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November 25, 1983

To: Members of the Executive Board
From: The Acting Secretary
Subject: The Level and Growth of Fund Reserves and the Determination
of Fund Charges

The attached paper on the level and growth of Fund reserves and the determination of Fund charges has been tentatively scheduled for discussion on Monday, December 19, 1983.

Att: (1)

INTERNATIONAL MONETARY FUND

The Level and Growth of Fund Reserves and the Determination
of Fund Charges

Prepared by the Treasurer's Department

(In consultation with the Legal Department)

Approved by W.O. Habermeier

November 25, 1983

I. Introduction

At the most recent review of the Fund's income position, the Executive Board concluded that a further review of the rate of remuneration, charges, and reserves should be undertaken not later than the upcoming mid-year review of the Fund's net income position. 1/ A paper has recently been issued which examines the rate of remuneration in relation to the SDR interest rate and the impact on the Fund's income position of an increase in the rate of remuneration to equality with the SDR interest rate. 2/ This paper considers (i) the factors relevant in judging both the adequacy of the level of the Fund's reserves and the rate of growth of reserves over time; and (ii) methods that might be used to set the rate of charge levied on the use of the Fund's ordinary resources.

The paper is organized as follows: Section II reviews the recent evolution of the Fund's expense, income, and reserves; Section III considers the need for reserves by the Fund; Section IV analyzes the factors that bear on the setting of the rate of charge; and Section V summarizes the discussions and draws some conclusions.

II. Expense, Income and Reserves

The origin and purpose of the Fund's reserves were described in a recent paper reviewing the Fund's income position. 3/ It may be useful to discuss briefly the main elements that make up the Fund's expense

1/ See Executive Board Meeting No. 83/70 (May 16, 1983) and "Review of the Fund's Income Position for Financial Years 1983 and 1984" (EBS/83/75, 4/18/83).

2/ See "The Rate of Remuneration and the Fund's Income Position" (EBS/83/237, 11/2/83).

3/ See "Review of the Fund's Income Position for the Financial Years 1983 and 1984" (EBS/83/75, 4/18/83), Appendix II. See also "Future of the Fund's Investment Program" (SM/57/93, 11/14/57) and "Establishment of a General Reserve from Net Income" (SM/58/28, 4/4/58) and "Fund's Reserves--General and Special" (SM/69/140, 9/11/69).

and income as a means of measuring and explaining the instability in the Fund's net income position and in the rate of accumulation of the Fund's reserves.

1. Remuneration

As can be seen from Table 1, remuneration payments and administrative expenditures by the Fund have accounted for 72 percent or more of total Fund expenses in the past 13 years; and in 1982 and 1983, they accounted for over 80 percent of total expenses of the Fund. Changes in the amount of remuneration expense thus exercise a critical influence on the Fund's financial position.

The amount of remuneration expense is a function of the rate of remuneration and the level of members' remunerated reserve positions and both elements have shown considerable variability in recent years:

(i) Since 1974 the rate of remuneration has been linked, in varying proportions, directly to the combined market rate of interest and, since 1978, directly to the SDR interest rate, which has itself been linked directly to the combined market rate. Forecasting interest rate developments is hazardous. A small change in the average SDR interest rate (and the rate of remuneration) over that obtaining at the beginning of the financial year could lead to a significant change in net income. At present rates of remuneration and the absolute size of remunerated reserve tranche positions, a variation of one percentage point around the assumed rate of remuneration results in a change in net income of approximately SDR 125 million.

(ii) The total of members' remunerated reserve positions is very closely linked with members' use of the Fund's ordinary resources. Each purchase that is financed from ordinary resources will result in a change in income-generating balances or income-costing balances or both. ^{1/} Disregarding the service charge on purchases outside the reserve tranche--which contributes to the Fund's income position only when the purchase is made--a purchase from the Fund normally leads to a reduction of income as long as the rate of charge is below the rate of remuneration. A deviation in the amount or in the timing of purchases from the estimates made at the beginning of the financial year will

^{1/} Except for purchases in the remunerated reserve tranche, as a result of which a decrease in one member's remunerated reserve tranche is offset by an increase in the reserve tranche of a member whose currency is sold; the sale of currency of a member that does not have a remunerated reserve tranche will improve the Fund's net income position, while a drawing on the unremunerated reserve tranche will normally worsen the Fund's income position. The sale of SDRs, rather than currency, will cause the Fund's net income to fall by the difference between the SDR interest rate and the rate of remuneration.

Table 1. Fund Expense, Income and Reserves

(In millions of SDRs)

Financial year	Expense					Income						
	Remuner- ation expense	Adminis- trative expenses	Interest on GAB borrowing	Other expenses	Total	Interest on SDRs	Service charge or stand-by charge	Margin over cost of borrowing	Other	Periodic charges (ORD)	Net income	Reserves Total ^{2/}
1971	37.4	39.9	11.8	--	89.2	4.3	3.2	--	--	128.1	46.4	784.4
1972	30.5	53.7	1.2	--	85.5	7.2	3.0	--	--	62.0	-13.3	776.2 ^{3/}
1973	29.3	55.0	--	0.1	84.5	10.2	3.2	--	21.2 ^{4/}	28.2	-21.7	754.5
1974	27.2	48.4	--	0.1	75.7	7.8	2.5	--	--	28.2	-37.2	717.3
1975	62.4	44.5	--	0.1	107.0	21.1	21.0	-1.2	--	56.4	-9.7	707.6
1976	104.1	51.3	--	--	155.4	20.8	26.6	3.9	--	101.2	-2.9	704.7
1977	226.9	65.2	12.7	5.0	309.8	23.0	24.4	11.6	--	232.7	-18.2	686.5
1978	200.9	70.3	71.5	3.9	346.5	39.8	13.2	5.1	--	316.0	27.5	714.0
1979	171.7	73.4	70.7	4.0	319.8	57.1	18.1	14.9	--	275.8	46.1	760.1
1980	241.0	86.0	31.1	0.1	358.2	81.8	11.0	13.1	--	253.3	3.1	763.2
1981	372.8	100.4	31.0	-0.6	503.7	265.8	23.7	15.8	--	278.4	80.1	843.3
1982	908.6	153.8	31.1	-0.5	1,093.1	657.2	39.6	18.7	--	469.6	92.0	935.3
1983	981.1	191.8	31.1	-0.4	1,203.6	444.3	55.6	16.3	--	752.8	65.4	1,000.7

^{1/} Since 1980 administrative expenses in terms of U.S. dollars have increased by 93 percent and in terms of SDRs they have increased by 123 percent. The SDR rate of the U.S. dollar over these years has increased by almost 15 percent, thereby exaggerating to some extent the rise in administrative expenses. Administrative expenses also reflect one time expenses such as the amortization of past service costs of the staff retirement plan (1977 - 1981) and the Fund's liability for accumulated annual leave and termination entitlements of staff (1983).

^{2/} Details may not add due to rounding.

^{3/} The sum of the Fund's Special Reserve and General Reserve; the General Reserve has been maintained unchanged at SDR 365.6 million since FY 1972. The change in total reserves from 1971 to 1972 includes also income from investment (SDR 17.5 million) and a distribution of part (SDR 12.5 million) of income earned in 1971.

^{4/} Represents proceeds realized from sale of Headquarters building to IBRD.

result in a divergence of net income from its projected level, which will need to be offset in other ways or result in some variation in the rate of growth in reserves from one year to another. 1/

2. Administrative expense

As regards other elements that make up the Fund's expense, the Fund's administrative expenses are of considerable importance, not only because of their size but also because they give rise to two types of estimation errors which importantly affect the outcome for the Fund's net income. First, administrative expenditures are subject to changes incorporated in supplementary budget authorizations. Second, administrative expenditures are expressed in U.S. dollars, which for the purpose of estimating net income are converted into SDRs at the then prevailing exchange rate. Exchange rate fluctuations over the year will lead to differences between budgeted and actual expenditures expressed in SDRs. Differences between original estimates and the actual outturn of administrative expenditures in the past have approached absolute amounts of net income that were required to achieve an increase of 3 percent in reserves.

3. Fund borrowing

The net cost of borrowing by the Fund does not normally greatly affect the Fund's net income position. Interest paid on CAB borrowing has been below the rate of remuneration and therefore has helped to maintain Fund income at a rate higher than would otherwise be the case. The cost of other Fund borrowing (as in connection with SFF and EAR) is passed on to the users with a margin of 0.2 percent on the amount purchased which accrues to the Fund. In general, borrowing by the Fund either contributes to the Fund's gross income position or has reduced remuneration expense; the timing of its contribution to Fund income depends on the timing of purchases and is, therefore, subject to the same uncertainties as mentioned in paragraph 1.

4. Income from SDR holdings and periodic charges

Income from the Fund's SDR holdings and income from periodic charges levied on the use of the Fund's ordinary resources are by far the most important elements in determining the Fund's gross income position. The income generated from the Fund's holdings of SDRs is dependent upon the average SDR interest rate--a reflection of market

1/ Income projections also assume a certain level of use of unremunerated reserve tranche positions during the year, which are financed by the use of the remunerated position of another member, thereby raising operational expense. The use of unremunerated positions can vary substantially from one year to another and thereby affect the Fund's net income position.

interest rates--and the average level of SDR holdings by the Fund, over which the Fund has considerable but not complete control. ^{1/} In view of the high variability of the SDR interest rate, the Fund's income on its SDR holdings can differ from the projected income to a considerable extent.

As regards the Fund's income from charges, the service charge derives directly from the volume of purchases outside the reserve tranche. Periodic charges which are levied on the use of the Fund's ordinary resources normally provide the principal source of the Fund's income. Because the rate of charge is fixed at the beginning of the Fund's financial year, the gross proceeds from these charges vary according to fluctuations in the outstanding level of credit financed by the use of ordinary resources. This source of income financed, for example, 65 percent, 71 percent and 63 percent of the Fund's total expenses in 1976, 1980, and 1983, respectively.

5. The rate of charge and variables affecting Fund income

The rate of charge is highly sensitive to changes in variables that directly affect the Fund's income position and which, therefore, are relevant in determining the rate of charge. Table 2 shows the results, in the form of percentage point changes in the rate of charge, of a sensitivity analysis of changes in certain variables that are relevant in determining the rate of charge. The table is based, for illustrative purposes, on a one percentage point change in the SDR interest rate, one percentage point change in the rate of remuneration, a change of SDR 0.5 billion in the Fund's SDR holdings, and a change in the use of the Fund's ordinary resources equivalent to SDR 1 billion. The table also includes the change in the rate of charge (Column 4) that would have resulted if the rate of remuneration had been equal to the SDR interest rate.

^{1/} Actions to change the level of the Fund's holdings of SDRs would, of course, have effects on the holdings of currency and thus on gross remuneration payments.

Table 2. Sensitivity of the Rate of Charge
to Changes in Certain Selected Variables

(In percentage points)

Financial year	Actual rate of charge (1)	1 percent- age point change in SDR interest rate (2)	1 percent- age point change in rate of remuneration (3)	Rate of remuner- ation = SDR interest rate (4)	Change of SDR 0.5 billion in SDR holdings (5)	Decline of SDR 1 billion in use of Fund credit <u>1/</u> (6)
1978	4.77	0.68	0.85	--	--	0.21 (-0.16)
1979	5.04	0.46	0.71	0.15	0.02	0.14 (-0.10)
1980	5.25	0.42	0.70	0.55	0.08	-0.48 (0.31)
1981	5.30	0.22	0.83	0.79	0.09	-0.76 (0.51)
1982	6.25	0.26	1.09	2.13	0.13	-0.74 (0.57)
1983	6.60	0.47	1.00	1.52	0.07	-0.19 (0.16)

1/ Figures in parentheses show changes resulting from an increase in the use of Fund credit of SDR 1 billion.

Some of the more significant results of the analysis may be summarized as follows:

(i) A change in the SDR interest rate has a significantly smaller effect on the rate of charge than a change of the same magnitude in the rate of remuneration alone (i.e., when the rate of remuneration is changed in relation to the SDR interest rate). This is because the induced change in the rate of remuneration resulting from a change in the SDR interest rate--and in the combined market rate--is partly offset by a change in income from the Fund's SDR holdings, while no such offset occurs when only the rate of remuneration is changed.

(ii) If the rate of remuneration is equal to the SDR interest rate, the income effect of a substitution between the use of SDRs and usable currencies disappears. The impact on charges increases with a rising level of the SDR interest rate and the rate of remuneration. Since 1978, changes in the level of the SDR interest rate (reflecting the combined market rate) have been the prime determinant of changes in the rate of charge.

(iii) Changes in the level of outstanding Fund credit also have a significant effect on the rate of charge: a decline in the use of Fund resources has a greater (and more favorable) impact on charges than a rise in the volume of outstanding Fund credit because a reduction in the use of Fund credit normally reduces operational expense (remuneration) by more than it reduces operational income from the service charge and periodic charge.

While the sensitivity analysis shows the close interrelations of the many variables affecting the Fund's income, it seems clear that changes in the level of the combined market rate of interest and, to a lesser extent changes in the outstanding level of Fund credit, exercise the dominant influences on the rate of charge and on net income. It is, however, in these two areas that differences between the actual outcome and the projected behavior have been greatest.

For example, in FY 1982 actual net income exceeded projected net income as projected at the beginning of the year by SDR 92 million (or 5.1 percent of gross income in that year) due mainly to the fact that average outstanding balances subject to charge were SDR 2.5 billion (or 25.3 percent) below the level originally forecast. In FY 1983, net income exceeded the original estimate by SDR 128 million (6.3 percent of gross income) due almost exclusively to the sharp fall in the SDR interest rate (hence the rate of remuneration) in the course of the year from 12.15 percent to 8.52 percent. This fall in interest rates resulted in an excess of actual over projected interest-related income of SDR 144 million, or 6.8 percent of total operating income. 1/

In these circumstances, and taking into account that the rate of charge on use of the Fund's ordinary resources has normally been maintained unchanged for a year, the Fund's net income has become highly sensitive to even relatively small deviations in market rates of interest and also to the level and changes in the average volume of outstanding purchases. 2/

In practice, at high levels of use of the Fund's resources, it is virtually impossible to achieve a particular income target and to maintain unchanged a fixed rate of charge which is levied on average

1/ The key variable on which the Fund has no control is the level and variability of the combined market interest rate. The behavior of interest rates over the last two years suggest that the distributional properties of this variable have not been stable. For example, the average rate of interest calculated on weekly data covering a two-year period ended September 1983 was 10.11 percent with a standard deviation of 1.79 percent. The average for the first year was 11.63 percent (standard deviation of 1.27 percent) while that for the second year was 8.56 percent (0.23 percent); the coefficients of variation were 0.11 percent in the first year and 0.03 percent in the second year as against 0.18 percent for the two-year period. It may also be noted that the range of variations in the interest rate was 5.69 percent for the two-year period, and was 5.18 percent in the first year but only 0.96 percent in the second year.

2/ For an analysis of the importance of the role of cost-free resources in determining the size of the differential between the rate of charge and the rate of remuneration in the light of changing levels of outstanding purchases, see "The Rate of Remuneration and the Fund's Income Position" (EBS/83/237, 11/2/83), pp. 9-11.

balances that vary (increase) over the course of the year while the cost of resources to the Fund--as reflected in the rate of remuneration--varies in accordance with market rates of interest.

III. Factors Bearing on the Level and Growth of Fund Reserves

1. Reserves and other variables

A number of variables that are relevant for the consideration of an appropriate rate of growth of the Fund's reserves are presented in Table 3. These data show that the Fund's reserves have risen steadily in absolute terms since FY 1978, but relative to other elements of the Fund's operations and transactions, particularly members' use of Fund resources and Fund borrowing, reserves have been declining since 1980. Given the reserve target of only a 3 percent annual increase, the relative decline of Fund reserves may be expected to continue at least through FY 1984 in view of the pending increase in quotas, the expected expansion in the demand for use of the Fund's resources and the likely increase in Fund borrowing.

2. Purposes of reserves

As has been mentioned in previous discussions, the Fund's reserves serve essentially three purposes: (i) to provide a cushion against possible annual deficits and other potential losses; (ii) as a (minor) source of additional liquidity; and (iii) as an indicator of sound financial management of the Fund's assets.

(i) The most compelling reason for the accumulation of reserves is to protect the capital of the institution from possible losses arising, for example, from an excess of the Fund's expenditures over its income, or from the failure of a member to meet its financial obligations to the Fund.

It cannot be excluded that the Fund could incur an annual deficit, in particular from unexpected and temporary developments in the Fund's operational and administrative expenditures, at a time when it would not be feasible to generate a parallel increase in income. However, other types of potential losses are possible, for example, from the failure of members to discharge their obligations to the Fund, or the risk of exchange losses on currencies held in accounts not subject to maintenance of value (e.g., the Special Disbursement Account or the Investment Account). It is not possible, however, to quantify precisely a relationship that might be regarded as optimal between Fund reserves and various magnitudes indicating the size of the Fund and the level of its operations and transactions (indications bearing on the need for reserves are discussed below); important judgmental factors must enter the calculation.

Table 3. The Fund's Reserves and Other Financial Variables 1974-83

(In millions of SDRs)

Year Ending April 30	Net Income (Deficit)	Opera- tional Income	Total Reserves	Percent Increase (Decrease) over Pre- vious Year	Total Reserves as a Percentage of				
					Quotas	Out- standing Purchases	Opera- tional Income	Outstanding Borrowing	Assets
1974	(37.2)	38.5	717.3	(4.9)	2.5	20.7	1,863.1	--	2.4
1975	(9.7)	166.5	707.6	(1.4)	2.4	10.7	425.0	28.3	2.2
1976	(2.9)	455.9	704.7	(0.4)	2.4	5.8	154.6	10.9	1.9
1977	(18.2)	774.6	686.5	(2.6)	2.3	4.3	88.6	8.9	1.8
1978	27.5	839.6	714.0	4.0	2.2	5.1	85.0	8.9	1.5
1979	46.1	753.3	760.1	6.5	1.9	7.4	100.8	15.1	1.7
1980	3.1	614.2	763.2	0.4	2.0	8.6	124.3	20.3	1.7
1981	80.1	882.3	843.3	10.5	1.4	8.6	95.6	19.3	1.3
1982	92.0	1,788.9	935.3	10.9	1.4	6.2	52.3	13.8	1.3
1983	65.4	2,045.0	1,000.7	7.0	1.6	4.2	48.9	9.1	1.3

(ii) The growth of the Fund's net income and its reserves adds to the volume of usable resources, albeit to a modest extent. The Fund's liquidity is enhanced because an increase in usable assets from net income is not accompanied by a potential increase in demand on the Fund's resources, as is the case when quotas are increased. ^{1/} In this regard, it is worth noting that the relative contribution to Fund liquidity from reserves diminishes the larger is members' access to Fund resources in terms of quotas, i.e., the Fund's own resources. Nevertheless consideration of Fund liquidity would suggest an increase in reserves over time.

(iii) The Fund's present declared policy regarding its annual net income position and additions to its reserves has an important bearing on the Fund's standing in the international financial community. A policy that aims to manage operational income and operational and administrative expenditures in such a way as to achieve some net income each year tends to provide assurance to the Fund's creditors that the financial affairs of the institution are being managed in a responsible manner. Furthermore, it is important for the perception of both the public in general and the Fund's creditors in particular that the Fund would plan normally to secure a net income on its operations.

3. Size of growth of reserves

(i) Target growth of reserves

The present policy of the Fund which aims at a specific annual increase in reserves is relatively recent. It was adopted in 1981 and followed a series of annual deficits, particularly in the years 1972-77. The deficits occurred during a period when Fund credit was expanding rapidly and reaching a high level, and gave rise to fears that deficits would increase further. In 1977 a series of measures was introduced aimed at eliminating the deficit, providing for a system of review of the Fund's financial position and for automatic adjustment in the rates of charges or in the rate of remuneration, unless the Board decided

^{1/} Apart from the contribution to the Fund's liquidity, reserves form part of the cost-free resources available to the Fund, and contribute importantly to the concessional element in the Fund's charges. See "The Rate of Remuneration and the Fund's Income Position" (EBS/83/237, 11/2/83), p. 10.

otherwise. ^{1/} In 1981 the system was rationalized further when the Executive Board adopted a specific target rate of net income to be taken into account in determining periodic charges on the use of Fund resources. Rule I-6(4)(a) states:

"The rate of charge shall be determined at the beginning of each financial year on the basis of the estimated income and expense of the Fund during the year and the target amount of net income for the year. The latter shall be 3 percent of the Fund's reserves at the beginning of the year or such other percentage as the Executive Board may determine particularly in the light of the results in the previous financial year."

The rate of growth of reserves of 3 percent per year reflected a balance of conflicting considerations. It was generally agreed that reserves should grow both steadily and moderately. However, while it was felt that a rate of increase in the Fund's reserves would contribute to the Fund's financial strength, it was also important to avoid the need for an increase in the rate of periodic charges that would add an important additional burden to the balance of payments difficulties experienced by members that were making use of the Fund's ordinary resources.

(ii) Indicators of growth of reserves

As can be seen from Table 3, the level of reserves in relation to some of the more important variables which bear on the need for reserves have shown a considerable decline over the last six years.

^{1/} In April 1977, the Executive Board decided on a number of measures aimed at eliminating the deficit; the rates of periodic charges were increased as from April 1, 1977 by 0.375 percent per annum; the initial rate of charge (i.e., for the first twelve months) was fixed at 4.375 percent progressing to a maximum rate of 6.375 percent. Secondly, it was decided that charges would be paid promptly rather than 30 days after the end of the quarter. Thirdly, provision was made for a prompt review of the Fund's financial position whenever the margin of the initial rate of charge over the rate of remuneration was reduced to less than 1/4 of 1 percent or increased to more than 1 percent because of changes in the rate of remuneration. If a new decision regarding the rate of charge or the rate of remuneration was not taken as a result of the review, the rate of initial charge would be 1/4 of 1 percent above the rate of remuneration.

With effect from January 1, 1979, the Executive Board modified the 1977 Decision to provide for a review of the Fund's financial position, the rate of remuneration and the rate of charge, "if in any period of six successive months the Fund's total expenses exceeded its income." It also provided that the initial rate of charge would be 1/4 of 1 percent above the rate of remuneration, unless the Board as a result of the review decided otherwise. This system of reviews continued in effect until May 1, 1981 when the present system was adopted of determining a net income target of 3 percent of reserves at the beginning of the financial year.

The present level of the Fund's reserves may seem relatively adequate in relation to potential income deficits. However, in relation to quotas, to outstanding use of Fund credit, and to the level of the Fund's borrowing, the level of reserves is low, and perhaps more significantly, is falling sharply. ^{1/} Given the prospective further sharp increase in the use of the Fund's resources, financed in part by a substantial increase in borrowing, the downward trend in reserves in relation to Fund activity is likely to continue over the next few years at the present target for net income. Consequently, consideration might be given to the desirability of increasing the level of reserves to achieve a higher ratio to the volume of outstanding purchases and to the level of the Fund's borrowing: for example, if reserves were to be raised to approximately 10 percent of average outstanding purchases over the next few years, the Fund would need to achieve a net income of approximately 13 percent per annum of reserves at the beginning of each financial year for the remainder of the decade; if reserves were to amount to, say, 15 percent of outstanding borrowing over the balance of the decade, then the Fund would need to earn net income of approximately 11.5 percent of reserves at the beginning of each financial year.

While it may not be reasonable to determine a precise target reserve growth on such indicators as outstanding purchases or Fund borrowing, such indicators point to the fact that the accumulation of reserves has been slow in relation to the present expansion of the Fund's credit activities. As a consequence it might seem prudent to allow for some increase in reserves relative to the overall size of the Fund and to the rate of expansion in its credit activity, which could imply a somewhat faster rate of reserve growth than would result from adhering to the 3 percent target rate.

(iii) Increase in reserves in real terms

The suggestion has been made by an Executive Director that reserves might grow pari passu with other economic magnitudes in such a way as to ensure that the level of Fund reserves in real terms would not decline over time. In this connection the suggestion has been advanced that the rate of growth of reserves might equal the rate of interest on the SDR (which for this purpose could be considered to present an average rate of return on capital). ^{2/}

While the present rate of reserves growth would not be out of line with the growth rates mentioned in the preceding section, this approach presents a number of difficulties. The SDR rate of interest based on

^{1/} Perhaps equally important is the composition of the outstanding credit and the nature of the balance of payments problems of members indebted to the Fund, though these factors are less easily captured in a particular statistic.

^{2/} With an average interest rate on the SDR during the preceding financial year of 10.10 percent, the net income target for FY 1984 under this approach would have been set at about SDR 100 million.

short-term interest rates in the domestic money markets of five major financial countries, and thus essentially reflect the monetary policies of those countries; its connection to a general rate of price increase is indirect, and possibly long-run, at best. Furthermore there is no strong reason to assume that the Fund's need for reserves would be directly related to world inflation. Neither the growth of quotas, nor the growth of credit outstanding by the Fund, nor the Fund's total operational expenses would seem to be systematically related to average price increases or to some other general indicator of world inflation.

The Fund's credit activities and its outstanding borrowing are directly related to the size and distribution of balance of payments disequilibria which tend to exhibit a cyclical pattern, and which can change for reasons other than changes in the rate of inflation or the SDR interest rate. It should not, however, be implied that the Fund's reserves should not grow over time because of the cyclical changes in Fund activity, but rather the rate of increase in Fund reserves might be more appropriately related to the increases in the nominal values which are more directly related to the Fund's need for reserves.

(iv) Reserves and administrative expenditures

It has been suggested in the past by some Executive Directors that the Fund's need for reserves is related more directly to its administrative expenses and less directly to the volume of its financial operations. This argument rests on the more general view that the Fund would have significant administrative expense even if its financial activities would be smaller than they have been in recent years. Two points may be made in this connection: (a) a relatively high level of reserves would indeed reduce the risk that, independently of developments in market rates of interest, administrative expenditures would play a significantly important role in determining the Fund's structure of charges if the demand for Fund credit fell to low levels; and (b) a level of reserves could be achieved that would avoid an impairment of capital resources that might be needed to meet administrative expenditures which are not related to the rising administrative costs associated with a higher volume and greater complexity of the Fund's financial operations. To generate sufficient income, by an amount that would cover administrative expenditures at the present level of approximately SDR 200 million, the Fund's reserves would have to be about SDR 2.3 billion. 1/ To achieve this level of reserves in a reasonable period of time, say over the decade, reserves would have to increase at an annual (compound) rate of 8.7 percent. 2/

1/ On the assumption of an SDR interest rate at the recent average level of 8.75 percent per annum.

2/ If one-half of present administrative expense were attributed to the costs of administering financial operations, the annual compound rate would be 1.4 percent.

(v) Other considerations

The elements which determine the need for reserves are rather complex and are not easily reduced to a simple numerical expression. The desired annual rate of increase of reserves would depend on whether reserves are to be considered mainly a cushion against the failure of member countries to meet their obligations and against other unexpected contingencies, or whether reserves should also serve a somewhat wider role, say, in helping to produce income (or reduce operational expense) that would meet the Fund's administrative expenditures.

There is little doubt that in absolute terms the present level of reserves could accommodate to only a limited extent unanticipated adverse developments in the Fund's financial position that would need to be cushioned by a decline in the Fund's reserves. In this respect, it is to be emphasized that a relatively low level of reserves deprives the Fund of a certain degree of flexibility, particularly if, in the face of an unanticipated adverse development, the adjustment that otherwise would be necessary in the variables directly affecting the Fund's net income position (such as, e.g., the rate of charge, or the rate of remuneration, or the margin charged above the cost of borrowed resources) would be of such a magnitude that might be considered disruptive or counterproductive to the Fund's broader policy objectives. In other words, the level of reserves should reflect to some degree a precautionary element that would provide for occasions when the target accumulation of reserves could not be met without major changes elsewhere.

(vi) Future growth of reserves

As an intergovernmental institution of a cooperative nature with financial resources derived mainly, though not exclusively, from the subscriptions of its members, the Fund's need for reserves is not comparable to that of private enterprises or of public financial institutions that are organized more closely on commercial principles and procedures. Nevertheless, the Fund has a need for reserves and provision should normally be made for regular growth in the Fund's reserves, which would be subject, of course, to periodic regular review and subject to such adjustments as may be required in the light of circumstances.

The actual rate of accumulation of reserves over the last six years has been 6.5 percent per annum compound which, in the light of the large-scale growth of the Fund's activities over that period, does not seem excessive. Indeed, indicators bearing on the need for reserves would suggest the need to raise the ratio of reserves to outstanding purchases and borrowing, and suggestions have been made to preserve the real value of the Fund's reserves by linking the rate of growth of reserves to the SDR interest rate. While the Fund's credit activities are likely to expand over the next few years, the actual volume of outstanding purchases and Fund borrowing will fluctuate sharply over

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time. Consequently, if the reserve target would be determined as a fixed percentage of the outstanding volume of purchases or borrowings (or to the SDR interest rate), the absolute amount of reserve accumulation could vary considerably with the ebb and flow of Fund activity. The present target, which is based on the existing level of reserves, is relatively stable but may also be regarded as a minimum target for the medium term. The considerations that were of significance in establishing the target continue to be relevant, in particular the need to strengthen the Fund's financial position over time without putting an undue burden on Fund debtors through a large increase in periodic charges. The target provides for some increase in the Fund's reserves while also permitting some flexibility in the rate of reserve accumulation. The present Rules provide for the possibility periodically to adjust *the net income target, and in present circumstances a case might be made to raise the target.* However, there may be considerable advantages in maintaining the present 3 percent target while permitting some upward flexibility in the actual rate of accumulation of reserves, e.g., by the addition to reserves of income in excess of target as has been decided by the Executive Board in the last two financial years. In contrast, if net income fell for any length of time below the target in present circumstances, steps would need to be considered to restore the reserve growth to the target level.

IV. Determination of the Rate of Periodic Charge

1. Present policy

Since FY 1982, the rate of charge levied on the use of the Fund's ordinary resources has been determined at the beginning of each financial year on the basis of (i) the projected income and expense of the Fund for the year and (ii) a target amount of net income which has been set in the Rules at equivalent to 3 percent of the Fund's reserves at the beginning of the financial year, unless the Executive Board determines another target amount. The income position is reviewed midway through the financial year, and if at that time the actual net income for the first six months, on an annual basis, is below the target amount of net income by an amount of 2 percent or more of the Fund's reserves at the beginning of the financial year, the *Executive Board shall consider how to deal with the situation.* If the Executive Board does not reach agreement on a different course of action to safeguard the Fund's financial position, the rate of charge is automatically adjusted as of November 1 so as to ensure that the target amount of net income for the year will be achieved. 1/

Since the adoption in 1981 of the present method of determining the rate of charge on the use of the Fund's ordinary resources, the rate of charge that was set at the beginning of a financial year has been maintained throughout the year. However, actual income for each

1/ Rule I-6(4), which specifies the manner of setting the Fund's charges, is reproduced in Appendix II.

year has diverged from the target amount, as shown in Table 4 below:

Table 4. Rate of Charge, Net Income Target, and Actual Net Income

Financial year	Rate of charge	Net Income		Percentage increase
		Target	Actual	
1982	6.25	--	92	10.9
1983	6.60	28	65	6.9
1984	6.60	30	52*	5.2*

*Projected; see "Review of the Fund's Income Position" (EBS/83/248, 11/21/83).

The Executive Directors have in the past considered various alternatives regarding the disposition of the amount of net income that was earned in excess of the target amount. Under the present system the Executive Board has endorsed the preferred course of the management to place each year the amounts in excess of the target income to the Fund's reserves. An alternative course of action would have been to use the excess income to raise the rate of remuneration or lower the rate of charge retroactively. However, there is no a priori formula to determine the appropriate distribution between an increase in the rate of remuneration and a reduction in the rate of charge, at least as long as the rate of charge remains below the rate of remuneration or the rate of remuneration remains below the SDR interest rate. 1/ Another alternative would be to use a previous year's "excess" income as part of the net income for the subsequent financial year, so that the rate of remuneration could be higher or the rate of charge lower than would otherwise be the case in that year. This procedure could imply that the Fund would plan deliberately for a net deficit (as distinguished from a deficit that arises because of unanticipated developments) which would seem generally undesirable and inconsistent with the standing of a well-managed financial institution. Finally, income in excess of target could be distributed in accordance with Article XII, Section 6(a) to all member countries in proportion to their quotas. It may be difficult to find a consensus for this approach in view of the difficulties in balancing the interests of creditor and debtor countries

1/ Under the Articles, the rate of remuneration cannot exceed the SDR interest rate. Furthermore, decisions by the Executive Board regarding changes in the rate of charge and the rate of remuneration require a majority of 70 percent of the total voting power, and these may be difficult to achieve when the interest of Fund creditors and Fund debtors would conflict.

in the Fund, and especially if the current distribution of quotas would be under scrutiny.

2. Evaluation of present method

The present method of determining the rate of charge broadly meets the prime aim of securing some increase in reserves in each year. The mechanism of the mid-year review of the Fund's financial position provides, in the absence of other actions, for an automatic increase in the rate of charge if the income target is not met at mid-year. However, the present method, while avoiding deficits, does not ensure that the amount of net income earned in any year will be precisely equal to the target amount.

The outcome of the present system of determining charges and providing net income depends to a considerable extent on (i) estimates of the use of Fund credit during the forthcoming financial year, and (ii) on the relative stability of interest rates in the course of the year at the level at the beginning of the year. The estimates of use of the Fund's resources over a year ahead are subject to a considerable margin of error. Furthermore, and as noted earlier, interest rates have not been stable over the last few years. During periods of very high use of Fund resources, the predominant importance of changes in market rates of interest from the levels assumed at the beginning of the year have a major impact on the Fund's net income position (mainly via the impact on remuneration). Some Directors have therefore suggested that consideration should be given to alternative approaches in the setting of the rate of charge on the use of ordinary resources that would not only reduce the significance of the impact of the estimation process, including the assumption of stable interest rates during the financial year, but would better ensure that the target of net income for a particular year would be met more closely.

A number of methods that could be employed to set charges are presented in Appendix I. These alternative methods are based either on shortening (Method 1) from one year to, say one half year, or eliminating (Method 2) the present estimation period of use of the Fund's resources, and also reducing the time assumed for the stability of interest rates, or determining the rate of charge on a retroactive basis (Method 3), as is now done regarding charges levied on use of borrowed resources under the SFF and EAR. In general the results of Methods 1 and 2 are not superior to the present method, mainly because changes in the level of interest rates during the period exert a major influence on the level of income and they cannot be reduced or eliminated, and while Method 3 achieves the net income target precisely, it leaves no room for flexibility particularly in the event that a need would arise for a somewhat faster rate of reserve accumulation. Indeed, the greater the precision that is sought in seeking to meet the reserve target, the more likely the reserve target would itself need to be adjusted periodically in the light of changing circumstances, thereby possibly increasing the frequency with which the rate of charge would

need to be adjusted. Essentially, with a steady policy on reserve accretions, all the methods that would achieve more closely the target amount of net income have as a consequence a need to adjust more frequently the rate of charge on the use of ordinary resources. Alternatively, those methods that would tend to keep the rate of charge on the use of ordinary resources relatively stable for somewhat longer periods of time, such as a year, involve a relatively large degree of fluctuation (or divergence from the target) in the Fund's net income position and in its level of reserves, which could in some circumstances lead to a decline in reserves. In present circumstances this policy change would not seem to be indicated.

3. Continuation of present system

The present system of setting charges has been in effect for only two and one half years. During this brief period of time the average volume of ordinary resources outstanding has increased from SDR 5.3 billion to SDR 16.0 billion and interest rates have fluctuated to an unprecedented degree. The rate of charge has been comparatively stable at 6.25 percent in FY 1982 and 6.60 percent in FY 1983 and FY 1984. While net income has been above the target levels for each of these financial years, the reserve accumulation has been relatively small, particularly taking into account the Fund's total operational income and expense in those years.

In short, the present system of setting charges has worked reasonably well in somewhat difficult circumstances, and it seems to contain a reasonable degree of flexibility to accommodate changing circumstances. Furthermore, and as noted above, in view of the considerable uncertainties that can and do affect the Fund's income position, and depending on the circumstances, there is advantage in allowing the amount of net income to vary somewhat in relation to the agreed net income target before taking steps to bring net income closer to the target amount. Indeed in view of the relatively low level of reserves it would seem useful to permit net income to exceed the target amount for some time, and, as a corollary, to take early action to restore net income to its target level if net income fell below target for any length of time. By allowing net income to fluctuate above the target amount, it is possible to avoid frequent (and sometimes offsetting) changes in the rate of charge and also to take account of a favorable trend in the combined market rate of interest, or in a projected decline in the use of Fund credit (or in a projected reduced use of the unremunerated reserve tranche positions).

In these circumstances, and also taking into account the simulated results of other methods of setting the rate of charge, there would seem to be comparatively little advantage in changing the present system of setting the rate of charge. The semi-annual reviews of the Fund's income position that are provided for in the present Rules are an important safeguard that permits the Executive Directors to undertake periodically an examination of both the present method of setting charges and the results of that method.

V. Summary and Conclusions

The following are some of the main points made in the preceding analysis:

1. It has not been possible in practice to achieve a given net income target in the face of a rate of remuneration that reflects variations in market rates of interest and a fixed rate of charge on the use of the Fund's ordinary resources.

2. A change in the level of the SDR interest rate (reflecting changes in the combined market rate) has been the prime determinant of a change in the Fund's net income position through its impact on the rate of remuneration, and thereby on the rate of charge.

3. A change in the average level of use of the Fund's ordinary resources also exerts a major influence on the Fund's net income position, and hence on the rate of charge. The greater the use of the Fund's ordinary resources the smaller is the impact of the fixed amount of cost-reducing (interest-free) resources on the Fund's financial operations. In these circumstances the differential between the rate of remuneration (i.e., the average cost of resources to the Fund) and the rate of charge (i.e., average return to the Fund on outstanding credit) needs to be narrowed in order to achieve a given net income target.

4. The Fund's reserves serve a number of purposes: (i) as a cushion to protect the Fund's capital from possible loss which could arise from a deficiency of income or from the failure of a member to observe its obligations; (ii) as a minor source of additional liquidity; and (iii) as an indicator of sound financial management.

5. While the present level of reserves may be judged not inadequate in relation to potential income deficits, reserves have over the last few years declined sharply in relation to Fund quotas, members' use of the Fund's resources, and Fund borrowing, and may be expected to fall further during the next few years. A relatively low level of reserves deprives the Fund of a certain degree of flexibility. In the event that adjustments would be needed in the face of an unanticipated development that adversely affected the Fund's income position, the relatively low level of reserves could require the Fund to take faster and stronger action than might be considered appropriate in the light of the Fund's broader policy objectives.

6. The view has been expressed that the level of reserves should grow pari passu with other economic magnitudes in such a way that the level of Fund reserves in real terms would not decline over time. However, the increase in reserves may be more appropriately related to the increase in nominal values which are more directly related to the Fund's need for reserves. These indicators would also suggest the need for a relatively large rate of growth in reserves in present circumstances.

7. In light of these considerations, the present target rate of growth of net income of 3 percent may be regarded as relatively low in present circumstances. Consequently, it would not seem unreasonable to accept, for the next few years, an actual increase in reserves that might be greater than would be indicated by the net income target of 3 percent of reserves at the beginning of the financial year. Furthermore, if net income fell below the target, for whatever reasons, steps might need to be considered promptly to restore the growth of reserves to at least the target level.

8. The present method of determining the rate of charge broadly meets the prime aim of achieving an increase in the Fund's reserves, though it does not ensure that the net income target will be met exactly. The outcome of the present system in terms of the Fund's net income position depends to a considerable extent on (i) the accuracy of estimates of use of Fund credit during the forthcoming financial year, and or (ii) interest rates remaining stable in the course of the year at the level obtaining at the beginning of the financial year. However, estimates of use of Fund credit are subject to a considerable margin of error, and interest rates have been highly volatile over the last few years, causing substantial differences between estimated net income and actual net income, though the differences are small when measured in terms of the Fund's operational income and expense.

9. It has been suggested that consideration be given to improve the method of setting periodic charges by lessening the importance of the estimation process, including the assumption that interest rates will remain stable for the whole year. Various methods of setting the rate of charge were presented. In general they did not produce results that were superior to the present system. Essentially those methods that would more nearly achieve the target amount of net income than the present system would, as a consequence, increase the frequency of changes in the rate of charge on the use of ordinary resources. The more stable is the rate of charge, the lower the likelihood of meeting the net income target without some deviation. They might, therefore, induce periodic changes in the net income target which over the medium term would not seem to be warranted.

10. The present system of setting charges has been in effect for only two and one half years, after a number of experiments with other methods to safeguard the Fund's financial position. During that time, the rate of charge has been relatively stable and while the net income target has been exceeded in FY 1982 and FY 1983, the "excess" income that was placed to reserve, while relatively small in absolute amounts, nevertheless provided a useful addition to a level of reserves that could be regarded as relatively low. Indeed, in terms of reserve accumulation there may be some advantage in allowing for the next few years, the amount of net income to exceed on occasion the agreed net income target. If net income should fall below the target for any period of time, steps should be taken promptly to raise net income to the target level, particularly while the level of reserves is relatively

low. The present system has provided not only useful flexibility in the rate at which reserves have accumulated but has avoided the need for frequent changes in the rate of charge at a time of considerable instability in interest rates. Nevertheless, it may be appropriate to review the present system of setting charges, including the appropriateness of the size of the net income target, when the current expansion of Fund credit would seem to have come to an end.

Alternative Methods of Setting Charges

The Appendix explores alternative approaches to the present method in setting the rate of charge that would help achieve more closely the target amount of net income. Three methods are discussed below and the simulated results of using these methods on the basis of information available for FY 1982 and FY 1983 are presented in Appendix Table 1.

(i) Method 1 - prospective use of Fund resources

In analogy to the present safeguard mechanism, charges could be set more or less automatically each half year (or each quarter). Charges would be determined for the forthcoming half year (or quarter) at the beginning of the period on the basis of (i) the then obtaining SDR interest rate, (ii) the volume of purchases expected to be outstanding on average during the period and (iii) one half (or one quarter) of the annual net income target. An automatic adjustment would be made to the rate of charge for the forthcoming half year (or quarter) if any of the assumptions had not materialized by the end of the period, or if net income had deviated from the target for the period; the deviation would be distributed over the balance of the financial year so as to achieve the annual target. ^{1/} If it were desired to limit the frequency of changing the rate of charge and to shift part of the adjustment to the target level of income, a trigger could be adopted so that no adjustment would take place unless it were estimated that net income on an annual basis deviated by more than, say, 2 percent, up or down, from the target income of 3 percent of reserves.

A simulation of the outcome of such a method of setting charges during the two years since introduction of the present method of setting charges is set out in Appendix Table 1. The rate of charge would have been relatively stable in FY 1982, but frequent adjustments would have been needed in FY 1983. The average rate of charge would have been slightly lower in both years (more so in 1982 than in 1983) than the actual rate, and the income target would have been approached more closely. While in 1982 there would have been a substantial excess above the target of a balance between income and expenditures, the target would virtually have been met in 1983. The semiannual adjustment tended to be more volatile than quarterly adjustments in the rate of charge and the income target would not have been approached as closely. With annual adjustments, there is, of course, little difference between this alternative and the present method.

^{1/} Alternatively, if the net income target were set for periods longer than a year, a rolling adjustment over the subsequent four quarters could be considered.

Table 1. Comparison of Alternative Methods
of Determining the Rates of Charges

	Quarterly				Semi-Annual		Weighted Average (at annual rates)			Net Income (SDR million)	
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Half	2nd Half	Quar- terly	Semi- Annual	Actual	Target	Actual
Method 1 (Prospective Use of Fund Resources)											
FY 1982											
Rate of charge	4.95	5.40	5.40	5.40	4.95	5.60	5.30	5.30	6.25		
SDR rate	13.06	14.02	13.21	11.89	13.48	12.43	13.08	13.08			
Net income	13	7	8	-7	12	10	21	22		--	92
FY 1983											
Rate of charge	7.50	7.50	5.51	5.21	7.50	5.52	6.27	6.37	6.6		
SDR rate	12.10	10.96	8.77	8.49	11.54	8.51	10.20	10.20			
Net income	21	25	12	-30	46	-7	28	39		28	65
Method 2 (Current Use of Fund Resources)											
FY 1982											
Rate of charge	3.50	5.30	5.70	5.40	4.35	6.10	5.05	5.30	6.25		
SDR rate	13.06	14.02	13.21	11.89	13.48	12.43	13.08	13.08			
Net income	-10	4	14	-6	-8	30	2	22		--	92
FY 1983											
Rate of charge	6.05	7.45	5.78	6.37	7.10	5.83	6.39	6.37	6.6		
SDR rate	12.10	10.96	8.77	8.40	11.54	8.51	10.20	10.20			
Net income	-19	17	12	4	27	13	14	40		28	65
Method 3 (Past Use of Fund Resources)											
FY 1982											
Rate of charge	4.15	5.05	5.00	5.70	4.61	5.38	5.03	5.03	6.25		
SDR rate	13.06	14.02	13.21	11.89	13.48	12.43	13.08	13.08			
Net income	--	--	--	--	--	--	--	--		--	92
FY 1983											
Rate of charge	6.88	6.80	5.35	6.27	6.85	5.85	6.27	6.27	6.6		
SDR rate	12.10	10.96	8.77	8.49	11.54	8.51	10.20	10.20			
Net income	7	7	7	7	14	14	28	28		28	65

(ii) Method 2 - current use of Fund resources

The suggestion has been made to set the rate of charge on the basis of values for the variables used in the calculation that were known at the beginning of a given period. The SDR rate (and hence the rate of remuneration) would be that which obtained at the start of the period, as is now the case in making the calculation for the financial year as a whole. However, the proposed method would eliminate the estimation of the amount of net purchases (and the projected total of service charges) over the forthcoming period as is needed under the current method. In view of the more frequent calculation of the rate of charge the extent of divergences of actual values between the beginning and the end of the quarter would be less than the current method (though more frequent estimates of net purchases under the present would tend to reduce the divergences between actual and projected values).

The outcome of a simulation for FY 1982 and FY 1983 of this variant is set out in Method 2 of Appendix Table 1. Fluctuations in the rate of charge under this method would have been somewhat larger than under the method that takes prospective purchases into account. The average annual level of the rate of periodic charges would have been somewhat lower in 1982 and somewhat higher in 1983. Conversely, the net income target in 1982 (which was a balance between income and expenditures) would have been virtually met. However, in 1983 net income would have been only half of the target amount of SDR 28 million.

(iii) Method 3 - past use of Fund resources

During the Fund's history, periodic charges on the use of the Fund's ordinary resources have always been set ahead of the period to which they applied. However, a different system applies as regards charges levied on balances acquired by the use of borrowed resources under the Supplementary Financing Facility and the Policy on Enlarged Access. As the cost to the Fund of resources borrowed by the Fund under both of these policies fluctuates, and in order to average these costs for all users of borrowed funds under these policies, charges are set retrospectively at the end of semi-annual periods on the basis of average outstanding use of borrowed resources under each facility, and of the average net cost of borrowing to the Fund (taking into account the income from temporarily invested undisbursed proceeds of the loans). ^{1/} With the rate of remuneration linked to a market-determined SDR interest rate which since August 1, 1983 is calculated and applied each week rather than each quarter, a similar uncertainty now obtains regarding the cost to the Fund of ordinary resources. Consequently, consideration could be given to adopt an analogous system of determining the rate of charge for the use of ordinary resources retroactively. The rate of charge could be set retroactively every half year on the basis of credit outstanding during the period and taking into account an agreed

^{1/} See Rules I-6(3) and I-6(5).

target for net income during the financial year. As the rate of charge would be the only unknown at the end of the period, it could be set in such a way to ensure that the net income target is achieved.

A simulation of the outcome of retroactive determination of charges for financial years 1982 and 1983 is shown in Method 3 of Appendix Table 1. There would have been no divergence under this method between actual net income and target income during the period. The rate of charge in 1982 and 1983 would have been below the rates under the other methods, and net income would have been lower, particularly in 1982 which would reflect the zero income target. As can be seen this system of setting charges is relatively inflexible and the net income target becomes the main policy variable.

Rule I-6(4):

The rate of charge on holdings acquired as a result of a purchase (i) in the credit tranches, or (ii) under the Extended Fund Facility (Executive Board Decision No. 4377-(74/114), as amended), or (iii) under the Facility for the Compensatory Financing of Export Fluctuations (Executive Board Decision No. 4912-(75/207), as amended), or (iv) under the Facility for the Problem of Stabilization of Prices of Primary Products (Executive Board Decision No. 2772-(69/47), as amended), or (v) under the Facility for Compensatory Financing of Fluctuations in the Cost of Cereal Imports (Executive Board Decision No. 6860-(81/81)), shall be determined in accordance with (a), (b), and (c) below.

(a) The rate of charge shall be determined at the beginning of each financial year on the basis of the estimated income and expense of the Fund during the year and the target amount of net income for the year. The latter shall be 3 percent of the Fund's reserves at the beginning of the year or such other percentage as the Executive Board may determine particularly in the light of the results in the previous financial year.

(b) A mid-year review of the Fund's income position shall be held shortly after October 31 of each year. If actual net income for the first six months of the financial year, on an annual basis, is below the target amount for the year by an amount equal to, or greater than, two percent of the Fund's reserves at the beginning of the financial year, the Executive Board will consider how to deal with the situation. If on December 15 no agreement has been reached as a result of this consideration, the rate determined under (a) at the beginning of the year shall be increased as of November 1 to the level necessary to reach the target amount of net income for the year.

(c) A review of the Fund's income position shall be held shortly after the end of each financial year. If the net income for the year just ended is in excess of the target amount for the year, the Executive Board will consider whether the whole or a part of the excess should be used to reduce the rate of charge, or increase the rate of remuneration to not more than the rate of interest of the SDR, retroactively for the year just ended, or both, or to place all or part of the excess to reserve.

(d) If the Fund's net income for a financial year is in excess of the target amount for that year, the Executive Board may for the purposes of the determinations and estimates referred to in (a) and (b) above in respect of the immediately subsequent financial year, decide to deem any part of the excess over the target amount that has been placed to reserve as income for that subsequent financial year.