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REPORT OF THE WORKING GROUP ON STATISTICS AND
INDICES OF PRICES AND QUANTA

(ST/ECLA/CONF. 36/L. 5)

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/I. INTRODUCTION

I. INTRODUCTION

1. Organization of work

1. The Working Group on Statistics and Indices of Prices and Quanta met at Santiago, Chile, from 24 to 28 November 1969, under the joint sponsorship of the Economic Commission for Latin America and the Statistical Office of the United Nations.
2. The meeting was attended by representatives of Argentina, Bolivia, Chile, Colombia, Ecuador, Honduras, Jamaica, Mexico, Panama, Paraguay, Trinidad and Tobago, and Uruguay. The Latin American Institute for Economic and Social Planning (ILPES), the Inter-American Statistical Institute (IASI) and the Organization for Economic Co-operation and Development (OECD) were also represented.
3. The Working Group met as part of the world programme to discuss the suggestions of the Statistical Office of the United Nations regarding a system of statistics and of quantity and price indexes integrated with the new United Nations System of National Accounts (SNA),^{1/} which was approved by the Statistical Commission at its fifteenth session. The views of this Working Group, together with those of similar groups in other parts of the world, will be submitted to the Statistical Commission for consideration at its sixteenth session, which will be held in Geneva in 1970. This meeting of the Working Group is the third of a series of meetings on the new System of National Accounts. The first was held in November 1965 to examine the bases for the new system and its adaptation to the circumstances prevailing in the Latin American countries,^{2/} and the second in November 1967 to discuss the details of the new system, its classifications and its accounts and tables.^{3/}

^{1/} A System of National Accounts (Studies in Methods, Series F, No 2, Rev. 3; United Nations publication, Sales No: E.69.XVII.3). The Spanish version will be available in June 1970. The former Spanish version (E/CN.3/356 and annexes) was used at the meeting.

^{2/} See "Report of the Working Group on National Accounts" (E/CN.12/740), Santiago, Chile, 8-17 November 1965.

^{3/} See "Report of the Working Group on National Accounts" (E/CN.12/801), Santiago, Chile, 3 October to 10 November 1967.

4. At the opening meeting, Mr. Manuel Balboa, Deputy Executive Secretary of the Commission, welcomed the participants. After a brief review of the history of the United Nations System of National Accounts and its latest revision, he stressed the importance of an integrated and consistent system of series at constant prices and of the price quantity statistics necessary for this type of calculation, as an instrument for quantifying the different macroeconomic variables increasingly used in all analyses related to development and economic planning. He mentioned some of the theoretical and practical problems that arise in the preparation of series at constant prices, especially countries with high rates of inflation, which may result in seriously distorted measurements of real economic growth if a method of deflation using inappropriate indices is used instead of direct measurement. He pointed out that the Working Group's contribution was eagerly awaited, particularly any suggestions regarding practical procedures for calculating price and quantity indexes in the light of experience and of prevailing situations in the Latin American countries.

5. The following officers were elected at the opening meeting:

Chairman: Juan Sourrouille, Argentina

Vice-Chairman: Jesús Tello, Colombia

Rapporteurs: Alfonso Aulestia, Bolivia
Carlos Koncke, Uruguay

2. Agenda and documents

6. The following agenda was adopted at the opening meeting:

- (1) A system of quantity and price index numbers
- (2) Methods, techniques and problems of gathering and compiling price and quantity series
- (3) Problems of price and quantity statistics and their use in national accounts in Latin America.

7. The list of background documents is appended as annex II.

8. The present report was approved at the last working meeting, held on 28 November 1969. The speakers at the closing meeting were Mr. Manuel Balboa, Deputy Executive Secretary of ECLA, and Mr. Juan Sourrouille, on behalf of the participants.

/II. SUMMARY

II. SUMMARY OF DEBATE

1. A system of price and quantity indexes

(a) General objectives and scope of the index numbers

9. The Working Group proceeded to discuss the document (E/CN.3/401), entitled "A draft system of quantity and price index numbers". The Group was informed that the scope of the system of price and quantity index numbers was limited and covered only transactions in the production and expenditure accounts of the national accounts. While the values of labour and capital employed in production might be expressed as quantities and prices in terms of their own units of measurement, and some experience had already been acquired of such measurements, they had not yet been included in the integrated system of index numbers since it was considered that before this could be done a more searching study of the question was required. Price and quantity indexes relating to other income flows, such as dividends and interest, social security payments and savings had not been included in the system, because they could not be factored into price and quantum indexes in their own units of measurement. Price indexes for such flows in terms of their purchasing power over baskets of commodities or other magnitudes could, however, be estimated.

10. The Group noted that it was not possible to consider the problem of deflating income flows at the meeting, and yet the problem was of urgent importance. It was pointed out that to begin with at least and especially in view of the need to analyse inter-sectoral income transfers, countries might express the product at factor cost and constant prices by deflating current values using the implicit gross domestic product deflator.

11. The Group was informed that, as far as price indexes were concerned, the system covered not only index numbers needed for the deflation of the national accounts but also index numbers needed for other purposes, such as measuring changes in the cost of living over short periods of time, changes in contract prices for construction work, etc. Also a number of quantity indexes estimated at shorter intervals of time than needed for national accounts work were included in the system.

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12. The Group noted that the two documents E/CN.3/401 and 402 presented the problems of developing price and quantity indexes at three levels: first the framework of national accounts within which the system was proposed to be developed. Then the contents of an ambitious but greatly simplified system as compared to the ideal framework was presented, and, lastly, the practical problems of estimating the price and quantity indexes by means of indicators were dealt with.

13. The Group's reactions to documents E/CN.3/401 and 402 can be summed up as follows:

(a) Both documents are multi-purpose documents and therefore do not deal with certain aspects nor analyse in depth other aspects which are of fundamental importance for national accounts at constant prices. These basically include an explicit definition of the principal aggregates, the balances that should be respected and the aims of the measurements.

(b) The foregoing implies that the first task is to deal with the question of the conceptual framework for the optimum content of a system of accounts expressed in constant terms. Before this is developed, it would seem unsuitable to focus discussions on specific aspects of the techniques of quantifying indicators.

14. One participant was of the opinion that it would be premature to discuss a theoretical system of indexes at monthly or quarterly intervals before first considering the possibility of having the SNA itself cover such periods or other fields, for example, accounts at the level of a region within a country.

15. The Group considered the framework shown in table 1 of document E/CN.3/401, noting that it represented only a general framework, based on the matrix of the revised SNA, within which it would be useful to develop a system of price and quantity index numbers, both for use in estimating national accounts at constant prices and for other purposes. For benchmark years, at five-year intervals or longer, a number of series which were almost as detailed as in the table would be required, but for annual or more frequent intervals, series which were much more simplified, with regard both to classification and to valuation, were called for.

16. It was agreed that table 1 could be considered as providing a satisfactory and complete picture of the various flows of goods and services included in the new integrated system which were to be estimated at constant prices. Although it was recognized that in future, the studies under way on how to express other SNA items, such as income flows and stocks of capital, at constant prices, should be continued, it was considered that the submatrices covered in the document constituted a first essential step towards drawing up recommendations on the system of price and quantity index numbers which would be used in calculations at constant prices.

17. It was pointed out, however, that document E/CN.3/401 considered price and quantity indexes only in terms of flows of goods and services and therefore did not reflect any important improvement on the SNA. Some transactions which were not flows of goods were included at constant prices in A System of National Accounts, and not in document E/CN.3/401, e.g., the concepts of depreciation and indirect taxes (A System of National Accounts, table 12, p. 184). The Group emphasized the need for document E/CN.3/401 to include at least some suggestions for an adequate system of index numbers to express these items at constant prices, even though this would involve the use of conventional solutions. Some participants were of the opinion that conventional methods should have an explicit conceptual basis and that their analytical implications should be stated.

18. One participant considered that primary emphasis should be placed on defining price indexes for the transactions presented in tables 9, 10 and 13-16, and to some extent in tables 11 and 12. This should be followed by a definition of conventional units of measurement for all other transactions relating to gross domestic product accounts and for external transactions. In his view, this would complete the stages needed to develop a conventional system of integrated accounts at constant prices.

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19. Some participants suggested that the new versions of the documents discussed at the meeting were more faithful to the guidelines indicated in paragraphs 4.73 et seq. of chapter IV of A System of National Accounts, and made special reference to aspects relating to value added, primary inputs and productivity which were illustrated briefly in table 4.7 and discussed mathematically in paragraphs 4.122 to 4.138 of the annex of chapter IV of that document.

20. It was noted that the two entries T 11.3 and T 11.4 in row 4 of table 1 should not have been put in columns 3 and 4 of the table, for two reasons. First, A System of National Accounts, did not recommend a distinction between protective and other import duties in its accounts and tables and, in its definite version, was ambiguous about their treatment. Secondly, it did not recommend a distribution of import duties by commodities or industries in its accounts and tables. Shifting those entries from columns 3 and 4 would make it easier to make estimates at approximate basic values.

21. The Group took account of the fundamental distinction between the basic units of observation and classification utilized in table 1 of document E/CN.3/401 for the estimation of price and quantity indexes, namely commodities and activities. In addition the purpose or object of outlays on final consumption were also used. These distinctions of basic units of observation and classification corresponded to those of the revised SNA.

(b) The content of the system: suggested series of quantity and price index numbers

22. Table 2 of document E/CN.3/401 was presented in three parts, following the national accounting framework used in table 1, describing series for supply and disposition of commodities; output, intermediate consumption and gross capital formation by kind of activity; and final consumption of goods and services by object or purpose of expenditure.

23. The Group unanimously agreed that the series of quantity and price index numbers suggested in table 2 were merely illustrative and should not be taken as covering all the possibilities, in terms of coverage and disaggregation, of the series to be compiled. In view of the emphasis which

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Latin American planning systems currently place on annual operational plans, some participants suggested that, when choosing quantity and price indexes, particular attention should be given to the data required for analysing and making short-term economic policy decisions.

24. In order to make it easier to compare the input-output and other tables given in A System of National Accounts with the suggestions given in table 2 of document E/CN.3/401, the Group considered that it would be useful to present all the implicit tabulations in the table. This would also help to give a clearer picture of the cross-classifications included in a simplified manner in the table.

25. The Group then proceeded to discuss in practical terms the contents of the system as set out in table 2 of document E/CN.3/401. It was recognized that, in addition to the annual and more frequent series contained in table 2, the system also recommended the inclusion of cross-classified price and quantum indexes corresponding to the framework of tables 11 and 12 of the new System of National Accounts at less frequent intervals, possibly every five years.

26. Some participants pointed out that the classification of expenditure according to object and to the kind of economic activity from which supplies were forthcoming provided divisions that were homogeneous from the point of view of the operation of the markets and that this was vital to establishing representative samples for price index purposes. By linking these two classifications, sub-aggregates could be obtained that were homogeneous in terms of both demand and of supply.

27. The Group discussed what priorities might be assigned to the compilation of the various series shown in table 2 and the frequency with which the series should be compiled.

28. It was agreed that, with regard to the establishment of priorities for future work on the quantity and price indexes suggested in table 2 of document E/CN.3/401 the following general principles could be established:

- (a) The frequency of compilation should be designed to satisfy the individual requirements of those using the data in each country;

/(b) The

- (b) The methods used should be in line with the level of development of basic statistics in each country;
 - (c) Given current Latin American conditions, tables on the domestic supply of commodities are of lower priority than those relating to the production of commodities classified according to kind of activity;
 - (d) Valuation at producers' and purchasers' values has higher priority than valuation on the basis of approximate basic values.
29. The following specific suggestions were made on table 2:
- (1) Separation of the agricultural sector from the goods producing industries in sections I A 1 and II A 1. It was considered that production figures for such activities would not be significant if compiled at less than quarterly intervals.
 - (2) Breakdown by sectors of intermediate consumption in section II B, to make the section comparable with sections II A and II C.
 - (3) Inclusion of series for imports fob in section I B.
 - (4) Inclusion of quantity and price indexes for changes in stocks, valued at producers' prices, to follow section I F.
 - (5) Inclusion of monthly price indexes under section II B - intermediate consumption.
 - (6) Inclusion of quantity and price indexes for imports and exports of services, excluding factor services.
 - (7) Inclusion of quarterly figures for the gross output of services by government and private non-profit institutions, by kind of activity, under section II E.
 - (8) Inclusion of quarterly and annual price indexes for the gross output of services by government and private non-profit institutions, by kind of activity, under section II E.
 - (9) Inclusion of annual quantity and price indexes for the intermediate consumption of commodities by government and private non-profit institutions, under an additional heading in section II E.

/(10) Inclusion

- (10) Inclusion of quarterly quantity indexes for the value added by producers of government services and private non-profit services under section II F.
- (11) Inclusion of annual price indexes for the value added by producers of government services and private non-profit services under section II F.
- (12) It was suggested that monthly quantity and price indexes for exports of commodities at producers' values (section I G) should not be included in the proposal.

30. Besides setting out general principles regarding priorities to be observed in the course of future work on the compilation of table 2 (see paragraph 28) and suggesting specific modifications to the table (see paragraph 29), the Group felt it should give a detailed presentation of its position on the priorities dealt with in table 2 and the frequency of compilation of the various indexes. This detailed presentation will be found in annex III "Suggested priorities for the series of quantity and price index numbers contained in table 2", which also includes the specific suggestions listed in the previous paragraph.

31. The Group held a wide-ranging discussion on whether section II C should be included in table 2, in view of the fact that it might be considered that the series suggested in it were derived from the series listed in sections II A and II B. The Group, however, felt that section II C must be retained on the grounds that value added was not always calculated by the "double deflation" method. The Group noted that, while the annual series for value added had to be compiled by the double deflation method, the series for value added at more frequent intervals (monthly, quarterly) listed in section II C were merely an extrapolation of the corresponding indexes for gross production in section II A.

32. A number of participants mentioned the need to make it clear, specifically in table 2, that the value of the X's in the frequency column was not always the same in terms of coverage of goods and services, as pointed out in document E/CN.3/401, paragraph 30, and document E/CN.3/402, paragraph 50.

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33. The same participants also considered that the concepts of quantity and price used in table 2 should be explicitly defined, especially with respect to trade and other services, since document E/CN.3/402 referred to them only as examples.

(c) Classification schemes; valuation; base period and formulas

34. The Group was informed of the progress of work on an international commodity classification currently being compiled by the Statistical Office and ECLA.

Valuation

35. The Group was informed that the index numbers of prices and quantities of commodities in table 1 of document E/CN.3/401 were assumed to be at approximate basic values, i.e., market prices less commodity taxes on the output. In this case the wider SNA definition of commodity taxes was used, namely all indirect taxes that vary with the quantity or value of a commodity. This only excluded indirect taxes on industries, like court fees, driving licences, etc. In two cases (see footnote (a) of table 2 and paragraph 31 of document E/CN.3/401), namely the supply of commodities and the activity of industries, approximate basic values were recommended, although somewhat ambiguously, as a secondary and additional valuation for annual and less frequent index numbers. For benchmark year estimates, however, approximate basic values were recommended for all series since they were intended to be used for developing index numbers of prices and quantities suitable for deflating input-output tables.

36. It was agreed to adopt the theoretical valuation scheme for those tables at basic prices; but attention was drawn to the practical difficulties in applying that type of valuation. Some participants with recent experience in the preparation of input-output tables in their own countries pointed out that, in spite of their desire to use producers' prices, they had been compelled to prepare the tables at purchasers' prices, as the only possible solution in view of the basic statistical material available. Other participants agreed that that was the general practice in input-output research in the region.

37. The reason was that basically those tables had been prepared with statistical data from the production accounts of the different branches of activity; in other words, that type of table had been constructed with data on the production functions, which were column headings. There had been a general lack of adequate information on the detailed end-uses of production flows that would have made it possible to prepare the table with data for the rows, which would consequently have been valued at producers' prices.

38. The above-mentioned difficulties were aggravated by the widely differing marketing margins or tax effects for a single good according to its end-use.

39. The foregoing considerations convinced the participants of the virtues of presenting the proposed scheme less frequently than annual, but they stated that the position with respect to basic statistics made it impossible, for the time being, to consider using real basic values in the preparation of input-output tables.

40. The secretariat explained that document E/CN.3/401 suggested the use of basic values only for the preparation of input-output tables, considering the great value which the operation of matrices prepared in that form would have for certain types of economic analysis, from the standpoint of the homogeneity of the valuation of products of different origin (for example, domestic production and imports). Such valuations, could, in certain cases, be on an annual basis.

41. The Working Group made a careful study of the problems of valuation. The secretariat explained the concepts of purchasers' values, producers' values, approximate basic values and real basic values, in the light of the concepts in the new SNA. Although the suggestion put forward in the document regarding the use of basic values for the preparation of input-output tables was perfectly clear, in the case of annual series the Working Group felt that the proposals in the document were not sufficiently clear with respect to the use of the valuation at basic values of the products included. Thus, for example, in section C, on simplifications in valuation, paragraph 28, it was stated that "approximate basic values should, however,

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be used in the case of input-output tables of the system and at least in the case of annual series on output as well". This was reinforced by the statement in section D, Frequency of compilation and nature of the various series, paragraph 31, to the effect that "the annual index numbers in respect of the gross output of commodities and industries and the value added of industries are to be valued at producers' values and approximate basic values ...". In this connexion, stress was once again laid on the contents of chapter VI, on valuation. However, that general criterion, which was repeated throughout the document, was not expressed sufficiently strongly in the recommendations in table 2, on suggested series of quantity and price index numbers, in which that type of valuation was mentioned only in a footnote.

Weighting, base period and formulae.

42. The Working Group was informed that the recommendations in the chapter under the above heading were tentative and that any suggestions as regards practical problems in this field would be welcome since they might serve as the basis for the development of improved recommendations.

43. The Working Group agreed to adopt the suggestions put forward in the document. In practice, the region, with few exceptions, was using the Laspeyres formula for both quantity and price index numbers.

44. A group of participants pointed out that the context of chapter VII had not been treated at sufficient length, as might have been expected in a document like E/CN.3/401, which was specific in character, particularly since previous United Nations documents had already dealt with the subject adequately. Moreover, although there was general agreement from a theoretical point of view on the use of the Laspeyres and Paasche formulas, as recommended in the above-mentioned document, the relevant recommendations had to be clarified so that they would take into account the present situation indicated by the widespread use of the Laspeyres formula for both quantity and price index numbers.

45. It was suggested that the wording of paragraph 51 in the Spanish version be changed to avoid the phrase "...un año anterior..." being taken to mean the immediately preceding year.

2. Methods, techniques and problems of gathering and compiling price and quantity series, and problems of their use in national accounts in Latin America

46. The Working Group decided to take up agenda items 2 and 3 together. The secretariat summarized the contents of document E/CN.3/402 and emphasized its relationship with document E/CN.3/401.

47. The participants considered that document E/CN.3/402 examined a number of specific methodological concepts of a very general nature, together with theoretical and practical considerations which, while they contributed new elements, could not all be exhaustively analysed at such a meeting. The document was somewhat vague because in some places it presented alternative methods without recommending any specific choice.

48. It was also felt that in many parts of the document no specific recommendations were put forward regarding the methodologies described, which made it difficult to accept or reject the proposals.

49. Some participants expressed the view that the estimates for the government sector should reflect the effects of changes in productivity. It was suggested that it would be advisable to lay stress on the Document's recommendations regarding use of the data deriving from the application of programme budgeting techniques.

50. The participants expressed the wish that the Statistical Office of the United Nations should update the document entitled Index Numbers of Industrial Production,^{4/} in view of the lack of practical up-to-date technical handbooks. In particular, it was considered that in several Latin American countries the manufacturing sector was not properly measured, despite all the experience in its treatment, because of the persistence of serious methodological and information problems which document E/CN.3/402 seemed to assume were completely solved.

51. It was noted that experience in Latin America showed that indexes had been prepared which were not originally designed for national accounts, and they had subsequently been analysed and rearranged in order to make the best possible use of them. Document E/CN.3/402 would be a suitable instrument for filling the gaps noted in that respect, and helping to disseminate the methods used to all countries facing similar problems.

^{4/} Studies in Methods, Series F, No. 1 (New York, 1950)

52. For example, because of the lack of detail in the data on production or expenditure that were usually available, goods and services were presented generically, which made it impossible to differentiate between qualities, brand, varieties, etc. Prices, on the other hand, were quoted at a specific level and not for generic groups. It was therefore necessary to establish representative samples of generic goods in order to determine the specific items to which the prices related. In that case it would be useful if more than one specific item were considered as representative of the generic group, in case some items should disappear from the market. An attempt would thus be made to obviate the adverse effects of changes in quality and sales procedures, sudden price changes, etc., on the index numbers.

53. There was then a discussion of the deficiencies of export and import statistics owing to the heterogeneous nature of the item concerned. In some countries it was nearly always necessary to revalue exports on the basis of prices in the export market, because of unreliable invoicing practices. Another point noted was the exclusion of services, particularly under the head of tourism. It was considered that surveys of tourist spending should be carried out and supplemented with data from travel agencies.

54. The Working Group considered that many of the strictly statistical topics included in document E/CN.3/402 should be dealt with separately and at greater length.

55. One of the participants drew attention to the problems arising from the fact that the bases used for weighting index numbers were fixed, especially in regard to seasonal variations. That system implied spurious fluctuations in prices which were affected by seasonal variations in supply and demand. To overcome this difficulty, it was suggested that the use of variable weights on a monthly basis should be studied.

56. The Group expressed a desire to discuss some of the problems raised in document E/CN.3/402 in conjunction with the secretariat document ST/ECLA/Conf.36/L.4. Accordingly, consideration was given to some specific points which the participants considered should have been included in the former document and which, they suggested, should be included in a future version.

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57. The Group felt that own-account consumption had not been given full enough treatment in paragraph 39 of document E/CN.3/402, considering its importance in the Latin American countries, and suggested that specific attention should be paid to this question in any new version of the document. The Working Group was of the opinion that studies in depth should be carried out in bench-mark years, and that as far as possible, advantage should be taken of population and, particularly, agricultural censuses, to obtain information and general data in order to establish a universe, on the basis of which detailed data for intermediate years could be obtained using appropriate sampling methods. Mention was also made of the system of material balance sheets as a means of estimating own-account consumption, in which some countries in the region had already had some experience.

58. On the question of the measurement of commercial services, while table 2 in document E/CN.3/401 indicated the need to compile quantity and price index numbers for trade margins, the Group considered that document E/CN.3/402, which dealt with the practical aspects of measurement, should present additional methods that would take into account the most usual practices in Latin America.

59. It was specifically suggested that the document should include the opinion of using a measurement system which would combine the results of surveys of trade channels and margins with series for marketed production volume. The proposed method would directly affect the content of paragraphs 27 and 85 of document E/CN.3/402.

60. The proposed system of index numbers included the compilation of annual indexes of producers' and purchasers' prices in respect of categories of commodities by type of disposition. Those series, simply or coupled with quantity indexes of the supply of commodities, also classified by category of commodity and type of disposition, should furnish the bases for estimating price and quantity indexes for distributive-trade and transport margins. Those indexes should be so defined that, in addition to making it possible to assess a greater volume of physical activity in the trade and transport sectors, they would enable a balance to be struck, at constant prices, between the origin and final use of production.

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61. It was also stated that the recommendation that indexes of sales should be used to measure the output of the commercial sector had the technical disadvantage that in the region such indexes were confined virtually exclusively to the major cities, which made them a less reliable indicator.

62. One participant mentioned that his country used the method mentioned above of trade margins and channels combined with marketed production for annual figures, supplemented by a deflated index for retail sales in the capital city to show variations on a quarterly basis. The Group considered it advisable to conduct sample surveys of both retail and wholesale establishments to obtain quantity and price data on sales, which would give a reasonably good coverage of the trends of commercial activities in the different regions.

63. One participant observed that, since it was not feasible for indicators of price variations to be based on a complete set of data on all the items making up the aggregates but only on a sample of the items, care should be taken to design the samples in such a way as to ensure that they were sufficiently representative of the aggregates to which they referred, and were reasonably reliable. For this purpose, it was necessary to establish sub-aggregates for which there were homogeneous price trends in terms of: (a) the pattern of supply and demand; (b) functional organization of markets in economic space; (c) size of markets.

64. The Group then considered the type of indicators needed to measure gross fixed capital formation at constant prices. Paragraphs 40-42 on this topic in document E/CN.3/402 merely stressed the importance of measuring such capital formation by the sectors using the capital goods concerned. The Group considered that, in view of the sort of data that was available in the region, the emphasis in this type of measurement should at present be placed on the use of indicators based on type of goods. Only a passing mention was made of these indicators in paragraph 42 where they were referred to merely as a means of comparing the results that might be obtained by using the first type of indicators.

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65. The Group suggested that the first two sentences of paragraph 17 should be replaced by the following: "The compilation of quantity indexes of the gross output and value added of banks and other financial services raises the question of the service(s) to be measured, as well as problems similar to those discussed below for the services of government and private non-profit institutions. Criteria for determining financial services would include new loans granted, bank deposits - whether personal or business, time or demand - and the over-all trends of changes in the money supply and the way in which it is absorbed by variations in the real product, and also prices and the over-all liquidity of the economy. Similarly, indicators such as the number of cheques cleared or deposits made might be of some use".

66. The Group discussed the contents of paragraph 24 and observed that it was more difficult to compile statistics in the region than the paragraph suggested. It agreed that it would prefer the first sentence to begin with the words "Possibly in some countries monthly and annual figures ..." and to be followed by a sentence reading: "If this is possible, and bearing in mind the importance of these indicators, it is necessary to pay special attention to the criteria that should govern the selection of the products to be considered in the light of the resources available for data collection and compilation".

67. During the discussion of paragraph 60 of document E/CN.3/402, some participants indicated that they would like further clarification of the reasons why that paragraph laid special emphasis on changes in the quality of items covered by price indexes and suggested that equal emphasis should be placed on quantity indexes since they were often used to extrapolate series in constant terms.

68. As regards methods of calculation, it was pointed out that if value series were deflated by means of price indexes from which variations in quality had been eliminated, so that they only showed price changes, quantity indexes would be obtained which implicitly include quality changes.

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69. The Working Group expressed special appreciation of the background document ST/ECLA/Conf.36/L.4, "Use of price and quantity indexes in national accounts calculations in Latin America", which was frequently used and which enabled the Working Group to make a precise and adequate analysis of documents E/CN.3/401 and 402. The Group was unanimous in expressing its satisfaction with the efforts of the ECLA secretariat. At the same time, it was suggested that this type of work should be continued, in view of the fact that it constitutes a very important contribution in the transfer of experience and in improving the technical quality of national accounts in Latin America.

70. The Group expressed the opinion that the United Nations Statistical Office should, as soon as possible, publish the technical manual on national series of national accounts covering flows of commodities at constant prices so as to establish a firm link between theoretical outlines and the basic statistics available in most countries, in accordance with resolution 1 (XV), 5 (b) adopted by the Statistical Commission at its fifteenth session.^{5/} In this connexion, it was suggested that in drawing up the manual, the Statistical Office should take account of existing practices in the region, for which purpose all countries should be asked officially to submit a full account of the methods they used, with complete details of available series. This material should be evaluated, such evaluation and the experience of other regions to be used as guidelines for alternative methods and calculations. Lastly, it was suggested that a further document should be drafted in which the possibility of extending the application of measurements at constant prices to transactions which are not flows of goods and services should be considered.

^{5/} Official Records of the Economic and Social Council, Forty-fourth session, Supplement No. 10 (E/4471).

Annex I

LIST OF PARTICIPANTS

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Enea Avondoglio	Deputy Chief of the National Income Department, Central Bank of Argentina
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Annex II

LIST OF DOCUMENTS

		Available in	
		Spanish	English
<u>Working papers</u>			
ST/ECLA/Conf.36/L.1	Provisional agenda	x	x
ST/ECLA/Conf.36/L.2 (E/CN.3/401)	A draft system of quantity and price index numbers	x	x
ST/ECLA/Conf.36/L.3 (E/CN.3/402)	The collection and compilation of price and quantity series	x	x
ST/ECLA/Conf.36/L.5	Draft report	x	x ^{a/}
<u>Background documents</u>			
ST/ECLA/Conf.36/L.4	Use of price and quantity indexes in national accounts calculations in Latin America	x	x
Studies on Methods Series F, No. 2, Rev. 3	A system of National Accounts	-	x
E/CN.3/356	Propuestas para la Revisión del SCN 1952 (1967)	x	-

a/ First part only.

Annex III

SUGGESTED PRIORITIES FOR THE SERIES OF QUANTITY AND PRICE INDEX NUMBERS INCLUDED IN TABLE 2 ^{a/}

Description of series	Producers' and purchasers' values ^{b/}						Approximate basic values (only annually)
	Quantity indexes			Price indexes			
	Monthly	Quarterly	Annually	Monthly	Quarterly	Annually	
I. Supply and disposition of commodities classified according to kind of activity where characteristically produced and type of commodity.							
<u>Supply</u>							
A. Domestic gross output and total supply of commodities	C	C	C	C	C	C	C
B. Imports							
Goods (cif prices plus import duties)			B				B
(cif prices)	A	A	A	A	A	A	A
(fob prices) ^{c/}			B				B
Services ^{d/} (excluding factor services)	A	A	A	A	A	A	A
<u>Disposition</u>							
C. Intermediate consumption of commodities by industries	C	C	C	C	C	C	C

Annex III (Cont.)

Description of series	Producers' and purchasers' values ^{b/}						Approximate basic values (only annually)
	Quantity indexes			Price indexes			
	Monthly	Quarterly	Annually	Monthly	Quarterly	Annually	
D. Consumption of commodities by services government and private non-profit services to households		B	A		B	A	C
E. Final consumption of commodities by households, divided into durable, semidurable and non-durable goods and services	C	B	A	C	B	A	C
F. Total and gross fixed capital formation and changes in stocks, classified by type ^{e/}	C	B	A	C	B	A	C
G. Exports							
Goods (producers' values) (fob prices) ^{f/}	excluded		C	excluded		C	
Services ^{d/} (excluding factor services)	A	A	A	A	A	A	
Services ^{d/} (excluding factor services)	A	A	A	A	A	A	
II. Output, intermediate consumption and gross capital formation by kind of activity							
<u>Industries</u>							
A. Gross output of commodities by kind of activity							
1. Goods producing industries							
Agricultural goods	C	B	A			A	C
Other goods	C	B	A			A	C
2. Distributive trade and transport		B	A			A	C

Annex III (Cont.)

Description of series	Producers' and purchasers' values ^{b/}						Approximate basic values (only annually)
	Quantity indexes			Price indexes			
	Monthly	Quarterly	Annually	Monthly	Quarterly	Annually	
3. Other industries		B	A			A	C
B. Intermediate consumption of commodities by kind of activity			A	B		A	
C. Value added by kind of activity							
1. Goods producing industries							
Agricultural goods	C	B	A			A	C
Other goods	C	B	A			A	C
2. Distributive trade and transport		B	A			A	C
3. Other industries		B	A			A	C
D. Total and gross fixed capital formation and changes in stocks, by kind of activity		C	B		C	B	C
<u>Producers of government services and private non-profit services</u>							
E. Gross output of services by kind of activity		B ^{g/}	A		C ^{h/}	A ^{h/}	
E. bis. Intermediate consumption of commodities by kind of activity ^{i/}			A			A	
F. Value added by kind of activity		B ^{g/}	A			A ^{h/}	
G. Gross capital formation		C	B		C	B	

Annex III (Concl.)

Description of series	Producers' and purchasers' values ^{b/}						Approximate basic values (only annually)
	Quantity indexes			Price indexes			
	Monthly	Quarterly	Annually	Monthly	Quarterly	Annually	
III. Final consumption of goods and services by object or purpose of expenditure							
A. Household final consumption expenditure, by object	C	C	B	A	A	A	
B. Final consumption expenditure of private non-profit institutions, by purpose			B			B	
C. Government final consumption expenditure, by purpose.			B			B	

a/ Document E/CN.3/401, pp. 16 to 21.

b/ Purchasers' values equal producers' values in the case of service industries and retail trade. For a more precise description of the concept of each series, see table 2.

c/ The inclusion of this level of valuation is recommended.

d/ The preparation of indexes under this head is recommended.

e/ The preparation of indexes for total fixed capital formation and also for changes in stocks is recommended.

f/ It is recommended that annual indexes be calculated at cif prices of the importing countries, when required.

g/ It is recommended that these indexes be prepared quarterly.

h/ The preparation of these price indexes is recommended.

i/ The preparation of quantity and price indexes under this head is recommended.