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EBS/85/126

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May 14, 1985

To: Members of the Executive Board

From: The Secretary

Subject: Factors Relating to Burden Sharing in the Fund

Attached for consideration by the Executive Directors is a paper on factors relating to burden sharing in the Fund, which has been scheduled for discussion on Wednesday, June 5, 1985.

Mr. Robert Hicks (ext. 7822) is available to answer technical or factual questions relating to this paper prior to the Board discussion.

Att: (1)

CONFIDENTIAL

INTERNATIONAL MONETARY FUND

Factors Relating to Burden Sharing in the Fund

Prepared by the Treasurer's Department

Approved by David Williams

May 14, 1985

I. Introduction

As requested at EBM/85/40 and EBM/85/41, this paper presents an analysis of the concept of "burden sharing in the Fund", i.e., an examination, from the point of view of equity, of the present financial arrangements as they bear on the distribution of the costs of operating the Fund. Under present arrangements, projected deficits in the Fund's income position, whether they derive in part from, for example, increased administrative expenses or from the removal of overdue charges from the Fund's accrued income or from increased remuneration payments, prompt consideration of an increase in charges on the use of the Fund's ordinary resources, or a smaller fall in charges than might otherwise be the case, if the Fund's reserve target was not otherwise expected to be met by the current rate of charge on the use of ordinary resources. Some Executive Directors have expressed the view that increases in the financial costs of operating the Fund might be shared, for example, by reducing the remuneration coefficient or otherwise reducing the Fund's operational expenses, or spreading administrative costs over all members, for example, in proportion to voting power, as well as through an increase in the rate of charge on the use of the Fund's ordinary resources.

Section II outlines some of the general considerations that might be brought to bear on the issue of financing the cost of operating the Fund. Section III deals with the element of concessionality in the resources supplied to and by the Fund which derive from interest-free resources in the Fund; Section IV reviews the factors bearing on the rate of remuneration; Section V deals with the rate of charge; and Section VI attempts to draw some conclusions.

II. General Considerations

Consideration of the concept of "burden sharing" immediately raises two issues: (i) the burden that is to be shared; and (ii) the standard that should be applied to measure and to share the burden.

The concept of burden, as indicated above, that is used in this paper is one that concerns the financial costs incurred by Fund members in operating the Fund. This is a relatively narrow concept in the context of the Fund, particularly when comparisons are made with the scale and distribution of benefits of Fund membership which are less precisely measurable. The Fund does not bestow unique benefits to particular countries or groups of countries. 1/ The benefits of Fund membership are also without individual limitation, and include not only financial benefits but those deriving, for example, from technical services provided by the Fund, such as technical assistance and instruction, as well as those benefits that flow from the objectives of the Articles such as a multilateral and nondiscriminating payments system. 2/

The benefits of Fund membership go beyond a direct accounting of the financial balance between members and it is not implausible to assume that over time all countries benefit equally from Fund membership. This is not to say, of course, that the financial costs of running the Fund at any one point of time might not seem large to a given member or group of members, but as pointed out below, members' positions in the Fund change both over the short run and, more markedly, over the long run. Furthermore, while the financial costs of operating the Fund can be broadly measured, it is not always possible to make an allocation of these costs, even conceptually, because in the last resort the issue of financial burden is a matter of each individual member's position in the Fund and not one of groups of countries or even the membership in aggregate.

The primary source of financing the Fund is through subscriptions paid by its members rather than by borrowing from official or market sources; the accumulation of reserves plays only a minor role in expanding the Fund's usable assets. Members' subscriptions, which are equal to quotas, have endowed the Fund with three types of assets--the local currency component of members' subscriptions (which have averaged approximately 77 percent of members' total subscriptions) and the reserve asset payment which, prior to 1978, was normally made in gold and, since the Second Amendment, has been made largely in SDRs (but may be paid in currency). These subscription assets are the operative financial base of the Fund and it is the use of these financial assets by the Fund to meet members' need for Fund credit or to meet members' need to encash their reserve tranches or for other operations and transactions (including meeting the administrative expenses of the

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1/ The one major exception is provided by Article V, Section 12(f)(ii) whereby the Fund may sell gold to provide balance of payments assistance "on special terms to developing members in difficult circumstances, and for this purpose the Fund shall take into account the level of per capita income."

2/ It may also be noted that the Fund, if requested, may decide to perform financial or technical services that are not on the account of the Fund, provided they are consistent with its purposes as provided in Article V Section 2(b). The Fund would be able to absorb the administrative costs incurred in the performance of these financial or technical services, or it may agree with members on some other arrangement.

Fund) that results in financial costs being incurred by individual members.

In view of the importance of members' subscriptions, a key to the distribution of burdens and benefits and the costs that are associated with both, is a member's quota and its share in the total of Fund quotas. Members have permanent rights and obligations which do not vary among members and a cardinal principle of Fund policies is the uniformity of treatment of members. Many of these policies are based on quotas. However, quotas serve as effective limits to the application of policies to individual members, and the effects of Fund policies are reflected in individual members' positions in the Fund. Quotas in themselves do not reflect the short-run consequences for individual members of the application of Fund policies. The operative distributive key for measuring financial burdens and benefits in the Fund over the short run needs to be based on each member's individual position in the Fund. Over time, the importance of quotas, and the share in quotas, increase in significance because quotas determine, for example, members' voting strength and SDR allocations.

The incidence of the financial costs in operating the Fund goes beyond the fact that creditors may receive remuneration at below market or market-related interest rates or debtors may pay charges at concessional rates. The individual costs of financing the Fund must also take into account (i) whether a member, debtor or creditor, holds a reserve tranche position (including a portion that is not remunerated); and (ii) the level of the Fund's gold and SDR holdings. Furthermore, shifts in the burden of financing the costs of operating the Fund occur because of changes in individual member positions in the Fund which arise from the effect on members of the Fund's operations and transactions. For example, members' use of the Fund's ordinary resources, which can raise, lower, or leave unchanged the Fund's income and expense, and repurchases, which usually improve the Fund's income position, give rise to complex sequences of changes in members' positions and it is in these changes in member's positions that day-to-day shifts in burden sharing occur.

A second issue that arises is the standard that might be used to measure members' financial contributions to the cost of operating the Fund. There are no obvious automatic standards. Quotas, which purport to reflect members' relative economic size in the world economy, or voting power, which is broadly proportionate to quotas, may be used as an indicator of ability to pay. However, standards such as quotas or voting power are not satisfactory as criteria for the distribution of financial costs and returns because, while quotas measure relative positions at a particular time, they do not reflect the day-to-day costs of financing the Fund that arise as a result of the Fund's operations and transactions with members. There would not appear to be an operational method to redistribute these costs along the lines of quota or voting shares.

A more relevant standard of measurement would be a market interest rate or a market-related interest rate. A number of considerations need to be taken into account in coming to a conclusion on the appropriate rate of interest that might be used as a standard of measurement of the cost in supplying credit to the Fund and of the element of concessionality in credit extended by the Fund. As regards the supply of resources, the cost to a member whose currency is being sold by the Fund is the cost that arises from the conversion of the currency sold by the Fund into a freely usable currency (usually U.S. dollars) or the cost of raising the resources from the domestic financial market in the event that no conversion of the currency sold by the Fund was involved. The interest rates at which members invest their reserves vary considerably. The interest on external reserves that are invested in short maturing assets may reasonably be approximated by the SDR interest rate (or the interest rate on three month U.S. Treasury bills). However, members also invest their reserves in the euro-currency markets and in assets with a maturity of longer than three months so that the yield on such investments would normally be higher than the rate of interest on the SDR which, in any event, is an administered rate determined by the Fund. Furthermore, when members borrow on their domestic financial markets to finance their obligations to the Fund, it may be more representative to use a medium-term rate, as, for example, the five-year combined interest rate on which the Fund borrows instead of a short-term rate. In these circumstances, it may be reasonable to measure the cost of supplying resources to the Fund by use of both the SDR interest rate, as a proxy for the short-term interest cost, and the five-year combined interest rate, as a proxy for a medium-term interest rate, thereby providing a range which would be indicative of market interest rates.

From the point of view of the user of Fund credit, the SDR interest rate and the five-year combined market rate would also seem to provide a reasonable range of market-related interest rates to measure concessionality in the Fund's rate of charge. The SDR interest rate, which acts as a cap to the rate of remuneration paid by the Fund and which exceeds the rate of charge levied by the Fund, would be at the lower limit of the alternative cost of credit that might be available outside the Fund to members. The five-year combined market rate charged to the Fund on much of its EAR borrowing could also be used as a proxy for the cost that a member would pay for medium-term credit obtained from outside the Fund. The Fund is engaged in maturity transformation, in that it creates short-term liabilities when it provides medium-term credit to members, and it would normally be expected that some margin would be added to the Fund's borrowing rate of interest to cover administrative costs and provide some net income for reserve accumulation. It would also be expected that members in general would not be able to borrow at the same rate as the Fund presently borrows from official sources, but at somewhat higher, if varying, rates depending on the credit standing of the borrower. 1/ However, no margin has been added either to the SDR interest rate or to the five-year combined market interest rate that are used in the calculations presented below to measure the element of concessionality in Fund credit; the calculations might, therefore, be regarded as somewhat conservative. The use of market-related interest rates would seem to provide a reasonable standard by which to measure within a range the cost of the use by the Fund of its financial assets, both to creditors, when their currency is used by the Fund, and to debtors, which pay charges to the Fund on the use of the Fund's ordinary resources. 2/

III. Concessionality of Resources Supplied to and by the Fund--Interest-Free (Cost-Reducing) Resources in the Fund

The Fund has the benefit of (i) not paying remuneration on a portion of each member's creditor position and (ii) of selling the currency of a member, whose balance of payments and reserve position has improved and that had previously drawn its unremunerated reserve tranche, without paying the rate of remuneration on such use. The Fund also holds balances of currency as a result of certain past operations, in particular the sale of gold, which are independent of current positions. Together, these "resources" provide a relatively large amount of interest-free (or cost-reducing) assets which total at present approximately SDR 3.5 billion. These interest-free resources derive essentially from a complex interaction of three main sources: (a) unremunerated reserve tranches; (b) gold sales; and (c) reserves. These sources are explained further below:

1. Unremunerated reserve tranches--the norm for remuneration

Remuneration is payable to a member only on the amount by which the Fund's holdings of a member's currency, less any holdings of currency that have been excluded from the calculation, 3/ are below the "norm" for remuneration, i.e., the difference between quota and the norm

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1/ For further discussion of this matter see "Special Charges on Overdue Financial Obligations to the Fund", EBS/85/121 (5/13/85), esp. p. 16-17.

2/ The analysis is confined to ordinary resources because the Fund has decided to treat borrowed resources separately and to determine the rate of charge on the use of borrowed resources by passing on the full costs of borrowing by the Fund plus a small margin.

3/ In 1981, the Fund decided to exclude from the reserve tranche all holdings of currencies that had been acquired by the Fund as a result of members' drawings in the credit tranches and under the special facilities. As a consequence, members can be in debt to the Fund, i.e., some of the Fund's holdings are subject to charges, and simultaneously hold a reserve tranche position. The distinction between debtor and creditor members thus becomes somewhat blurred because a debtor member can hold a reserve tranche position.

represents the unremunerated portion of a member's creditor position. The Second Amendment provided that the norm for remuneration shall be calculated as the sum of 75 percent of quota as at the date of the Second Amendment of the Articles (April 1, 1978) and the increases in quota consented to and paid after that date. 1/ The norm for individual members consequently differ, and at present individual norms range between 88.49 percent 2/ and 98.95 percent of quota (the average of all norms is 91.73 percent). In other words, the absolute size of the unremunerated reserve tranches is equal to 25 percent of quotas on April 1, 1978, plus subscription payments by new members and quota increases since 1978 above their norm; these balances now amount to almost SDR 7.4 billion. However, many members have made purchases in the unremunerated reserve tranche, and are themselves users of "cost less" resources. Outstanding unremunerated creditor positions which reduce the cost of financing Fund credit at present total SDR 6.1 billion (line 1 less line 7 of Table 1). However, the Fund can irreversibly raise the norm for remuneration to a level not in excess of 100 percent of quota and by so doing it would effectively eliminate interest-free resources, unless the Fund were to sell gold.

2. Gold sales by the Fund

Between 1947 and 1980, the Fund sold, at the former official price of US$35 p.f.o, the equivalent of SDR 5,651 million of gold in replenishment of its currency holdings; net sales of gold amounted to SDR 2,976 million (see Appendix Table 1). Sales of gold in replenishment operations were also sometimes made to achieve other purposes of the Fund, such as to acquire an investment income for the Fund (see below), or in restitution to members, or, as in the period 1976-80, for the benefit of developing member countries. 3/

1/ For members joining the Fund after April 1978, the norm is calculated as the weighted average of the norms applicable to all other members on the date on which the member joined the Fund, plus any increase in quota consented to and paid subsequent to the date on which the member joined the Fund.

2/ Excluding Kampuchea whose norm is 75 percent of quota because there has been no change in Kampuchea's quota since the Second Amendment came into effect.

3/ The proceeds of the 25 million ounces of gold sold in restitution amounted to SDR 874.22 million and were added to the Fund's currency holdings in the General Resources Account (except that the share of Kampuchea was withheld). The proceeds of the gold auctions amounted to US$5,713 million, of which the equivalent of US$1,073 million, SDR 874.9 million, represented the capital value and was also added to the currency holdings of the General Resources Account. The balance, amounting to the equivalent of US$4,640 million represented profits available to the Trust Fund of which the part corresponding to the shares of developing countries in the Fund, or US$1,289 million, was distributed directly to 104 developing countries. The remainder, plus income earned on the temporary investments of the profits, was used to make long-term, low interest loans to low-income developing countries. Loans were extended by the Trust Fund to 55 member countries for a total amount equivalent to SDR 2,991 million.

Table 1. Interest-free (Cost-reducing) Resources

(In millions of SDR)

	April 30					
	1960	1965	1970	1975	1980	1985 Est.
1. Subscription payments in excess of members' norms for remuneration 1/	13,646	15,089	5,176	7,290	7,312	7,380
2. Reserves	62	290	717	708	763	1,038
of which:						
(a) Gold investments	22	148	366	424	424	424
(b) Net income	40	142	351	284	339	614
3. Excess of sundry liabilities over sundry assets 2/	-7	-18	-22	43	183	--
4. Subtotal (1+2+3)	13,701	15,361	5,871	8,041	8,258	8,418
5. Less - Gold holdings	2,495	2,217	2,763	5,370	3,636	3,620
6. Interest-free resources (4-5)	11,206	13,144	3,108	2,671	4,622	4,798
7. Less - Use of unremunerated reserve tranche	10,378	11,279	1,882	2,163	2,327	1,302
8. Interest-free resources net of use of the unremunerated reserve tranche (6-7)	828	1,865	1,226	508	2,295	3,496
9. Interest-free resources (6) as percent of quotas	78.5	82.2	14.6	9.2	11.8	5.4
Interest-free resources net of use of the unremunerated reserve tranche (8) as percent of purchases outstanding 3/	252.4	126.9	30.5	21.4	45.4	17.7

1/ The Fund has paid remuneration on members' creditor positions since July 28, 1969. The calculation of the norm for remuneration is discussed on pages 5-6.

2/ This mainly represents the amount by which the net receipt of assets on the Fund's income and expense transactions has exceeded net income on an accrual basis.

3/ Purchases outstanding subject to charges, excluding Oil Facility, SFF and EAR purchases.

The net sales of gold by the Fund added the equivalent of SDR 2,976 million to the Fund's currency holdings and thereby reduced aggregate creditor positions by the same amount. At the present remuneration coefficient applied to the average SDR interest rate in FY 1985, the reduction in the operational expense by the Fund below what it would have been in the absence of gold sales would be approximately SDR 240 million per annum. Present gold holdings amount to the equivalent of SDR 3,620 million and these holdings reduce the overall total of interest-free or cost-reducing resources.

3. Reserves 1/

From the beginning of the Fund's operations up to 1956, the Fund had a net operating loss in each fiscal year except 1948. During this period the Fund did not pay members remuneration for the use of currency and its only expenses were administrative, but the proceeds from charges were insufficient to cover the Fund's administrative expense. The net cumulative losses for those years appeared in the Fund's balance sheets as "Excess of Expenditure over Income" and were shown as deductions from members' subscriptions--effectively the Fund's quota resources were being consumed. The net cumulative loss to April 1956 amounted to US$14.21 million. In view of the impairment of its quota resources and the need to strengthen the Fund's financial resources, the Fund initiated a program in January 1956, under which it would sell gold to the United States, with the right of repurchase, and invest the proceeds in U.S. dollar securities with the aim of correcting the deficiency of income and also to build reserves to meet future deficits and generally strengthen the Fund's financial position. The Fund sold gold to the United States for this purpose in January 1956, July 1959 and November 1960 for a total amount equivalent to US$800 million (at the former official price of US$35 p.f.o. of gold). Between January 1956 and November 1957, the income from the investments helped to meet the Fund's past administrative expenditures; after November 1957 the investment income was accumulated in the Fund's Special Reserve. These gold investments were liquidated in two operations and the gold was reacquired by the Fund--the first, for half the investment in September 1970, and the second, for the balance of the original investment, in February 1972. At the time of the liquidation in 1972, the total income from the investment amounted to US$432.3 million, of which US$423.9 million had been placed in the Special Reserve. A considerable proportion of the Fund's present total reserves, amounting as a maximum to approximately 40 percent, might thus be attributed from interest earnings on the investment of the proceeds of temporary gold sales to the United States made for the purpose of acquiring an income.

1/ The purpose and adequacy of the Fund's reserves are discussed in "Factors Bearing on the Adequacy of Fund Reserves", (EBS/85/125, 5/14/85).

The operational deficits were eliminated in November 1957 and the Fund began to build reserves both as a result of the income received from its gold investment program (which was reflected in the Fund's Special Reserve) and also as a result of positive net operating income from 1957 (which was reflected for a time in the Fund's General Reserves). Charges were payable in gold and after the First Amendment of the Articles in 1969, members were given the option to pay charges in SDRs, an income earning asset, or gold. In the six years from 1972 to 1977, the Fund again entered a period in which it incurred deficits, amounting to over SDR 103 million, and the combined reserves of the Fund declined from about SDR 784 million at April 30, 1971 to about SDR 686 million at April 30, 1977. 1/ Since then, as indicated above, the Fund has generally run a net operating surplus, except for FY 1985, which was also added to Special Reserves and reserves now amount to SDR 1,038 million. (Since the Second Amendment, the Fund receives income only in the form of SDRs which help increase its income.)

4. Relative importance of interest-free resources

As can be seen from Table 1, the total of interest-free resources, net of gold holdings and use of the unremunerated reserve tranche (line 7), at present amounts to approximately SDR 3.5 billion, or approximately 18 percent of the Fund's total resources used to finance purchases subject to charges. The Fund's operational expense would be approximately SDR 280 million higher at the present remuneration coefficient applied to the average SDR rate for FY 1985 if such unremunerated reserve tranche positions did not exist. As can be seen from the table, the total of interest-free (cost-reducing) resources varies somewhat depending on the level of reserves and by the amount of net drawings in the unremunerated reserve tranches.

The availability of interest-free resources is a major favorable influence on the financial position of the Fund mainly by keeping the Fund's operational expense lower than would otherwise be the case. However, in view of the origins of, and the all pervasive influence of the interest-free resources in the Fund's income and expense, it is not possible to assign these resources to any particular group of Fund members or for any particular purpose or function of the Fund. These resources lower the cost of financing the Fund's operations and transactions with members. In the aggregate, the interest-free resources enable the Fund to absorb its administrative expenses and, in combination with the remuneration rate being below the SDR rate of interest, allows the maintenance of a rate of charge on the use of Fund credit that is below the SDR interest rate and is substantially lower than the five-year combined market rate which, as suggested earlier, might be used to measure the financial costs and benefits of Fund-related transactions. However, it would be arbitrary to attribute any part of these

1/ Technically, the deficits were charged against the Special Reserve, which represented income from the gold investment program.

interest-free resources to any individual Fund-related operations. 1/ If there were no interest-free resources (and the rate of remuneration was equal to the SDR rate as permitted under the Articles), the rate of charge would exceed the SDR interest rate and would approach the five-year combined rate. In that event the Fund would be in a position similar to financial institutions elsewhere in that lending rates normally exceed borrowing rates, in order to cover administrative expenses and provide for reserve accumulation.

Interest-free resources are unlikely to increase to any important extent in the near future unless the Fund would sell gold, and which would reduce creditor positions, or experience a major increase in reserves or use large amounts of currency held above the remuneration norm, both of which could therefore be expected to result in increased income. On the other hand, members may draw their reserve tranche positions, including the unremunerated positions which would reduce available interest-free resources and would tend to increase the Fund's operational expense. The importance of interest-free resources diminishes with the expansion of Fund credit as the resources are spread over a growing total of balances subject to charge. The issue that arises in these circumstances is how to accommodate the increases in costs or reduction in income that arise from the expansion of the Fund's operations and transactions and possibly from an increase in reserve accretion. In the following two sections the various aspects bearing on the Fund's administrative and operational (remuneration) expenses and on the main source of the Fund's income--the rate of charge--are discussed in an attempt to come to some conclusions as regards their relative contributions to the Fund's financial equilibrium and their role in enabling the Fund to conduct its operations on concessional terms while meeting its administrative and operationally desirable expense.

IV. The Fund's Expenses

1. Administrative expense

The costs of running the Fund, both as regards its expenditures for capital assets, its day-to-day current expenses as well as the payment of contingent amounts, such as those relating to the Staff Retirement Plan, comprise the Fund's administrative expenses. These expenses are financed from the general resources of the Fund, overwhelmingly by the use of U.S. dollars, which increases the U.S. reserve tranche position on which the Fund pays remuneration. In the event current income is insufficient to meet the administrative expenses for conducting the

1/ Even if an attribution were attempted, an issue would arise as regards the calculation of interest-free resources; for example, whether to include the drawn portions of the unremunerated reserve tranches in the total of interest-free resources, and also whether members' contributions should be scaled uniformly on the basis of quotas, or, as determined by the Articles, in accordance with the norm for remuneration.

business of the Fund, the Fund runs down its reserves. The Articles do not prescribe a specific mechanism for meeting the Fund's administrative expenses.

As indicated above, the Fund experienced two relatively long periods of deficits: between 1947 and 1956, when it ran down its quota resources because it held no reserves, and between 1972 and 1977, and again in FY 1985, when it ran down its Special Reserves. When the Fund runs down its reserves or its quota resources, it tends to reduce the total of interest-free resources and to weaken the Fund's overall financial position, which of necessity would call for a rebuilding of its assets through an increase in net income as soon as conditions permitted.

Increases in net income normally come about either by a reduction in operational expense--for example, reflecting a decline in the SDR interest rate (following a reduction in short-term interest rates in the major financial centers) which results in a reduction of the rate at which remuneration is paid, or because the Fund enters a net repurchase phase with a consequent contraction of creditor positions or an increase of its SDR holdings or by an increase in the rate of charge on the use of the Fund's resources. Increases in net income through the reduction of operational expense are not, however, inherently predictable and can be expected to reverse themselves as interest rates rise and as the volume of the Fund's business expands. 1/

Some Directors have suggested that as an alternative to raising charges at a time when the Fund is experiencing deficits or reduced income, consideration be given, perhaps in combination with an increase in charges, to reduce the remuneration coefficient, and some Directors have also suggested that the Fund's administrative expenses be met by an annual levy on all members in proportion to, say, quotas or voting power (in analogy with the SDR Department in which each participant is charged an assessment in proportion to net cumulative allocations) or, as suggested by others, by generating investment income for the specific purpose of meeting the Fund's administrative expenses.

The establishment of separate financing arrangements to meet the Fund's administrative expenses raises a number of fundamental issues, including the question whether any of the interest-free resources should be attributed to meet directly some, or all, of the Fund's administrative expense. Another issue that arises is whether an annual levy might be introduced in proportion to some common standard, even though it might be assumed that all members benefit equally from Fund membership, or, whether, in view of the economic inequalities between

1/ Account must also be taken of the impact on the Fund's income of the stand-by and extended arrangement fees (which are partly refundable) and the service charge which contributes to income when purchases are made.

members, some form of progressive levy might not be more equitable. In this connection, it is noteworthy that the Fund does not have the legal power to impose additional financial obligations on members beyond those imposed by or under the Articles. The implied powers of the Fund, as recognized in Article XII, Section 2(g), are only those which by necessary implication are appropriate to exercise express powers or enforce express obligations; new powers or obligations cannot be created. Any arrangements under which members made periodic contributions to cover administrative or operational expenses or deficits, or both, would have to be voluntary.

As regards the generation of investment income, the Fund could, under the present Articles, invest part of its gold holdings or its currency holdings, up to the equivalent of its reserves, and thereby generate investment income. In other words, the Fund could use its assets to invest in income-generating assets rather than use these assets in Fund lending or it could sell some gold for the purpose of making an investment. The Fund's reserves at present amount to SDR 1,038 million. The investment of assets in suitably liquid form at the going rate for SDR-denominated investments of about 10 percent per annum could be expected to yield approximately SDR 104 million. However, it needs to be recognized that investment from the Fund's currency holdings up to the equivalent of the Fund's reserves would result in an increase of remuneration costs of approximately SDR 84 million at the current rate. A question of attributing the proceeds of the investment income to particular uses of Fund resources would thus remain. If, however, the investment would be financed out of the profits from sales of gold, the issue of the payment of remuneration would not arise, indeed remuneration expense would decline because the capital value of the gold sold would remain in the General Resources Account, but the question of attribution of the increase in interest-free resources resulting from the sale of gold would again arise.

2. Remuneration

The evolution of the Fund's policy and its obligations with respect to the payment of remuneration were discussed in detail in "The Rate of Remuneration and the Fund's Income Position" (EBS/83/237, 11/2/83). It might suffice, at this point, to note that, as indicated in Table 2, the payment of remuneration became a major element in the Fund's expenses only after 1974 when it was decided to set the SDR interest rate by reference to a combined market interest rate and the SDR interest rate was linked to the rate of remuneration. 1/ The Second Amendment of

1/ The Fund made a (preferential) distribution of net income to members for the financial years 1968 and 1969, in amounts equal to 1 1/2 percent of the amounts by which 75 percent of a member's quota exceeded the Fund's average holdings of that member's currency during the year. Distributions of net income were made with respect to the financial years 1970 and 1971, i.e., after the First Amendment came into effect to those members eligible to receive remuneration in amounts by which 2 percent per annum exceeded remuneration paid at the rate of 1 1/2 percent per annum (i.e., at 1/2 percent per annum).

the Articles provided that the rate of remuneration may not be more than the SDR interest rate, nor less than four fifths of that rate. As a result of the decision to base the SDR interest rate on a basket of short-term domestic market interest rates, the rate of remuneration also reflects short-term market interest rates. The linkage between the rate of remuneration and market rates through the SDR interest rate thus results in a direct impact of market interest rates on the Fund's income position and, indirectly, on the cost of Fund credit.

For reasons discussed earlier, the extent of concessionality in credit advanced to the Fund can be measured with reference to a market rate of interest, and the SDR may be regarded as a reasonable proxy for short-term market rates with the five-year combined interest rate acting as a proxy for somewhat longer rates. It might thus appear that credit advanced to the Fund would contain a considerably reduced element of concessionality once the remuneration coefficient reaches 100 percent and the rate of remuneration is equal to the SDR interest rate, although, as noted earlier, the SDR is an administered rate set by the Fund itself. However, the remuneration coefficient is at present 91.66 percent of the SDR interest rate. Furthermore, as provided by the Second Amendment of the Articles, remuneration is payable on the amount by which only a specified part of a member's quota, the norm, exceeds the average daily balances of the Fund's holdings of a member's currency, after deducting excluded holdings from the reserve tranche. Taking these two constraints together, the "effective" rate of remuneration paid on a member's creditor position is considerably lower than the actual rate of remuneration because the unremunerated reserve tranche represents credit extended to the Fund without cost. The "effective" remuneration coefficient is at present approximately 72 percent of the SDR interest rate (as against the nominal remuneration coefficient of 91.66 percent), which may be regarded as an indicator of the concessional element in the cost of credit extended to the Fund. As can be seen from Table 3, the rate of remuneration was much lower in terms of the five-year combined market rate; the nominal rate of remuneration averaged just over 70 percent of the five-year combined rate, and the effective rate of remuneration was only 60 percent of the five-year combined rate.

The present total of remuneration paid to creditors expressed as a percentage of total creditor positions would yield a rate of remuneration of 6.34 percent (compared with an average SDR interest rate of 8.81 percent, an average combined rate of 10.64 percent and a rate of charge of 7 percent on the use of the Fund's ordinary resources). If the SDR interest rate were applied to the totality of present creditor positions, so that the rate of remuneration and the SDR rate were equalized, the Fund's operational expense would be higher by approximately SDR 700 million; in terms of the five-year combined rate, the yield on creditor positions is approximately SDR 1.2 billion lower than if creditor positions had been invested in assets yielding the five-year combined rate.

Table 2. Income and Expense - FY 1950-1985

(In millions of SDR)

	1950	1955	1960	1965	1970	1975	1980	1981	1982	1983	1984	1985 (Est.)
Income												
Total charges 1/	2.32	2.35	21.00	47.75	137.71	145.42	532.36	616.47	1,131.62	1,601.04	2,420.37	3,002.00
of which periodic charges on ordinary resources	1.92	2.04	16.91	35.91	124.73	56.41	253.35	278.44	469.57	752.79	1,117.06	1,341.00
Interest on SDR holdings	--	--	--	--	0.41	21.12	81.81	265.81	657.25	444.26	371.63	478.00
Total Income	2.32	2.35	21.00	47.75	138.12	166.54	614.17	882.28	1,788.87	2,045.30	2,792.00	3,480.00
Expense												
Interest on borrowing 2/	--	--	--	4.55	19.13	69.23	284.02	329.53	634.87	807.38	1,239.86	1,564.00
Remuneration	--	--	--	--	27.18	62.37	240.99	372.81	908.63	981.12	1,286.32	1,721.00
Administrative expense	3.97	4.99	6.88	17.65	34.26	44.60	86.07	99.86	153.33	191.40	192.76	231.00
Total Expense	3.97	4.99	6.88	22.20	80.57	176.20	611.08	802.20	1,696.83	1,979.90	2,718.94	3,516.00
Net Operational Income	2.32	2.35	21.00	43.20	91.81	34.94	89.16	179.94	245.37	256.80	265.82	195.00
Net Income (Expense)	(1.65)	(2.64)	14.12	25.55	57.55	(9.66)	3.09	80.08	92.04	65.40	73.06	(36.00)

1/ Includes service charges and charges on stand-by and extended arrangements.
2/ Includes transfer charges on amounts borrowed under the GAB.

Table 3. Concessional Element in Average Rates of Income and Expense
FY 1982-85

(In Percent)

						Concessional Element						
						Compared with Combined SDR Five-Year Interest Rate				Compared with SDR Interest Rate		
Finan-cial Year	SDR Interest Rate (1)	Combined SDR Five-Year Interest Rate (2)	Rate of Remu-neration (3)	Effective Rate of Remu-neration 1/ (4)	Rate of Charge 2/ (5)	SDR Interest Rate (6)	Rate of Remu-neration (7)	Effective Rate of Remu-neration 1/ (8)	Rate of Charge 2/ (9)	Rate of Remu-neration (10)	Effective Rate of Remu-neration 1/ (11)	Rate of Charge 2/ (12)
1982	13.05	13.32	11.05	6.29	6.25	0.27	2.27	7.03	7.07	2.00	6.76	6.80
1983	10.20	10.98	8.42	5.60	6.60	0.78	2.56	5.38	4.38	1.78	4.60	3.60
1984	8.70	10.48	7.39	5.52	6.60	1.78	3.09	4.96	3.88	1.31	3.18	2.10
1985	8.81	10.64	7.77	6.09	7.00	1.83	2.87	4.55	3.64	1.04	2.72	1.81

1/ The total of remuneration paid to creditors expressed as a percentage of total of creditor positions (remunerated and unremunerated).

2/ Rate of charge on the use of ordinary resources.

The distributive effects of the unremunerated reserve tranche positions are significant in any assessment of the cost to members of credit extended by them to the Fund. Members which have had relatively small quota increases since the Second Amendment (April 1978) have proportionately the largest unremunerated reserve tranche positions. Many members have drawn the full amount of their reserve tranche positions and do not hold unremunerated reserve tranche positions. However, when the Fund sells the currency of such members, following a sufficient improvement in their balance of payments and reserve positions, no remuneration is paid by the Fund until the Fund's holdings of currency falls below the norm. As indicated above, members normally experience a loss of foreign income as a result of Fund sales of their currency which is equal to the income on the reserve assets that are exchanged for the currency sold by the Fund, less the rate of remuneration to be earned, if any. In the case of a reserve currency (or of the issuers of freely usable currency that have agreed to convert their currency outside the market) the cost of the sale of the currency by the Fund is equal to the local cost of borrowing by the member whose currency is sold by the Fund, less, of course, the rate of remuneration earned on the reserve tranche. Indeed, as a general proposition, when the rate of remuneration is below the average rate of return earned on members' external reserve assets, or below the local cost of borrowing, as is normally the case, then members experience a loss of net income in connection with the sales of their currency by the Fund. 1/ As indicated above, the losses of income are substantial in aggregate, though members in return acquire an SDR-denominated asset which is readily available to meet the need for balance of payments financing.

The payment of remuneration has become the Fund's largest operational expense and it is the most significant element in determining the Fund's overall cost and, therefore, in the determination of the rate of charge on the use of its ordinary resources. The cost of credit available to the Fund has risen over the last few years not only because market rates of interest have risen but because the rate of remuneration has risen relative to market rates through its link with the SDR interest rate. It has been argued that the rate of remuneration and the SDR interest rate should be equalized because of the close similarity of the two assets. The view has also been put forward that it would be essential to raise the rate of remuneration closer to the SDR and market interest rates in order to help ensure the Fund's future supply of usable ordinary resources, in particular in relation to future increases in quotas. The increase in the rate of remuneration and, perhaps as important, the comparatively large expansion in Fund credit (including use of the unremunerated reserve tranches) have together led to a reduction in the concessional element in the cost of the credit made available to the Fund. However, as can be seen from Table 3, it would seem reasonable to conclude that

1/ If the income is expressed in U.S. dollar terms, the calculation would need to take into account the SDR/U.S. dollar exchange rate.

there remains a relatively large concessional element in the overall cost of ordinary resources made available to the Fund.

V. The Fund's Income--Charges

The Fund's income derives overwhelmingly from charges (Table 2). The bulk of its income derives from periodic charges levied on the use of its ordinary resources, fees from stand-by and extended arrangements (which are refundable when purchases are made), service charges on drawings outside the reserve tranche, and from the margins on members' use of resources borrowed by the Fund. The Fund's only other source of income is the interest received on its holdings of SDRs. The Fund's income covers total expenses--remuneration, administrative expenses and reserves accumulation (net income). However, there is a considerable concessional element in Fund charges. As noted earlier, applying the present remuneration coefficient and the average SDR interest rate in FY 1985, to the interest-free resources of approximately SDR 3.5 billion permits income from charges to be about SDR 280 million lower than it otherwise would be; this is equivalent to approximately 1.4 percentage points on the rate of charge. If the same calculations were made using the remuneration coefficient at 100 percent of the average SDR interest rate in FY 1985 and also using the five-year combined market rate then the interest-free resources permit income from charges to be SDR 310 million and SDR 370 million and the rate of charge lower by 1.5 and 1.8 percentage points respectively than would otherwise be the case. In view of the relative decline in importance of the interest-free resources as the volume of Fund credit expands, the increase in marginal costs to the Fund, whether stemming from higher administrative expense or the operational costs associated with the expansion of Fund credit, has to be met out of higher operational income or by running down reserves (or by some combination of both).

By far the most uncertain element in the Fund's expense is its remuneration expense, which depends not only on the outstanding volume of credit financed by ordinary resources and drawings in the unremunerated reserve tranches, but, perhaps more importantly, on the level and changes in the SDR interest rate to which the rate of remuneration is linked. It is, therefore, to be expected that the rate of charge and changes in the rate of charge are effectively determined by remuneration expense and changes in remuneration expense, i.e., by the rate of change in the growth of Fund credit and by the actual rate of remuneration (see Table 2). The Fund's administrative expenditures play a major role in determining the rate of charge only when the demand for the Fund's ordinary resources falls to low levels. 1/ Reserve accumulation, which over the last few years has been a relatively constant absolute factor, also has a relatively small impact on the determination of charges.

Notwithstanding the above, any net increase in the Fund's lending tends to lead to an effective reduction in the concessional element in the rate of charge because the contribution of interest-free resources, which are an essentially fixed amount, are spread over a larger amount of outstanding credit. In a broader comparison of the rate of charge with market interest rates, the degree of concessionality in Fund charges can fall for many reasons; for example, a rise in market interest rates or an increase in net drawings in the unremunerated reserve tranches increase the Fund's remuneration expense and would normally result in a rise in Fund charges. Nevertheless, concessionality in relation to market interest rates may well increase if the rise in the rate of charge is less than the rise in market rates of interest. Furthermore, and as can be seen from Table 3, the relatively sharp fall in the concessionality in the Fund's rate of charge in relation to market interest rates has been due more to the recent fall in market interest rates while the rate of charge has remained relatively stable.

In terms of the SDR interest rate, which, in view of Rule I-10(d), may be regarded as an effective upper limit to Fund charges without triggering a review of the remuneration coefficient, and as shown in Table 3, the rate of charge of 7 percent is approximately 1.81 percentage points below the average interest rate for the SDR in FY 1985. An interest differential of that size is the equivalent of SDR 350 million on balances of ordinary resources subject to charges. Furthermore, the present rate of charge is 3.64 percentage points below the five-year combined market rate, which is the equivalent of SDR 710 million on balance of ordinary resources subject to charge. The comparatively large differentials between the rate of charge and market-related interest rates reflect the relatively low effective cost of credit made available to the Fund. In other words, a relatively large element of subsidy is provided to the Fund through the relatively low rate of remuneration which not only provides a substantial element of concessionality in the rate of charge, but also helps to finance the Fund's administrative expenses, and helps keep the rate of charge considerably lower than market rates.

1/ A rate of charge equivalent to about 1.25 percent would be required to meet administrative expenses of SDR 250 million at the present level of use of the Fund's resources. However, if the amount of average balances subject to change shrunk dramatically, say, to SDR 3 billion, the average rate of charge to meet administrative expense would be 8.33 percent. However, other compensating reductions in cost would have occurred in the meantime and the importance of the interest-free resources would rise dramatically thereby mitigating the rise in the rate of charge.

In view of Rule I-10, it may be expected that the rate of remuneration will rise relatively to the SDR interest rate. It can, therefore, also be expected that the concessional element in Fund operations that is provided through a relatively low rate of remuneration will be diminished to some extent in the future, though a substantial concessional element will remain so long as the norm for remuneration remains below the quota level. If, for example, the rate of charge in FY 1985 had equalled the average SDR interest rate in FY 1985 of 8.81 percent, resulting in a considerable reduction in the concessional element in the rate of charge, the rate of remuneration could have been raised to the SDR interest rate and the Fund would have experienced a net income of the order of SDR 90 million. 1/ In that case, the effective rate of remuneration would have been 6.92 percent (or a coefficient of 78.5 percent of the SDR interest rate) in view of the continued existence of interest-free resources as represented by the unremunerated reserve tranches.

1/ If the rate of charge had been set at the five-year combined market rate, the rate of remuneration could have been raised to the SDR interest rate and the Fund would have experienced net income of SDR 445 million.

VI. Summary and Conclusions

The following tentative conclusions may be drawn from the preceding discussion:

(i) The concept of burden that is involved in sharing the costs of operating the Fund cannot easily be defined. While it can be assumed that the benefits of Fund membership, which are not exclusively, or perhaps even primarily, of a financial nature, apply equally to all members, the day-to-day burden of operating the Fund falls on individual members. However, members' positions in the Fund are continually changing: debtors become creditors and members' shares in quotas shift over time in response to changes in relative economic positions. Furthermore, it is impossible to trace the incidence of the Fund's operations and transactions on individual members or groups of members; the sale of currency by the Fund can either increase, decrease or leave unchanged the Fund's operational income, depending on the position in the Fund of the member whose currency is sold by the Fund, while repurchases normally increase the Fund's operational income. The issue of sharing the burden of operating the Fund is determined by members' individual positions in the Fund and changes in those positions which result from the Fund's operations and transactions with individual members.

(ii) A fundamental element in the Fund's financial structure, and which has all pervasive effects on the financial position of members in the Fund, is the existence of interest-free, or cost-reducing, resources. These resources which, at present, amount to approximately SDR 3.5 billion, derive from (a) sales of gold by the Fund in the past; (b) the accumulation of (nongold) reserves; and (c) and the fact that remuneration is payable only on the amount by which a specified part of a member's quota, the norm for remuneration, exceeds the average daily balances of the Fund's holdings of a member's currency (the norm at present averages 91.73 percent of quota for all members). The Fund can irreversibly raise the norm for remuneration to a new level not in excess of 100 percent of quota, and by so doing it would in present circumstances effectively eliminate interest-free resources, unless the Fund decided to sell gold.

(iii) The existence of interest-free resources, in combination with a rate of remuneration that is less than the SDR interest rate, enables the Fund to absorb the administrative expenses of the Fund and levy a rate of charge that is below the SDR interest rate. It is, however, impossible to attribute these interest-free resources to any particular element in the Fund's expenses; they are available to the Fund in general.

(iv) A question has been raised whether it would be possible to finance the Fund's administrative expenses, and perhaps also the accumulation of reserves, by means other than from the Fund's operational income or, in the event of an insufficiency of income, from its reserves and thereby possibly avoid raising charges to meet administrative or operational deficits. The possibility of a levy imposed on members in proportion to, say, quotas or voting power could be considered though a progressive levy might be considered preferable on grounds of the economic inequality of members. However, the Fund does not have the legal power to impose additional financial obligations on members beyond those imposed by or under the Articles and any arrangements under which members made periodic contributions to cover administrative or operational deficits would have to be voluntary. Alternatively, consideration could be given to invest the Fund's currency resources up to the equivalent of the Fund's reserves, which at present amount to SDR 1,038 million, rather than use the resources in Fund lending, or to sell gold and invest the profits up to the equivalent of the Fund's reserves. The investment income could be used to help meet the Fund's administrative expenses or reserve accumulation. However, unless gold were sold for this purpose, an investment of the Fund's assets in an amount equivalent to the total of its reserves would increase the Fund's remuneration expense.

(v) Despite the increase in the rate of remuneration in relation to the SDR interest rate, and after taking into account the unremunerated reserve tranche positions, the "effective" rate of remuneration is equivalent to 72 percent of the average SDR interest rate, and to 60 percent of the five-year combined rate which are the interest rates that have been taken as proxies for market interest rates and against which concessionality in credit advanced to and by the Fund might be measured. The relatively low "effective" remuneration coefficient is an indication of a considerable element of concessionality in the cost of credit made available to the Fund. If the average SDR interest rate for FY 1985 were applied to the totality of creditor positions, the Fund's operational expense would be higher by approximately SDR 700 million and by SDR 1.2 billion if the five-year combined rate were used in making such a calculation.

(vi) The Fund's rate of charge on the use of its ordinary resources contains a substantial concessional element which derives from the interest-free resources and from the rate of remuneration being below the SDR interest rate. In terms of the SDR interest rate, the rate of charge has a concessional element equivalent to 1.8 percentage points, which is equivalent to approximately SDR 350 million on balances of ordinary resources subject to charges. As compared with the five-year combined rate, which is perhaps a closer proxy for the alternative cost of credit outside the Fund, the present rate of charge has a concessional element equivalent to 3.6 percentage points or SDR 710 million on balances of ordinary resources subject to charges.

(vii) The element of concessionality in the cost of credit extended to the Fund through the relatively low rate of remuneration is considerably larger than the concessional element in the rate of charge levied by the Fund on the use of its ordinary resources and this goes some way to meet administrative or operational deficits. However, as the rate of remuneration approaches the SDR interest rate, the concessional element stemming from the relatively low rate of remuneration will diminish, even though a large concessional element will remain as long as the norm for remuneration is below the quota level and a sizeable proportion of the total of unremunerated reserve tranche positions remains undrawn.

(viii) The comparative unevenness in the distribution of concessionality in the credit made available to the Fund and in the credit charged by the Fund limits, to a considerable extent, the flexibility in shifting the burden of financing the costs of operating the Fund, in particular in financing the Fund's administrative expenses and reserve accumulation or administrative or operational deficits.

Table 1. Sources and Uses of the Fund's Gold 1946-1985

(In millions of SDRs)

Calendar Year	Original Subscription	Quota Increases	Repur-chases	Pur-chases	Charges	Return of Investment	Sales for Investment	Sales for Currencies	Interest and Transfer Charges	Remuneration	Gold Holdings (End of Period)
1946	15.4	--	--	--	--	--	--	--	--	--	15.4
1947	1,338.1	--	--	--	3.1	--	--	--	--	--	1,356.6
1948	64.5	6.5	--	6.1	1.9	--	--	--	--	--	1,435.6
1949	12.7	--	1.0	--	1.3	--	--	--	--	--	1,450.6
1950	32.9	--	9.4	--	1.6	--	--	--	--	--	1,494.5
1951	18.3	--	15.7	--	2.1	--	--	--	--	--	1,530.6
1952	98.1	--	59.7	--	3.5	--	--	--	--	--	1,691.9
1953	5.5	--	0.5	--	4.1	--	--	--	--	--	1,702.0
1954	14.4 1/	--	19.9	--	3.3	--	--	--	--	--	1,739.6
1955	5.6	--	61.2	--	1.5	--	--	--	--	--	1,807.9
1956	40.6	3.9	37.1	--	2.2	--	200.0	--	--	--	1,691.7
1957	11.6	5.6	60.8	--	9.9	--	--	600.0	--	--	1,179.6
1958	57.7	--	76.7	--	17.6	--	--	--	--	--	1,331.6
1959	10.0	1,192.7	153.8	--	18.9	--	300.0	--	--	--	2,407.0
1960	--	191.7	131.7	--	8.9	--	300.0	--	--	--	2,439.3
1961	55.3	12.9	55.9	--	13.9	--	--	500.0	--	--	2,077.3
1962	21.5	4.5	67.2	--	23.3	--	--	--	--	--	2,193.8
1963	37.3	6.6	48.5	--	25.8	--	--	--	--	--	2,312.0
1964	-10.2 2/	80.9	19.8	--	28.6	--	--	250.0	2.0	--	2,179.3
1965	-10.9 3/	43.3 3/	41.4	--	27.8	--	--	400.0	12.0	--	1,868.9
1966	8.7	1,156.8	11.4	--	24.9	--	--	147.9	16.0	--	2,906.8
1967	1.9	32.2	10.8	--	22.8	--	--	--	15.0	--	2,959.5
1968	0.5	47.2	85.7	--	32.4	--	--	547.0	19.0	--	2,559.3
1969	7.4	24.3	82.3	--	65.9	--	--	151.5	19.0	--	2,568.7
1970	63.3	1,733.4	15.4	646.1	51.1	400.0	--	920.0	14.3	8.8	4,534.9
1971	4.4	88.2	478.6	137.5	73.1	--	--	385.5	6.4	22.7	4,902.1
1972	60.7	0.2	29.7	--	5.6	400.0	--	--	--	28.5	5,369.8
1973	0.2	--	3.1	--	0.4	--	--	--	--	3.6	5,369.9
1974	--	--	--	--	--	--	--	--	--	0.3	5,369.6
1975	--	--	--	--	--	--	--	--	--	--	5,369.6
1976	--	--	--	--	--	--	--	136.5 4/	--	--	5,233.1
1977	--	--	--	--	--	--	--	628.0 4/	--	--	4,605.1
1978	--	--	--	--	--	--	--	468.6 4/	--	--	4,136.5
1979	--	--	--	--	--	--	--	388.0 4/	--	--	3,748.5
1980	--	--	--	--	--	--	--	128.1 4/	--	--	3,620.4 5/
	1,965.5	4,630.9	1,577.3	789.7 6/	475.7	800.0	800.0	5,651.1	103.7	63.9	

1/ Czechoslovakia withdrew from the Fund and SDR 2 million of the gold subscription was applied to repurchases.

2/ Cuba withdrew from the Fund and SDR 12.5 million of the gold subscription was applied to repurchases.

3/ Indonesia withdrew from the Fund and SDR 15.5 million of the original gold subscription and SDR 13.75 million of gold subscription for quota increase were applied to repurchases.

4/ Sales of gold in 1976-1980, the capital value of which aggregated SDR 1,749.2 million, were to finance the Trust Fund (SDR 874.9 million) and sales to members in proportion to their quotas on August 31, 1975 (SDR 874.3 million) as provided by the Second Amendment Articles of Agreement.

5/ The Fund's gold holdings have remained unchanged since 1980.

6/ Includes purchases of gold held under earmark for members and excess gold resulting from swaps.