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August 2, 1985

To: Members of the Executive Board

From: The Secretary

Subject: SDR Allocations in the Current Basic Period -
Review of Pertinent Considerations

The attached paper reviewing SDR allocations in the current basic period has been scheduled for discussion on Friday, August 30, 1985.

Mr. Rhomberg (ext. 8976) or Mr. Mathieson (ext. 7662) are available to answer technical or factual questions relating to this paper prior to the Board discussion.

Att: (1)

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INTERNATIONAL MONETARY FUND

SDR Allocations in the Current Basic Period:
Review of Pertinent Considerations

Prepared by the Research Department

(In consultation with the Legal Department
and the Treasurer's Department)

Approved by Wm. C. Hood

August 2, 1985

Although the subject of SDR allocation in the fourth basic period has been extensively discussed since 1980, the broad support among participants required for a proposal to the Board of Governors for the allocation of SDRs has not been attained. In considering the issue of an SDR allocation, the Interim Committee noted in its Press Communique of April 19, 1985 that:

The members of the Committee had an exchange of views on the question of an SDR allocation in the current basic period. While the SDR constitutes an integral part of the structure of the Fund, it was not possible to reach the degree of support required for such an allocation. The Committee agreed to consider the matter again at its next meeting in the light of developments.

This paper provides updated information on developments that have been discussed in earlier papers on SDR allocation, 1/ such as movements

1/ Earlier papers relating to SDR allocation in the fourth basic period are:

SM/80/189, "Considerations Relating to the Size of SDR Allocations," July 25, 1980 (and Correction 1, August 13, 1980).

SM/81/4, "Considerations Relating to the Size of SDR Allocations in the Fourth Basic Period," January 7, 1981 (and Correction 1, January 19, 1981).

SM/81/74, "Further Considerations Relating to the Size of SDR Allocations in the Fourth Basic Period," April 1, 1981 (and Supplement 1, April 14, 1981).

SM/83/157, "Considerations Relating to a Possible Proposal for an Allocation of SDRs in the Current Basic Period," July 11, 1983.

SM/83/196, "Considerations Relating to the Long-Term Global Need to Supplement Existing Reserve Assets," August 26, 1983.

SM/83/266, "Considerations Pertaining to the Allocation of SDRs," December 28, 1983 (and Supplement 1, January 20, 1984).

DM/84/11, "Demand for International Reserves and Effects of Reserve

in international reserves and liquidity, world trade, and inflation, and it considers the criteria for an SDR allocation that are set forth in the Articles of Agreement in the light of these recent developments. The paper is divided into five sections. Section I briefly reviews the criteria for an SDR allocation. Section II documents recent changes in economic and financial conditions that have a bearing on the adequacy of reserves and international liquidity. In Section III, the latest World Economic Outlook (WEO) projections are used to estimate the likely growth of the demand for reserves during the current basic period and beyond. Section IV examines the possible sources of reserve growth and the role that SDR allocations could play in satisfying the long-term global need for reserves. Section V is concerned with factors affecting the appropriate size of SDR allocations, including the prospects for inflation, the international adjustment process, and the relative position of the SDR in non-gold reserves. The final section summarizes the arguments pertaining to a decision on SDR allocations during the remainder of the 1980s.

I. Criteria for SDR Allocation

The criteria which must be satisfied before an allocation may be decided are set out in Article XVIII, Section 1(a) of the Articles of Agreement:

In all its decisions with respect to the allocation and cancellation of special drawing rights the Fund shall seek to meet the long-term global need, as and when it arises, to supplement existing reserve assets in such manner as will promote the attainment of its purposes and will avoid economic stagnation and deflation as well as excess demand and inflation in the world.

These criteria have been further clarified in previous discussions of SDR allocation. 1/ First, an SDR allocation must satisfy a need to

1/ (Cont'd from p. 1) Increases on the World Economy: An Annotated Bibliography," February 22, 1984.

SM/84/148, "Allocations of SDRs--Legislative History of the Concept of 'Global Need' to Supplement Existing Reserves," June 27, 1984.

SM/84/191, "Allocation of SDRs in the Fourth Basic Period," August 3, 1984.

SM/85/50, "Allocation of SDRs in the Current Basic Period--Renewed Considerations," February 11, 1985.

1/ An examination of the previous discussions concerning the interpretation of the criteria contained in Article XVIII can be found in SM/84/148, "Allocations of SDRs--Legislative History of the Concept of 'Global Need' to Supplement Existing Reserves," June 27, 1984.

supplement existing reserve assets. Such a need could in principle exist even when the demand for reserves is fully satisfied. In particular, a decision to allocate SDRs does not imply the judgment that the existing demand for reserves could only be met in that way. 1/

Second, the need for reserve augmentation must be global in nature. SDR allocation must satisfy the reserve needs of the international community as a whole, although it does not require that each individual member country have a specific need for additional reserves. Indeed, the adverse impact of a reserve shortage experienced by an individual country or a group of countries on the performance of the world economy and the functioning of the international monetary system would be a consideration that would be taken into account in establishing whether a global need for reserve supplementation existed.

Third, there must be a long-term need for reserves. SDR allocations are not intended to be used for countering cyclical movements in the world economy. The normal five-year length of the basic period emphasizes that allocations should reflect trend developments in the international economy.

Fourth, the allocation of SDRs must further the attainment of the Fund's purposes as stated in Article I of the Fund Agreement. 2/ This includes facilitating balanced growth of international trade, a stable

1/ These discussions were reflected in the Managing Director's proposal to the Board of Governors for allocations of SDRs during the third basic period on October 25th, 1978. The relevant passage is:

While it is true that most countries have a means for satisfying their need for reserves when international capital markets are as free as they are today, the decision to allocate special drawing rights does not depend on a finding that the long-term global need cannot be met except by allocation. A characteristic of a system in which countries add to their gross reserves as their international indebtedness increases is that they are faced with the need for periodic refinancing. This difficulty does not arise when additions to net reserves are made through allocation of special drawing rights.

2/ Article I(ii)--To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.

Article I(iii)--To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.

exchange rate system, and the avoidance of competitive depreciation. In addition to these requirements, the objective of making the SDR the principal reserve asset in the international monetary system must also be recognized. 1/

II. Recent Movements in Reserves and International Liquidity

This section examines developments in the international economy that have affected reserve holdings and international liquidity since the beginning of the fourth basic period. During this period, there has been a decline in the availability of international credit to many countries, as well as sharp movements in international trade, economic activity, and commodity prices. These developments have altered the demand for and the supply of reserves.

Non-gold reserves have grown at an average annual rate of 10 percent during the period 1974-84, with the growth in these reserves exhibiting a strong cyclical pattern in recent years (Table 1). In 1982, for example, reserves fell by 1 percent, the first such decline since 1959. As a result, many countries attempted to rebuild their reserve holdings, and these efforts were reflected in an expansion of reserves from SDR 327 billion at the end of 1982 to SDR 386 billion at the end of March 1985 (an annual rate of 7.6 percent).

This accumulation of reserves has resulted in some increases in the ratio of reserves to imports for the various country groups from the low values attained in 1981 or 1982 (Table 1 and Chart 1). For all countries

1/ The relevant provisions are as follows:

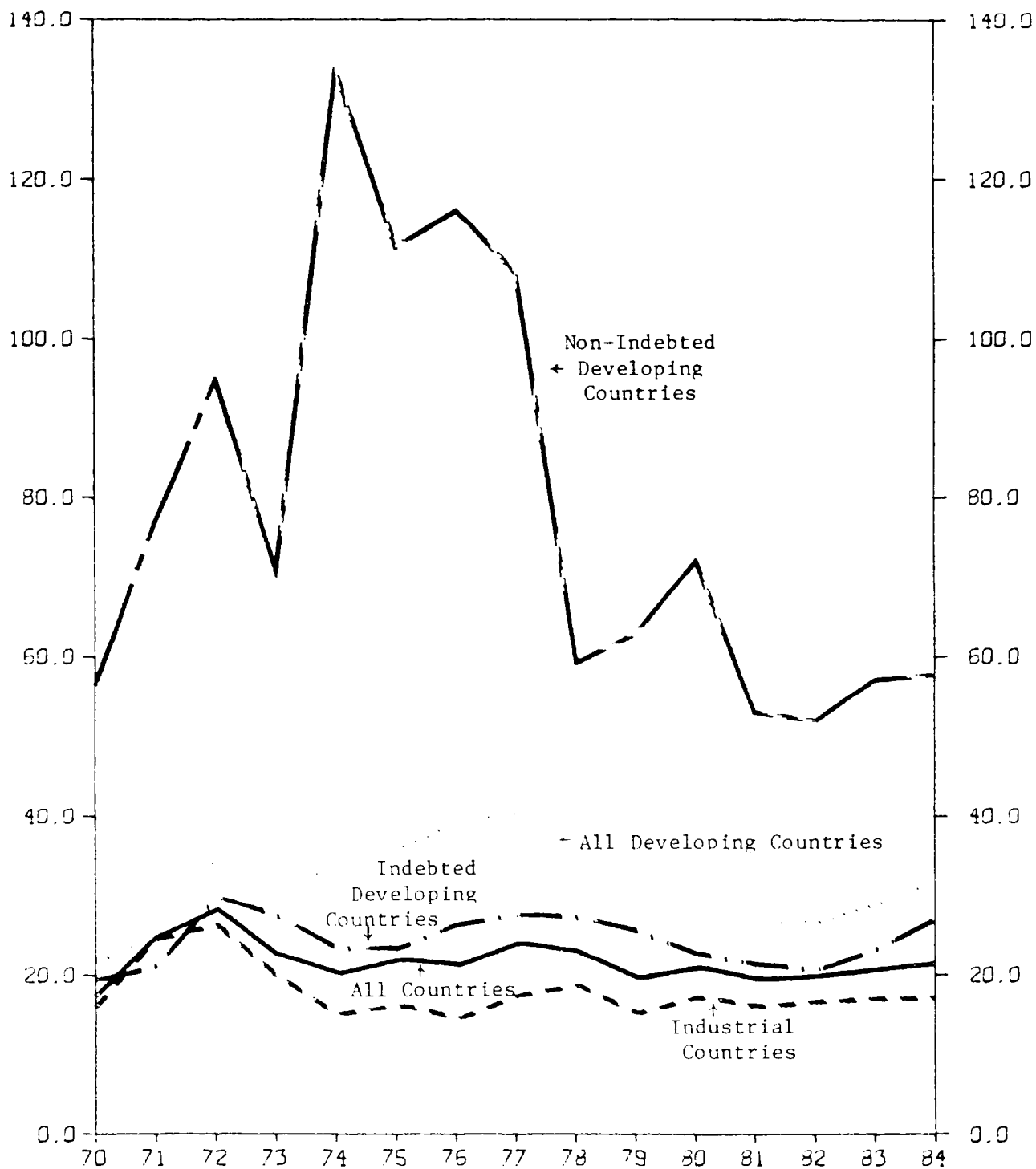
Article VIII, Section 7--Each member undertakes to collaborate with the Fund and with other members in order to ensure that the policies of the member with respect to reserve assets shall be consistent with the objectives of promoting better international surveillance of international liquidity and making the special drawing right the principal reserve asset in the international monetary system.

Article XXII--In addition to the obligations assumed with respect to special drawing rights under other articles of this Agreement, each participant undertakes to collaborate with the Fund and with other participants in order to facilitate the effective functioning of the Special Drawing Rights Department and the proper use of special drawing rights in accordance with this Agreement and with the objective of making the special drawing right the principal reserve asset in the international monetary system.

Chart 1

Ratio of Non-Gold Reserves to Imports 1/

(In percent)



1/ The annual rate of imports in the fourth quarter is the divisor of the stock of reserves at year's end.

Table 1. Non-gold Reserves of All Countries and Groups of Countries, and SDR Allocations and Holdings: Amounts and Ratios to Merchandise Imports and to Trade Imbalances, End of Years 1970-84

(In billions of SDRs)

	Non-Gold Reserves						Cumulative SDR Allocations <u>2/</u>	Holdings of SDRs by Participants <u>3/</u>
	All Countries	Industrial Countries	Developing Countries		Indebted Developing Countries			
			Total	Indebted Countries <u>1/</u>	Non-Indebted Countries	Countries With Recent Debt-Servicing Problems		
Amounts								
1970	56.2	38.9	17.3	14.6	2.7	6.5	8.1	3.1
1971	87.0	63.7	23.3	17.1	6.2	7.3	9.9	5.9
1972	111.7	79.7	32.0	25.4	6.6	11.7	13.8	8.7
1973	113.8	77.5	36.3	32.7	7.3	16.1	16.6	8.8
1974	145.5	98.3	47.2	41.9	25.2	23.0	18.9	8.9
1975	160.1	111.5	48.6	42.9	33.6	23.1	19.0	8.8
1976	185.1	127.7	57.4	54.9	40.5	28.0	26.8	8.7
1977	219.9	148.9	71.0	63.5	57.5	28.7	34.8	8.1
1978	245.0	163.1	81.9	68.7	35.2	30.5	38.2	8.1
1979	272.0	175.2	96.8	80.8	50.0	36.1	44.7	12.5
1980	321.8	199.3	122.5	89.8	47.4	38.4	51.5	11.8
1981	380.3	235.1	145.2	95.3	49.9	35.2	60.1	16.4
1982	325.4	184.5	140.9	90.0	51.0	23.6	60.4	17.7
1983	360.8	202.9	157.9	103.9	51.0	29.7	75.2	14.4
1984	503.0	224.5	278.5	128.7	49.8	44.3	84.4	16.5
1985:4	485.7	216.8	268.9	121.5	47.5	42.9	78.6	16.7
Ratios to Imports <u>3/</u>								
1970	15.4	16.0	21.6	19.5	56.5	17.7	21.0	1.0
1971	23.5	24.8	25.1	21.1	77.0	19.2	22.8	1.7
1972	28.2	26.3	35.6	29.7	91.7	29.0	30.4	2.3
1973	23.0	19.0	30.7	27.3	70.7	32.8	23.4	1.8
1974	20.2	15.0	33.7	23.3	133.5	31.1	17.8	1.2
1975	21.9	16.2	35.8	23.4	111.5	29.8	18.7	1.2
1976	21.2	14.5	39.2	26.3	116.0	34.1	21.7	1.0
1977	23.0	17.5	40.4	27.5	108.4	31.2	25.0	0.8
1978	22.9	14.7	33.2	27.1	59.2	31.7	24.3	0.8
1979	19.8	15.1	31.6	25.4	62.9	30.3	22.4	0.9
1980	20.9	17.2	24.6	22.6	71.9	25.7	20.7	0.8
1981	19.4	16.0	26.6	21.2	53.8	21.9	20.7	1.0
1982	19.9	16.7	26.5	20.6	51.8	17.1	22.3	1.1
1983	20.7	17.0	28.8	23.2	57.1	22.1	23.7	0.8
1984:4	21.5	17.2	31.7	27.0	57.8	31.0	28.2	0.9
Ratios to Trade Imbalances <u>5/</u>								
1970	117.9	170.0	60.8	79.5	42.0	84.5	76.0	7.1
1971	137.5	201.2	70.7	79.9	49.9	93.7	72.1	10.8
1972	174.7	219.2	114.5	136.8	70.1	160.3	121.7	14.5
1973	140.9	179.1	99.6	123.3	53.5	142.9	108.9	11.2
1974	75.7	102.0	58.2	74.3	42.8	74.1	75.6	4.8
1975	109.1	172.8	77.8	79.7	75.5	89.7	70.6	6.4
1976	105.8	129.3	90.3	110.2	72.5	120.9	100.9	5.3
1977	114.7	126.6	102.5	112.3	91.7	135.3	98.5	4.6
1978	120.8	150.2	95.1	98.8	88.5	119.2	87.0	4.6
1979	108.0	166.9	74.6	88.8	56.4	97.6	82.8	5.3
1980	97.5	157.1	64.6	81.1	46.6	81.0	81.2	3.6
1981	100.8	162.2	68.0	86.9	48.0	90.9	84.7	5.0
1982	103.3	131.3	81.0	81.7	79.9	60.9	93.0	5.6
1983	113.0	124.6	100.7	83.5	175.2	57.0	102.2	4.6
1984:4	98.1	92.7	105.7	94.5	152.4	75.6	108.8	5.2

1/ The category of indebted developing countries includes all developing countries except the eight Middle Eastern oil exporters.2/ The ratios for cumulative SDR allocations and holdings of SDRs are calculated by using imports and trade imbalances for all countries.3/ The annual rate of imports in the fourth quarter is the divisor of the stock of reserves at year's end.4/ Imports are taken as growing at the rates projected in the World Economic Outlook.5/ Trade imbalances equal the sum of the absolute values of differences between exports and imports for individual countries in each group.

together, non-gold reserve holdings have grown roughly in line with world imports, and the value of the ratio at the end of 1984 (21.5 percent) was nearly equal to the average value of the ratio (21.3 percent) that prevailed during the period 1974-81. This stability of the overall ratio of reserves to imports has reflected to a significant degree the relatively stable value of the ratio for the industrial countries, which has remained at about 17 percent since 1982. In contrast, the ratio of reserves to imports for developing countries stood at 29.6 percent at the end of 1980 but then declined to 26.5 percent by the end of 1982. The accumulation of reserves and, in some cases, the sharp decline in imports, combined to raise this ratio to 31.7 percent by 1984.

For the indebted developing countries, 1/ the ratio of non-gold reserves to imports declined from 27.5 percent in 1977 to 20.6 percent in 1982 and then recovered to 27.0 percent by 1984. Among the group of indebted developing countries, those with recent debt-servicing problems 2/ experienced a decline in the ratio of non-gold reserves to imports from 31.2 percent in 1977 to 17.1 percent in 1982 and then an increase to 31.0 percent in 1984. In contrast, countries without recent debt-servicing problems experienced a less pronounced decline in this ratio from 25.0 percent in 1977 to 20.7 percent in 1981 and then a recovery to 25.2 percent by 1984 (Table 1).

Since a low ratio of reserves to imports can be interpreted as either representing a general shortage of reserves or a desire to hold a relatively lower stock of reserves, additional measures must be used to gauge the adequacy of reserves. For example, if trade imbalances (imports not matched by exports) expanded or exhibited greater variability, then a country would most likely want to hold larger reserves to maintain stable exchange market conditions. Despite the rebuilding of reserve holdings by many countries since 1982, the ratio of non-gold reserves to aggregate trade imbalances for all countries has declined from 100.8 percent in 1981 to 98.1 percent in 1984 (Table 1 and Chart 2). 3/ There has

1/ The category of indebted developing countries include all developing countries except the eight Middle Eastern oil exporters (Islamic Republic of Iran, Iraq, Kuwait, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, and the United Arab Emirates).

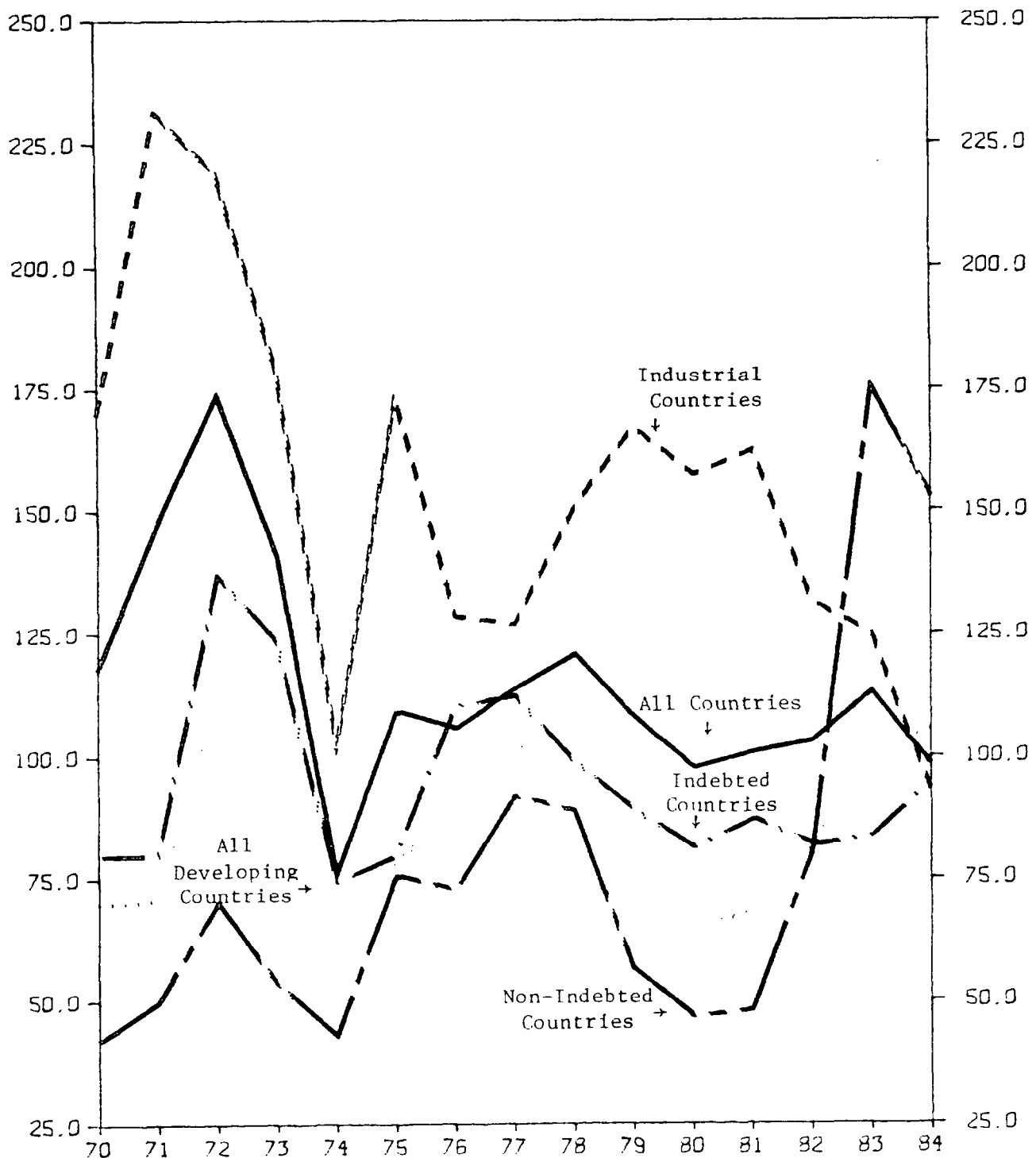
2/ Countries that have experienced recent debt-servicing difficulties are defined as those which incurred external payments arrears during the period 1981 to 1983 or rescheduled their debt during the period from 1981 to mid-1984 as reported in the relevant issues of the Fund's Annual Report on Exchange Arrangements and Exchange Restrictions.

3/ Aggregate trade imbalances are defined as the sum of the absolute values of differences between exports and imports for individual countries. Trade imbalances are used instead of the more comprehensive measure of current account imbalances in order to obtain the broadest possible coverage.

Chart 2

Ratio of Non-Gold Reserves to Trade Imbalances 1/

(In percent)



1/ Trade imbalances equal the sum of the absolute values of differences between exports and imports for individual countries in each country group.

been a sharp difference, however, between the movements in the ratios for industrial and developing countries. For the industrial countries as a group, this ratio fell from 162.2 percent in 1981 to 92.7 percent in 1984. Much of the decline in this ratio can be attributed to an increase in the aggregate trade imbalances of the group of industrial countries, which increased from SDR 114 billion in 1981 to SDR 242 billion in 1984, in part as a result of further rises in some large trade deficits (e.g., for the United States) and in some large trade surpluses (e.g., for Japan). Trade imbalances of developing countries declined, by contrast, from SDR 214 billion in 1981 to SDR 169 billion in 1984. This decline and an increase in their holdings of non-gold reserves combined to increase their ratio of non-gold reserves to aggregate trade imbalances over this period from 68.0 to 105.7 percent (Table 1 and Chart 2). The increase in this ratio does not necessarily mean that the non-gold reserves of developing countries have become more adequate. The decline in the aggregate trade imbalances of these countries has reflected the adjustment efforts of many of them, which have restrained imports and helped generate larger exports. For example, from 1982 to 1984, the SDR value of imports of the developing countries grew at an annual rate of only 1.3 percent. In contrast, the SDR value of exports grew by 5.2 percent per annum from 1982 to 1984. Once the adjustment process presently underway has been completed and regular access to financial markets has been restored, it is likely that imports would resume their long-run trend growth and that the previous increase in the ratio of non-gold reserves to imports would to some extent be reversed.

The adequacy of a country's stock of reserves will be affected by the scale of international financial transactions. In the absence of information on gross capital flows, external bank debt has been used as a financial scale factor, with which reserves can be compared (Table 2). The ratio of non-gold reserves held by all countries to the external bank debt of all countries has been fairly stable at 15 percent throughout the period 1982-84, following a decline from 16 to 15 percent in 1981. In contrast, the developing countries as a group experienced a decline in this ratio from 20 percent in 1981 to 17 percent in 1982. The reduced availability of international bank credit since 1982 and the extensive efforts undertaken by some developing countries to increase their reserve holdings resulted in a slight increase in the ratio of non-gold reserves to external bank debt for all developing countries from 17 to 18 percent in the second half of 1984. However, movements in this ratio have varied across regions. For example, in 1984 the ratio of non-gold reserves to external bank debt for developing countries in the Western Hemisphere has been restored to its 1981 level of 8 percent. In contrast, African countries as a group experienced a decline of the ratio of non-gold reserves to external bank debt from 21 percent in 1981 to 11 percent in 1984.

Table 2. Ratio of Non-Gold Reserves to External Debt to Banks for Selected Groups of Countries and Individual Countries, 1981-84 1/

(In percent)

	1981	1982		1983		1984	
	2nd	1st	2nd	1st	2nd	1st	2nd
	Half	Half	Half	Half	Half	Half	Half
<u>(a) Including main offshore centers ^{2/}</u>							
All countries	16	15	15	15	15	15	15
Developing countries	20	17	17	17	17	17	18
Of which:							
Africa	21	14	13	11	11	11	11
Asia	23	21	22	24	24	25	25
Europe	14	10	11	10	12	12	13
Middle East	82	73	73	71	64	57	58
Western Hemisphere	8	7	6	6	6	7	8
Argentina	13	12	10	13	4	7	5
Brazil	10	9	5	5	5	8	12
Mexico	5	2	1	3	4	7	8
<u>(b) Excluding main offshore centers</u>							
All countries	20	17	17	17	17	17	17
Developing countries	34	29	28	27	28	28	29
Of which:							
Africa	25	16	15	12	13	13	13
Asia	47	44	44	47	51	55	55
Europe	14	10	11	10	12	12	13
Middle East	128	115	115	113	103	93	96
Western Hemisphere	16	12	10	10	10	12	14

1/ The source of the interbank data is the regular reports of resident banks' external positions made for International Financial Statistics purposes by the authorities of over 100 countries. The nonbank debt to international banks is drawn from detailed geographic analyses of resident deposit banks' claims on nonresidents provided by the authorities of Australia, Bahrain, Belgium, Canada, Denmark, France, Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, the Netherlands, Singapore, Sweden, Switzerland, the United Kingdom, and the United States (the U.S. authorities also provide reports for the branches of U.S. banks in the Bahamas, the Cayman Islands, and Panama).

2/ The following offshore centers are included in (a) but excluded from (b): Africa--Liberia; Asia--Hong Kong and Singapore; Middle East--Bahrain and Lebanon; and Western Hemisphere--Bahamas, Cayman Islands, Netherlands Antilles, and Panama.

The recent movements in the ratio of non-gold reserves to external bank debt provides only an approximate indication of the change in the need for reserves since the evolution of external bank debt has been influenced by the curtailment of access to international credit markets experienced by many developing countries since 1982. As a result, the availability of borrowed reserves has been lessened and international liquidity diminished. While some countries have been attempting to accumulate owned reserves through current account surpluses in order to offset the reduced availability of borrowed reserves, this has been a difficult and slow process. In these circumstances, movements in the absolute level of reserves, the ratio of reserves to imports, and the ratio of reserves to external bank debt may, by themselves, understate the level of reserves that could be considered adequate once the current adjustment efforts are completed and normal access to financial markets is restored.

III. The Long-Term Global Need for Reserves

The recent movements in reserves and economic prospects imply a continuing global desire for increased reserve holdings. In this section, an effort is made to assess the magnitude of the global reserve needs during and beyond the fourth basic period. One traditional procedure for measuring the effective need for reserves is to apply the average ratio of reserves to imports from a period with "normal" economic activity and access to financial markets to the level of imports projected to prevail during the period under consideration. However, such a normal period has not existed during recent decades. For example, the period since 1970 has witnessed large external payments disequilibria, increased variability of real output, commodity prices, and exchange rates, as well as a greatly expanded access to international credit markets by developing countries and then a sharp curtailment of this access. While it is difficult to evaluate the effect of each of these factors on the average value of the ratio of reserves to imports, it may be necessary to adjust any representative average value of this ratio that is used in measuring the need for reserves.

During the 11-year period 1974-84, the average ratio of non-gold reserves to imports for all countries was 21 percent. This ratio has remained in a relatively narrow range between 19 and 24 percent during the period, thus providing evidence of a relatively stable relation between non-gold reserves and imports. If the late 1980s are to encompass lower inflation, less variability of exchange market transactions, more steady real output growth, and fewer structural shifts in the international economy than the 1970s and early 1980s, then the ratio of reserves to imports may remain below the 1974-84 average value. However, if reduced access to international financial markets should continue, then many countries may seek to hold higher reserves, implying a higher ratio of reserves to imports than the average for 1974-84.

The current WEO exercise projects a continuing increase in the volume as well as the SDR value of world trade in the 1980s. In particular, the SDR value of world imports is projected to rise at an average annual rate of 8.4 percent during 1985 and 1986 and at an average annual rate of 9.2 percent beyond 1986. 1/ If the reserve holdings were to rise to a level that would keep the ratio of non-gold reserves to imports constant at its average value for the period 1974-84 (21.1 percent), then non-gold reserves would have to rise during 1985 and 1986 by an additional SDR 71 billion to reach SDR 474 billion by the end of 1986, and they would have to rise by SDR 261 billion to reach SDR 735 billion by the end of 1991. 2/

Even if the ratio of reserves to imports were to decline somewhat from its average value for the period 1974-84, these considerations suggest that the global demand for reserves is likely to expand throughout the remainder of the fourth basic period and the remainder of the 1980s as the level of international trade and financial transactions continues to grow. 3/

This projection of the effective need for reserves based on the average ratio of reserves to imports does not reflect the influences of a number of potentially important factors. The reduction in access to international financial markets experienced by a number of countries is

1/ The percentage changes in the volume and SDR unit values of world imports are:

Percentage Change in	1982	1983	1984	1985	1986	1987 and Beyond
Volume	-2.5	2.0	9.5	5.5	5.0	5.0
Unit value	<u>2.5</u>	<u>-1.5</u>	<u>2.5</u>	<u>2.5</u>	<u>3.5</u>	<u>4.0</u>
Total value	0.0	0.5	12.2	8.1	8.7	9.2

2/ A fifth basic period of normal five-year duration would end in 1991.

3/ The estimates of the global demand for non-gold reserves are sensitive to changes in the value of the ratio of reserves to imports used in calculations. A decrease of 1 percentage point from 21.1 percent to 20.1 percent would reduce the projected increase in the level of reserves demanded at the end of the fourth basic period by SDR 4 billion from SDR 71 billion to SDR 67 billion; and it would reduce the projected increase in the level of reserves demanded at the end of 1991 by SDR 13 billion from SDR 261 billion to SDR 248 billion.

likely to increase their demand for both owned and total reserves in the future, which would imply a move toward a higher value of the ratio of reserves to imports than the historical average. ^{1/}

IV. Sources of Reserve Growth

During the 1970s, many countries found borrowing in international capital markets to be an effective means of increasing their reserve holdings. For countries with access to the international financial markets, the supply of reserves was not tied to the structure of the current account balances of any group of countries, and their aggregate stock of reserves adjusted to changes in effective demand. A country's access to credit markets and the terms on which it could borrow tended to reflect the creditor's assessment of the country's ability and willingness to make the real transfers necessary to service its debt.

During 1981 and 1982, however, the ability of many developing countries to maintain or increase their international reserves was severely diminished as a result of a number of macroeconomic developments and disturbances in international financial markets, including a severe deterioration in the terms of trade of the non-fuel exporting developing countries, high nominal and real interest rates, and a substantial appreciation of the U.S. dollar. Countries without access to market borrowing could satisfy their need for international reserves only by generating a balance of payments surplus. For these countries, the rebuilding of reserves that has taken place since 1982 has thereby involved the high real costs associated with the spending and output adjustments needed to generate a surplus in the external accounts. An SDR allocation designed to help satisfy the long-term global need for reserves could play a role in reducing some of these costs since countries without access to international markets could acquire the reserves necessary to meet their long-term need for reserves without having to resort to temporary current account surpluses. Moreover, as will be discussed in Section V, a modest SDR allocation would not remove the incentive to undertake the adjustments needed to restore a sustainable balance of payments position and normal access to international financial markets.

^{1/} The reserve needs of the major subgroups of countries can be obtained similarly by applying the group's average ratio of reserves to imports to the group's projected level of imports during the period under consideration. However, the reserve ratios for the subgroups are considerably more variable than the ratio for all countries. In particular, the ratio for developing countries varied between 40.4 percent in 1977 and 26.5 percent in 1982. Hence, the average ratio during the "normal" period is not a useful estimate of reserve need.

It has been pointed out that the current account deficits of reserve-currency countries, in particular the United States, could be a source of reserve growth. Such a reserve source could be most important when the monetary authorities in various countries cannot obtain reserves through borrowing from international markets. Since the increase in net financial claims on the reserve-currency country that is the counterpart of the current account deficit can be absorbed by both foreign monetary authorities and private nonresidents, however, the link between such current account imbalances and the growth of international reserves need not be direct. For example, there does not appear to be a stable and predictable relationship between the U.S. current account balance and the change in non-U.S. foreign exchange reserves or in U.S. residents' liabilities to non-U.S. official holders. 1/

Current and prospective economic and financial developments point to several potential benefits to be derived from SDR allocations during the remainder of the fourth basic period. First, SDR allocations could in part make up for the difficulties encountered by some developing countries in obtaining borrowed reserves since 1982. If access to international financial markets continued to be restricted for many countries and official transfers expanded only moderately, an SDR allocation designed to satisfy the long-term global need for reserves would reduce the burden of generating temporary balance of payments surpluses for the purpose of reserve accumulation.

Second, an allocation will lower the share of borrowed reserves in total non-gold reserves and thereby reduce the vulnerability of the reserves stock to financial disturbances. Recent experience makes clear that the stability of a reserve system with a large share of borrowed reserves can be seriously affected by disturbances in international credit markets. The growing importance of borrowed reserves is evident both in the reserve management practices of many countries and in the growing availability of liquidity for creditworthy countries from expanding international financial markets. Of course, reserve statistics do not permit identification of borrowed and owned reserves. While the relative importance of borrowed reserves could be gleaned by comparing a country's holdings of non-gold reserves with either its total external debt or some component of that debt, such a comparison would not be very revealing. In general, reserves could be obtained through borrowing at either short or long term, and the mix of such borrowing could evolve over time in response to changes in financial market conditions. Moreover, foreign loans are used for many purposes other than reserve accumulation.

1/ This issue is discussed in more detail in the companion paper SM/85/218, "Implications of U.S. External Current Account Deficits for the Volume of International Reserves."

Finally, a resumption of allocations would contribute to the objective of making the SDR the principal reserve asset of the international monetary system in accordance with Article VIII, Section 7, and Article XXII. 1/

V. Size of an SDR Allocation

While the likely increase in long-term global demand for reserves is an important element in determining the size of an SDR allocation, there must also be consideration of the effects of such an allocation on the functioning of the international monetary system, price and output developments in the international economy, and the Fund's general purposes.

1. Previous SDR allocations

The scale and timing of previous SDR allocations are shown in Table 3. Allocations of SDRs occurred during the first (1970-72) and third (1978-81) basic periods. There were no allocations in the second basic period and, up to now, in the fourth basic period. The initial SDR allocation of SDR 3.4 billion in 1970 represented 6.1 percent of non-gold reserves, and the most recent allocation of SDR 4.0 billion in 1981 represented only 1.2 percent of non-gold reserves. Total cumulative SDR allocations as a percent of non-gold reserves reached a peak value of 8.4 percent at the end of the first basic period and then declined to 3.8 percent at the end of 1978. The allocations of the third basic period, which ended in 1981, raised the share of cumulative SDR allocations (of SDR 21.4 billion) in total non-gold reserves to 6.5 percent at the end of 1982. In the absence of allocations during the fourth basic period, this percentage is likely to decline to 4.5 percent by the end of the fourth basic period at the end of December 1986, if the ratio of non-gold reserves to imports is assumed to return to its average value for the period 1974-84 and imports expand in line with WEO projections.

2. SDR allocations and the demand for reserves

Previous discussions of SDR allocations have assessed the appropriate size of SDR allocations by determining the increase in SDRs that could satisfy the anticipated expansion of the demand for non-gold reserves. During the remainder of the fourth basic period, total demand for non-gold reserves has been projected to grow by SDR 71 billion to SDR 474 billion, and reserves are anticipated to grow by a further SDR 261 billion to SDR 735 billion by 1991 (Section III). Table 4 summarizes the effects

1/ See footnote 1, page 4.

Table 3. SDR Allocations and Cumulative SDR Allocations
Relative to Non-Gold Reserves, 1970-84

Basic Period		SDR Allocations	Cumulative SDR Allocations	
		(In billions of SDRs)	(In percent of non-gold reserves at year-end)	
1970	First	3.4	6.1	6.1
1971	First	3.0	3.4	7.3
1972	First	3.0	2.7	8.4
1973	Second	--	--	8.4
1974	Second	--	--	6.5
1975	Second	--	--	5.9
1976	Second	--	--	5.0
1977	Second	--	--	4.1
1978	Third	--	--	3.8
1979	Third	4.0	1.5	4.9
1980	Third	4.0	1.2	5.4
1981	Third	4.0	1.2	6.5
1982	Fourth	--	--	6.5
1983	Fourth	--	--	5.9
1984	Fourth	--	--	5.3

Table 4. Hypothetical SDR Allocations and Ratio
to Non-Gold Reserves

<u>SDR Allocation</u>		Percentage of Projected Reserve Growth Provided by SDR Allocation	Cumulative SDR Holdings Relative to Non-Gold Reserves
<u>Annual Amount</u>	<u>Total Amount</u>		

<u>(In billions of SDRs)</u>		<u>(In percent)</u>	
<u>Fourth Basic Period</u>			
<u>1985 - 1986</u>		<u>At Year-End 1986</u>	<u>At Year-End 1986</u>
3.0	6.0	8.5	5.8
5.0	10.0	14.1	6.6
7.0	14.0	19.7	7.5
9.0	18.0	25.4	8.3
<u>New Five-Year Basic Period</u>			
<u>1987 - 1991</u>		<u>At Year-End 1991</u>	<u>At Year-End 1991</u>
3.0	15.0	5.7	4.9
5.0	25.0	9.6	6.3
7.0	35.0	13.4	7.7
9.0	45.0	17.2	9.0

of various hypothetical SDR allocations on the percentage of projected reserve increases financed by them and on the ratio of cumulative SDR holdings to non-gold reserves during the current or a new basic period.

3. The effect of SDR allocations
on inflation and adjustment

Concerns have been expressed that an SDR allocation in the current multiple reserve-currency system could be inflationary or weaken the resolve to continue the adjustment efforts being undertaken by many countries. As regards the potential inflationary effect, an allocation of SDRs that just satisfies the long-term global need for reserves supplementation would not be expansionary since the reserves provided would be willingly held. Even if a sizable proportion of the allocated SDRs were transferred from the developing countries to the industrial countries, low inflation could still be maintained as long as the rates of growth of monetary aggregates in the countries receiving SDRs were kept within their target ranges. ^{1/} An SDR allocation could also have a potential inflationary impact if the SDRs allocated to developing countries were monetized by governments through an exchange of SDRs for domestic credit at the central bank. However, even if the entire SDR allocation were monetized, the resulting increases in monetary bases would be fairly modest. ^{2/} Thus, both scenarios produce a fairly moderate potential for inflation and one that could easily be offset. Hence, SDR allocations that do not exceed the long-term growth of reserves are not likely to be inflationary and are unlikely to create expectations of higher inflation.

It has been argued that SDR allocations may lead to a relaxation of the stabilization efforts of countries with adjustment programs. There are, however, strong incentives for such countries to maintain their adjustment efforts, to which the availability of new bank money is frequently tied; moreover, the willingness of creditors to make appropriate reschedulings depends also upon continued progress with adjustment. Furthermore, indebted developing countries have demonstrated their desire to maintain a stable ratio of non-gold reserves to total imports. In

^{1/} The largest inflationary effect would occur when the entire allocation of SDRs received by developing countries were spent on goods in the industrial countries and allowed to increase the monetary base of the industrial countries by an equal amount. The share of an allocation of SDR 10 billion going to developing countries would be SDR 3.7 billion in 1985, or approximately 1 percent of the total monetary base (as of the end of December 1984) of industrialized countries.

^{2/} An SDR 10 billion allocation in 1985 could increase the monetary base (as of the end of December 1983, the latest date for which complete data were available) of developing countries at most by 1.5 percent.

particular, these countries have sought to replenish their reserve holdings immediately after they suffered an actual decline in the course of the disturbances in financial markets in 1982. In the face of these considerations, it could be argued that allocations of the size considered here, while lowering the cost of acquiring and holding reserves, would not remove the incentive to undertake current adjustment efforts designed to restore sustainable balance of payments positions and normal access to international financial markets.

VI. Conclusion

The current and anticipated expansion of world trade and activity during the remainder of the 1980s implies a growing long-term global need for reserves. While this need could be satisfied by various sources of reserve growth, an SDR allocation could satisfy a portion of the growth in the need for reserves and contribute to the stability of the international reserve system by reducing its dependency on borrowed reserves. Such allocations would not be inflationary and may smooth the adjustment process. In addition, the share of the SDR in non-gold reserves could be sustained.

