno** posted a note that discusses arguments used in favor of the creditor, debtor, and acquisition approaches in turn. The note argues, among other things, that the creditor approach is consistent with the principle of market valuation. The criticism that the creditor approach imputes new agreements between the debtor and the creditor would not hold, because the market sets the conditions for tradable instruments. The debtor approach would imply a mixture of valuation criteria. On the other hand, the key criticism to the debtor approach of making analytically meaningless entries in revaluation accounts would also be not correct. This would be linked with the fact that markets factor in default risks that may not materialize in subsequent periods. The *System* should make room for distinguishing between ordinary and extraordinary, or crisis, situations. A crisis would demand contract-based presentations in tandem with presentations that reflect current market valuations. The author believes that the acquisition approach deserves more support because of its closeness to commercial accounting, even when it fails to provide creditor/debtor symmetry.

IV. RESULTS OF THE IMF QUESTIONNAIRE

31. In April 2000 the IMF Statistics Department sent out a questionnaire to all its correspondents in the member countries. The questionnaire, which was preceded by a four-page explanation, included ten questions (see Appendix III).

32. Seventy answers were received: 25 from statistical offices, 35 from central banks, four from ministries of finance, five coordinated answers, and one from the category 'other official.' In addition, six institutions notified the Fund that they had no opinion in the matter.

33. The questionnaire asked which of the three recording principles (debtor approach, creditor approach, and acquisition approach) was regarded as conceptually preferable, separately for application in the national accounts, balance of payments, government finance statistics, and monetary and financial statistics. Many respondents answered this question only for those statistics in which they felt they had expertise; this meant that in 120 out of the in total 280 cases no opinion was given. Of the 160 opinions, 105 were in favor of the debtor approach, 29 in favor of the creditor approach, 23 in favor of the acquisition approach, and three in favor of other approaches. For each of the macroeconomic statistics, the debtor approach was the most preferred option.

Conceptually preferred method	For the national accounts	For the balance of payments	For government finance statistics	For monetary/ financial stat's	Total
Debtor's	30	24	28	23	105
Creditor's	8	11	4	6	29
Acquisition	4	12	2	5	23
Other	-	-	1	2	3
No opinion	28	23	35	34	120
Total	70	70	70	70	280

34. It should be noted that these results should be interpreted carefully, in particular because no weighting has been applied to the answers received. However, the survey seems to indicate the existence of reasonable satisfaction with the debtor approach.

V. CONCLUSION AND RECOMMENDATIONS

35. The conclusions in section A below are an assessment by the moderator of where the discussion stands. By its nature, this assessment bears subjective elements. The recommendations in section B suggest, given the fact that the theoretical discussion has not generated clear answers, a way forward that is expected to gain broad support.

A. Conclusions of the moderator

36. A preliminary question that may be asked reads: Which approach is currently recommended by the *1993 SNA* and *BPM5*? The EDG was handicapped by uncertainty about the answer to this question. The main problem is posed by the ambiguously worded definition of interest in *1993 SNA* paragraph 7.93, which was further compounded by the deviating texts in balance of payments documents. From old documents written by ABS staff it is clear that they were convinced that the “full accrual method” or creditor approach was introduced in the 1993 manuals. Later, the analysis of the IMF position paper went to great length to prove that the debtor approach is what the *1993 SNA* actually recommends. However, an EDG is not the proper vehicle for deciding which principles are recommended in a manual. What it can do is investigate whether the recommendations still reflect current thinking and practice, and make proposals to revise the manuals as appropriate. How to record the accrual of interest was subject to discussion during the *SNA* drafting process, and the answer to the question is therefore a simple matter of fact. **The ISWGNA, with its present membership and institutional background, is well placed to confirm the consensus opinion accepted at the time the *1993 SNA* was drafted.**

37. The main question then becomes which approach best fits the overall national accounts. Three criteria can be used in making a choice: (1) Is the approach consistent with the *System*'s basic principles, (2) is it relevant for economic analysis, and (3) can it be implemented in practice. These aspects are addressed in turn.

38. The proponents of both the debtor and the creditor approaches claimed to be consistent with basic national accounts principles. The argumentation of the proponents of the creditor approach essentially rested on the invocation of a single principle—that of current market valuation. The argumentation of the proponents of the debtor approach appeared broader, by for instance incorporating aspects of imputation and the distinction between volume and price. However, they failed to provide a clear interpretation for the entries that appear in the revaluation account when market rates do not change—this in spite of some indications in the IMF position paper, the paper by Philippe de Rougemont, and even Anne Harrison's investigations. **In the opinion of the moderator, pertinent arguments have been advanced for both the creditor and the debtor approach. In his view, in sum, these arguments would not support the claim that one or the other is the sole approach consistent with the principles underlying the *System*.** It should be noted that the EDG did not support the acquisition approach, as this method may result in a non-symmetric treatment of the debtors' and creditors' accounts. In the last months of the EDG, some alternative methods were indicated. Philippe de Rougemont mentioned a method

departing from expected current interest, and Anne Harrison's analysis would lead to a modified creditor approach.

39. Of course the two groups differed on the question about which approach is the most meaningful for economic analysis. The proponents of the creditor approach claimed to be consistent with commercial practices, but this seems to be only partially the case. There appears to be agreement that the creditor approach is analytically more relevant for creditors making decisions on when to buy or sell, or debtors when making decisions on the buyback of their obligations. Full agreement existed that debtor-approach interest does not bear relevance for secondary holders of bonds. On the other hand, proponents of the debtor approach claimed that this principle at least would be relevant to debtors (among which governments) and holders that adhere to their investment. The stacking of continuously changing opportunity costs under the creditor approach would serve very specific types of analysis only, and the abrupt and potentially very large changes in interest under the creditor approach would make little economic sense. Anne Harrison suggested that these hefty changes may disappear to a large extent once a more satisfactory solution is found for dealing with inflation. **The moderator can only conclude that the EDG has significantly enriched the understanding of the problem, but that it has failed to come to a consensus position that may assist the ISWGNA in making decisions on the desirability of a revision of the 1993 SNA.**

40. Although the discussions in the EDG were mainly concerned with theoretical issues, implementation considerations may also be of eminent importance. For a long time, Bob McColl's assessment remained uncontested that it is impossible to collect or compile data for the debtor approach, whereas the compilation of data for the creditor approach is easy. However, this situation changed in the last months of the EDG. Lucie Laliberté stated that the implementation of both the debtor and the creditor approaches requires the availability of detailed information on characteristics of individual bonds, and Philippe de Rougemont argued that it is unlikely that the creditor approach is easier to implement than the debtor approach. **The moderator therefore concludes that no consensus has been reached on a preference for either of the approaches from an implementation point of view.**

B. Recommendations

41. Compilers of both the national accounts and the balance of payments urgently need confirmation on which principle the 1993 SNA currently recommends for the accrual of interest on debt securities. As indicated above in section II, people directly involved in the drafting of the manual have indicated that by majority decision the debtor approach was adopted as such. The analysis of the IMF position paper confirmed that the debtor approach is followed in most pertinent sections of the SNA. On the other hand, the EDG found that the definition of interest in paragraph 7.93 is worded in an ambiguous manner. These considerations lead to the following recommendation:

1. **The ISWGNA should confirm that in the 1993 SNA the amount of interest on debt securities and the time path of its accrual are determined at the instruments' inceptions.**

Because the confirmation about which method the ISWGNA chose during the drafting process of the *1993 SNA* does not concern an amendment but a simple statement of fact, the moderator believes there are sufficient reasons to treat it as a "clarification beyond dispute." However, in view of the longstanding diverging interpretations of the exact nature of the decision, the ISWGNA may wish to follow the heavier "interpretation" procedure.

42. The participants of the EDG remained deeply divided on how the *1993 SNA* should treat the accrual of interest on debt securities. The majority of the contributions argued that the *SNA* should state that interest on a debt security accrues consistent with the instrument's current market value. However, there was also strong opposition against this principle. Because the number of participants in the EDG remained very small, and also because a request of the IMF Committee on Balance of Payments Statistics (BOP Committee) required an answer, the IMF Statistics Department surveyed its correspondents in the member states in April 2000. The moderator concludes from both the EDG and, in particular, the responses to the questionnaire, that, at this point in time, no broad support exists for having the *1993 SNA* adopt the creditor approach.

43. On the other hand, the discussion about the theoretical appropriateness of the various options to account for the accrual of interest has shown that merits can be found in recording the accrual of interest on the basis of the instrument's current market value.

44. The considerations in the above two paragraphs lead to the following recommendations:

2. **At this point in time, there is no reason for the ISWGNA to start a procedure for revising the 1993 SNA concerning the current recommendations on the accrual of interest.**
3. **The ISWGNA should recognize explicitly that compilers of national accounts may wish to record, in supplementary tables, the accrual of interest on the basis of current market values and the consequences thereof on the various parts of the *System*.**

45. Anne Harrison has indicated in her contribution to the EDG that in various groups investigations are going on that may shed further light on the concept of income. She proposes to integrate these efforts and at the same time reinvigorate the debate on high inflation. This could help move the accrual of interest discussion beyond its present impasse. She also thinks it would be a serious mistake to rush to a conclusion while there is so much discussion about the correct way forward.

46. The approach proposed by Anne Harrison probably is the only way to develop and improve, in a consistent manner, the system of national accounts. However, the path towards the point when concrete proposals can be made that will receive broad support will probably be very long. The experience of the Accrual of Interest EDG would support this presumption. Clearly, there are concerns about the concept of income in the current SNA. The moderator suggests that the ISWGNA give due recognition to this aspect, in addition to the inconclusive methodological debate in the EDG.

4. The ISWGNA may wish to acknowledge that the issue of how the *System* should account for the accrual of interest may be reconsidered on the occasion of a wider discussion on the concept of income in the 1993 SNA.

47. The BOP Committee has been particularly interested in the outcomes of the Accrual of Interest EDG and the reaction of the ISWGNA to its conclusions. The Committee has much at stake in these issues in view of the different guidelines given in the various balance of payments basic texts. Furthermore, the Committee has expressed strong interest in ensuring that the suite of macroeconomic statistics remains consistent.

5. If the ISWGNA adopts the above recommendations, the BOP Committee may wish to take similar action. Specifically, it may wish to clarify what principal methodology it currently recommends to record the accrual of interest in balance of payments statistics.

Chronological List of Papers Posted on the EDG

Bloem, Adriaan and Cor Gorter (IMF), *Accrual Recording of Interest: Is There a Case for Revising the 1993 SNA?* Posted as basic document in July 1999.

McColl, Bob (ABS), *Full Accrual Accounting for Investment Income under New International Statistical Standards*. Written in December 1995, posted as basic document in July 1999.

Hill, Peter, *Holding Gains and Interest Accrual*. Paper written in October 1996, posted as basic document in July 1999.

Eurostat, *Recording Interest on an Accrual Basis, Methodological Note*. Provisional version of a chapter for a manual on deficit and debt in the European Union. Posted as basic document in July 1999.

Hill, Peter, *Accrual Recording Of Interest Revisited: Why The SNA Must be Revised. A comment on the IMF Paper on Interest Accrual*. Paper presented at the OECD meeting on National Accounts, September 21, 1999; revised September 27, 1999. Posted on the EDG on October 7, 1999.

Laliberté, Lucie, *Foreign Portfolio Investment in Canadian Bonds*. Working paper of the IMF Committee on Balance of Payments Statistics, dated March 1996. Posted on the EDG on October 14, 1999.

Australian Bureau of Statistics, *Accounting for Interest on Debt Securities: Why the Creditor Approach Should be Preferred*. Posted on the EDG on October 21, 1999.

Laliberté, Lucie, *Income from Bonds: The 1993 SNA Treatment. Position of the IMF Statistics Department*. March 22, 2002. Posted on the EDG June 10, 2002.

Wright, Chris, *Income from Bonds. A response*. Posted on the EDG on August 6, 2002.

Lynch, Robin, *Untitled contribution*. Posted on the EDG on August 15, 2002.

Laliberté, Lucie, *Reply to A Response to the IMF Position Paper, June 2002*. Posted on the EDG on August 28, 2002.

Australian Bureau of Statistics, *Comments by the Australian Bureau of Statistics on the IMF Paper Income from Bonds: the 1993 SNA Treatment*. Posted on the EDG on September 3, 2002.

Harrison, Anne, *Untitled contribution*. Posted on the EDG on September 3, 2002.

De Rougemont, Philippe, *Debtor versus creditor principle of interest recording in macroeconomic statistics—A comment*. Posted on the EDG on September 3, 2002.

Harrison, Anne, *Accrual accounting of interest. Comments on the papers on the forum website*. Posted on September 11, 2002.

Text of the IMF Questionnaire

1. In your opinion, which of the three recording principles mentioned in the introduction is **conceptually** preferable

Debtor

Creditor

Acquisition

- a) for the national accounts?
- b) for balance of payments?
- c) for government finance statistics?
- d) for monetary and financial statistics?

2. What is, or are, the main considerations for your choice(s)?

3. Would your answers to question 1 change if practical considerations were taken into account? Please explain.

4. Do you see a place for an approach other than the three mentioned in question 1? If so, please describe that approach and its advantages.

5. What is (are) the approach(es) presently used in your system?
(Please indicate the statistics you collect and any adjustments you make to change the basis(es). Also please note if the basis(es) for reporting is (are) not known.)

6. Are there differences between the way interest is recorded between the holder of the security and the issuer?

7. Do you attempt to reconcile those differences? If so, please specify how.

8. If your statistics include the values of securities both as assets and liabilities, are they valued as assets on the same basis as they are valued as liabilities?

9. Are debt securities assets and liabilities both recorded on market prices?

10. Do you have other comments regarding this issue?

Appendix III. Main results of the IMF Questionnaire

Country	Agency	No opinion	Question 1: Conceptually best			Question 2 Reason?	(Question 3) Most practical	Question 5 Main method used
			NA	BoP	GFS			
Argentina	SO	?	AA	AA	AA	AA	AA	DA
Armenia	SO		AA	AA		mc		none
Australia	All		CA	CA	CA	cc, eb, sy, nr	CA	CA
Bangladesh	CB		AA	AA	AA	mc	AA	AA
Belarus	SO	x						
Belgium	CB		DA	DA	DA	va, sy	DA	DA
Bolivia	CB		DA	DA		va	AA	DA
Botswana	SO		DA	DA	DA	va, nv	CA	none
Brazil	SO		CA	CA	CA		DA	
Brunei	CB							none
Canada	SO		DA	DA	DA	oc		mix
China: Hong Kong	SO		CA	CA	CA	cc, eb	CA	CA
Colombia	SO		DA			va	CA	CA
"	CB	x						
Croatia	SO	x						none
Czech Republic	SO		DA			oc		DA
Denmark	SO		DA	DA	DA	hg, nt		
Domenican Republic	CB		CA	CA	CA	cc	DA	DA
Estonia	CB		DA	DA		oc, sy	DA	DA
"	SO		DA	DA				
Finland	CB		CA			cc	DA/AA	DA
France	CB		DA	DA	DA	hg	CA	
"	SO						DA	DA
Greece	All		DA	DA	DA			DA
Honduras	CB		DA	DA	DA	oc		DA
Hungary	SO		DA	DA	DA			none
"	CB							none
Jamaica	All		CA	AA	DA	cc; mc; nv		DA

Country	Agency	No opinion	Question 1: Conceptually best			Question 2 Reason?	(Question 3) Most practical	Question 5 Main method used
			NA	BoP	GFS			
Japan	MoF			AA			AA	
"	All		CA		cc		DA	
Kazakhstan	CB			AA	DA	DA	DA	
Korea	CB		DA	DA	DA	DA	DA	
Kuwait	CB			AA				
Kyrgyz	SO	x					none	
"	CB			AA				
Latvia	CB			DA	DA	DA	DA	
Liechtenstein	SO	x			oc			
Macedonia	CB			AA	mc		none	
"	CB				oc, hg	AA	none	
Mauritius	CB			DA	oc		DA	
Moldova	CB			CA	CA	DA	DA	
Netherlands	SO		DA	DA	other		DA	
New Zealand	SO			CA	as, fd, hg		DA	
Peru	CB			DA	mc, sy, as		DA/AA	
Philippines	CB			DA	oc		DA	
Poland	SO		DA		hg		DA	
Portugal	CB		DA	DA	hg		DA	
"	MoF			DA				
Puerto Rico	other		DA	DA				
Quatar	CB		DA	DA	oc		DA	
Russia	CB		AA	AA			AA (in BoP)	
"	CB		DA		sy, hg			
"	SO		DA	DA	hg	AA	"	
Senegal	CB		DA	CA	hg, mc	DA	DA	
Singapore	CB	x					DA	
Slovak Republic	All		DA	DA			DA	
Slovenia	CB		DA	DA			DA	
South Africa	CB		DA	CA	oc; -, ;, eb		DA	
Spain	CB		DA	AA	hg; -, ;, -	DA	DA	

Country	Agency	No opinion	Question 1: Conceptually best			Question 2 Reason?	(Question 3) Most practical	Question 5 Main method used
			NA	BoP	GFS			
Sweden (2 answers)	SO		DA			sy, hg, fd	AA	mix
Switzerland	MoF			DA	DA			DA
"	CB			DA		hg	DA	
Tanzania	CB		DA	DA	DA		AA	DA
Thailand	SO		AA					
Turkmenistan	SO		DA	DA	DA			none
Turkey	MoF		DA	AA	DA	DA	DA	
United Kingdom	CB		CA	CA	Other	CA	DA	?
"	SO		CA	CA	DA		DA	DA
USA	SO		DA	DA	DA	AA	DA	DA
Venezuela	CB		DA	DA	DA	DA	DA	DA
			DA	24	28	23	DA	31
			30	11	4	6	CA	3
			8	12	2	5	AA	4
			4	0	1	2	mix	2
			0	28	35	34	none	10
			28	23	70	70	Total	25
			70	70	70	70		50
			6					
			25	4	4	2		
			35	2				
			4					
			5					
			1					
			70	6				
			70					
			28	23	70	70	Total	25
			70	70	70	70		50

▼ Total Q. 1 ▲

Legend:

SO = Statistical Office	DA = Debtor Approach	as = close to accounting standards
CB = Central Bank	CA = Creditor Approach	cc = current cost or opportunity cost conformity
MoF = Ministry of Finance	AA = Acquisition Approach	eb = economic behavior agents
All = Coordinated answer	N.a. = No answer	fd = consistent with new treatment financial derivatives
		hg = holding gains should not enter income concept
		mc = market price conformity
		ni = no imputations please
		nr = no (unexpected) reconciliation entries
		nt = non-tradables and tradables treated consistently
		nv = no volatility in recorded interest
		oc = original contract remains valid
		sy = symmetrical treatment in the accounts
		va = volume accrual consistently treated

Note 1: This overview represents our best interpretation of the responses.

Note 2: The column Question 2 does not show answers like 'because it is easy to implement', 'because it is the law', 'because the manuals say so', and 'because it is important.'

Some Other Documents on the Accrual of Interest in Statistics

The documents are presented in chronological order.

Harper, Peter, *Recording Interest Income in the Balance of Payments*. IMF Working Paper WP/95/71, July 1995.

IMF Statistics Department, *Accrued Interest on Debt Securities with a Fixed Rate of Interest at the Time of Issue*. Paper prepared for the Eleventh Meeting of the IMF Committee on Balance of Payments Statistics, October 1998.

Bank of England, *Income Accrual: Interpreting and Implementing the New Statistical Standards*. Document DAFFE/MC/STAT(98)5 of the OECD Working Party on Financial Statistics, March 1998.

Australian Bureau of Statistics, *Accounting for Interest on Debt Securities in Australia*. Document DAFFE/MC/STAT(99)20 of the OECD Working Party on Financial Statistics of October 14-15, 1999.

New Zealand, *The Treatment of Income Accrual in New Zealand Statistics*. Document DAFFE/MC/STAT(99)22 of the OECD Working Party on Financial Statistics of October 14-15, 1999.

Ángel Menéndez, Miguel (Banco de España), *Recording of Accrued Interest in National Accounts: Securities Other Than Shares Issues By The Central Government*. Document DAFFE/MC/STAT(99)23 of the OECD Working Party on Financial Statistics of October 14-15, 1999.

Rewald, Robert (Board of Governors of the Federal Reserve System), *U.S. Comments on the Discussion Paper Prepared by the Bank of England*. Document DAFFE/MC/STAT(99)25 of the OECD Working Party on Financial Statistics of October 14-15, 1999.

Sahoru Hagino (Bank of Japan), *Distinction Between Capital Gain and Income Gain*. IFC Bulletin 5, October 1999. (The Bulletin also includes comments by Orlando Calição of the Bank of Portugal).

Gentilini, Aureliano and Valeria Pellegrini, *Accruals Methodology: Statistical Problems in the Estimation of Interest for New Financial Instruments in the Context of Globalization of Financial Markets*. IFC Bulletin 5, October 1999.

Joice, John and Chris Wright, *Statistical Treatment of Accrual of Interest on Debt Securities*. IMF Working Paper WP/01/132, September 2001.