2 Jung

53

## Review of the SNA

# Report of the fourth co-ordinating group meeting

## 3-7 December 1990

## Contents

Introduction	1
Capital Expenditure and Assets	1
Service Output of Capital Formation	2
Measurement of Output	4
Research and Development	5
Mineral Exploration	6
The Environment	8
Depletion Allowances	10
Environmental Assets	10
Natural Growth	11
Market and Non-Market	12
Countries in Transition	14
Transactions and Accounting Rules	17
Progress on the Review	20
Valuation	23
Accounts and Tables	24
Multiple Exchange Rates	26
Derivatives	27
Gold	29
Pensions	31
Goodwill	31
Capital Stock and Capital Consumption	32
Classifications	33

#### REVIEW OF THE SNA

Report of the fourth meeting of the

Co-ordinating Group

Wasington, DC

3 - 7 December, 1990

## Introduction

The meeting was opened by Ramesh Chander who explained that though the UNSO was organising the meeting, the World Bank had agreed to host it and he explained the logistical arrangements for the meeting during the week. Jan Van Tongeren then read a welcoming statement from Mr. Seltzer, the head of the UN Statistical Office. His hope was that at this meeting the Group would be able to make final decisions on the issues outstanding. Rene Rakatobe and Uma Choudhury were appointed the joint Chairmen for the meeting.

### Capital expenditure and assets

The first item to be taken up was a paper of this title

(ESA/STAT/AC.38/13) prepared and introduced by Anne Harrison. In the first section of the paper the characteristics of existing assets recognised in the SNA were reviewed in terms of a number of distinguishing features often associated with assets. The objective was to identify those characteristics absolutely essential to assets so that a definition might be derived. At the completion of this overview it was suggested that an asset could be defined as 'a stock of wealth over which ownership can be established and which may be the subject of an SNA transaction in future'.

In discussion reference was also made to the definition of an asset occurring in Colin Pettigrew's paper on derivatives (ESA/STAT/AC.38/4 discussed later in the week) and which was in accordance with the International Accounting Standards Committee (IASC) which read 'an asset is a resource deriving from past events and from which future economic benefits are expected to flow. It was generally agreed that there was no great difference in intent between the two formulations and the question was what sort of definition was to be preferred. The reference to future economic benefits indicated the economic justification for regarding an asset as such but was itself a rather loose form of words which in turn would require clarification if this were the basis of the formal definition of an asset. By contrast the definition referring to SNA transactions, though less informative to a general economist, aimed at limiting more precisely the entities that could be regarded as assets. It was suggested that since it is an SNA definition of an asset that is required, the definition should be expressed in terms of concepts precisely defined in the SNA.

On the whole, however, the meeting concluded that they would prefer a rather more general form of definition such as 'an economic asset is a stock of value to its owner based on current or future economic benefits that may be derived from it'. This one sentence definition should be accompanied by an exposition which explains the terms used together with descriptions of conventions that need to be adopted in border line cases.

#### Service output of capital formation

The next aspect for discussion was one that has underlain much of the discussion on the extension of the asset boundary over several previous Expert Group meetings. Could the output of a service industry be treated as capital formation? At the moment the draft SNA states that services are consumed at the moment they are delivered which precludes their inclusion

as assets. The output of some service industries, however, becomes embodied in goods and thus this output could be recorded as capital expenditure. In addition the output of some service industries may be regarded as goods and thus also qualify. There was some discussion about whether architectural plans, for example, which are clearly the output of a service industry should themselves be regarded as a service or as a good. There was general agreement that such products, whether goods or services, could under certain circumstances be treated as assets since they met the basis of the definition discussed earlier.

It was also agreed that some services take a long time to produce, for example architectural designs and software development, and that it would be artificial to regard all production as taking place at the moment that the assignment was complete. This, therefore, would lead to the recording of the production of such services over an extended period of time and this production would not infrequently be recorded as stocks of work in progress even though it was not wholly embodied in items that could be construed as goods.

The Group then discussed the appropriate treatment of transfer costs distribution and other margins paid on the acquisition of capital assets, whether new or secondhand. These payments themselves do not give rise to future economic benefits and therefore would not seem to satisfy the definition of assets agreed above. Should they, therefore, be treated as current expenditure rather than capital as in the present SNA? Almost all participants felt these payments should continue to be treated as capital and while the view was expressed that it might be desirable to write these costs off quickly in the other changes in volume of assets account, on balance the group agreed to continue to treat transfer costs etc as at present as part of capital expenditure. They should be written off over the whole life of the asset to which they apply in the calculation of consumption of fixed capital.

### Measurement of output

The paper queried whether the elimination of inter establishment flows meant that own account capital formation would only be recorded if separate establishments were defined to cover this activity. It was agreed that this was not what was intended by the proposal to eliminate inter establishment flows; it was only those flows relating to intermediate consumption that should be eliminated.

The meeting then took up the appropriate treatment of literary artistic work. In the present SNA when such works are produced on own account, the production is excluded from the production boundary and the income derived is regarded as property income. The group agreed that there is no basis for treating literary artistic endeavour on own account differently from such activity undertaken by employees. Therefore output which is produced for sale should be included in the production boundary and hence in measures of output, whether they are produced by employees or the self employed. The income would then arise directly from production and not be treated as property income. As a consequence when literary artistic output generates income over more than one accounting period it will be treated as a capital asset.

The value to be attributed to literary artistic work is the market price when it is sold or, where appropriate, at the cost of a similar product. Where neither of these valuations is available it should be valued at cost.

The treatment of historical monuments and works of art give rise to acute practical problems especially of measurement. They clearly satisfy the definition of asset agreed above but attributing correct valuations to them is frequently extremely difficult if not impossible. Often such items had been produced before compilation of national accounts was undertaken but not always. Recently constructed civic monuments may fall under the category of historical monuments, for example. The meeting agreed that

while conceptually such items were produced within the production boundary, they should, by convention, be recorded in the accounts as non-produced assets and thus not subject to depreciation allowances (consumption of fixed capital).

#### Research and development

The original recommendation on the possible treatment of research and development expenditure as capital formation was taken by the Expert Group on Input/Output in March 1988. This recommendation read 'there is a strong case for including at least some R and D expenditures in capital formation'. Discussion at subsequent Expert Groups suggested it was very difficult to make a distinction between some R and D expenditure to be included and some to be excluded and therefore concluded that all R and D expenditure should be treated as capital. In the time since that decision was made, a number of participants in the Expert Group have expressed some misgivings about this conclusion and in a number of other meetings involving the wider SNA community very considerable unease amounting almost to hostility to this suggestion has been encountered.

In the paper before the meeting a number of proposals were put forward. Firstly it was suggested that the original recommendation of the Expert Group was correct; that some R and D expenditures meet the definition of asset agreed above and the problem is to find a suitable demarcation of this subset of all R and D expenditure. One possibility would be to exclude some classes of R and D expenditure as identified in Frascati, for example expenditure undertaken by government or non-profit institutions not funded by enterprises, and an even more restrictive option would be to allow only those expenditures recognised by commercial

accountants in accordance with IASC recommendations as capital to be similarly treated in the SNA. These recommendations are sufficiently stringent that while capitalisation of R and D expenditure would be possible it would be exceptional.

In discussion the group confirmed their unease with the proposal to classify all R and D expenditure as capital. It was felt, for example, that it was inappropriate to treat historical research as capital and that some medical research, for example the search for a cure for AIDS, while valuable in its own right might not be appropriate for treatment as capital expenditure. There was little support for the suggestion that IASC recommendations be followed and the group therefore concluded that its previous recommendations should be reversed and that no research and development expenditure should be treated as capital in the next SNA.

In mitigation of this decision there was very strong support that R and D expenditures should be identified in the accounts separated from other intermediate consumption. For this purpose it was felt that the classification of industrial outlays by purpose (COIP) should be revitalised and implemented as a matter of some importance and be an integral part of the changes associated with the new SNA. Identification of R and D expenditures along these lines would then allow the development of satellite accounts which could be tailored to individual country's needs and this was felt to be the best alternative to present at the moment.

## Mineral exploration

The 1968 SNA treats R and D and mineral exploration and development in a parallel manner. The paper before the meeting tried to explore some of the similarities and also some of the differences. The expenditure involved in mineral exploration and development reveals mineral deposits which are then brought into the production process by exploitation activities. However, it is the deposits themselves that qualify as assets

in the sense previously defined and not the expenditure leading up to their discovery, though this is a cost that needs to be offset when calculating the commercial value of the assets. In commercial accounting these expenditures may, in certain circumstances, be treated as capital expenditure but they do not themselves represent assets. Rather they are liabilities in the sense of being borrowings against expected future earnings. These 'deferred expenditures' are allowed to be shown as capital expenditures because of the extremes of timing differences between the preparatory work (mineral exploration and development) and the consequent productive activity (mineral exploitation). Again the paper suggested that it might be appropriate for the SNA to consider the IASC recommendations in this area.

The group did not consider that it would be appropriate to consider introducing the concept of deferred expenditure into the SNA and therefore reverted to the consideration of whether or not to consider mineral exploration as capital expenditure and if so how much? The major problem in considering such capital expenditure is that if no deposits are found there is capital expenditure recorded in the accounts with no resulting asset. Despite this and despite the fact that this could be rather important especially for small countries, the group decided that all expenditure on mineral exploration should be counted as capital expenditure. When the mineral deposits are recorded in the balance sheets the value attributed to them should be net of any capitalised exploration expenses. Where no mineral deposits are discovered the expenditure should be written off in the other changes in volume account.

There was some discussion about the possibility of including such expenditure only when it was successful. However the problem here is that it is not known at the time the expenditure is undertaken whether the end result will be successful or not. It was also argued that in other cases of recording capital expenditure, even on physical equipment, there was no

requirement in the SNA that such expenditure should be successful (in the sense of being used) for it to qualify as capital expenditure. This meant it would introduce a new criterion for the category of mineral exploration if success was to be a necessary condition.

Further discussion on capital was deferred until later in the week.

#### The Environment

On Tuesday morning the discussion turned to a consideration of the environment. In introducing the topic Mrs. Choudhury reminded the group that the previous decision had been that environmental considerations should be treated in satellite accounts and not in the main system. Since then concern had been expressed that it was necessary to find a rationalisation for why this position had been adopted and further proposals had been made that some environmentally adjusted aggregates should still be presented in conjunction with the central accounts. Stewart Wells from Statistics, Canada had been invited to present a paper on the first part of this (his paper entitled 'Environmental statistics in the SNA, ESA/STAT/AC.38/14) and Jan Van Tongeren presented his proposals in 'Proposed accounts and tables for the revised SNA' with an evaluation on comments received (ESA/STAT/AC.38/8).

It was felt that the main message that needed to be given for the rationalisation for not including the environment in the central accounts arose from a misperception by a number of observers including many environmental economists. It was true that the conventional national accounts do not present measures of welfare or of sustainable income but the misperception is that they do not purport to do so. National accountants would be better advised to educate the users to realise this rather than to make adjustments that address some but not all of the

deficiencies in these areas. At the same time it was felt appropriate that expenditures within the national accounts should clearly identify those elements relating to the environment because of the serious concern about this area that was generally recognised. As far as welfare was concerned it was argued that the notion that an increase in income is synonymous with an income in welfare may be incorrect for both economic and non-economic reasons. The simple process of aggregating the accounts to measure welfare might require different approaches if a welfare measure is the objective rather than a more straightforward income measure. In the case of government expenditure, for example, institutional failure is recognised in the SNA which therefore measures the activity solely as the sum of costs without imputing a welfare measure to these. If society accepts that, for example, producers may create pollution without either legal or financial penalties how can the SNA make an objective rather than subjective 'correction' to the resulting monetary flows.

A number of participants argued forcibly that they felt this attitude was excessively defensive and negative. They saw the criticisms being levied against the SNA for its indiferrence to environmental attitudes as being a major challenge. If the SNA itself did not respond to the challenge, the risk was that an alternative system would be proposed by economists and others with less than perfect understanding of the national accounts system. A system of national accounts including adjustments for the environment would be developed and it would be better done by national accountants than by others.

Nevertheless the majority of the meeting felt that no system yet been developed on the incorporation of environmental indicators in international accounts that was yet mature enough to incorporate within the SNA. They felt it would not be enough simply to include environmentally adjusted aggregates. These should not be optional 'add ons' to the system but part of the fully integrated accounting system based on alternative assumptions.

An earlier version of the UNSO paper had been presented to the OECD national accounts meeting in July 1990 and the participants there held very strongly this view with a number stating categorically that even if the SNA recommended such adjustment items their countries would not follow these recommendations. Both those present at that meeting and others felt that it would be inappropriate for the SNA to ignore this expressed opinion of a large number of practising national accountants.

## Depletion allowances

Despite this recommendation it was agreed that the question of depletion allowances should be looked at again separately. Although many of the areas involved in making environmental adjustments to national accounts are statistically 'soft', the question of making an explicit allowance for the depletion of natural resources is rather more firmly based and the case for including this in the central SNA is stronger. Carol Carson offered that BEA would prepare a paper on this topic reviewing and evaluating the work done to date including what should be measured and how it should be measured and would have this paper ready for discussion at the next Expert Group meeting scheduled for April.

#### Environmental assets

It was pointed out that there needs to be some clarification on which natural assets should be recorded in the national accounts. It had previously been agreed that timber tracts should be included as assets and the growth in the timber recorded as production. What would the appropriate treatment for natural forests be? By parallel with the standing timber it would seem these should be included as assets. On the other hand this would imply that natural growth of these forests where there is no human intervention should yet be counted as production. On these grounds, therefore, one could argue that natural forests should be

treated as environmental but not economic assets reserving this last term for assets that are deliberately drawn within the production boundary. Similar arguments could be advanced in relation to stocks of fish and herds of wild animals. How far should all land count as an economic asset? Should this include national parks and designated wilderness areas, for example? Even given agreement that economic assets as recorded in the SNA should be those assets that meet the definition agreed previously and which contribute to activities within the production boundary, a separate study would be undertaken investigating environmental assets in general to determine which should be included as economic assets and how the others should be treated in the context of satellite accounts for the environment.

## Natural growth

A previous conclusion by the Expert Group had been that natural growth should be recorded as production when this was growth of trees, crops or animals that were directly controlled and managed by human intervention. There are two reasons behind this recommendation. The first was to apply similar principles to trees and crops as had previously been applied to animals. The second concern arose from considerations of the effect of inflation on measurements of agricultural output. In years where there is high inflation the value of output greatly exceeds the cost of inputs incurred much earlier in the year. Rather than count the whole of the difference as value added, it should be recognised that part of this difference is in fact equivalent to a holding gain and as such should be eliminated from the accounts.

A number of participants said that although the principle of treating growth in tree crops should be treated in a parallel manner to that of animals, they felt this was not appropriate for annual crops. Where such crops are grown by peasant farmers without paid employees, there is no satisfactory basis on which to make an estimate of costs incurred during

the growing season. Another objection concerned the consequences for countries where the crops grew but for a number of reasons (drought, locust-plagues or the simple inability to harvest the crops) meant that a large proportion of the crop was wasted after the growth had taken place. These factors would frequently constitute exceptional events and on present proposals the growth would be recorded as part of gross product (going into stock) and eliminated from there via the other changes in volume account. Despite these reservations the group agreed to adhere to their previous recommendation without qualification.

#### Market and non-market

There were two papers to be discussed under this heading. The first 'Distinction between market and non-market' prepared by EUROSTAT (ESA/STAT/AC.38/15) and 'Market versus non-market: a suggested simplificiation' by Peter Hill (ESA/STAT/AC.38/21). There are three aspects to this problem. The first is how to make the distinction between market and non-market producers; the second is what are the consequences of this distinction for sectoring in the accounts and the third what is the consequence on valuation of output of the two types of producers.

The 1968 SNA defines industries as being full cost producers and also refers to other producers of good and services. The proposal now is to use the terms market and non-market to cover these two groups. In the ESA, the distinction is made by means of convention and relies on where resources for the producers come from. In the Input/Output Expert Group meeting, however, it was agreed that in principle all activities could either be market or non-market and the problem was how to define rules so that activities that were felt on a column sense basis to be enterprises (for example railways or steel mills) would be classified in such a way as to fall into the corporate sector, even though they may receive most of their resources directly from government. Under the present SNA conventions

either these activities were treated in the corporate sector and the payments from government regarded as subsidies or if they were to be regarded as non-market producers (because their sales did not cover most of their costs) they would be included in general government because by convention the corporate sector cannot include non-market producers. Since there was general recognition that this last alternative, that is the allocation to general government, was to be avoided, the question then was how to frame the definitions of market and non-market activity, and subsidies in order to avoid this.

In his paper Peter Hill suggested that some clarity could be achieved by looking at three different types of production: production for the market, production on own account and production where no market exists. The first two were marketable and the last two were not marketed. The present distinction between market and non-market is concerned with the distinction with whether the production is marketable rather than not. It was suggested that it would be helpful to change instead to a distinction between whether the goods were marketed or not. For simplicity in discussion this latter distinction was referred to as commercial and non-commercial although ultimately the terms market and non-market might still be used with this revised interpretation since they do not exist in the 1968 SNA. Only commercial producers would be included in the corporate sectors, though sometimes they will also be engaged in non-commercial production (e.g. own account capital formation).

There was clear agreement that pure public goods (that is those where the use by one individual did not impact the use by others) should be treated as non-commercial production. In general, except for the services rendered to enterprises by government, these would be designated collective consumption in the new SNA. Education and health activities were more difficult to categorise between commercial and non-commercial.

The move to a distinction between commercial and non-commercial producers eased the principles of valuation. Both own account production and production for which there is no market should be valued at the prices of products made by commercial producers where these exist (for example subsistence agriculture) and at the sum of costs where comparative prices do not exist.

To determine the value of output of commercial producers it is necessary to know whether to treat payments from government as purchases of goods and services or as subsidies. Most of the group were in favour of treating at least some of the payments by government as imputed purchases of goods and services, and a number spoke in favour of the distinction being made according to whether the goods and services formed part of final consumption or were costs incurred by enterprises with the former being treated as government expenditure on the goods and services concerned and the latter as subsidies. No final agreement on this point was reached and the matter remains for resolution.

## Countries in transition

The first item on the agenda on Wednesday morning was the discussion of the paper 'Proposed amendments to the draft text of SNA to be applicable for countries in transition' (ESA/STAT/AC.38.12) by Gyorgy Sandor. While it was acknowledged that a handbook would be prepared discussing how countries in transition could implement the SNA, this paper aimed to identify those items where references in the Blue Book would be necessary in order to cope with particular characteristics of transition economies. A number of these characteristics are expected to persist for sometime; these include the much expanded size of government, the lack of markets and general competition and the degree of subsidisation.

One area of particular difficulty was the provision by enterprises of cultural and social amenities to their employees. There were three ways in which this could be treated. It could either be regarded as compensation of employees in kind, it could be treated as transfers to the employees and final demand by households or finally it could be treated as final expenditure of enterprises. This last alternative had been considered by previous Expert Groups and rejected though at the time of the consideration the particular problems of countries in transitions were not directly considered. Because the payments made were not perceived either by the employer or the employee as being related to labour costs those used to the MPS might prefer the second of the three alternatives.

In discussion the question was raised again about how wide a set of conditions the SNA were supposed to cover. It was pointed out that there were quite wide variations in conditions between countries in transition, that other countries outside eastern Europe with a history of using the MPS were also considering implementing the SNA possibly in parallel with the MPS and that even for the so called market economies there were imperfections in the operation of markets to varying degrees which made rigorous interpretation of the SNA difficult. Many developing countries shared many of the characteristics of countries in transition not just with respect to the role of government and the degree of subsidisation but also, for example, distortions in the housing market. These situations had persisted for a very long period of time and were likely to persist for some years to come. Therefore while there was clearly a pressing need for a hanbook to address the particular problems of countries in transition now, it would be a mistake to assume that all these problems would disappear very quickly and it would be appropriate for the Blue Book to

cover a number of problem areas caused by market failure. This was to ratify one of the conclusions of the very first Expert Group meeting on the structure of the SNA that the system should, in principle, be applicable to all countries whatever their internal characteristics and whatever their present state of development.

A number of points were made in response to particular queries raised. It was felt it was inappropriate to regard market prices as necessarily synonymous with fully competitive prices. Within the SNA a market price is a transaction price and this is unambiguously defined even if the price is fixed rather than determined by market conditions. It is true that in some instances external trade of countries in transition have been conducted along lines closer to barter than market transactions but the system allows for the recording of barter transactions and of itself this should not pose a theoretical problem about the appropriate treatment. One area where it was felt there may be difficulties in producing consistent statistics on a before and after transition basis was in respect of financial claims since the nature of these in centrally planned economies is significantly different from those in mixed economies and it is this that has led to the development of two tier banking systems in many countries in transition.

In conclusion it was agreed that the number of points to be clarified in the Blue Book would be further elaborated in a paper for the next Expert Group meeting. These points were expected to cover, among other items, the treatment of prices, the identification of institutional units, the appropriate treatment of services provided to employees, exchange rate problems, measurement of the financial system, distortions in the housing markets and the measurement of consumption of fixed capital. A revised version of the paper under discussion would be prepared for the April meeting including identification of particular parts and paragraphs in the draft SNA that would need to be altered and may contain suggested amendments in these areas.

## Transactions and accounting rules

The next item for discussion was the paper 'Transactions and accounting rules' (ESA/STAT/AC.38/9) by Peter Hill. Some of this information had been circulated to the experts earlier as part of chapter 1 but it had not previously been discussed. As with other sections of the draft to be discussed by the Expert Group, it was clear that comments in writing sent later to Peter Hill would be very welcome.

There was some discussion about how far 'transaction' should be used as an expression to cover all of the entries in the flow accounts. It could be argued that output, intermediate consumption and the consumption of fixed capital are not really transactions but rather could be regarded as transformations. This distinction could also be made about many of the items in the other changes in volume of assets account, for example war losses. Nor were the balancing items in the accounts appropriately described as transactions. As mentioned in earlier meetings there is a word in the French system of accounts 'operation' which is a more general term. By starting with a definition of this concept it is then possible to get back to a definition of transactions as being a subset of this more general class. There was general agreement that a distinction can be made between different types of entries in the account but no single English omnibus term could be suggested.

The definition proposed for a transaction drew heavily on the distinction between goods and services and some participants queried whether this was necessary and helpful. Peter Hill emphasised that he felt the exchange of ownership of goods and assets was quite a different type of transaction from the provision of services. It was possible to have retrading and secondary markets in goods but not in services. If one travels from A to B one could not then decide not to keep to the journey, for example. Others felt that the change of ownership was too legalistic a

concept to rely on and that in the measurement of work in progress, for example, no such change of ownership took place. There was a grey area between pure goods and pure services and the embodiment of a service in a good was different from the provision of the service itself and did not convert the service to a good. Other participants felt that a distinction between goods and services should be made even though it was not possible to have a precise definition that was correct for every border line case.

Paragraph 6 states that 'the provision of a service should be understood to include the provision of labour'. Some participants felt that a distinction could be made and was important, since the provision of labour was not associated with a risk element which could not be said of the provision of services.

There was then discussion about the distinction between monetary and non-monetary transactions. The text as written suggests that financial transactions are a subset of monetary transactions. However, if financial transactions are those relating to financial assets then monetary transactions would be a subset of these rather than vice versa. Clarification was needed about whether accounts receivable and payable were the same as monetary transactions. It might be helpful to introduce distinctions between transactions that do not involve the financial accounts, those that only involve the financial accounts and those that span both.

There was some discussion about the appropriate treatment of barter transactions. A delay in a barter transaction may imply it becomes monetary. In the case of barter it is an economic and not a financial claim that is involved but there is no way in the accounts at present to record a non-financial claim unless an economic claim were to be introduced under the heading of trade credit.

In paragraph 30, a statement is made that all intra-unit transactions are not recorded. However, it had been clarified earlier in the meeting that this was not correct in respect of final consumption and explicit reference should be made for the rental of own account dwellings.

In the section on illegal transactions, questions were raised about the neccessity and adequacy of mutual agreement by both parties to a transaction as a basis for its inclusion; for example shoplifting may be recorded in accounts for retail establishments though this is not an activity they agree to. Further, the effects of many crimes are necessarily included in the accounts.

It was felt the discussion of the time of recording transactions was a useful exposition of the problem. It should be noted that full accrual is the theoretically correct basis of recording but that in may instances this will be a counsel of perfection which cannot be adhered to.

As written there is an internal contradiction between paragraph 61 and 62. The first needs to be changed to be consistent with the second. In paragraph 63 point 3 the expression that 'bills bonds etc are created when first sold' is imprecise since some are sold in instalments. In paragraph 68 elaboration is needed in order to deal adequately with deep discounted bonds.

There was discussion of the time of recording taxes in paragraph 70 to 72. This reflects an earlier decision of the Expert Group to record taxes on a cash basis. However, several participants had been unhappy with that decision at the time and further discussion led to a revised decision to record taxes in general on a due for payment basis except when the amounts due cannot be effectively construed as constituting payables within the system. Even in this case, however, the taxes actually paid should be recorded at the times at which the liabilities arise rather than when the payments are made. The IMF supplied alternative draftings for these paragraphs and these principles were accepted by the group.

## Progress on the review

Late on Wednesday the discussion on transactions and accounting rules was interrupted to take a report on where the review process stood now and what the plans were for the immediate future.

In September 1989 it had been agreed that the draft final version of the Blue Book should go to the Statistical Commission not in 1991 but 1993. Regional Commission meetings were planned to go ahead on the basis of the July 1989 draft and the discussion document to be prepared early in 1990. This discussion document was dispatched in March 1990 with the chapters as they stood at that time. One of these had not been seen by the Expert Group, five had been revised by the authors in light of comments from the Expert Group meetings in the middle of 1989 but not reviewed again. By July 1990 another three chapters had been revised and these were incorporated in the version of the draft that is going to the Statistical Commission in February 1991. The cover note to these documents made clear that there was still some outstanding issues, for example that of assets.

By March 1990 it was clear that the informal groups suggested in 1989 were not working. The Inter Secretariat Group met in June and reconfirmed the commitment that the draft should go to the 1993 Statistical Commission. They also accepted the suggestion that Carol Carson should be co-opted to the group to provide co-ordinating support. The Inter Secretariat Group met again in July and September 1990 and outlined the tasks that are still to be undertaken.

There will be a last review meeting in February to March 1992. This will consider a new draft in English to be completed by October 1991. It will need to be accompanied by documentation of the changes that have taken place since the draft of the Statistical Commission in 1991 (which exists in multiple languages). The October 1991 version will exist in English only.

There need to be changes in the way of working if this deadline is to be achieved. It will be necessary to keep track of revisions that have been made to the drafts. These may be in the form of a cover note by Peter Hill or may subsequently be computerised. The question remains about how best to use input from the expert group. Comments by the experts are always welcome by Peter Hill but these should be sent not just to Peter but to all members of the Inter Secretariat Group. The text will be put on the OECD computer system so that anyone who has access to that system can have access to the new computerised text. An account will be set up with DHL to facilitate speedy dissemination of drafts and comments to those concerned. Peter Hill will draw up a schedule of when he expects to revise the various chapters. It is hoped that two experts will agree to read each chapter and comment on these as they are revised by Peter. Everybody is free to comment on all of the chapters but there must be a firm commitment by at least two experts to do so for each chapter.

It is intended to have an expanded group of people working on the text. The hope is that Peter Hill will take a year's leave as soon as possible after 1st January 1990. It is intended that Anne Harrison will work with him for a number of months on this task (1). Andre Vanoli will continue working on the tables. These are the major consultancies that are planned and there may be others.

The next issue was how to arrange that the Regional Commissions should have input into the continuing process. The proposal at the moment is to have a largish inter regional meeting with perhaps eight to ten participants from each region overlapping at least in part with the Expert Group meeting planned for February/March 1992. There will also be an Expert Group meeting held in April 1991 which will consider the comments

Footnote: Immediately subsequent to the meeting this proposal was changed and Anne Harrison will not now be involved in this work.

made by the Regional Commissions and the Statistical Commissions as well as the new chapters and annexes. It is assumed that at least the first version of all chapters and annexes of the text will be available by the time of that meeting.

In order to fund these activities there is a need for more money. A letter was despatched in late November to about twelve countries asking whether they would be prepared to make financial contributions to the process. The first call would be payment for Peter Hill's time but resources are also needed for the handbooks.

The Statistical Commission meeting in February 1991 will have before it a report of the activities of the group and the review process. It will be realistic in terms of where the process is and will be updated immediately before the Commission meeting.

In response to questions it was stated that although the co-ordinating group will be the main body to comment on draft text as it becomes available others will not be excluded. A timetable will be drawn up as soon as Peter Hill prepares a schedule of when he will redraft the chapters allowing three or four weeks for each of the review groups to operate.

For commercial producers it was argued that there was normally a relationship between prices, costs, demand and the balance of supply and use. A commercial producer might be defined as one who sold most of his output (in volume terms) at a price that was high enough to significantly affect demand. There was general agreement with the intent of this statement but several participants felt it was not sufficiently precise for ready implementation in a wide variety of conditions where information about price elasticity, for example was missing.

#### Valuation

On Thursday morning discussion returned to the question of valuation. Besides the section in the transactions and accounting rules chapter there were three other papers for considering. These were: 'Valuation principles and supply and use tables in the sectoral accounts' by Steven Keuning (ESA/STAT/AC.38/18), 'Valuation of non-market production' by Jan Van Tongeren (ESA/STAT/AC.38/22) and one simply entitled 'Valuation' by Anne Harrison (ESA/STAT/AC.38/22).

Discussion centred on two issues: the treatment of transport margins and the treatment of taxes on products. It was agreed that where transport is provided by a producer as an ancillary service this would be included in the valuation at basic prices and would not form part of the transport margin. This is in accordance with the proposals that ancillary services should not be separately identified and valued and that intra unit deliveries of intermediate consumption would be consolidated out. On the other hand if the producer provided transport to the purchaser and charged separately for it, this would be regarded as secondary production of the producer and the amount concerned would be included in transport margins. So also would transport provided by a third party transporting the goods in question from the producer to the purchaser.

At the last Expert Group meeting in September 1989 it became clear that there was a difference of opinion about how intermediate input should be valued in a production account where output is measured at basic prices. One view is that taxes on products paid on intermediate inputs should be treated as part of value added and a charge against that producer's value added with intermediate inputs valued at basic prices. The alternative is to regard taxes on intermediate products of part of the cost of intermediate inputs so the taxes would be regarded as being paid by the supplier of these goods and intermediate inputs would be valued at purchaser's prices.

It was suggested that these alternative points of view arise from ambiguity about the nature of taxes on product. Purchasers prices exceed producer prices by taxes on products and it is implicit in this attribution that it is the purchaser and not the producer who pays the tax on the product. It was argued, therefore, that it is appropriate to treat taxes on products not as a tax on production but a tax on consumption. Some taxes on products, specifically taxes on imports and non-deductable VAT, cannot be treated as taxes on production and must remain a charge against the value added of the unit consuming the products to which these taxes apply. Consistency would suggest that all taxes on products should be treated similarly leading to intermediate inputs always being valued at basic prices in production accounts where output is valued at basic prices. (Note that if taxes on products were treated this way it would be consistent to treat subsidies on products in a similar way; that is as a receipt by the final consumers. This would help resolve the allocation of which subsidies should be treated as government purchase of goods and services and which as subsidies to producers).

Detailed discussion on this proposal was limited. The view was expressed that the whole question of value of production at basic prices was rather academic and that for many purposes valuation at market prices was usually acceptable and what was done in practice.

## Accounts and tables

There were four papers relevant to this discussion. The first 'Proposed accounts and tables for the revised SNA: an evaluation of comments' prepared by Jan Van Tongeren (ESA/STAT/AC.38/8), a comment from EUROSTAT on the proposed tables (unnumbered paper), a numerical example of the central SNA table system prepared by UNSO (ESA/STAT/AC.38/17) and 'A proposal for a SAM which fits into the next system of accounts' by Steven Keuning (ESA/STAT/AC.38/19).

Although a number of comments had been received relating to the accounts and tables, not all of these comments pointed in the same direction. The experts were reminded that there was still an opportunity to send in written comments and they were urged to send in written comments by 7th January. (This date was later amended to 31st January).

A number of participants said they would like to have the simplified accounts for a nation appearing as the first set of tables in the Blue Book. There is general agreement that these tables should be called 'consolidated' rather than 'simplified' and the view was also expressed that they concealed rather more than they reveal. While it could be argued that there would be attractions to having the first accounts in the book correspond with the first accounts that people are used to seeing in statistical publications, it was also argued that this was not necessarily the best way to approach the system pedagogically. While it is possible to explain an overview of the whole system and then explain how it may be consolidated, it is rather more difficult to explain a detailed conceptual approach from consolidated accounts.

It was eventually agreed that of the four groups of tables (1) production accounts, (2) distribution and uses of income, (3) accumulation accounts and (4) balance sheets should be shown as a condensed set of sectoral accounts as the first presentation of the accounts.

A number of views were expressed that at present there is too much emphasis in chapter 2 on sectoral accounts and too little on supply and use tables, goods and services accounts and similar tables such as consumption by purpose. GDP by activity and capital formation by industry, asset and sector some cross classification tables were felt to be missing including one on value added and one showing fixed capital formation cross classified between owning and using sector.

There was considerable discussion about the appropriate role of matrix presentations and the role of SAMs. Many participants felt that a SAM should be included in the Blue Book as a central part of the accounting system. Some reservations, however, were expressed about the proposal in Steven Keuning's paper because this is not only a matrix presentation as opposed to T accounts but also introduces some different concepts into the accounts. It was felt that it would be less confusing to the users if first of all a SAM was presented which agreed exactly with the T accounts presented elsewhere in the system and then the advantage of the matrix presentation was developed in terms of allowing the incorporation of alternative breakdowns and concepts allowing more flexibility according to priorities of individual countries and analytical needs. Anne Harrison offered to prepare a note on this for consideration by the working group that was going to meet to discuss accounts and tables taking into account the comments that would have been received by the end of January 1991.

#### Multiple exchange rates

The paper for this topic was 'Proposed SNA treatment of multiple exchange rates with particular emphasis on parallel market exchange rates' by Jan Van Tongeren (ESA/STAT/AC.38/11). In his introduction, Jan Van Tongeren said that there were three questions to be answered: (1) how to treat revenue from exchange rate differentials recevied by private banks or foreign exchange dealers; (2) how to measure this; (3) how to present it in the accounts.

The normal case is that the average between the buying and the selling rate is the rate used for conversion of the foreign transaction. The differences between this central rate and the buying and selling rates are service margins provided by financial auxillaries and are paid by exporters, tourists or importers. They are domestic transactions. When there is a parallel market, the difference between the buying and selling

rate is still a service charge. Where there is a difference between a parallel rate and an official rate, if an exporter, say, is allowed to sell. part in the parallel market and part at the official rate, the appropriate exchange rate to be used is that formed by converting the transactions at the actual rate that is used i.e. a weighted average of the two rates, the weights representing the proportion of sales taking place at each of the two rates. The paper suggests that if the part of the transaction that is sold in a parallel market is done so illegally rather than legally, that the conversion should be done at the official rate. The group felt this was inappropriate and that the same procedure should be followed as when the transactions legally take place part in the official and part in the parallel market.

There was then discussion about how the revenue arising from differences between official and parallel rates should be treated. Some participants felt this too should be treated as a service charge but others said that this represented a holding gain and loss. It was too sophisticated to try to separate out a service charge and that in some cases all that may be possible would be to take gross foreign currency dealings and apply an arbitrary percentage to this without allocation to users. While several participants supported this position no decision was reached and the issue was left for a sub group to take up.

### <u>Derivatives</u>

This subject was introduced by Colin Pettigrew whose paper 'Treatment of derivatives or secondary instruments' (ESA/STAT/AC.38/4) formed the background to this discussion. At the Financial Flows Expert Group meeting in September 1988 it had been agreed that options should be excluded from the category of financial assets and be treated as non-financial intangible assets. Further consideration suggested that they did not fit consistently with other items included under that heading either and that options were

not the only type of new financial instrument which gave rise to similar problems. The paper under discussion, therefore, addressed instruments that have been variously described as new financial instruments, off balance sheet transactions, hedging instruments and contingent liabilities and assets. In particular it covered traded and over the counter options, futures, warrants and tradeable swaps. The term derivatives or secondary instruments was used to describe all of these.

All of them have the characteristics satisfying the definition of an asset agreed previously. Derivatives are often, but not always, linked to specific financial instruments though options, futures and swaps can be linked to commodities. However, the basic characteristic of all these types of contract is essentially a financial arrangement. This pointed to reversing the earlier decision about the treatment of such assets and including them as financial assets. As financial assets are always met by liabilities, it would then be necessary to have liabilities established by convention. These would be construed to the person writing the option.

On balance the meeting agreed with these proposals as less harm would be caused by including these items in financial assets than by grouping them with other non-financial intangibles assets.

There was then discussion about how to classify the items. One proposal was that a separate category should be introduced for these but most of the group were in favour of including them under the other categories in the classification of financial instruments previously agreed. However, the hedge against risk implied by the use of a derivative should not be regarded as an integral part of the other contract but as a separate financial transaction.

There was then discussion about whether the premiums for options should be treated as a form of insurance payment. It was argued that the whole of the premium should not be treated as a fee and indeed in the market the feeling is that none of it is a fee but that all of it

represents the asset. In practical terms it might be possible to determine a separate element for options but this would not be possible for futures and swaps. Given the wide range of problems that will emerge on imputing the service charge for financial intermediation, it may be better not to compound the imputation process by introducing more in this area. The meeting agreed with this proposal and suggested that the Blue Book should indicate that conceptually premia on options includes a fee for service, but because of practical difficulties no attempt would be made to isolate this and instead the whole of the payment would be treated as a financial transaction.

In the discussion on non-financial assets on Monday the question of leases had been discussed. These are presently treated in the SNA as non-financial intangible assets and it was suggested that this treatment should be extended to other transferable contracts; for example contracts on services, on football players and contract to purchase aircraft at a future date. In light of the decision to treat traded and over the counter options as financial assets, work still needs to be doen to clarify the boundary between transferable contracts to be treated as non-financial assets and options.

#### Gold

The paper relating to this topic was 'Gold revisited' by Kevin O'Connor and Jack Bame (ESA/STAT/AC.38/6). At the present time the SNA and balance of payments are inconsistent on their treatment of financial gold. The conclusion reached at earlier expert group meetings was that the SNA should adopt the balance of payments convention so that the two systems would be harmonised. This means that the concept of financial gold would be omitted from the national accounts. Gold would either be a commodity or monetary gold, this latter when it was held by the monetary authorities. At least one country (the UK) feels this decision is to the detriment of

the national accounts which should continue to recognise that gold may be held as a financial asset by any sector, in particular of course, by commercial banks. The reasons for this can be summarised as follows: gold can be a means of payment; it can be cut up and reconstituted without losing value; it does not decay; there is a well established market it for it with a daily value and it is now possible to have accounts denominated in gold which earn interest.

While the group had some sympathy with this point of view, they were concerned that if the case for gold as a financial asset were allowed this would set a precedent for treating other items, for example silver, platinum and diamonds, in a similar way.

The discussion also brought in the consideration of gold held by households. Although this is typically not fine gold but gold in the form of jewellery it had been accepted by other Expert Group meetings that this constituted a form of saving by households in many countries and should be recognised as a form of household assets. This implies that purchase of such gold jewellery should not form part of consumption expenditure and thus draw down savings but rather should be a use of savings in the capital account. It was felt that there should be parallels between this sort of treatment of gold for households and of gold held effectively as a financial asset in other sectors (and possibly by households also). Again the question was raised if jewellery and antiques can be treated this way by households why not consumer durables but there was sympathy for the proposal to investigate the possibility of introducing another item to appear in the capital account which would show the acquisition of such physical objects as a form of saving rather than as final or intermediate consumption. Anne Harrison agreed to prepare a paper along these lines.

#### Pensions

This item had originally been a topic for consideration during the SNA. review process but has not been taken up at any of the Expert Group meetings so far. The position was reviewed in a paper 'Pensions in the SNA review' by Kevin O'Connor (ESA/STAT/AC.38/5) suggesting that even though it is rather late in the revision process, the issue is too important not to investigate. The matter was felt to be important not least for socio-economic breakdown of household income and that the importance of pensions was likely to increase over time. In any case practical recommendations had to be found for the appropriate treatment of over funded schemes and establishing the ownership of the funds committed to the schemes.

Much preliminary work had been done in the area but this does not elaborate the consequences of making changes. It was agreed that the Inter Secretariat Group would try to find a consultant to write a paper on this topic for consideration at the April meeting.

#### Goodwill

The question of the appropriate treatment of purchased goodwill had been raised in the paper on non-financial assets on Monday but discussion had been postponed for lack of time. Goodwill is taken to be the difference between the net worth of a company and the sum of all the separately identifiable and valued assets and liabilities. In general it is agreed that there should be no entries for goodwill in the national accounts. However, when a company is taken over by another, part of the transaction cost must be attributed to goodwill (it may in some circumstances be negative) and it was argued that in such circumstances (only) purchased goodwill should appear in the list of assets acquired and on the balance sheet. It would be classified as a non-produced

non-financial intangible asset and in keeping with commercial accounting practices would need to be written off over a period of time after acquisition of the company. This writing off should take place in the other changes in volume of assets account.

## Capital stock and capital consumption

The background documents for this subject were 'Proposed annex on capital stock and consumption of fixed capital by the OECD (ESA/STAT/AC.38/7) and some sections of the paper on non-financial assets.

The calculation of consumption of fixed capital serves three purposes:

(1) it shows the service of capital stock in production; (2) it shows the decline of the value of assets; (3) it demonstrates how capital formation is financed. The text should spell out these functions and elaborate them. However, some misgivings were expressed about the appropriateness of supposing that consumption of fixed capital represented the services of capital stock, for example in the case of government buildings, and it was felt that for some analytical purposes net stock rather than gross stock was more useful.

It was felt there should be more discussion on the method of depreciation and whether and when straight line assumptions were appropriate. There should also be discussion about assumptions on life length and adjustments that may need to be made for the accounts if in the event these assumed life lengths prove to have been inaccurate.

Capital consumption calculations are usually based on the assumption that the residual value of an asset at the end of its useful life is small and positive or zero. However, there are some assets, for example oil wells and nuclear reactors, where the abandonment costs involved when the asset is no longer to be used are very considerable and amount to a large

negative value of the asset at the end of its life. In some cases, for example the abandonment costs on oil wells, there are legal obligations to prepare for the write off of these costs during the use of the well.

Adequate treatment of these issues should also be spelt out in the annex.

#### Classifications

The background document for this topic was 'Which classifications need revising in the revised SNA' by EUROSTAT (ESA/STAT/AC.38/6).

Classifications are an integral part of the SNA and some of these remain to be updated and revised. ISIC has just been revised. There is a draft proposal for a revised classification of household goods and services prepared by OECD and EUROSTAT but work remains to be done in a number of other areas. On several occasions experts have pointed to the need to revise COFOG to facilitate the breakdown between individual and collective consumption and also to identify specific areas of expenditure, for example on the environment and research and development. The classification of exports and imports needed attention and also the classification of changes in stock. At present few links existed between functional classifications and those based on products and activities.

The group endorsed these concerns and hoped that resources would be found to pursue the matters raised. They also referred again to the neglected draft on classifications of outlays by industry by purpose (COIP) and expressed their strong concern that this should be taken up as a matter of some urgency.