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SCALE OF ASSESSMENTS FOR THE APPORTIONMENT OF THE EXPENSES OF THE UNITED NATIONS

Report of the Ad Hoc Intergovernmental Working Group on the Implementation of the Principle of Capacity to Pay

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I. INTRODUCTION

1. On 29 November 1994, the General Assembly adopted resolution 49/19 A, entitled "Scale of assessments for the apportionment of the expenses of the United Nations". In that resolution, the Assembly, recalling paragraph 2 of its resolution 48/223 C of 23 December 1993, in which it reaffirmed the principle of capacity to pay as the fundamental criterion for determining the scale of assessments, and taking note of the views expressed by Member States during its forty-eighth and forty-ninth sessions, decided to study and examine all aspects of the implementation of the principle of capacity to pay as the fundamental criterion in determining the scale of assessments for contributions to the regular budget.

2. The General Assembly also decided to establish an ad hoc intergovernmental working group of 25 experts in economics, finance, statistics and related fields, which was to study and examine all aspects of the implementation of the principle of capacity to pay as the fundamental criterion in determining the scale of assessments for contributions to the regular budget and to submit a report thereon to the General Assembly no later than 15 May 1995.

3. The General Assembly also invited the President of the General Assembly to appoint the experts in consultation with Member States with due regard for equitable geographical representation.

4. The Ad Hoc Intergovernmental Working Group of Experts held two sessions at Headquarters, the organizational and preparatory session from 21 to 24 March 1995 and the substantive session from 18 April to 5 May 1995. The list of experts is contained in annex I to the present report.

II. ORGANIZATIONAL MATTERS

A. Election of officers

5. At the first meeting of its organizational and preparatory session, on 21 March 1995, the Working Group elected by acclamation Mr. Toyoo Gyohten (Japan) as its Chairman.

6. At the same meeting, the Working Group also elected by acclamation three Vice-Chairmen, Ms. Olga Pavlova Derkova-Teneva (Bulgaria), Ms. Gylliane Gervais (Canada) and Mr. Hafedh Bejar (Tunisia), and a Rapporteur, Mr. David Silveira da Mota Jr. (Brazil).

7. Prior to the substantive session, the Chairman, Mr. Toyoo Gyohten, submitted his resignation from the Working Group to the President of the General Assembly. At the first meeting of the substantive session, on 18 April 1995, the Working Group elected by acclamation Mr. David Silveira da Mota Jr. as the new Chairman of the Working Group.

8. The Working Group also elected by acclamation Ms. Gylliane Gervais (Canada) as the new Rapporteur, and Mr. Ziyad F. Monayair (Kuwait) as one of the three Vice-Chairmen.

9. The Working Group expressed its sincere appreciation to the previous Chairman, Mr. Toyoo Gyohten, for presiding over the organizational and preparatory session of the Working Group and guiding its work successfully.

B. Adoption of the agenda

10. At the first meeting of its organizational and preparatory session, on 21 March 1995, the Working Group adopted the following agenda:

1. Election of the Chairman and Vice-Chairmen and Rapporteur.

2. Adoption of the agenda.

3. Organization of the session.

4. Presentation of documents.

5. Examination of all aspects of the implementation of the principle of capacity to pay as the fundamental criterion in determining the scale of assessments for contributions to the regular budget.

6. Discussion of arrangements for the substantive session.

C. Organization of work

11. At the organizational and preparatory session, the Working Group agreed in principle to organize its deliberations along the following lines: (a) income measures; (b) base period; (c) conversion to a common currency; (d) assessable income; and (e) data availability. At the first meeting of its substantive session, on 18 April 1995, the Working Group agreed to continue its discussions, organized under the same headings.

12. In accordance with paragraph 4 of General Assembly resolution 49/19 A, the Working Group extended an invitation to officials of the International Monetary Fund (IMF) and the World Bank to meet with the Group to discuss certain topics, but that could not be arranged at the time.

13. The Working Group noted that its task was different from that of the Committee on Contributions, whose work formed an invaluable source of information and inspiration for that of the Working Group. Unlike the Committee on Contributions, which often had to take into account precise instructions from the General Assembly as well as various political considerations, the Working Group had to concentrate on clarifying, from a technical viewpoint, what constituted capacity to pay and providing practical advice on how that principle could best be implemented in practice. The Working Group noted that its recommendations would be sent to the appropriate decision-making bodies.

14. The members of the Working Group, noting that they had been appointed as experts, stressed that the views they expressed in the discussion and in the report were their own and did not necessarily reflect the positions of their respective Governments.

D. Documentation

15. The Working Group was provided with a number of documents, the list of which is contained in annex II to the present report. Additional information was provided by representatives of the United Nations Secretariat.

16. The Working Group also received a note verbale from the Permanent Mission of Latvia to the United Nations, raising a number of questions. Those questions are addressed in the Working Group's report.

E. Adoption of the report

17. The Working Group considered its draft report from 1 to 5 May 1995. The text of the final report was adopted on 5 May.

F. Closure of the session

18. At the final meeting of the Working Group on 5 May 1995, the Chairman thanked the experts for the spirit of cooperation with which they had conducted their work. Despite the complexity of the issues, the Working Group had managed to make a valuable contribution to the consideration of the implementation of the principle of capacity to pay. He thanked the members of the Bureau for their assistance and cooperation. In particular, on behalf of all members of the Working Group, he expressed sincere appreciation to the Rapporteur, whose tireless efforts had enabled the Working Group to complete its task successfully. He also thanked all the staff of the Secretariat for their support.

III. SUBSTANTIVE MATTERS

A. Background

1. The numbers in perspective

19. The United Nations regular budget, which was at a level of some $1.2 billion in 1994, has to be financed by Member States, which together have a population of 5 billion and a combined income of about $20,000 billion. On average, therefore, the Organization has to obtain contributions of about 25 cents a head, or 0.006 per cent of world income. This compares with typical national taxation of between 20 per cent and 50 per cent, and international taxes (such as the European Union’s) of around 2 per cent of national income.

20. Most countries with a per capita income below the world average of $3,200 contribute between 0.001 per cent and 0.006 per cent of their income to the United Nations regular budget, while the richer countries contribute just over 0.007 per cent of theirs. Thus, the Member States with the highest per capita income contribute about $1.80, and the Member State with a median income per capita of $500 slightly less than 1 penny per capita. These wide disparities reflect the wide disparities in world income levels as revealed by the United Nations national income figures.

21. There are some cases of countries whose contributions fall outside these ranges. Some small states contribute as much as 0.05 per cent of their income, and as much as $5 per capita; some large industrialized ones contribute less than 0.006 per cent and $1 per capita to the regular budget. These figures also reflect the complex interaction of a number of factors built into the United Nations scale of assessments over the years, representing adjustments decided by the General Assembly from time to time.

22. In addition to the regular budget, the United Nations assessed another $3.5 billion for peace-keeping operations in 1994. Certain specialized agencies of the United Nations, whose scales of assessment are related directly or indirectly to the United Nations regular budget scale, assessed over $1.6 billion for their regular budgets in 1994.

2. Description of existing methodology

23. The Charter of the United Nations provides that the expenses of the Organization shall be borne by Member States as apportioned by the General Assembly. The Assembly has established that this apportionment shall be in accordance with the fundamental criterion of capacity to pay and has mandated the Committee on Contributions to devise, and to recommend changes to, a scale of assessments to be approved by the Assembly for the apportionment of the United Nations regular budget. The present methodology on which the scale of assessments is based has been the subject of continuing review and debate over the years in the Fifth Committee of the General Assembly and the Committee on Contributions. The basic elements of the methodology are as follows.

24. The scale of assessments is expressed in percentage terms with two decimal places. In other words, it has 10,000 points, one point representing one hundredth of 1 per cent (0.01 per cent) of the total. It is generally in effect for three years. Its starting point is the national income of Member States, converted into United States dollars and expressed as a share of world income. 1/ The present methodology includes the following features:

(a) A base period currently set at 7.5 years (average of the periods 1985-1992 and 1986-1992) for the calculation of national income;

(b) A reduction of national income for countries with a per capita income below $6,000 to reflect a theoretical repayment of external debt, known as the debt burden adjustment;

(c) An allowance for countries with low per capita income, consisting in a further reduction of national income equal to a given proportion of the gap between a country's per capita income and a cut-off point now set at the world average per capita income; the proportion of relief, known as the gradient, is now set at 85 per cent;

(d) A maximum assessment rate (the "ceiling"), now set at 25 per cent, i.e., 2,500 points, and a minimum one (the "floor"), now set at 0.01 per cent, or one point;

(e) An assessment rate not exceeding 0.01 per cent, i.e., equal to the floor rate, for Member States recognized as least developed countries;

(f) A scheme of limits establishing the maximum rate by which a Member State's assessment can vary between two successive scales;

(g) Lastly, an adjustment, known as mitigation, whereby the assessment of certain countries facing exceptionally difficult circumstances is further reduced on a discretionary basis by the Committee on Contributions.

25. The various steps of the methodology can be summarized as follows.

Step 1: National income is reported by Member States in local currency for the relevant statistical period in reply to the United Nations National Accounts Questionnaire (UNNAQ). Gaps in data sets are filled by the Statistical Division, using the most reliable information available from other sources and making estimates on the basis of past relationships and/or related indicators (see annex III, para. 4, for a detailed description).

Step 2: The national income figures supplied by Member States, or estimated by the Statistical Division, in local currency are then converted into United States dollars for each year of the base period, essentially on the basis of the market exchange rate (MER) (see annex III, para. 5 for a detailed description). The annual results expressed in United States dollars are then averaged to yield the base period national income. A country's share of world income is simply its base period national income divided by the base period world income obtained by summation.

Step 3: The debt-burden adjustment is then applied to all Member States with a per capita income below $6,000. It should be noted that the per capita income figures referred to here are not, and cannot be, the ones calculated in step 4 on the basis of United Nations official data supplied to the Committee on Contributions, but are rather figures established by the World Bank for its own purposes. The adjustment consists of a reduction of national income (from step 2) equal to 12.5 per cent of total outstanding public and private long-term external debt, on the assumption that this debt is repaid on average in approximately eight years. It is a theoretical adjustment, made whether or not the external debt is actually repaid. The amount of relief granted to eligible countries is absorbed implicitly by all countries on a pro rata basis.

Step 4: For each Member State, the base period national income from step 2 is divided by the population of the mid-point (and not the average) of the base

period to obtain the base period per capita income. 2/ The world average per capita income ($3,055 for the period 1985-1992 or $3,198 for the period 1986-1992) is calculated as world income divided by world population and is therefore a weighted average. The population figures are official data provided in response to a United Nations questionnaire, supplemented if necessary with estimates prepared by the United Nations Population Division.

Step 5: The low per capita income adjustment is then applied to Member States with a per capita income (determined in step 4) below the cut-off, set at the world average per capita income. The adjustment consists of a reduction of a Member State's national income (from step 3) equal to the percentage by which its per capita income falls below the world average, multiplied by the proportion of relief, i.e., the gradient, currently 85 per cent. Thus, on the assumption of a world average income of $4,000, a country with a per capita income of $2,000 gets an abatement of 42.5 per cent on its national income, i.e., 85 per cent of 50 per cent. The further a country is below the world average, the higher the relief it gets. And the higher the gradient, the higher the proportion of relief is. Since the scale of assessments adopted for 1980-1982, the amount of relief granted to countries eligible for the low per capita income adjustment is absorbed on a pro rata basis only by non-eligible countries, i.e., those with a per capita income above the world average, rather than by all countries as in step 3.

Step 6: Country shares below 0.01 per cent (one point) are raised to the floor rate and the assessment rate of least developed countries is reviewed to ensure that it stays at the floor. The points corresponding to the difference between the sum of assessment rates thus adjusted and 100 per cent are distributed on a pro rata basis among countries above the floor. The ceiling rate is then applied to the highest contributor and the ensuing point reduction is absorbed on a pro rata basis among countries with shares below the ceiling and above the floor and that are not least developed countries.

Step 7: The scheme of limits is then applied. "It consists of eight rate brackets and two sets of constraints, i.e., percentage and index point limits, which delimit the maximum possible individual rate increases or decreases between two scales. The level of the maximum increase or decrease is defined by the limit with the lesser value ... The points that cannot be absorbed by countries whose rates of assessment have reached the level permissible ... are distributed, on a pro rata basis, among those countries whose assessment rate increases or decreases are within the constraints established by the scheme of limits." 3/ 4/ The scale of assessments after steps 1 to 7 have been carried out is known as the machine scale.

Step 8: Finally, from time to time, some Member States voluntarily accept a higher assessment, enabling the Committee on Contributions to make ad hoc adjustments to the machine scale on a discretionary basis. This process is known as mitigation.

B. Capacity to pay

26. The Working Group was guided in its deliberations by the following general principle expressed and reaffirmed by the General Assembly on numerous occasions over the years, namely that the principle of capacity to pay is, and should remain, the fundamental criterion to be used in preparing the scale of assessments. What the Working Group set out to do, under the mandate it received from the General Assembly, was to study and examine all aspects of the implementation of that principle.

27. In discussing the fundamental question of what is capacity to pay, the Working Group noted that the General Assembly realized from the start that it was not a concept that could be defined with precision. Taking into account the work accomplished by the Committee on Contributions over the years to overcome those difficulties, the Working Group felt that it was possible to identify an objective and generally acceptable measure of capacity to pay.

28. The Working Group was of the view that the starting point of the determination of capacity to pay was the share of each Member State's national income in world income and that other factors such as the special circumstances of Member States with low per capita income should also be taken into consideration.

29. From a technical standpoint, there was wide agreement among members of the Working Group that any measure of capacity to pay had to be the best possible approximation. The degree of refinement attempted should take account of the availability and quality of comparable data, and also of the extent to which it makes a difference to the result. The measure should be as simple, transparent and objective as was consistent with reasonable equity.

30. The Group also considered whether any other general principles could be formulated to help to determine whether any scale of assessments was consistent with capacity to pay. One general principle that was suggested by some members of the group was that Member States should contribute the same proportion of their income if they had the same per capita income. Other members of the Group felt unable to support the proposal, since the implications of the application of such a principle were far from clear.

31. As in national taxation systems, capacity to pay can be defined in terms of income and/or wealth or expenditure. It is generally recognized, however, that estimates of wealth, individual or collective, are less reliable than those of income or expenditure flows. The Committee on Contributions explored the possibility of combining some measure of national wealth with that of national income as a measure of capacity to pay at its thirty-sixth session in 1976, and again at its fortieth session in 1980, and noted that statistics on national wealth were available for only a few countries and that their use for international comparisons was highly controversial.

32. In theory, if wealth was to be included in the ideal measure of capacity to pay, in a given period it should probably be based not on the level, but on the change in wealth during that period, which is equal to income plus capital gains or losses and other changes in the volume of assets. Admittedly, income is

normally large in relation to the change in wealth in any given period, and some of the capital gains accruing to, or capital losses incurred by, Member States are automatically captured in the national income figures when they are converted to United States dollars on the basis of MERs. The appreciation or depreciation of a currency vis-à-vis the United States dollar represents precisely a capital gain or loss. But there remains the difficulty of adequately reflecting, as a measure of capacity to pay, capital gains or losses not resulting from exchange rate variations.

33. The Working Group considered in that connection the situation of the oil-producing countries, whose national wealth was considerably reduced by the drop in world oil prices in 1986. Prima facie, it would appear that this event adversely affected their capacity to pay more than that which is reflected by the drop in their national income.

34. Similarly, the Working Group noted the concern repeatedly expressed by countries whose national income depends heavily on the export of non-renewable resources, to the effect that the depletion of these resources is nowhere reflected in national income or GNP. This contrasts with the depreciation of fixed assets which is deducted from Gross National Product (GNP) to arrive at national income. The new 1993 System of National Accounts (SNA) departs from the present SNA conventions in recommending that non-renewable resources be treated as assets on the national balance sheet, which implies that their depletion would appear as a negative change on that balance sheet. The practice in this area, however, is far behind the theory: estimation of the stock of resources in terms of physical quantities remains extremely difficult, its valuation even more so, and only a few national statistical agencies are pursuing it. To all intents and purposes, therefore, internationally comparable statistics on the depletion of non-renewable resources will not be available in the foreseeable future. It was suggested that one way to eliminate the inconsistency in the treatment of fixed assets and non-renewable resources in the measurement of capacity to pay would be to disregard depreciation (i.e., to use GNP instead of Net National Product, commonly referred to as National Income).

35. An alternative approach to the use of income or wealth figures would be to base capacity to pay on Final Domestic Demand, on the grounds that it avoids the problem of capital adjustments such as those faced by oil-producing countries; to the extent that countries spend above (or below) their current income by borrowing (or saving), their current capacity is increased (or reduced), while their future capacity is correspondingly decreased (or enhanced). This will, in due course, be reflected in the expenditure measures in future years.

36. There was general agreement that capacity to pay should be based on widely applicable measures. Several members concluded that that factor alone pointed to the use of flow measures (i.e. income) rather than stock measures (i.e. wealth) as the best approximation, especially in the absence of reliable estimates on national wealth.

37. While all members therefore accepted that national income figures, either gross or net, should be employed in step 1 of the calculation of the scale of assessments, as described in paragraph 25 above, some felt that capacity to pay

was best derived only from national income and others considered that it should also reflect the general level of development as measured through socio-economic indicators or through concepts such as sustainable development. Some members also attached importance to continuing to take into account in the income estimates the debt burden faced by a number of countries. Other members did not favour the practice of granting ad hoc adjustments in taking account of the debt burden.

38. The Working Group pointed out that the low level of development of developing countries affected their capacity to pay, as was manifested in the generally low level of socio-economic indicators. Some members pointed out that in practice it was difficult to make a precise and satisfactory set of adjustments to embody those factors in the assessment formula. Moreover, not only were there serious data problems, there was also the risk of double-counting, since such socio-economic indicators were usually highly correlated with one another and with national per capita income. Other members expressed the view that the low per capita adjustment was not enough to measure the special economic and financial circumstances of developing countries as they affected capacity to pay. A number of experts expressed their conviction that socio-economic indicators constituted an important factor in determining the capacity to pay, particularly of the developing countries that faced development responsibilities and whose economies had specific characteristics.

C. Income measures and data availability

1. Main economic aggregates

39. The principal income concepts defined in the SNA (using the presently accepted terminology) that could serve as a basis for determining capacity to pay are:

(a) Domestic Product, which measures the unduplicated value of production of goods and services originating within the boundaries of a country, whether the factors of production are owned by residents or non-residents; 5/

(b) National Product, which measures the income accruing to factors of production (labour income, investment income) whose owners normally reside in a country, regardless of where the production takes place;

(c) National Disposable Income, which combines factor incomes measured in National Product with net income from transfers (i.e., remittances by households and Governments) and thus represents the total income actually received by residents of a country.

These aggregates can be expressed on a gross basis (Gross Domestic Product (GDP), GNP and Gross National Disposable Income (GNDI)) or on a net basis (Net Domestic Product (NDP), Net National Product (NNP) and Net National Disposable Income (NNDI)) when a deduction is made for depreciation of fixed assets. NNP is commonly known as National Income. It is this measure that has always served as the starting point in the calculation of the scale of assessments.

40. The relationship between the various measures discussed is as follows:

Gross Domestic Product
plus
Labour income and investment income received from abroad
less
Labour income and investment income paid to abroad
=
Gross National Product or Gross National Income
less
Allowances for depreciation of fixed assets
=
Net National Product or National Income
plus
Current transfers received from abroad
less
Current transfers paid to abroad
=
Net National Disposable Income

41. An alternative measure, GNDI, can be obtained by omitting the deduction of allowances for the depreciation of fixed assets above. The expenditure measure mentioned in paragraph 35 above, Final Domestic Demand, is equal to GDP less inventory change and exports, plus imports.

42. In terms of relative magnitude, all these fundamental aggregates are very close to one another for most countries and their trend is highly correlated. In the great majority of countries, GNP is lower than GDP, typically by 1 or 2 per cent. It goes without saying that world GNP is equal to world GDP. National Income, or NNP, represents usually between 88 per cent and 95 per cent of GNP. In the case of National Disposable Income (NDI), either gross (GNDI) or net (NNDI), estimates are lacking for a large number of countries (over 100), accounting together for about 15 per cent of the 1997 scale of assessments; available estimates for NDI are not as reliable as for GDP or National Income but here, again, the difference between National Income and NNDI is minimal, no more than 2 to 3 per cent at most and usually much less. Coverage of the expenditure measure, Final Domestic Demand, is more limited; it can be approximated by subtracting the surplus or deficit on trade in goods and services from GDP.

43. Conceptually, of the three fundamental aggregates, Domestic Product is clearly unsatisfactory as an approximation of capacity to pay for two reasons: first, it is a measure of factor income rather than total income (i.e., factor income plus income in the form of transfers); second, it reflects income generated within the boundaries of a country, ignoring the fact that a significant portion of that income may leave the country in the form of service payments on the external debt and dividends remitted abroad by foreign-owned companies.

44. National Product is superior to Domestic Product as a measure of a country's capacity to pay. It still measures only factor income, but it reflects income actually accruing to its citizens in that it includes the investment income received from abroad and excludes that which has left the country (i.e. service payments on the external debt and remittances of dividends).

45. NDI is the most appropriate measure of capacity to pay because it represents the total income actually available to residents of a country, namely National Product (or National Income), plus net transfer income.

46. Aggregates measured on a gross basis, i.e. GDP, GNP and GNDI, are more readily available because depreciation cannot be measured directly. Even when recorded in business books, depreciation does not correspond to any actual transaction. It is thus a notional or theoretical adjustment. Aggregates requiring less estimation to fill in data gaps (in terms of countries and/or years) are more reliable. Therefore, in terms of reliability and availability, GDP is a superior aggregate to GNP and National Income which, in turn, are superior to GNDI and NNDI.

47. The preceding analysis is clearly supported in the table below. 6/ First, accuracy appears marginally lower for the most recent year available. Second, the most theoretically appropriate measure, National Disposable Income, is the least available, and Gross Domestic Product, while theoretically less appropriate, is the most readily available and most reliable, with National Income (or Net National Product) somewhere in between. Had the table been prepared for Gross National Product, it would have ranked lower than GDP but higher than National Income in terms of reliability and availability, because only one aggregate must be deducted from GDP (factor incomes received from or paid to abroad) to arrive at GNP, while two aggregates (factor incomes from or to abroad and depreciation) must be deducted from GDP to arrive at National Income.

48. The findings in table 1 can be summarized in terms of trade-offs. First, there is a trade-off between timeliness, on the one hand, and availability and reliability, on the other. The difference in the results between 1990, 1991 and 1992 is marginal for GDP, but more significant for National Income. This type of consideration should have a bearing on the adoption of the appropriate base period for the scale of assessments, discussed below. Second, there is another trade-off between "appropriateness" (i.e., what is theoretically appropriate) and availability. GDP is more widely available and more reliable than the other two measures, but it is conceptually less satisfactory. This type of consideration should have a bearing on the adoption of the appropriate income measure for the scale of assessments.

Table 1. Reliability and availability of national accounts, according to income measure a/

	No. of countries	1997 assessment rate
1. Gross domestic product		
1990		
Good	170	99.78
Medium	2	0.06
Weak	12	0.16
1991		
Good	169	99.76
Medium	3	0.08
Weak	12	0.16
1992		
Good	166	99.56
Medium	3	0.08
Weak	15	0.36
2. National income		
1990		
Good	98	95.20
Medium	33	3.27
Weak	53	1.53
1991		
Good	81	93.76
Medium	49	4.70
Weak	54	1.54

	No. of countries	1997 assessment rate
1992		
Good	66	93.01
Medium	58	5.22
Weak	60	1.77
3. National disposable income		
1990		
Available	74	87.52
Not available	110	12.48
1991		
Available	68	87.91
Not available	116	12.09
1992		
Available	53	85.95
Not available	131	14.05

a/ The following criteria were used to assess the reliability of income measures:

Good: Source is reply to United Nations National Accounts Questionnaires or data provided by United Nations regional commissions or international organizations such as IMF or the World Bank, GDP, GNP and National Income have been supplied by Member States or else only National Income has not been supplied and has been derived on the basis of reliable data reflecting the relationship of National Income to GDP or GNP at most with a one- or two-year lag.

Medium: GDP and GNP have been estimated from sources other than reply to United Nations National Accounts Questionnaires, regional commissions or international organizations, and National Income has been derived on the basis of reliable data reflecting the relationship of National Income to GDP at most with a three-to-five-year lag.

Weak: Estimates for the country have been derived solely from data pertaining to a neighbouring country, or else have been derived from data reflecting the relationship of National Income to GDP with a lag of five years or more.

49. Having taken into consideration all of the above, the Working Group agreed that NDI was theoretically the most appropriate measure of capacity to pay. However, given the lower reliability and availability of that income measure, the Group considered that its use in the scale of assessments would be impractical for the time being. It noted that hitherto National Income (equal to NNP) had been the basis of calculation. The Working Group recommends that, for reasons of data availability, comparability and simplicity, the basis of calculation should be Gross National Product.

50. The Working Group noted that, in the recent past, availability of reliable and internationally comparable national accounts has been a matter of concern with respect to many centrally planned economies that relied on the Material Product System (MPS) instead of the SNA, and thus had to derive estimates of national income with the help of conversion keys. The Working Group was informed that, in most former centrally planned economies, programmes of transformation of the official statistics in accordance with the international standards were being implemented and that national accounts were now compiled on the basis of the concepts and definitions of the 1993 SNA on a regular and systematic basis. International organizations and, above all, the United Nations Statistical Division and the Organization for Economic Cooperation and Development (OECD), provide assistance to the former centrally planned economies in solving technical problems, such as those pertaining to the introduction of the 1993 SNA and the treatment of the informal sector and the underground economy.

51. Two additional problems, both of which would tend to inflate the former centrally planned economies' figures in relation to other countries, were noted: (a) estimates for the earlier years of the 7.5 year base period were unsatisfactory and (b) the adoption by these countries of the new SNA in advance of other countries would result in a broader definition and thus a higher measure of income for them. The Working Group therefore recommends that the Committee on Contributions address this issue before the next scale of assessments is developed.

2. Alternate income measures

52. The Group took note of the special problems and development needs faced by developing countries and considered how the basic income measures might be combined with, or supplemented by, alternative income measures and, if so, to what extent.

53. There are two fundamentally different approaches that have been attempted in this regard, that of socio-economic indicators and that of adjustments to national income. The first approach consists of theoretical measures combining national income with social and economic indicators (level of education, health quality, available infrastructure, poverty, etc.), both in the form of indices. At present, no socio-economic indicators are embodied in the scale methodology. The Committee on Contributions pointed out in its report to the General Assembly at its forty-eighth session 7/ that the efforts undertaken to incorporate

socio-economic indicators in the methodology "were abandoned after several years, owing to the insurmountable technical and other problems encountered in the process ...".

54. In the other approach, the national income figures are adjusted through additions or deductions that are deemed necessary to arrive at an appropriate measure of income. Among such adjusted income measures that have been envisaged by the Committee on Contributions over the years are (a) income adjusted for changes in national wealth; (b) sustainable income, defined as national income minus expenditures required to sustain such income into the future; and (c) debt-adjusted income. In this context, the Working Group focused its discussion on the last-mentioned measure, the only one incorporated in the present scale methodology, and on the adjustment to which it gives rise, namely, the debt-burden adjustment.

(a) Socio-economic indicators

55. In the view of some members, the rationale behind socio-economic indicators (which also applied to adjusted income measures) was that it was more relevant to determine the real, rather than the absolute, capacity to pay and that that real capacity to pay was not adequately reflected in the basic income measures. National income, for instance, does not take account of the depletion of natural resources (see paras. 32-34 above), putting countries that rely on one major source of exports at a disadvantage. Similarly, countries without a developed infrastructure require the allocation of some of their income to that need and thus cannot be compared equitably to other countries with the same per capita income but which already are at a more advanced stage of development. Alternate income measures, in combination or in addition to national income, according to those members, would result in a more appropriate measure of capacity to pay.

56. Proponents of the use of the basic national income measures (as in steps 1 and 5 of the present methodology described in paragraph 25 above), on the other hand, pointed to the comprehensiveness and standardization of the national accounts and their wide acceptance and application as the essential reasons for their preference. Moreover, many of the socio-economic indicators were already reflected in the standard macroeconomic aggregates, for example, debt-servicing, government expenditure on social services such as education, health, etc., and their inclusion might lead to double-counting. Past studies undertaken by the Committee on Contributions revealed a high correlation between income and socio-economic development indicators.

57. They also mentioned some shortcomings in the use of socio-economic indicators, such as (a) less standardization in concepts; (b) less sensitivity to changes and thus slower to react to recent developments; (c) data available for fewer countries and less timely than national accounts; (d) estimates difficult, if at all possible, to make; (e) more subjectivity since their use as relative measures entailed setting weights and norms that, in the absence of acceptable standards, were often made arbitrarily; and (f) the fact that they led to higher, rather than lower, assessments for developing countries.

58. Some members drew the attention of the Working Group to the Human Development Report 1994, published by the United Nations Development Programme (UNDP). The report contains the human development index, available for 173 countries, which, they felt, was an example of a socio-economic indicator that could perhaps be incorporated in the scale methodology in combination with the basic national income figures. There have been several versions of the Human Development Index, and the current one is a combination of three indices, each with a weighting of one third, as follows: 8/

(a) The first index is life expectancy at birth expressed in years, and pertaining to 1992;

(b) The second index is itself a synthetic one on educational attainment, combining the adult literacy rate expressed in percentage and the mean years of schooling, both for 1992;

(c) The third index is real GDP per capita for the year 1991, converted into United States dollars on the basis of purchasing power parities and further adjusted by reducing the per capita income of countries above a threshold of US$ 5,120 (i.e. the mechanism of the low per capita income adjustment, but in reverse and with different parameters).

59. The Working Group recognized that, while such a synthetic index was analytically useful, it was unsuitable for the purpose of measuring capacity to pay in that it negated the effect of the low per capita income adjustment and therefore went against the wish of the General Assembly that the special situation of developing countries be taken into consideration in the scale of assessments.

60. For the time being, there were no concrete proposals on how to combine socio-economic indicators with the basic income measures in the assessment formula. Despite the difficulties, some members wished the efforts in that direction to be pursued. Given the theoretical and practical difficulties in the use of socio-economic indicators, other members considered that any adjustments to basic income figures were best subsumed, in whole or in part, under the low per capita income adjustment, which was based on reliable and comparable national income measures.

(b) Debt-burden adjustment

61. The Working Group acknowledged the seriousness of the debt problem of developing countries and the desire of the international community to provide appropriate support and relief. It noted that, since 1969, various ad hoc adjustments had been made in the scale of assessments in recognition of that situation, so that, in the 1995-1997 scale, 47 countries benefited in varying degrees from the debt-burden adjustment described in paragraph 25 (step 3 of the existing methodology). In the 1995-1997 scale, the cash relief of the debt-burden adjustment amounted to 83.5 points (out of 10,000), or about US$ 10 million.

62. The Working Group noted that the national income figures that were the starting-point for the scale of assessments accounted fully for interest payments on external debt on an accrual basis, i.e. whether or not those payments were actually made on time. The debt-burden adjustment was intended to take account of amortization payments.

63. Several members stressed that the debt burden was the most important financial and budgetary constraint many Governments had to face and that the debt problem was now as difficult as before. Those members pointed to the recent financial and economic deterioration in Mexico and, in general, in the entire Latin American region, where major crises directly linked to the outstanding debt arose every so often. They considered that the present adjustment, which was the product of successive decisions of the General Assembly, should be maintained because the debt affected the capacity to pay of the countries concerned.

64. Several members drew attention to a number of features of the adjustment:

(a) It was based on a theoretical presumption that principal repayments on public and long-term private debt were made at a rate of 12.5 per cent a year; it was not, however, linked to actual payments made nor did it take account of the extent to which debt was refinanced;

(b) The Committee on Contributions had explicitly acknowledged in its report to the General Assembly at its forty-eighth session 9/ that "the conceptual problem inherent in this adjustment is that the deduction of debt from national income does not result in an income concept defined in international standards";

(c) The qualifying limit for the debt adjustment, a per capita income of $6,000, was about double the cut-off used in the low per capita income adjustment. The per capita income figures utilized for that purpose were, moreover, not consistent with the official United Nations data employed by the Committee on Contributions for the purpose of calculating per capita income; rather, they were based on data prepared by the World Bank for its own purposes;

(d) The amount of relief so granted was insignificant in relation to the magnitude of the problem those countries faced and to the relief provided through other mechanisms such as the Paris and London Clubs.

They concluded that the adjustment was not sufficiently soundly based nor substantial enough to justify modifying the basic income measure and it would best be subsumed under the low per capita income adjustment.

65. The same members also suggested that, if particular countries could demonstrate that they had actually made substantial net repayments (i.e., without refinancing), that could, prima facie, constitute a justification for a special adjustment by the General Assembly on the basis of a recommendation by the Committee on Contributions. With that proviso, they considered that the debt-burden adjustment should be eliminated.

D. Base period and frequency of scale calculation

66. In principle, the base period that best reflects capacity to pay is the same as the relevant assessment period: 1995 for payments in 1995, 1994-1996 for the period 1994-1996 and so on. This is, of course, not practical. Although MERs are available continuously, the most up-to-date national accounts estimates are produced, at best, only six months or so after the year to which they refer, are supplied to the United Nations with another three- to six-month lag and can be taken into account in the scale of assessments only two years behind the reference period (see para. 53 above). In addition, national accounts estimates are lagging by one or two years (in relation to the most up-to-date ones) (see table 1). They are also subject, on average, to two or three annual revisions thereafter.

67. Moreover, fully contemporaneous figures would not necessarily be helpful in management terms. Both the United Nations and Governments need notice of changes and usually prefer a degree of stability, since it is often difficult to secure funds for contribution increases at short notice. It should be noted, though, that it might be possible to apply a current assessment by making a provisional assessment on the basis of the most recent data and then applying an adjustment when the relevant figures become available.

68. Using only provisional figures and adjusting them when newer statistics become available might also cause difficulties for those Member States with incomes growing faster than the world average. But, by the same token, failure to adjust contributions promptly in response to changing circumstances does not properly reflect the position of countries whose relative incomes are declining. The effect of a long base period is to redistribute points in the assessment scale from countries with faster-growing economies to those that are growing slowly or declining.

69. The Working Group noted that, in determining the base period, accuracy and timeliness may be conflicting considerations. Using data for previous years may be more accurate and might be preferred if timeliness was not a consideration. The Working Group did not have access to data on the extent of revisions or whether they are systematically upward or downward, and recommends that such data should be collected and analysed. However, for most countries, revisions are usually small, even in relation to first estimates, and rarely more than 1 to 2 per cent. On the other hand, data for earlier years may actually be less appropriate, as in the case of the former centrally planned economies (see para. 51 above). Taken together, these factors point, in principle, to the most recent single year for which data are available as the appropriate base period for the GDP estimates.

70. Slightly different considerations apply to the selection of the base period for the exchange rate calculation. MERs fluctuate considerably from year to year and indeed from day to day. It is hard to dispute that in any given year the MER may have departed from some "underlying" value, which may represent the appropriate conversion rate for calculating capacity to pay. But it is even harder to determine what that "underlying" value might be - in other words, whether this year’s or last year’s MER is the "underlying" one and the other an aberration. Conventionally, many finance ministries assume, in making financial

provisions, for lack of any alternative, that the current rate is the correct one, a view for which there is some academic and market support. Equally, in the short term, sharp shifts in a country's MER clearly definitely result in a shift in its capacity to pay in foreign currency. One expert considered that it was important to modify the impact of excessive fluctuations in MERs and that, in theory, applying a relatively long base period for MER is one way of achieving such a purpose.

71. If instability in assessments were not a consideration, the appropriate base period for the exchange rates might, like that for GNP or national income figures, be the single year corresponding to them. The scale would fluctuate somewhat as a result, but over a run of years, distortions resulting from temporary misalignments would be offset. Indeed, if the measurement period were the same as the payment period, currency fluctuations vis-à-vis the United States dollar would tend to offset assessment share changes in United States dollars, yielding greater stability in the real value of domestic currency required to meet United Nations assessments.

72. In practice, some averaging of exchange rates (beyond that already embodied in annual figures, which are themselves averages of daily data) may be justified as a way of avoiding the problem that a particular year's exchange rate is unusually unrepresentative. MER data have the advantage that they are available right up to date, so even the most recent GNP or national income figures can be converted using figures for the year immediately after and the year before the one in question. Thus figures for year t would use the mean of the following rates:

$$MER_{t-1}\ MER_{t}\ MER_{t+1}$$

A further refinement would be to adjust these rates for price changes.

$$PARE_{t-1}\ MER_{t}\ PARE_{t+1}$$

If the base period for the GNP or national income data is three years, the appropriate conversion rate would be the MER for each year, without the adjustment for the prior year and the succeeding one, since the averaging would already be included.

73. The effect of shifting the base period from the present 7.5 years to 3 years or 1 year would be to require a one-time change in assessments amounting to some 1.5 to 2 percentage points in all, after eliminating the effects of phasing out the scheme of limits as already agreed by the General Assembly. Thereafter, assessments may change somewhat more rapidly than in the past, when there was a base period of up to 10 years, because the shorter base period would reflect capacity to pay more accurately and quickly, but the amounts involved would be only a fraction of the one-time effect resulting from the change in the base period and the elimination of the scheme of limits. This one-time change represents the accumulated effects of postponing changes in the past, and suggests that in future it would be desirable to adopt a short base period and then maintain it, whatever the short-term attractions of adjustments. Shifting the base period from 3 years, to 7, to 10, and finally to 7.5 years has in itself led to some anomalies in the scale of assessments.

74. While the assessment period remains three years, it would seem attractive to use a base period of three years also. The Committee on Contributions would then be able to examine a new data set every three years, reflecting shifts in capacity to pay.

75. The Working Group further considered that the Committee on Contributions, for information only, might wish to keep under review the evolution of national economies in successive years.

76. The Working Group accordingly recommends:

(a) A three-year base period for assessments, using GNP and MER;

(b) Avoiding any further change in the base period;

(c) Maintaining a database suitable for evaluation and simulation of the system.

77. Some members believed that, although the changes that could be expected to result might not be large, there should be annual recalculation of the scale for information. Later on, the possibility of automatic annual adjustment of assessments, with reviews at three- or five-yearly intervals, could be evaluated in the light of experience.

E. Conversion to a common currency

78. The choice of exchange rate for converting national income figures to a common currency is a crucial element in the calculation of the scale of assessments. Fluctuations and distortions in exchange rates can be a much greater source of variation and of error than income data.

79. The Working Group considered that the present practice of using MERs was in principle, and for most practical purposes, the appropriate one. United Nations contributions are paid in foreign currency (United States dollars) and it follows that the assessment scale should be based on exchange rates that reflect the costs of securing that foreign currency. The Group therefore considered the problems of applying that general rule and the circumstances in which departures from it might be needed. It examined, in particular, the usefulness of purchasing power parity (PPP)-based exchange rates. It also considered the proposition that the scale should be derived in terms of Special Drawing Rights (SDRs) rather than United States dollars.

1. Data availability

80. MERs are published in IMF International Financial Statistics for the 179 countries that are also members of the Fund. These rates are of three types:

(a) Determined in a market, for fully convertible currencies;

(b) Pegged or fixed to another currency; or

(c) Fixed by decree, usually on the basis of market forces in parallel markets.

81. The rates used for constructing the scale are annual averages of the principal rates used for most current transactions.

82. Other rates currently available for constructing the scale are:

(a) United Nations operational rates, used for accounting purposes in United Nations transactions with certain countries, and based on official, commercial and/or tourist rates;

(b) IMF blended rates (constructed for Commonwealth of Independent States (CIS) countries before independence, when no separate rates were available);

(c) Price-adjusted rates of exchange (PAREs), obtained by extrapolating from a reference year or period using the implicit price deflator of GDP;

(d) World Bank Atlas rates, a simple average of a current market rate and PARE rates based on the two previous years.

2. Application

83. There were four main arguments for departing from the use of MERs in the calculation of the scale of assessment. First, in countries with non-convertible currencies and, usually, multiple exchange rates, the official rates are particularly likely to be distorted and unrepresentative of both underlying economic performance and the cost, in domestic resources, of obtaining foreign exchange. In such cases, the Committee on Contributions employs either the principal rate agreed between the country and IMF, or the IMF blended rate. The Working Group noted that the number of such cases was tending to diminish and that the process of devising suitable rates was sometimes highly judgemental. It was suggested that the criteria used should be more clearly spelled out and that efforts should be made to devise more systematic tests of whether the rates selected were credible. Comparisons in terms of PPPs might eventually have a role in that regard (see para. 97 below).

84. Second, in countries with high inflation, changes in MER may not be synchronized with the inflation rate, resulting in a real exchange rate that may not correctly reflect the underlying capacity of the economy and may also fluctuate sharply. The same considerations apply as in the previous paragraph.

85. Third, where countries with moderate to high inflation rates peg their exchange rates, the real rate rises over time, possibly to a level that is unsustainable. PAREs are currently applied in such cases 10/ on an ad hoc basis by the Committee on Contributions. Members of the Group were uneasy with that adjustment, since it usually removed the possibility of reverting to MER when that would be warranted by changing economic circumstances. Moreover, the choice of base period for PARE seemed to be somewhat arbitrary, too long and too distant.

86. Fourth, the Group observed that there had been sharp fluctuations in MERs, in both the short and the medium terms, of the market economies. In the view of some members, that was evidence of misalignment and resulted, for some countries, in an income share in United States dollars that did not reflect underlying economic potential or capacity to pay. That suggested the need to develop indicators of the extent of misalignment, as well as ways of correcting for it. However, no specific measures were discussed, with the exception of PPP (see below).

87. The Group felt that those conversion rate issues needed to be reviewed in greater depth than it had time for, but that, meanwhile, the presumption should be that MERs remained the least unsatisfactory approach. Members also noted that, over time, exchange rate fluctuations around a trend would be mutually offsetting. Some aspects of the discussion are also to be found in section D above, on the base period and the frequency of the scale calculation.

3. Special Drawing Rights

88. The Working Group discussed the suggestion that the common currency employed in the scale calculation should be the SDR (the weighted average of five major currencies calculated and used by IMF) rather than the United States dollar. It was argued that that would be a more neutral and appropriate measure than a single currency, and would help to iron out some of the fluctuations about which there was concern. A clear distinction had to be made between accurate measurement of capacity to pay and the actual currency of payment.

89. In the discussion, it was pointed out that, for a single year, the numeraire used for the calculations made little difference to the result, since the cross rates between different currencies and SDRs had to be mutually consistent. In practice, there were slight inconsistencies among those rates because annual rates were the average of daily rates. That was demonstrated by calculations in a conference room paper showing very small differences in shares derived using dollars and SDRs. For a similar reason, calculating the scale with a base period of more than one year would result in relatively greater weight being given to national income in the later years of the base period than in a calculation using a stronger currency. Since the dollar had been weakening for some time vis-à-vis the SDR, an SDR-based calculation over three years would therefore put relatively less weight on the last year. In the event of a three-year base period, the effect of the change would be slight. Nevertheless, members of the Group felt that the idea should be studied further.

4. Purchasing Power Parity (PPP)

90. The most recent version of the SNA, that of 1993, recommends that comparisons of GDP, or GDP per capita, between countries be based on a methodology in which estimates expressed in national currencies are converted into a common currency at their purchasing power parities. The question thus arose of using PPP-based figures for the purpose of the scale of assessments.

91. The justification for the concept of PPP lies in the fact that the United States dollar price of a given good or service, when calculated by applying prevailing MERs to its actual price in local currency, often differs widely from country to country. PPPs align comparisons of sets of goods and services that make up the GDPs of different countries in real, rather than in nominal, terms. 11/ The current approach to this difficult problem consists in determining for each country the price in local currency of a suitably defined basket of goods and services. It is then possible to find out how many units of one currency are needed to purchase the equivalent in goods and services of one unit of the currency of another country, for example, the United States dollar. The PPP thus obtained is then used to convert into United States dollars all components of GDP. The result represents an approximation of what would result if every component of GDP was valued in United States dollar prices.

92. There are many technical difficulties in this procedure. They are being addressed in the framework of the International Comparison Programme (ICP), in which the United Nations Statistical Division is a major participant, along with IMF, the World Bank, the European Union, OECD and others. The progress already achieved has been considered sufficient for decisions to be taken at IMF and elsewhere henceforth to present international comparisons of GDP in terms of PPP-based figures.

93. In a staff study made available to the Working Group, the Research Department of IMF nevertheless recognizes that "PPPs are not necessarily the right conversion factors for all purposes". 12/ The United Nations Statistical Commission, 13/ while considering that "ICP generated a new type of information which could serve many important policy and research purposes both at the national and international levels", also stated that "ICP results were not currently suitable for assessing contributions to the United Nations", a position which it reaffirmed on several occasions. The Working Group wishes to associate itself with this position of the Statistical Commission.

94. One reason for the unsuitability of PPP-based GDP estimates in determining the scale of assessments is that, as yet, they are available only for a limited number of countries and a limited number of years. International price comparisons have been applied to detailed data from 16 countries for 1970, 34 countries for 1975, 60 countries for 1980, 64 countries for 1985 and 30 countries for 1990. Projections for other countries and other years have a considerable margin of error and imply that the scale of assessments would need to be reopened for the back years whenever new benchmark information became available. Member States could legitimately claim, on the basis of that new benchmark information, that they had been overassessed.

95. Other reasons relate to the concept of PPP itself. If PPPs were merely an approximation of what MER should be if there were no market imperfections, using PPP-based instead of MER-based figures would undoubtedly be advisable as soon as availability problems were resolved. However, United States dollar price disparities between countries, especially between developed and developing countries, are not only due to possible exchange rate misalignment but, much more importantly, to differences in real prices and price structures, which cannot be ignored when considering resource availability.

96. Another way to reach the same conclusion is simply to note that transactions between economic agents or with the outside world, when described in terms of money flows, cannot but be expressed by using actual prices and MERs. This is the reason why IMF, while adopting the PPP methodology for analysing macroeconomic aggregates, still uses MERs as the basis of financial dealings with its members. In line with the recommendation of the Statistical Commission, the World Bank does the same when considering credit eligibility of member countries.

97. The Group discussed the extent to which PPP-based GDP estimates might become a practical analytical tool if the rather limited data available were improved. It was suggested that it was unlikely that they would be suitable for direct use in the actual scale calculation, but that they had some potential as a useful way of identifying anomalous and non-credible exchange rates. There appeared to be a strong correlation (and a strong rank correlation) between per capita income figures estimated on the basis of PPP and on the basis of MER. The Working Group thought there would be value in making efforts to improve PPP data collection and methodology and that further consideration of the theory should also be encouraged.

F. The low per capita income adjustment

98. The Working Group affirmed the continuing relevance and importance of the principle of the low per capita income allowance and endorsed its continued application as a component of the measurement of capacity to pay. The allowance, which is deducted from a Member State’s national income to arrive at its assessable income, has been a feature of the United Nations scale from the beginning.

99. The structure of the formula used to calculate the allowance has remained largely unchanged. The key parameters are the per capita income limit (the limit or threshold) and the gradient (proportion of relief). Countries with per capita income below the limit are given a reduction equal to the proportion by which their per capita income falls below the threshold, multiplied by the gradient. Currently, the limit is $3,200 and the gradient 85 per cent, so that, for example, a country with a per capita income of $1,600 receives 42.5 per cent, i.e. 85 per cent of 50 per cent.

100. At present the reduction in assessable income resulting from the application of this allowance amounts to some 8.9 per cent, or 890 points. Prior to 1979, this was absorbed on a pro rata basis by all Member States. The adjustments were, in effect, spread over the whole membership, as indicated by the line "pre-79 LPCIA" in figure 1, which shows the per capita contribution at different levels of per capita income. Figure 2 expresses the same information in terms of contribution rates, i.e., a Member State's contribution as a proportion of its income.

101. Since 1979, the cost of the allowance has been redistributed only among the Member States with per capita incomes above the limit, with the result that those Member States bear a uniform surcharge of about 20 per cent. The effect of this is shown in the charts by the dotted line "Post 79 LPCIA". This also

produces a "jump" or discontinuity (equivalent to some 6 cents per head) when a country's per capita income goes above the limit. For comparison, the solid lines in the two charts show contributions per capita and contribution rates before the application of the low per capita income adjustment.

102. In relation to capacity to pay, the Working Group considered that the low per capita income allowance has a twofold rationale. First, the allowance could be thought of either as a starting point or as a general adjustment to take account of the various considerations, such as sustainable development, socio-economic development indicators, debt amortization, etc., which are not embodied in the basic income measure. Second, it reflects the principle of progressivity. As is seen in domestic tax systems, the smaller a person's income, the greater the proportion of it that is required to provide for basic needs such as food, clothing and shelter. For this reason, that person's capacity to pay taxes can be said to be proportionately lower than that of a person with a higher income. In most tax systems there is therefore a presumption that tax rates should be lower at the lower end of the income scale; hence the concept of the allowance for countries with low per capita income.

103. While the Working Group endorsed the continued application of the low per capita income allowance, the problem remained of how to arrive at specific parameters. The Group was not able to agree on specific principles to be used for that purpose. Some members suggested that, in addition to the general principle of equity set out in paragraph 30 above, the principle of progressivity required that no country's per capita contribution should be greater than that of another country with a higher per capita income. Other members of the Group felt unable to support those proposals since the implications of the application of such principles were far from clear.

104. With respect to the existing allowance system, the Group noted the discontinuity described in paragraph 101 above. Although the amounts involved were not large (about 6 cents a head for a country at the limit), some members considered that this should be eliminated by reverting to the pre-1979 method, which was less sensitive to data error.

105. Another consideration relevant to setting the parameters is the balance between the total cost of the allowance and the burden of financing it. The more countries that benefit from the allowance, the smaller the base to which it can be redistributed. At present there are about 105 countries with per capita incomes below the limit, accounting for roughly 85 per cent of the world population. Whatever the parameters, a clear criterion is needed for updating the income limit, which has already been updated from time to time in line with the growth of the weighted world average income in United States dollars. If all incomes grew at the same rate, the percentage allowances would remain unchanged, which would be acceptable if the object were to provide relief in accordance with relative incomes.

106. Alternatively, if the logic of the allowance formula were to provide relief in relation to some absolute level of income, it would follow that the limit should be increased only in line with price changes. This was, indeed, the intention in the earlier years of the system, but the price index used - United States inflation - was unsuitable for the purpose. Some members suggested that a more appropriate price index might be derived by dividing the growth in world nominal income by the growth in real world income as measured in terms of PPPs.

107. Some members considered the current per capita income limit to be too high, and suggested alternative criteria: the World Bank's limit for International Development Association (IDA) financing, the world median per capita income (i.e., that of half the world's population) and the upper quartile (i.e., that of the top quarter). Other members contended that none of those criteria was superior to the one being used and hence there was no justification for making a change.

108. The Group noted that the gradient had been raised a number of times to its present level of 85 per cent, after many years at 50 per cent. Some members felt that that was also too high, while others felt that the present gradient was appropriate and had been approved by the General Assembly by consensus.

G. Technical considerations

1. Rounding

109. The issue of rounding pertains only to the number of decimal places in which the scale of assessments is expressed and not to the number of decimal places with which it is calculated. In effect, ever since the scale has been calculated on a computer spreadsheet, calculations are automatically carried out to about 20 decimal places; the scale is rounded to 2 decimal places only at the last stage, for implementation purposes.

110. A scale expressed in percentages with 2 decimal places has 10,000 points and the minimum increase or decrease between 2 successive assessments is one point. For a Member State with an assessment of 500 points, a shift of one point represents two tenths of 1 per cent of its assessment. For a Member State with an assessment of 50 points, the same one-point shift represents 2 per cent. But for a Member State with an assessment of two points, the same shift translates either into a 50 per cent increase or a 50 per cent decrease. And the minimum by which the share of a Member State assessed one point can go up is 100 per cent.

111. If the United Nations had only 10 Members, the issue of rounding would not even arise. But the Organization has 185 members, 127 of which have an assessment of 10 points or less. It would seem fair to express the scale of assessments with a sufficient number of decimal places to avoid such large shifts in assessments at the bottom end of the scale. The easiest way to achieve this is simply to assign 100,000 points to the scale or, in other words, to express it in percentages with 3 decimal places. A Member State assessed 10 points would now have 100 points, etc. The minimum shift would still be one point, but this shift would now be 10 times smaller. On the basis of the

regular budget for 1995, about $1.2 billion, a point would no longer correspond to $120,000, but to $12,000.

112. This can be achieved without modifying the floor. The floor would be set at 10 points (0.010 per cent) instead of one point (0.01 per cent).

113. Alternatively, one could argue in favour of 4 decimal places, with increments of $1,200 instead of $12,000. One could also argue that there is no need even to express the scale with 3 decimal places, and that taking the results automatically calculated by the computer spreadsheet package (implicitly at 20 decimal places or so) would be perfectly adequate. However simple this may be to implement, it has the drawback of giving the erroneous impression that all the statistics entering the calculation of the scale are accurate to the twentieth decimal. But, by the same token, there is a margin of error inherent in all statistics and there is rounding. An equitable assessment scale should attempt to guard against excesses resulting from either one. In the present scale, a Member State can get a "windfall gain" or suffer a "windfall loss" of $120,000 simply as a result of rounding, which seems excessive with over 100 Member States assessed at 0.10 per cent or less.

114. While there was some concern that adding one decimal place to the scale might make the work of the Committee on Contributions even more difficult, on balance the Group felt that it could actually make it easier, because the smaller sums involved would give less reason for Member States to complain about excessive variations. The Working Group recommends that the scale of assessments be expressed in percentages with 3 decimal places (i.e., 100,000 points).

2. Population data

115. In the present scale methodology, the national income figures are averaged to yield the base period national income (see para. 25, step 2). The base period per capita income, on the other hand, is obtained by dividing this base period national income by the population figure of the mid-point of the period (see para. 25, step 4). Population figures are available for all years and are the most reliable element of the present methodology (see annex III, para. 6). For accuracy and consistency, the Working Group recommends that per capita income be calculated annually and averaged over the base period.

3. National accounts data

116. The definitions of income and expenditure are broader in the 1993 SNAs than under present conventions, and hence this will result in higher measures of GDP, GNP and national income for all countries. As Member States will implement the 1993 SNA at different dates (some in 1997, some in 1998 and some only after the year 2000) and revise their estimates for varying periods (some back to 1995, others to 1990, etc.), this will result in lower international comparability of national income data during a transition period that could easily overlap with up to three triennial scales of assessments. The Working Group recommends that the Committee on Contributions address this issue before the development of the

next scale of assessments to ensure that international comparability of basic income figures is maintained.

117. The Working Group notes that the absence of complete up-to-date and comparable national accounts data for several Member States obliges the Committee on Contributions to request from the Statistical Division a large number of estimates, which may be less satisfactory than the ones Member States could have supplied themselves. The Group thus encourages Member States to produce more timely and more complete national accounts.

H. Other matters

118. In its deliberations, the Working Group focused its attention on those aspects of the current methodology which it understood to be technical and on which its expert views had therefore been sought. In that context, the Group noted that decisions to establish a ceiling and a floor as an element of the methodology for the determination of the scale had been taken by the General Assembly on non-technical grounds. Similarly, it noted the Assembly's decision to introduce, and, subsequently, to phase out a scheme of limits. The Working Group was persuaded that, because of the nature of the above-mentioned decisions, it was not called upon to pronounce itself on them.

Notes

1/ In the context of the present report, the expression "world income" refers to the total income of the States Members of the Organization.

2/ The base period national income and base period per capita income are hereafter referred to simply as national income and per capita income.

3/ Official Records of the General Assembly, Forty-ninth Session, Supplement No. 11 (A/49/11), para. 12 (b).

4/ Additional adjustments are required to implement the partial phase-out of this scheme of limits called for in General Assembly resolution 48/223 B, but their description is unnecessary here.

5/ In the SNA, the concepts of "resident" and "non-resident" are not defined in terms of citizenship, but rather according to country of normal residence.

6/ Table prepared on the basis of two documents: for GDP and National Income, A/CN.2/R.578, the principal statistical document used by the Committee on Contributions in the formulation of the 1995-1997 scale of assessments; and for NNDI, a conference room paper prepared for the Working Group.

7/ Official Records of the General Assembly, Forty-eighth Session, Supplement No. 11 (A/48/11), para. 34.

8/ Human Development Report, Oxford University Press, New York, 1994, chap. 5, p. 91, box 5.1.

9/ Official Records of the General Assembly, Forty-eighth Session, Supplement No. 11 (A/48/11), para. 35.

10/ The application of PARE rates to deal with the problems identified in paragraphs 84 and 85 currently affects some 20 countries.

11/ Indices of PPPs are analogous to the more familiar price indexes, but purport to compare the evolution of prices in space, i.e. among countries, rather than over time. The expression "in real terms" in opposition to "in nominal terms" in the context of the PPPs thus refers to measures in which the PPP variations among countries have been removed and not to measures in which the variations in prices over time (i.e. inflation) have been removed.

12/ IMF, Washington, D.C., December 1993.

13/ E/CN.3/1987/26, para. 84.

Annex I

LIST OF EXPERTS

ALGERIA	Mr. Larbi Djacta
ARGENTINA	Mr. Atilio N. Molteni
BAHAMAS	Ms. Wendy M. Craigg
BRAZIL	Mr. David Silveira da Mota Jr.
BULGARIA	Ms. Olga Pavlova Denkova-Teneva
CANADA	Ms. Gylliane Gervais
CHINA	Mr. Tang Guangting
FRANCE	Mr. Michel Rougé
GERMANY	Mr. Giesbert Graf von Westphalen
INDIA	Mr. Natarajan Krishnan
JAPAN	Mr. Toyoo Gyohten, subsequently replaced by Mr. Kano Yamamoto
KENYA	Mr. Kangethe W. Gitu
KUWAIT	Mr. Ziyad F. Monayair
MALAWI	Mr. Gilton Bazilio Chiwaula
MALAYSIA	Ms. Mazenah Bte Meon
MOROCCO	Mr. El Hassane Zahid
NIGERIA	Mr. Ola M. A. Abiola
PARAGUAY	Mr. Francis Asibey
RUSSIAN FEDERATION	Mr. Yuri Ivanov
SPAIN	Mr. Tomás Ramos
TUNISIA	Mr. Hafedh Bejar
UKRAINE	Mr. Andriy Revenko

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Mr. Simon Broadbent
UNITED STATES OF AMERICA	Mr. Arnold Nachmanoff
VENEZUELA	Mr. Carlos A. Bivero

Annex II

LIST OF DOCUMENTS

1. Report of the Committee on Contributions (Official Records of the General Assembly, Forty-eighth Session, Supplement No. 11 (A/48/11))

2. General Assembly resolution 48/223 of 23 December 1993 on the scale of assessments

3. Report of the Committee on Contributions (Official Records of the General Assembly, Forty-ninth Session, Supplement No. 11 (A/49/11))

4. General Assembly resolutions 49/19 A and B of 29 November and 23 December 1994, respectively, on the scale of assessments

5. Provisional agenda for the organizational and preparatory session (A/AC.245/R.1)

6. List of members (A/AC.245/R.2)

7. List of information papers (A/AC.245/R.3 and Add.1 and 2)

8. Evolution of the methodology for the scale of assessments and its current application (A/CN.2/R.532 and update)

9. Review of the low per capita income allowance formula (A/CN.2/R.534)

10. Further development of alternative income measures for use by the Committee on Contributions (A/CN.2/R.544)

11. Progress report on the further development of price-adjusted rates of exchange (A/CN.2/R.563)

12. Alternative methodologies for assessment (A/CN.2/R.485 and Corr.1 (English only))

13. Excerpts from World Economic and Social Survey 1994 (ST/ESA/240-E/1994/65).

14. Conditions or circumstances which adversely affect the capacity to pay of Member States: economic and social indicators of capacity to pay and ability of Member States to secure foreign currency (A/CN.2/R.423)

15. Possible incorporation of selected economic and social indicators in the determination of the scales of assessments (A/CN.2/R.441 and Corr.1)

16. IMF, World Economic Outlook, Spring 1993, annex IV

17. Excerpt from World Economic and Financial Surveys, "Staff Studies for the World Economic Outlook", by the Research Department of IMF

18. Excerpt from The Economist - A Survey of the Global Economy, "War of the Worlds"

19. System of National Accounts, 1993 (ST/ESA/STAT/SER.F/2/Rev.4, chap. XVI, sect. f, International price and volume indices) regarding international comparisons of prices and volumes, with the System of National Accounts - 1993

20. Statistical Commission resolutions with regard to the use of purchasing power parity

21. Excerpt from The Timeliness of Quarterly Income and Expenditure Accounts: An International Comparison, table 2, national income and expenditure accounts release lags for 1992 by country

22. A description of the compilation and estimation of national income data used by the Committee on Contributions (A/CN.2/R.448)

23. Alternative methods to assess the relative capacity to pay, A/CN.2/457/Rev.1, paras. 29-32, part III A, Tax progression built into the present assessment methodology

24. Redistribution of the burden of relief (A/CN.2/R.490)

25. Alternative income concepts to measure the capacity to pay (A/CN.2/R.533)

26. National income data and related statistics (A/CN.2/R.578 and Add.1)

27. Sample of the national accounts questionnaire

Annex III

DATA SOURCES

1. There are three types of statistical data required for the formulation of the scale of assessments, namely: national accounts estimates, exchange rates and population estimates.

A. National accounts

2. The basic source of data is the annual United Nations National Accounts Questionnaire, which is sent to all national statistical offices about nine months after the end of the reference year, but only two to three months after the first compilation of annual national accounts for that year. Replies come in during the fall and winter and are processed. Data gaps are filled by the Statistical Division during the spring of the next year, in time for the Committee on Contributions session in May or June. At the 1994 session of the Committee on Contributions during which it established the 1995-1997 scale, the Committee thus had at its disposal national accounts data up to 1992, already two years behind the reference period.

3. The quality of the extracted data is mixed in terms of timeliness and coverage, although a degree of comparability is maintained owing to standardized concepts and definitions. Two types of adjustment are applied to basic data: one is to overcome incomparability arising from different concepts and methodologies, such as the conversion from the Material Product System (MPS) to the SNA, which is no longer necessary with the adoption of the 1993 SNA by former centrally planned economies; the other is to ensure uniformity of coverage by converting to a calendar-year basis the estimates originally compiled on a fiscal-year basis.

4. Where data are unavailable, use is first made of estimates prepared by, in order of priority, the United Nations regional commissions because of their proximity to, and knowledge of, countries' economic performance; international organizations such as the World Bank and IMF; specialized institutions such as the Organization of Petroleum Exporting Countries (OPEC) for oil-exporting countries and the Commonwealth of Independent States (CIS) for countries in transition formerly part of the Soviet Union; and finally, economic and financial publications such as the Economist's Economic Intelligence Unit, Bank of International Settlements reports, etc. The Statistical Division then makes estimates in the case of countries and/or years for which no data are available from the other sources mentioned above, on the basis of the following guidelines:

(a) Where the components that must be deducted from other income aggregates to arrive at national income (depreciation, factor incomes, etc.), are not available, use is made of proportions or percentages reflecting a prior year(s)' relationship between aggregates;

(b) Where absolute levels of national product are not available but distributive shares of the primary, secondary and tertiary sectors of the economy can be established for any year with sufficient reliability, the sectoral elements are weighted and extrapolated by relevant production indicators and price indices.

On average, approximately 70 per cent of Member States provide GDP estimates up to the most recent year of the statistical base period. The number of replies containing figures for GNP and national income is smaller. However, given all the other available sources, the national accounts data are still considered very reliable as illustrated in table 1 and discussed in paragraph 47 of the main body of the report.

B. Conversion rates

5. For most countries, the conversion rate is the average annual exchange rate published in the IMF International Financial Statistics or obtained on the basis of technical advice from IMF. The rates used to convert national income expressed in national currency into a common unit (United States dollars) are generally the average market exchange rates published in IMF International Financial Statistics or provided directly by IMF. For countries not members of IMF, use is made of the United Nations operational rates of exchange, which were established for accounting purposes and applied to all official transactions with these countries. In exceptional cases, as decided by the Committee on Contributions, price-adjusted rates of exchange are employed.

C. Population estimates

6. The population figures serving to derive per capita income levels are official data provided by national statistical offices in reply to a United Nations questionnaire. In the absence of such figures, estimates are made by the United Nations Population Division on the basis of well-established procedures. It should be emphasized that of the three types of statistical data used, population figures could be considered the most reliable, as they are based on census information and survey results.
