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June 16, 1983

To: Members of the Executive Board

From: The Secretary

Subject: Compensatory Financing Facility and Buffer Stock Financing Facility - Review of Experience with Financing of Fluctuations in the Cost of Cereal Imports and Selected Policy Issues

The attached paper on a review of experience with financing of fluctuations in the cost of cereal imports and selected policy issues has been scheduled for discussion by the Executive Board on Friday, July 15, 1983.

If Executive Directors have technical or factual questions relating to this paper prior to the Board discussion, they should contact Mr. Kaibni, ext. 74162.

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INTERNATIONAL MONETARY FUND

Compensatory Financing Facility and Buffer Stock Financing Facility--Review of Experience with Financing of Fluctuations in the Cost of Cereal Imports and Selected Policy Issues

Prepared by the Research Department

(In consultation with other Departments)

Approved by Wm. C. Hood

June 15, 1983

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Introduction

This paper discusses three topics: review of Decision No. 6860-(81/81) adopted May 13, 1981, on "Compensatory Financing of Fluctuations in the Cost of Cereal Imports" (Section I); experience with overcompensation and undercompensation in early drawings under the CFF (Section II); and quota limits under the CFF and BSFF in light of entry into effect of quotas under the Eighth General Review of Quotas (Section III).

Since the establishment of the CFF in 1963, there have been several major reviews: Annex I, entitled "Evolution of the CFF," provides a detailed account of the major changes introduced in the course of each review. More recently, the Executive Directors have reviewed on several occasions specific issues relating to CF policy. These and the conclusions reached are detailed in paragraph (f) of Annex I.

The paper contains three other Annexes: Annex II, entitled "World Cereal Situation and Outlook"; Annex III, entitled "Incidence of Over- and Undercompensation"; and Annex IV, consists of two tables relevant to the analysis in Section III.

I. Review of the Cereal Decision (Executive Board Decision No. 6860-(81/81))

On May 13, 1981, the Executive Board adopted, for an initial period of four years, Decision No. 6860-(81/81)--"Compensatory Financing of Fluctuations in the Cost of Cereal Imports." This review is made in accordance with paragraph (17) of that Decision, which reads as follows: "The Executive Board will review this decision not later than June 30, 1983, and when quota increases under the Eighth General Review of Quotas become effective."

The review is presented in three sections and an annex: the first summarizes the main features of the cereal decision; the second discusses operations under the decision; and the final section contains a summary appraisal and the staff's recommendations. Annex II reviews recent market developments and the outlook for cereal importing countries. Considerations regarding quota limits are discussed in Section III of the paper.

1. Main features of the cereal decision

On May 13, 1981, the Executive Board adopted a decision on compensatory financing of fluctuations in the cost of cereal imports, which established a means of providing members with assistance related to temporary increases in the costs of their commercial cereal imports that were caused by factors largely beyond their control. Rather than establishing a separate facility for cereal imports, the existing compensatory financing facility

(CFF) for export fluctuations was adapted to include a provision for financing excesses in the costs of cereal imports (paragraphs 1 and 4 of Decision No. 6860-(81/81)). An excess in cereal imports is calculated as the c.i.f. cost of such imports (excluding concessional cereal imports) in a given 12-month period less the (arithmetic) average cost of these imports for the five years centered on the same 12 months. 1/ Since the financing of cereal import costs is integrated with the financing of export shortfalls, Fund assistance is provided for the net amount of the cereal import excess and the export shortfall. The limit on the amount of assistance for cereal import excesses is 100 per cent of a member's quota, the same as the limit for export shortfalls, constrained by a joint limit of 125 per cent of quota on both the excess in cereal imports and the export shortfall. A member may use estimated data for cereal imports in the excess year for a maximum period of 12 months (paragraph 5).

Members may continue to use the CFF for export shortfalls alone, as in the past, or they may base their requests on the integrated scheme at any time (paragraph 2). Having opted for the integrated scheme, however, any future requests during the following three years will be governed by that option.

The conditions governing the use of the cereal facility are the same as those that apply for use of the CFF (paragraph 3). That is, the cereal import excess should be temporary and largely attributable to circumstances beyond the control of the member, such as a decline in domestic food production caused by a crop failure or a sharp rise in cereal import prices; the member must have a balance of payments need; the Fund must be satisfied that the member will cooperate with the Fund in efforts to find, where required, appropriate solutions for its balance of payments difficulties; and for financing which raises the amount of a member's outstanding drawings, under the cereal decision separately, or under the cereal decision and the CF decision together, above 50 per cent of quota, the Fund must be satisfied that the member has been cooperating with it in efforts to find appropriate solutions for the member's balance of payments difficulties.

2. Experience with the cereal decision

In the two years since the cereal decision was adopted, there has been a significant easing of the supply-demand balance in world cereal markets. Following two years of declining world cereal production, lower stock levels, and rising prices, the years 1981-82 have been characterized by record large production, rising stock levels, and sharply declining prices. The food

1/ The cereals included in the scheme are those covered by categories 041-046 of the Standard International Trade Classification, and include wheat, rice, and coarse grains such as maize, barley, sorghum and millet. The scheme is limited to these commodities because cereals account for approximately two thirds of the calorie consumption in developing countries and are substitutable for many other food commodities which may be in short supply.

situation of the developing countries has likewise been more favorable over the past two years, with fewer countries experiencing serious food shortages. The outlook for the near term, however, is less favorable for importing countries due both to higher world prices resulting from an expected decline in world output, and production shortfalls in a larger number of food deficit countries, particularly in Africa. Annex II reviews in more detail recent developments in the world cereal markets and in the cereal importing countries.

Six purchases by five members have been made under the cereal decision for a total amount of SDR 498.4 million, comprising an export component of SDR 191.6 million and a cereal component of SDR 306.8 million (Table 1). Total additional use of Fund resources resulting from the cereal decision amounted to SDR 281 million. 1/ Cereal import excesses were partly offset by export excesses in two cases (Malawi and Korea), while in three cases (Morocco, Kenya, and Bangladesh) the purchases combined cereal import excesses with export shortfalls (Table 2). In the second purchase by Malawi, an export shortfall was partly offset by a cereal import shortfall.

Four of the five countries that drew on the CFF cereal provision utilized the early drawing procedure, which allows the use of estimated data for exports for up to six months of the shortfall year, and for cereal imports for up to 12 months of the year. Only two of these countries, however, used estimated cereal data (three months for Morocco and four months for Bangladesh), while all four countries used estimated export data. The period estimated for exports was the same as that estimated for cereals in the case of Morocco and two months shorter than that estimated for cereals in the case of Bangladesh. Thus, in three of the four countries, the cereal data were more up to date than the export data. This may be attributable to the fact that cereal imports tend to arrive in a few, large shipments that are ordered months in advance. 2/ Of the four early drawings, Morocco was undercompensated by SDR 2.9 million, Malawi was overcompensated by SDR 10.5 million, and Bangladesh was overcompensated by SDR 19.3 million. The final calculation for Kenya's early drawing has not yet been completed.

The quota limit of 100 per cent for the cereal component was not reached in any of the purchases. The average drawing (cereal component) as a share of the member's quota was 37 per cent, with that of Morocco the

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1/ This figure is derived by subtracting from SDR 306.8 million the repurchases in respect of overcompensation by Malawi and Bangladesh (total of SDR 21.7 million) and the cereal import shortfall of SDR 4.1 million that partially offset the export shortfall in Malawi's second purchase under the decision.

2/ The main purpose of allowing up to 12 months of estimated data for cereal imports was to permit prompt compensation as soon as possible after the food import requirements due to a crop failure become evident. The experience with the cereal decision is still too limited to make a general judgment about the usefulness of the extended 12-month allowance for estimated data or about the timeliness of cereal import data versus merchandise export data.

Table 1. Drawings Under the Cereal Decision (EBD No. 6860-(81/81))

(In millions of SDRs)

Country	Date of Purchase	Drawings: Total Amount	Drawings: Total % Quota	Drawings: Export Component Amount	Drawings: Export Component % Quota	Drawings: Cereal Component Amount	Drawings: Cereal Component % Quota	Outstanding After Drawing: Total Amount	Outstanding After Drawing: Total % Quota	Outstanding After Drawing: Export Component (% Quota)	Outstanding After Drawing: Cereal Component (% Quota)
1. Malawi 1/	9/81	12.0	42.1	0	0	12.0	42.1	31.0	108.7	66.6	42.1
2. Korea	1/82	106.2	41.5	0	0	106.2	41.5	266.2	104.0	62.5	41.5
3. Morocco	4/82	236.4	105.1	113.0	50.3	123.4	54.8	278.4	123.7	68.9	54.8
4. Kenya 1/	5/82	60.4	58.3	28.8	27.8	31.6	30.5	129.4	125.0	94.5	30.5
5. Bangladesh 1/	8/82	71.2	31.2	37.6	16.4	33.6	14.8	108.1	47.4	32.6	14.8
6. Malawi	2/83	12.2	42.8	12.2	42.8	0	0	29.3	102.8	97.6	5.2
Total		498.4 2/		191.6 2/		306.8 2/		842.4			

1/ Drawings made under the early drawing procedure. Malawi had to repurchase SDR 10.5 million in February 1982. Bangladesh had to repurchase SDR 19.3 million (SDR 8.1 million in relation to the export component and SDR 11.2 million in relation to the cereal component) in March 1983. The final calculation for Kenya's early drawing has not yet been completed.

2/ Total drawings under the decision, after repurchases by Malawi and Bangladesh, amount to SDR 468.6 million, of which SDR 183.5 million is in relation to exports and SDR 285.1 million is in relation to cereal imports.

Table 2. Shortfall Calculations Under the Cereal Decision

(In millions of SDRs)

Country	Date of Purchase	Shortfall Year Ending	Net Shortfall: Net Amount	Net Shortfall: Export Shortfall	Net Shortfall: Cereal Excess
1. Malawi	9/81	6/81	12.0	-6.7	18.7
2. Korea	1/82	9/81	106.2	-464.0	570.2
3. Morocco	4/82	3/82	236.4	113.0	123.4
4. Kenya	5/82	12/81	65.8	34.2	31.6
5. Bangladesh	8/82	9/82	89.6	56.0	33.6
6. Malawi	2/83	9/82	12.8	16.9	-4.1

highest (55 per cent) and that of Bangladesh the lowest (15 per cent). This was consistent with the staff's earlier projections that most cereal drawings would be for less than 50 per cent of a member's quota. The joint quota limit of 125 per cent was reached only in the case of Kenya.

Two of the five countries that purchased under the cereal decision (Malawi and Korea) might have been able to purchase larger amounts if a separate cereal facility had been established. Assuming a 50 per cent quota limit for a separate cereal facility, Malawi would have been able to draw SDR 18 million instead of SDR 12 million in September 1982, and SDR 16.9 million instead of SDR 12.8 million in February 1983. Korea would have been able to purchase SDR 128 million instead of SDR 106.2 million in January 1982. Additional drawings resulting from cereal import excesses could, therefore, have been SDR 312.9 million with a separate facility, instead of the actual SDR 281 million with the integrated facility.

The ability to choose the cereal option at any time has allowed most of the more than fifty countries that have drawn on the CFF since adoption of the decision to continue to use the CFF for export shortfalls only, while still remaining eligible to choose the cereal option if the need arises. Bangladesh is one example of a country that, subsequent to the adoption of the cereal decision, decided in March 1982 to draw on the CFF for an export shortfall only, but later in September 1982, was able to choose the cereal option when the need arose because the domestic rice crop had been reduced by bad weather. Malawi is the only country that has drawn twice under the cereal decision, and in the second drawing an export shortfall was partly offset by a cereal import shortfall, but its outstanding CFF drawings are nevertheless equivalent to 103 per cent of quota. Four of the five countries that chose the cereal option have outstanding CFF drawings in excess of 100 per cent of their respective quotas.

The exclusion of the concessional element of cereal imports from the calculations has not given rise to particular problems in implementing the cereal decision. Members have either provided an adequate breakdown of food aid imports and commercial imports, or, when detailed data on food aid were not available, they have provided commercial data only.

In all five countries, the cereal import excesses resulted from the effects of adverse weather on domestic food production, circumstances which were largely beyond the control of the members. There was no evidence of cereal stock buildups and, in fact, the reverse appeared to be true in most cases.

Additional CFF drawings resulting from the cereal decision during 1981-82 have been broadly in line with the staff projections made in 1981 (SM/81/106, Supplement 1). Average annual additional financial requirements resulting from the cereal decision were projected at SDR 180 million for the 1981-85 period. The actual annual average for 1981-82 of about SDR 140 million was somewhat lower because of the relatively more favorable world food security situation. The slightly-smaller-than projected use of the provision during these two years is broadly consistent with the average estimated for the period 1981-85, since use during 1983-85 might be higher than the average.

3. Staff appraisal and recommendation

Operations under the cereal decision have been rather limited in the two years since the decision was approved by the Executive Board. This is probably largely attributable to the fact that world supplies and prices have been favorable to cereal importers. The decision appears to have achieved its purpose in the case of the five countries that have so far used it. No serious technical problems have arisen regarding its implementation. The option to include cereal imports at any time has allowed most countries to continue to use the CFF in relation to export shortfalls and remain eligible to exercise the cereal option should the need arise.

Other main features of the cereal decision, such as the integration of the assistance with that available in respect of export shortfalls, the allowance for cereal import data to be estimated for 12 months, the exclusion of food aid, the provision for stock adjustment, and the requirements relating to cooperation and "beyond the member's control" have not presented major problems of implementation.

The staff recommends that the cereal decision, apart from the matter of quota limits to access, which is discussed in section III and which will be considered in the forthcoming Board discussion on access, be maintained. If the Executive Board accepts this recommendation, then in view of the proximity of the date on which the quota increases under the Eighth General Review of Quotas are to take effect, the staff recommends that, again apart from quota limits to access, review of the decision called for at that time under paragraph 17 of the Cereal Decision not be carried out. The staff recommends, however, that the decision be reviewed again in two years' time, i.e., before it lapses on May 13, 1985.

II. Experience with Overcompensation and Undercompensation

1. Introduction

In November 1982, Executive Directors considered a staff paper (SM/82/204, 10/11/82) on the issue of overcompensation arising from early drawings made on the basis of partly estimated, rather than actual, data for the shortfall year, under the relevant provisions of the CFF decision. 1/

1/ Paragraphs 5 and 7 of Decision No. 6224-(79/135), adopted August 2, 1979, and paragraphs 5 and 12 of Decision No. 6860-(81/81), adopted May 13, 1981. The early drawing provisions were first introduced in the 1975 CF decision (paragraphs 4 and 8 of Decision No. 4912-(75/207), adopted December 24, 1975).

As indicated in the Chairman's summing-up of that meeting (EBM/82/145, 11/8/82), Executive Directors, noting that overcompensation on account of such drawings had remained limited, decided to introduce no changes in the early drawing provisions but to review the experience at a later date.

During the discussion, several Directors expressed their concern over two problems: one, delays by some members in reversing overcompensation following notification by the Fund; and two, long delays in the provision of the actual data required to enable the staff to determine the magnitude of overcompensation, if any. In response to a request by Executive Directors regarding these matters, a procedure has since been implemented by which the member requesting an early drawing is reminded of the following two points by way of a cable from the Fund: (i) the risk of overcompensation and, in that event, the need to make provision for a prompt repurchase; and (ii) the importance that the Executive Board attaches to the timely provision of actual data for the whole shortfall year.

The following section provides a brief review of experience with the early drawing provision since its introduction in January 1976. The incidence of overcompensation and undercompensation in early drawings is further discussed in Annex III.

2. Experience under the early drawing provision

From the introduction of the early drawing procedure in December 1975 until end-May 1983, 69 early drawings amounting to SDR 3.6 billion have been made. This compares with an overall total of 182 CF drawings amounting to SDR 10.2 billion made during the same period. Thus, 38 per cent of the cases and 35 per cent of the amounts have involved the early drawing procedure.

As of end-May 1983, final calculations of the shortfalls had been completed for 65 of the 69 early drawings made (Table 3). 1/ The calculations indicate that in 43 cases, members received "exact" compensation; in 6 other cases, members were undercompensated by a total amount of SDR 165 million; and in the remaining 16 cases, members had been overcompensated by a total amount of SDR 185 million. The total amount of undercompensation (SDR 165 million), comprises a large amount of SDR 140.5 million for one member (Argentina), and relatively small amounts, which add up to SDR 24.2 million for the five other members. The total amount of undercompensation represents 4 per cent of the total amount of 65 early drawings finalized so far; excluding Argentina, it amounts to less than one per

1/ A total of four early drawings have not yet been finalized: two cases from 1981 (Chad and Senegal), one from 1982 (Kenya), and one so far from 1983 (Zimbabwe). Information on Chad and Kenya has been received and is being processed. For Senegal, delays in finalizing the trade data continue to be extremely long, and no final data for the estimated period (three months for groundnuts and phosphates and 30 months for all other exports) have yet been received.

Table 3. Early Drawings in Relation to All CFF Drawings and the Incidence of Overcompensation and Undercompensation

(January 1976 to May 1983)

	All CFF Drawings		*Early Drawings 1/*		Early Drawings As Per Cent of Total		Over-Compensation		Under-Compensation	
	No.	SDR Millions	No.	SDR Millions	No.	Amount	No.	SDR Millions	No.	SDR Millions
1976	48	2,308	7	254	15	11	--	--	--	--
1977	14	240	4	61	29	25	--	--	--	--
1978	15	578	9	258	60	45	1	0.3	1	4.4
1979	23	572	7	140	30	24	2	44.5	--	--
1980	15	980	8	430	53	44	1	0.6	1	4.0
1981	29	1,242	20	672	69	54	7	59.1	1	0.8
1982	28	2,628	11	1,190	39	45	5	80.7	1	2.9
1983 (Jan. to May)	10	1,659	3	594	30	36	--	--	2	152.6
Total	182	10,208	69	3,598	38	35	16	185.2 2/	6	164.7

1/ Final calculations have been completed for all years prior to 1981. Final calculations have been completed for 18 of the 20 drawings made in 1981 and for ten of the 11 drawings made in 1982, and one of the three cases made in 1983.

2/ Sum of repurchases of overcompensated amounts is, at present, SDR 171.3 million, as a repurchase of SDR 13.9 million by Tanzania remains outstanding.

cent. The total amount of overcompensation (SDR 185 million) is more evenly distributed among the 16 affected members; it represents about 5 per cent of the total amount of the 65 early drawings finalized so far, and less than 2 per cent of the amount of all CF drawings made since January 1976.

The overcompensation of SDR 185 million for 16 members has been reversed to the extent of repurchases totalling SDR 173 million; 15 members repurchased the entire amounts for which they had been overcompensated, and one member (Tanzania) repurchased only SDR 4 million of the overcompensated amount and the balance of some SDR 12 million is still outstanding. 1/ Of the 15 cases of repurchase of the entire amounts, 8 were completed within 30 days of the member being notified by the Fund, 4 were completed within one to three months after notification, and 3 were completed within four to nine months.

Use of the early drawing procedure was particularly high in 1978 and 1981, when two thirds of CF drawings were made under the procedure; since January 1982, resort to early drawings has been less frequent, averaging about a third of the total number of CF drawings made.

As noted in the earlier staff paper on the subject, the incidence of over- and undercompensation is related to two factors: (a) the length of the period for which estimates are made and (b) the size of the drawing in relation to the estimated shortfall. When the drawing is equal to the whole estimated shortfall, the probability of exact compensation is very small; this is demonstrated by the fact that in all the 6 cases of undercompensation, and in 12 out of the 16 cases of overcompensation, the drawings were equal to the estimated shortfalls. On the other hand, in virtually all the cases of "exact" compensation, substantially larger estimated shortfalls than the drawings made provided an adequate safety margin against the risk of overcompensation.

3. Staff appraisal and recommendation

The staff believes that the early drawing provision of the CFF has continued to serve its two basic purposes, namely, (i) of providing more timely compensation for members and (ii) of allowing access to the CFF by countries that experience long delays in compiling their trade statistics. The staff considers that the incidence of under- and overcompensation has remained rather limited, and overall, the early drawing procedure has operated in a satisfactory manner. However, the experience with the reversal of overcompensation has not been completely satisfactory, inasmuch as in a number of cases of overcompensation, there have been considerable delays in completing the repurchases. It is to be hoped that the recent changes in procedures emphasizing the risk of repurchase in early drawings will have the effect of avoiding such delays in the future.

1/ See EBS/82/148 (8/18/82); EBS/82/178 (10/5/82); EBS/82/241 (12/28/82); and EBS/83/50 (3/2/83); two repurchases of SDR 2.0 million each were made by Tanzania on December 31, 1982 and on May 6, 1983.

In summary, the staff recommends that the policy regarding the operation of the early drawing procedure be maintained. The staff will, in any event, bring to the attention of the Executive Board any cases that give rise to unusual difficulties in the implementation of the decision.

III. Quota Limits Under the Compensatory and Buffer Stock Financing Facilities: Eighth General Review of Quotas

Aspects of the quota limits on access to the CFF and BSFF are discussed in this section. The objective is to set out some of the considerations relating to the decisions that Directors will need to take concerning access to these facilities and other facilities of the Fund in the light of the needs of the Fund's members and the Fund's prospective financial resources. The limited purpose to be served in this paper is to indicate the probable effects of various access limits on the capacity of the CFF and BSFF to meet the estimated future needs of members of the kind now being serviced through these facilities and to compare such prospective rates of service with those that have pertained in the past. Other papers to be provided later will consider the relationships among uses of resources under all the various facilities operated by the Fund on the one hand and the restrictions upon the total of such uses imposed by the limited availability of resources, on the other hand.

1. Compensatory financing facility

a. Outline of discussion

The discussion begins with a brief review of the trend of drawings under the CF facility (b).

Attention is then turned to what might be termed "core drawings" under the facility (c). These are drawings that relate only to export shortfalls (i.e., excluding drawings with respect to cereal imports) and that are made by what might be termed "core countries," which now number 120 (i.e., 146 Fund members less 14 industrial countries and 12 oil exporting countries. 1/ The discussion centers upon the ratio of actual CF drawings in the past, i.e., drawings by the core countries, to the aggregate shortfalls in the export earnings of the core countries, and the proportion of prospective shortfalls that might be financed in the future under various assumptions as to the quota limits on access to the CF facility. Additions to the prospective "core drawings" in respect of cereal imports (d) and on the part of oil exporters (e) are then assessed in turn. A recapitulation concludes the discussion of access to the CFF (f).

1/ The 14 industrial countries are those that, in accord with their own intentions, have refrained from the use of the CFF. With the exception of a drawing by Iraq in 1967, none of the 12 oil exporting countries has used the CFF to date.

b. CF drawings in perspective

Over the two decades since the CFF was established in 1963, the potential availability of Fund resources under the CFF has expanded significantly as a result of four general quota increases and three increases in the quota limits on CF drawings. This rise in the potential supply of CF resources has made possible a substantial expansion of drawings under the CFF, particularly after the 1975 liberalization of the facility. Annual drawings during the past seven years (1976-82) averaged SDR 1.22 billion, which is only 15 per cent less than the aggregate amount of drawings of SDR 1.43 billion made during the entire 13 preceding years (1963-75).

The level of drawings varied from year to year depending, inter alia, on the business cycle and variations in commodity prices. Thus, within the expanded structure of the CFF since 1975, annual drawings were particularly large in the aftermath of the 1975 liberalization of the CFF and the 1975 recession (SDR 2.3 billion in 1976) and have been running at a high level during the 1981-82 recession (SDR 1.2 billion in 1981 and SDR 2.6 billion in 1982). CF drawings in 1982 accounted for 35 per cent of the total credit extended by the Fund in that year. Outstanding drawings at the end of 1982, at SDR 5.4 billion, represented 28 per cent of total outstanding credit (Chart 1).

c. "Core drawings"

(1) Historical trends

In the projections of core drawings, the focus of attention is placed upon the relationship of these drawings to the total of shortfalls. This relationship is, in a sense, a measure of the service provided through the CFF. It will be useful to compare the effect upon this ratio of alternative quota limits on access to the CFF. Historical information pertaining to the service ratio is provided in Table 4.

In column 1, the trend value of export earnings is shown for each of the years 1966 through 1982. In columns 2 and 3, shortfalls are calculated in two ways: using deviations from five-year arithmetic means through 1978 in column 2 and using deviations from five-year geometric means in the balance of column 2 and throughout in column 3. (Shortfalls were calculated in relation to arithmetic means prior to 1979.) The ("geometric") shortfalls are shown as a percentage of trend exports in column 4. Column 5 shows the core drawings and in column 6 these are shown as a percentage of shortfalls. 1/ 2/

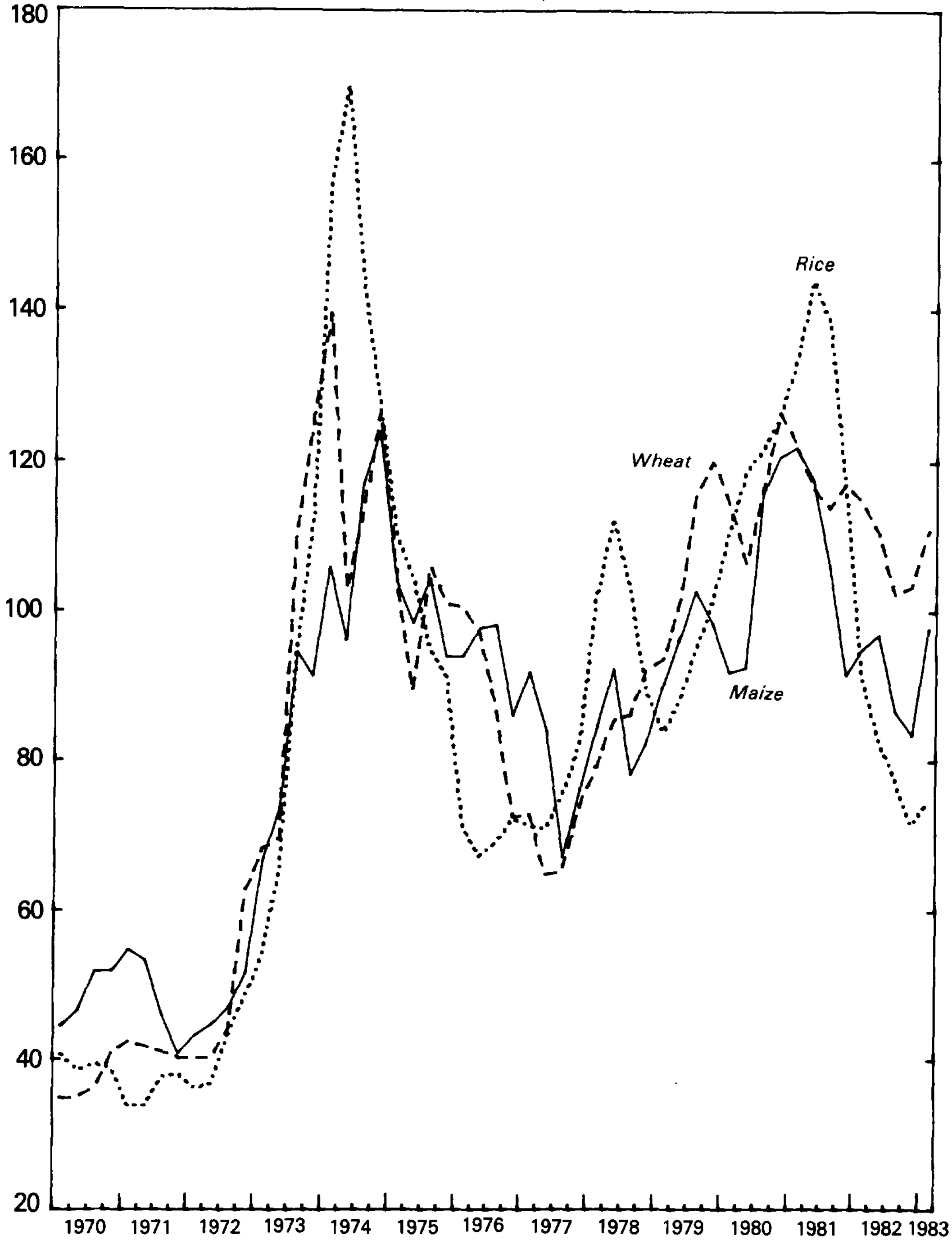
1/ The projections to be presented below are based on CF drawings relating to merchandise exports. The option to include certain services, which was instituted in 1979, has been used only by four countries in a total of five drawings. The five drawings were higher than if the requests were based only on merchandise exports by an aggregate amount of about

ANNEX II

CHART 1

PRICES OF MAJOR CEREALS[1]

(1975 = 100)



[1]Maize: U.S. No. 2 yellow, f.o.b. Gulf ports; wheat: U.S. No. 2 hard red winter, f.o.b. Gulf ports; *rice: Thailand, white milled 5 per cent broken, f.o.b. Bangkok.*

Table 4. Core Drawings in Relation to Shortfalls

	Trend Value of Exports (1)	Shortfalls A (2)	Shortfalls B (3)	Shortfalls as Per Cent of Trend Exports (4)	Core Drawings (5)	Core Drawings as Per Cent of Shortfalls (6)
	(In billions of SDRs)			(In per cent)	(SDR billions)	(In per cent)
1966	41.1	0.3	0.4	0.9	0.024	8.0
1967	43.8	1.5	1.4	3.3	0.181	12.9
1968	47.0	2.3	2.0	4.3	0.069	3.0
1969	50.2	0.9	0.7	1.4	0.013	1.4
1970	54.7	0.8	1.0	1.9	0.003	0.4
1971	62.3	4.2	3.6	5.8	0.069	1.6
1972	73.6	10.0	7.2	9.7	0.299	3.0
1973	85.3	4.2	2.1	2.5	0.113	2.7
1974	101.4	0.2	0.1	0.1	0.107	53.5
1975	121.4	9.9	7.0	5.8	0.239	2.4
1976	139.6	4.9	4.1	2.9	2.308	47.1
1977	158.4	4.2	2.9	1.9	0.241	5.7
1978	187.6	17.7	13.4	7.2	0.578	3.3
1979	219.0	5.6	5.8	2.6	0.572	10.2
1980	250.0	1.6	1.6	0.6	0.980	61.4
1981	287.3	3.1	3.1	1.1	1.230	40.1
1982	323.2	11.9	11.9	3.7	2.332	19.6

Note:

Column (1) Trend value of exports of 110 of the 120 core countries for which data are available throughout the period. Shown for each year is the 5-year geometric average of export earnings centered upon the shortfall year.

Column (2) Sum of shortfalls for the core countries other than for 10 countries for which adequate export series are not available. Shortfalls calculated through 1978 are the deviation of export earnings of the given year from the 5-year arithmetic average of earnings centered on that given year. For years after 1978, shortfalls are calculated as the deviation of export earnings of the given year from the 5-year geometric average of earnings centered on that given year.

Column (3) Sum of shortfalls for the 110 countries. For all years shortfalls are calculated as deviations from 5-year geometric averages.

Column (4) Column (3) as a per cent of column (1).

Column (5) Actual CF drawings, excluding the 1967 drawing by Iraq.

Column (6) Column (5) as per cent of column (2).

It will be noted that there is considerable variability in the ratio of core drawings to shortfalls. A number of factors affect this ratio. It is affected by the limits of access to the CFF. In any given year it is affected also by the extent to which the facility has been utilized in the immediate past, since a country that has already exhausted its access cannot have further recourse to the facility until it has reduced its outstanding drawings. The ratio as here calculated is also much affected by the fact that in practice the drawings of a particular calendar year do not necessarily relate closely to shortfalls experienced in that particular 12-month interval. It is useful therefore to average the figures for groups of years, and that is in fact done below.

Further historical information is given in Table 5. For each of the years 1966 through 1982, the aggregate quotas of the 120 core countries are given in column 1 and the maximum quota limits of access to the CFF that pertained on average in each year are given in column 2. The product of the quotas and quota limits, referred to here as potential supply of resources, is given in column 3. The average outstanding drawings in any year is given in column 4, and in column 5, the unutilized balance of potential supply is set out. Column 6 repeats the figures on core drawings shown earlier in Table 4. The utilization ratio, or the ratio of drawings to the unutilized balance of potential supply, is given in column 7. This ratio is used below in the projections of core drawings. 1/

1/ (Continued from page 12) SDR 17 million (7 per cent of the aggregate amount of the five drawings, but an insignificant portion of the aggregate CF drawings). The export figures shown in the table include only merchandise exports. The drawings figures include amounts that pertain to services.

2/ It will be noted that the drawings figures pertain to the core group of countries which now numbers 120, whereas the export shortfall figures pertain to a subgroup which now numbers 110 countries. The ten countries for which export data are not available over the entire period are small countries. The ratios of shortfalls to exports and core drawings to shortfalls are not significantly affected by the omission of the data for these ten countries.

The ratio of drawings to shortfalls shown in column 6 may be distinguished from the ratio of drawings to shortfalls of those members of the Fund who actually used the facility in meeting their shortfalls. This latter ratio, which is usually referred to as rate of compensation, assumed the following values in the years 1976-82:

1976	50.3
1977	44.2
1978	58.0
1979	52.0
1980	75.4
1981	49.2
1982	63.2

1/ Annex IV Table 1 reports on factors that affect changes in the utilization ratio.

Table 5. Utilization of Quota Limits

	Quota (1)	Quota Limit (2)	Potential Supply of CF Resources (3)	Outstanding Core Drawings (4)	Unutilized Balance of Potential Supply (5)	Annual Core Drawings (6)	Utilization Ratio (7)
	(SDR millions)	(In per cent)	(SDR millions)				(In per cent)
1966	6,060	31	1,894	85	1,809	24	1.3
1967	6,453	50	3,226	125	3,101	181	5.8
1968	6,611	50	3,305	272	3,033	69	2.3
1969	6,707	50	3,354	226	3,128	13	0.4
1970	7,028	50	3,514	168	3,346	3	0.1
1971	8,921	50	4,461	108	4,353	69	1.6
1972	9,128	50	4,564	231	4,333	299	6.9
1973	9,392	50	4,696	417	4,279	113	2.7
1974	9,403	50	4,702	526	4,176	107	2.6
1975	9,409	50	4,705	537	4,168	239	5.7
1976	9,426	75	7,069	1,359	5,710	2,308	40.4
1977	9,431	75	7,073	2,727	4,346	241	5.5
1978	11,319	75	8,489	2,764	5,725	578	10.1
1979	12,311	81	10,002	2,953	7,049	572	8.1
1980	13,112	100	13,112	2,900	10,212	980	9.6
1981	19,634	100	19,634	2,827	16,857	1,230	7.3
1982	19,899	100	19,899	3,522	16,377	2,332	14.2

Note:

Column (1) The average aggregate quotas in any year of the current group of 120 non-industrial non-oil Fund members which were members in the Fund in the given year.

Column (2) The limit on access to the CFF expressed as annual average.

Column (3) Column (1) times column (2) divided by 100. The computations are based on quarterly series of quotas (column (1)) and quota limits (column (2)); the information shown in column (3) represents the annual averages of quarterly data.

Column (4) Annual average of outstanding CF drawings at the beginning of each quarter within each year.

Column (5) Column (3) minus column (4).

Column (6) The same as column (5) in Table 4.

Column (7) Column (6) as a percentage of column (5).

Table 6 exhibits, in its upper half, averages over selected years of the historical data presented in the two previous tables. Projections of core drawings and underlying assumptions are arranged in the lower half of the table.

The potential supply of resources to users of the CFF, as the term is being used in this paper, depends upon the quota limits of access to the facility, for it is defined as the product of quotas and quota limits. For the information of Directors, projections are based on a series of assumptions as to quota limits of drawings in relation to export shortfalls. The figure of 100 per cent is included because that is the quota limit currently in effect. The figure of 85 per cent is included because at that figure the absolute access to the facility would be maintained for even the country (Laos) which has received the lowest percentage quota increase. 1/ The figure of 75 per cent is included because at that level the aggregate access of the 120 countries to the facility would remain at approximately the present level. However, with an access limit of 75 per cent, 48 of the 120 Fund members that have received below-average increases in their quotas would experience a reduction in absolute access. The figure of 65 per cent has been included because this is approximately (66.6 per cent would be the exact ratio) the access limit that would have left absolute access unchanged if the quotas of all the 120 countries now under consideration had increased by 50 per cent. The access limits of 50 per cent and 125 per cent have been included in order to assist Directors in extending the sensitivity analysis of the matter at hand.

In column 1 of Table 6, the unutilized balance of projected potential supply is shown. The potential supply itself is of course equal to the total of quotas for the 120 countries multiplied by the assumed quota limit. The outstanding balances to be deducted to obtain the unutilized balance of potential supply were built up year by year taking into account projected drawings and repurchases in each year.

The utilization ratio shown in colummn 2 is set at 10 per cent for the quota limit of 100 per cent, as this is approximately the value of the ratio in the period 1980-82, which is roughly the period when the CFF has operated with a quota limit of 100 per cent. The utilization ratio would be expected to vary inversely with the quota limits, since at lower levels of the limits a larger number of users of the facility will, given the total of calculated shortfalls, be constrained by the limits. The pattern of utilization ratios shown in column 2 is derived from a simulation based on an analysis of the cases that have arisen since the 1979 decision.

In column 3 a projection of core drawings is shown as the product of the figures in columns 1 and 2.

The trend value of exports is projected in column 4. It is assumed in this table that the value of exports will grow at a rate of 10 per cent

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1/ Except for Kampuchea, which received no quota increase.

Table 6. Projections of Core Drawings

	Unutilized Balance of Potential Supply (1)	Utilization Ratio (2)	Core Drawings (3)	Trend Value of Exports (4)	Shortfall as Per Cent of Trend Value of Exports (5)	Shortfall (6)	Core Drawings as Per Cent of Shortfall (7)
	(SDR billions)	(Per cent)	(SDR billions)		(Per cent)	(SDR billions)	(Per cent)
Actual							
Period averages							
1966-70	2.88	2.1	0.048	47	2.3	1.2	4.0
1971-75	4.26	3.9	0.165	89	4.5	5.7	2.7
1976-79	5.71	16.2	0.925	176	3.7	8.1	10.4
1980-82	14.48	10.4	1.513	287	1.9	5.5	27.5
1976-82	9.37	12.4	1.177	244	3.3	7.0	15.7
1971-82	7.30	10.3	0.755	167	3.1	6.5	10.9
Projections							
1984-88 average							
With quota limits of:							
(%)							
50	7.65	13.6	1.04	478	3.1	14.8	7.0
65	11.08	12.0	1.33	478	3.1	14.8	9.0
75	13.48	11.2	1.51	478	3.1	14.8	10.2
85	15.74	10.8	1.70	478	3.1	14.8	11.5
100	19.40	10.0	1.94	478	3.1	14.8	13.1
125	25.57	8.8	2.25	478	3.1	14.8	15.2

Note:

Column (1) Actual: Based on column (5) in Table 5.
Projected: Derived from simulations starting from the third quarter of 1983 with assumed utilization ratios, potential supplies, and repurchases.

Column (2) Actual: The ratio of column (3) to column (1).
Projected: Assumed ratios derived from simulations based on CF cases since the 1979 decision.

Column (3) Actual: Based on column (6) in Table 5.
Projected: Derived from simulations starting from the third quarter of 1983 with assumed utilization ratios, potential supplies, and repurchases.

Column (4) Actual: Based on column (1) in Table 4.
Projected: Based on 10 per cent assumed annual growth in trend exports.

Column (5) Actual: Based on column (4) in Table 4.
Projected: The average ratio for 1971-82.

Column (6) Actual: Based on column (2) in Table 4.
Projected: Column (4) multiplied by column (5) divided by 100.

Column (7) Actual: Based on column (6) in Table 4.
Projected: Column (3) divided by column (6) multiplied by 100.

which is to be compared to an annual rate of 14 per cent in the period 1966-82 and 16 per cent in the period 1971-82.

In column 5, the ratio of shortfalls to trend exports is projected at 3.1 per cent, which is the figure that applied on the average in the period 1971-82. Applying this percentage to the trend value of exports yields the projected average shortfall for the years 1984-88 exhibited in column 6.

In column 7 the ratio of projected core drawings to projected shortfalls is shown. 1/ At a quota limit of 100 per cent, the aggregate ratio of drawings to shortfalls would be substantially in excess of that which prevailed on average in the periods 1966-70 or 1971-75, somewhat in excess of that which prevailed in the period 1976-79 or the period 1971-82, but would be below the ratio that prevailed since the liberalization of the CFF (1976-82), and significantly below the ratio for 1980-82. Indeed, even a quota limit of 125 per cent would yield a ratio substantially below the 1980-82 experience, though roughly equal to the ratio for 1976-82 and well above the ratio for 1971-82.

A quota limit of 75 per cent would yield an average ratio of core drawings to shortfalls of the order of magnitude of experience in the 1971-82 period.

Assuming that core drawings are SDR 3.0 billion in 1983 and on the special assumption that in the period 1984-88 they are, each year, at the level shown in Table 7, outstanding drawings have been calculated. These are shown on average for the five years of the period for various assumptions as to quota limits. The maximum of outstanding drawings and the year it is attained is also shown. Thus it may be stated, for example, that on these assumptions, whereas at a quota limit of 100 per cent annual (gross) drawings are at a rate just under SDR 2.0 billion, the maximum of outstanding drawings during 1984-88 realized in 1985 would exceed the level at the end of 1983 by some SDR 1.6 billion. At a quota limit of 75 per cent, annual drawings would be SDR 1.5 billion, and the maximum of outstanding drawings during 1984-88 realized in 1985 would be some SDR 650 million above outstanding drawings at the end of 1983.

d. Drawings under the cereal decision

In documents prepared in connection with Board consideration of Fund financing of excesses in the costs of cereal imports, the staff presented estimates of financial requirements under the cereal decision. The estimates were based on historical relationships by which simulated drawings in respect of excesses in the costs of cereal imports were compared with simulated drawings in respect of export shortfalls. The ratio of additional

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1/ Annex IV Table 2 details the implications of alternative growth assumptions for drawings and service ratios.

Table 7. Core Drawings: Average of Annual and Outstanding Drawings (Actual for 1966-83 and Projected for 1984-88)

	Average Drawings		Maximum Outstanding	
	Annual	Outstanding	Amount	Year
	---- (In billions of SDRs) ----			
Actual drawings				
1966-70	0.048	0.193	0.261	1967
1971-75	0.165	0.445	0.722	1975
1976-79	0.925	2.809	2.921	1978
1980-82	1.513	3.704	5.397	1982
1976-82	1.177	3.193	5.397	1982
1971-82	0.755	2.048	5.397	1982
1983 1/	3.000	7.690	7.690	1983
Projected drawings, 1984-88 average 2/				
With quota limits of: (%)				
50	1.04	5.95	7.59	1984
65	1.33	6.80	7.97	1984
75	1.51	7.31	8.34	1985
85	1.70	7.87	8.80	1985
100	1.94	8.54	9.34	1985
125	2.25	9.43	10.05	1985

1/ Based on actual drawings for January-May and estimates for the remainder of 1983.
2/ Assuming that drawings are evenly distributed over the years 1984-88.

drawings (cereal) to CF drawings (export shortfalls) was determined at 12 per cent, and this ratio was used to project the average of annual cereal drawings over the period 1981-85. 1/

As discussed in Section I of this paper, experience with the cereal decision in the past two years suggests that drawings on account of cereals in relation to drawings on account of export shortfalls was much less than indicated by the historical relationship. This is because during this relatively short period, shortfalls experienced by a large number of countries coincided with relatively few countries experiencing excesses in the cost of their cereal imports. Nevertheless, for the purpose of projecting additional drawings on account of cereal imports for the medium-term period 1984-88, the historical ratio of 12 per cent established in 1981 has been retained. Accordingly, cereal drawings for 1984-88 are projected by multiplying the projected core drawings discussed in (c) by 12 per cent. On this basis, projected cereal drawings corresponding to various quota limits are detailed in Table 8. The table also shows the average of outstanding drawings and the maximum oustanding amounts over the years 1984-88.

e. The oil exporting countries

(1) Background

This part of the memorandum deals with a projection of possible CF drawings by the 12 members classified as oil exporting countries. 2/

The 12 oil exporting countries experienced significant increases in their export earnings throughout the 1970s as a consequence of the two rounds of oil price increases in 1973-74 and in 1979-80. These increases in oil earnings, however, were not uniform either among countries or years. Most individual oil exporters experienced statistical shortfalls in their oil exports in one year or another during this period. These shortfalls, however, being measured as deviations from the strongly rising trend of export earnings that characterized the 1970s, were, for most the most part, associated with balance of payments surpluses and sharply rising levels of international reserves. As a consequence, the 12 countries concerned felt no need for CF drawings.

The situation for most of the oil countries changed significantly after 1980. As discussed in SM/83/87, the oil earnings of most countries have declined continuously since 1980, and for some countries, the drop in earnings has weakened their balance of payments considerably. As a

1/ The projections made at the time of the cereal decision in 1981 and the actual drawings in the first two years of operation are reviewed in Section I of this paper.

2/ The classification is based on WEO; the countries are: Algeria, Indonesia, the Islamic Republic of Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Table 8. Cereal Drawings: Average of Annual and Outstanding Drawings (Actual for 1981-83 and Projections for 1984-88)

	Average Drawings		Maximum Outstanding	
	Annual	Outstanding	Amount	Year
	- - - - (In billions of SDRs) - - - -			
Actual drawings 1981-83 1/	0.15	0.27		
Projected drawings 1984-88 averages				
With quota limits of: 2/ (%)				
50/50/65	0.13	0.67	0.93	1988
65/65/80	0.16	0.76	1.08	1988
75/75/95	0.19	0.85	1.23	1988
85/85/105	0.21	0.91	1.33	1988
100/100/125	0.24	1.00	1.48	1988
125/125/155	0.28	1.12	1.68	1988

1/ Average for two years from May 1981.
2/ Limits on export component/cereal component/total outstanding drawings; the joint limit on total drawings is assumed to be roughly 25 per cent above the limit on the individual components.

consequence of these developments, the position of the oil exporting countries in relation to the CFF has become more akin to that of the other countries.

(2) The approach

For the purpose of making projections, the 12 oil exporting countries may be classified in three broad categories: first, countries that are unlikely to feel in need of CFF drawings because of strong reserves; second, those that feel they have a current need and may present requests; and third, countries whose prospective situation is not clear at present, but that may, nevertheless, present requests in future.

The aggregate quotas of the 12 countries are to increase by 56 per cent, from the present level of SDR 6.7 billion to SDR 10.4 billion under the Eighth General Review of Quotas. The aggregate quotas of countries that are not expected to have recourse to the CFF amount to SDR 2.8 billion at present and will increase by 57 per cent to SDR 4.4 billion when the new quotas become effective. The aggregate quotas of the remaining countries, those that may be considered as potential users of the CFF, are to increase by 55 per cent, from SDR 3.9 billion to SDR 6 billion.

Of the group identified as potential users, the quotas of those that currently feel they have a balance of payments need are to increase by 50 per cent to SDR 3.7 billion. The countries concerned have already approached the Fund about the possible use of the CFF, and in most cases have also shown an interest in making other use of Fund resources. The probability of countries in this group requesting CF drawings is relatively high.

The aggregate quotas of the remaining group of potential users are to increase by 63 per cent to SDR 2.3 billion. So far, none of the countries in this group has expressed interest in use of the CFF, but the possibility of requests by them at a later date cannot be ruled out.

Since none of these potential users of the CFF have outstanding CF drawings at present, their aggregate quotas represent the theoretical maximum of possible drawings on the assumption that present quota limits remain in effect. Actual drawings would, of course, depend not only upon the correctness of this assumption, but also on the actual size of the calculated shortfalls and satisfaction of the other criteria of the CF decision, namely, (a) need, (b) "beyond the control," and (c) cooperation.

(3) Shortfalls and drawings

On the basis of the assumptions regarding future earnings of oil exporters made in SM/83/87, the oil shortfalls for most countries are expected to reach a peak for calendar year 1983, and subsequently, the shortfalls "would become successively smaller as the 12 months of the shortfall year move deeper into 1984." Whether oil countries will continue to experience shortfalls beyond 1984 depends on the profile of their annual export earnings through the rest of the 1980s. It is quite possible that most countries could experience no shortfalls after 1984; this would happen, for example, if the projected increase in oil earnings of 9 per cent per year assumed (in SM/83/87) for 1984-86 is also assumed for the subsequent years. 1/

With these assumptions, the shortfall periods of relevance to consideration of possible requests by the oil exporters may be expected to correspond roughly to 12-month periods starting with calendar year 1983 and ending about one year later. The corresponding pattern of requests would probably span a period that extends to about the middle of 1985 and cease thereafter.

The average drawings and average outstanding amounts over the period 1984-88, as well as the maximum outstanding drawings and the year attained are set out in Table 9. In constructing these rough estimates, it has been assumed that the potential users having the higher probability of

Table 9. Oil-Exporting Countries: Projected Average of Annual and Outstanding Drawings for the Years 1984-88

Quota Limits	Average Drawings		Maximum Outstanding 1/	
	Annual	Outstanding	Amount	Year
(In per cent)	---- (In billions of SDRs) ----			
50	0.30	1.60	2.25	1985
65	0.40	2.10	2.90	1985
75	0.50	2.45	3.35	1985
85	0.60	2.80	3.80	1985
100	0.75	3.30	4.50	1985
125	1.00	4.10	5.60	1985

1/ Amounts correspond to the sum of (a) estimated drawings for 1983 (SDR 0.75 billion) and (b) the total of drawings for 1984-88 averaged in the second column, i.e., five times the amounts shown in the second column. (Figures are rounded to the nearest 50 million.)

1/ In this case, most countries will experience an excess for 1985 and zero shortfalls for subsequent years.

drawing will draw the theoretical maximum of drawings and that the other group of potential users will draw approximately one third of their theoretical maximum of drawings. 1/ It has also been assumed that some drawings by oil countries will take place in 1983, and that the rest, though shown as an annual average for the period 1984-88, will be expected to be concentrated in 1984 and 1985. 2/ Assuming a quota limit of 100 per cent, the rough calculations for 1984-88 imply annual averages of SDR 0.75 billion for drawings and of SDR 3.3 billion for outstanding amounts; the corresponding amounts for a quota limit of 50 per cent are SDR 0.3 billion for drawings and SDR 1.6 billion for outstanding amounts.

f. Recapitulation

In Table 10 are brought together the projections of annual averages for the years 1984-88 of "core" drawings, cereal drawings and drawings by oil exporters. The totals are given in column 1, in the upper half of the table.

In the lower half of the table, the average amount outstanding at year ends over the 1984-88 period is shown separately for core, cereal, and oil country drawings. The table also shows the maximum outstanding amount for total drawings and the year it is attained. On the assumption that the core and cereal drawings are the same in each of the five years 1984-88, and that the oil drawings are concentrated in the period through 1985, the maximum of outstanding drawings would be attained at the end of 1985. This matter is expected to be pursued in forthcoming papers on the Fund's financial position and enlarged access.

2. Buffer stock financing facility (BSFF)

In the period of nearly 14 years since the buffer stock financing facility (BSFF) was established in June 1969, there have been 34 drawings by 15 member countries for a total amount of SDR 456 million. Nineteen drawings by 5 members for a total of SDR 203 million were made in respect of tin (the Fourth, Fifth and Sixth ITAs); 4 drawings by 4 members for a total of SDR 130.7 million were made in respect of rubber; and 11 drawings by 9 members for a total of SDR 122.3 million were made in respect of sugar (Table 11). 3/

1/ The weighted average of these probabilities corresponds to drawings by all the potential users being roughly 75 per cent of their theoretical maximum of drawings.

2/ Drawings in 1983 are estimated at SDR 750 million; 60 per cent of the rest is assumed to take place in 1984 and 40 per cent in 1985.

3/ The Fund approved the 1973 Cocoa Agreement, but no purchases were made by members in connection with that agreement because market conditions did not allow accumulation of cocoa stocks.

Table 10. Actual and Projected Drawings with Alternative Quota Limits

	Period Average				Maximum Outstanding	
	Total	Core Drawings	Cereal Drawings	Oil Exporters	Total	Year
	(In billions of SDRs)					
Annual Drawings						
Actual						
1976-79	0.925	0.925	--	--		
1980-82	1.617	1.513	-- 1/	--		
1971-82	0.780	0.755	-- 1/	--		
1983	3.750	3.000	--	0.750		
Projected						
1984-88 average						
With quota limits of: (%)						
50	1.67	1.04	0.13	0.30		
65	2.09	1.33	0.16	0.40		
75	2.35	1.51	0.19	0.50		
85	2.61	1.70	0.21	0.60		
100	2.93	1.94	0.24	0.75		
125	3.43	2.25	0.28	1.00		
Outstanding Drawings						
Actual						
1976-79	2.809	2.809	--	--	2.921	1978
1980-82	3.820	3.704	-- 1/	--	5.397	1982
1971-82	2.076	2.048	-- 1/	--	5.397	1982
1983	8.725	7.690	0.285	0.75	8.725	1983
Projected						
1984-88 average						
With quota limits of: (%)						
50	8.23	5.95	0.67	1.60	9.99	1985
65	9.67	6.80	0.76	2.10	11.43	1985
75	10.61	7.31	0.85	2.45	12.35	1985
85	11.57	7.87	0.91	2.80	13.30	1985
100	12.87	8.54	1.00	3.30	14.60	1985
125	14.70	9.43	1.12	4.10	16.47	1985

1/ Drawings in relation to cereal imports, which amounted to SDR 307 million since 1981, are not shown for the period average, but are included in the totals.

Table 11. Drawings Under the Buffer Stock Financing Facility

(As of April 20, 1983)

	Country	Total Amounts Drawn in Respect of: Tin	Rubber	Sugar	Total	Percentage of Quota Outstanding: Maximum at Any Time	At Present
		(In millions of SDRs) 1/					
1.	Australia	--	--	56.3 (2)	56.3 (2)	3.0	2.7
2.	Bolivia	37.9 (6)	--	--	37.9 (6)	36.4	36.4
3.	Dominican Rep.	--	--	22.0 (2)	22.0 (2)	20.9	14.0
4.	Guyana	--	--	0.7 (1)	0.7 (1)	2.9	1.9
5.	Indonesia	33.3 (5)	37.4 (1)	--	70.7 (6)	9.1	9.1
6.	Jamaica	--	--	1.1 (1)	1.1 (1)	1.4	--
7.	Malawi	--	--	0.9 (1)	0.9 (1)	3.2	3.2
8.	Malaysia	110.9 (3)	67.8 (1)	--	178.7 (4)	29.8	29.8
9.	Mauritius	--	--	3.6 (1)	3.6 (1)	8.9	8.9
10.	Nicaragua	--	--	0.6 (1)	0.6 (1)	1.7	1.1
11.	Nigeria	1.5 (3)	--	--	1.5 (3)	0.5	0.1
12.	Philippines	--	--	36.1 (1)	36.1 (1)	17.1	11.5
13.	Sri Lanka	--	5.8 (1)	--	5.8 (1)	3.2	3.2
14.	Swaziland	--	--	1.0 (1)	1.0 (1)	5.4	5.4
15.	Thailand	19.2 (2)	19.7 (1)	--	38.7 (3)	7.2	7.2
	Total	202.8 (19)	130.7(4)	122.3(11)	455.6 (34)		

1/ Figures in parentheses indicate number of drawings.

Of the 15 members who have used the facility, 8 drew only once and only 3 drew in respect of more than one commodity (Indonesia, Malaysia and Thailand).

The maximum percentage of a member's quota outstanding under the facility at any one time was 36.4 per cent in the case of Bolivia, and the average maximum amount outstanding at any one time for the 15 members was 10.5 per cent. Leaving aside the possibility of Fund assistance to members in connection with the UNCTAD Common Fund (CF) if that should come into existence, the likelihood of any new commodities being included in buffer stock arrangements in the next 3-4 years is remote, although heavier stocking obligations than apply at present could be placed on members of a new Sugar Agreement in 1984, and of a new Rubber Agreement in 1985. In these circumstances, and if further contributions are called up, the amounts outstanding under the facility might be raised for one member only (Malaysia) to about 41 per cent of the present quota. At present, members of three commodity agreements (tin, rubber, and sugar) qualify for Fund assistance under the BSFF; of these, only members of the Sugar Agreement are likely to seek Fund assistance in the period immediately ahead.

In view of the limited prospective use of the BSFF, it is unlikely that a quota limit, even if reduced from 50 per cent to 40 per cent, would be a constraint on members' access. The staff would bring to the attention of the Executive Board major developments in the area of international commodity policy that may involve substantial claims on Fund resources under the buffer stock financing facility. Should the UNCTAD Common Fund come into force, it would be necessary for the Executive Board to determine at that time the extent to which it may wish to adapt the buffer stock financing facility.

Evolution of the CFF

The Fund's compensatory financing facility (CFF) was established in February 1963 to assist members, particularly exporters of primary products, encountering payments difficulties produced by temporary export shortfalls. A number of reviews of the facility have been undertaken at irregular intervals over the 20 years since then, but major changes resulting in more liberal access have been made on only three occasions--in 1966, 1975 and 1979--while the cereal decision was introduced in 1981. (The cereal facility is reviewed in the first section of the paper.)

a. Main features of facility

The permanent features of the facility, which have remained unchanged from the beginning are: (i) the member requesting use of the facility must satisfy the Fund that it is encountering payments difficulties; (ii) the member must cooperate with the Fund in finding solutions, where required, for its payments difficulties; (iii) the shortfall, defined as a downward deviation from the medium-term trend of exports centered on the shortfall year, must be temporary in character; and (iv) the shortfall must be largely attributable to circumstances beyond the member's control. CF drawings have, moreover, always been additional to what a member might draw under the normal tranche policies of the Fund.

The main features which have changed during the life of the facility concern: (i) access; (ii) method of estimating the medium-term trend of exports; (iii) coverage, e.g., the inclusion of certain services and of cereal imports; (iv) repurchase provisions; (v) reclassification of non-compensatory drawings as compensatory; and (vi) avoidance of double compensation.

b. The 1963 decision

Under the 1963 decision, 1/ outstanding drawings by an eligible member could reach a maximum of 25 per cent of its quota, and the member had to make a representation that it will cooperate (in future) with the Fund in efforts to find, where required, appropriate solutions for its balance of payments difficulties. The medium-term trend of a member's exports was estimated, about equally, by the application of an automatic formula to past exports (applying weights of 0.25 to exports in each of the two pre-shortfall years and a weight of 0.50 to exports in the shortfall year), and by using a combination of export data for three actual years and forecasts, based on market appraisal and available information, for the next two (post-shortfall) years. The trend was the arithmetic average of exports for the five years centered on the shortfall year.

1/ Executive Board Decision No. 1477-(63/8), adopted February 27, 1963.

c. 1966 review

The principal changes introduced in September 1966 1/ included the following: The limit on outstanding drawings under the facility was raised to 50 per cent of a member's quota, with drawings of no more than 25 per cent of quota in any 12-month period, except in cases of emergency or natural disaster. For drawings which would raise the outstanding amount under the facility above 25 per cent of its quota, a member had to have been cooperating with the Fund in finding solutions for its payments difficulties, as well as to give an undertaking to cooperate in future. In estimating the trend (still the arithmetic average of five years centered on the shortfall year), more emphasis was given to the qualitative method involving judgmental forecasts than to the automatic formula, and limits were placed on the forecasts--an upper limit for the average of post-shortfall exports of 10 per cent above the pre-shortfall average, and a lower limit of the actual level in the shortfall year. Provision was introduced for the reclassification as compensatory drawings, of all or part of previous non-compensatory drawings made no longer than six months earlier, provided that an export shortfall was found to exist on the basis of the latest available data. Procedures were adopted for avoiding double compensation arising from previous non-compensatory drawings from the Fund as well from previous CF drawings. At the end of each of the first two years following the drawing, a member was expected to repurchase half of any export excess calculated by using the automatic formula.

When the buffer stock financing facility (BSFF) was established in June 1969, 2/ a joint limit of 75 per cent of a member's quota (which remained in effect until 1975), was introduced for drawings under the BSFF and CFF together. The limit on each separately was 50 per cent of quota.

d. 1975 review

Major liberalization of the CFF was effected in December 1975. 3/ The limit on outstanding drawings was raised from 50 per cent to 75 per cent of quota, with drawings of no more than 50 per cent in any 12-month period, except in cases of emergency or natural disaster. The joint limit of 75 per cent of quota on aggregate BSFF and CFF purchases was abolished. 4/ Past cooperation with the Fund became a requirement for drawings which would raise outstanding amounts above 50 per cent of quota. The upper and lower forecast limits were removed and an extrapolation formula for estimating the medium-term trend of exports was introduced; in practice the formula produced unrealistic results and the judgmental

1/ Executive Board Decision No. 2192-(66/81), adopted September 20, 1966.
2/ Executive Board Decision No. 2772-(69/47), adopted June 25, 1969.
3/ Executive Board Decision No. 4912-(75/207), adopted December 24, 1975.
4/ By Executive Board Decision No. 4913-(75/207), adopted December 24, 1975.

forecast method continued to be used in the vast majority of cases. A major innovation was the adoption of the early drawing procedure under which it became possible to use estimates of exports for up to a maximum of six months of the shortfall year. The provision whereby previous non-compensatory drawings could be reclassified as compensatory drawings if there had been an export shortfall at the time, was amended to extend the time limit for the previous drawing from no earlier than 6 months to no earlier than 18 months. No use was ever made in practice of this extended reclassification provision. Repurchase requirements were amended to bring them into line with those applying to other Fund drawings; the expectation of repurchase in the event of an export excess being calculated one and two years after the drawing was dropped. On the other hand, in the case of early drawings, an expectation of prompt repurchase applied if, when actual export data for the whole shortfall year became available, the member was found to have been overcompensated by the drawing made on the basis of partially estimated data.

e. 1979 review

The next series of important changes to the CFF were made in August 1979. 1/ The limit on outstanding drawings was raised from 75 per cent to 100 per cent of a member's quota, and the 50 per cent of quota limitation on drawings in any 12-month period was abolished. The requirements of future cooperation for drawings that would not raise the member's outstanding amounts under the facility above 50 per cent of quota and of past cooperation for drawings that would do so, were both maintained. The extrapolation formula introduced in 1975 was abolished, but the medium-term trend of exports was changed from the arithmetic average to the geometric average of the five years centered on the shortfall year. A major modification of the facility was the option given to members of including receipts from travel and/or workers' remittances in the calculation of the shortfall. Once exercised, the same option has to be exercised in any CF request during the five subsequent years. Receipts from these services can be estimated for a maximum period of 12 months of the shortfall year, while the maximum estimation period for exports remains at six months. The provision for reclassification of non-compensatory drawings as CF drawings was abolished, as well as the procedures for avoiding double compensation in respect of previous non-compensatory drawings, but were maintained for doing so in respect of previous CF drawings. The repurchase provision in respect of possible overcompensation by early drawings was maintained and the other repurchase provisions were standardized to make them conform with the Fund's usual requirements.

f. Other issues reviewed

(1) The meaning of "shortfall largely attributable to circumstances beyond the control of the member." At EBM/82/42, 4/5/82, the Executive Board accepted the staff's recommendation in EBS/82/42 (3/12/82)

1/ Executive Board Decision No. 6224-(79/135), adopted August 2, 1979.

that existing procedures should be maintained except for two minor amendments relating to stock adjustment (viz., that no adjustment should be made for an increase in stocks in the shortfall year that restored them to normal levels; and that the modified stock adjustment procedure should apply to cereal import excesses).

(2) Experience with the requirement of cooperation. In considering EBS/81/251 (12/30/81), Executive Directors agreed that the staff should be guided by their wish that past practices relating to judgments on cooperation should continue to be applied in a flexible manner on a case-by-case basis (EBM/82/42, 4/5/82).

(3) Undercompensation in connection with early drawings. The sense of the meeting at which EBS/82/54 (10/11/82) was discussed was that no change should be made in existing procedures of permitting a member who had drawn under the CFF on the basis of estimated data for a shortfall year to request a further drawing when actual data showed that the member would have been eligible for a larger amount at the time of the original drawing (EBM/82/42, 4/5/82 and EBM/82/43, 4/7/82).

(4) Overcompensation in connection with early drawings. In their consideration of SM/82/204 (10/11/82), Executive Directors agreed that no change in the existing procedures was warranted at that time, but more emphasis should be put on better compliance with the repurchase expectation and on expediting the provision of actual data by members. A member making an early drawing was in future to be informed in writing that overcompensation might have to be repaid at an early stage so that the authorities would be well advised to keep sufficient resources available; and it would be impressed on the member that there was a need for it to provide actual data for the whole shortfall year as rapidly as possible. An appropriate procedure has since been implemented. It was suggested that the issue of overcompensation and related repurchase might be considered again in mid-1983. (EBM/82/1, 1/6/82; EBM/82/29, 3/12/83; EBM/82/43, 7/4/82; EBM/82/145, 11/8/82; and Chairman's Summing-Up (Buff 82/209, 11/18/82).

(5) Avoidance of double compensation with respect to emergency drawings. In a discussion of SM/82/230 (12/13/82), it was agreed that the status quo should be maintained. The staff and management would continue to be flexible and pragmatic, and recommend whatever seemed appropriate and sensible in individual cases (EBM 83/2, 1/3/83).

g. Proposals for modification made at various times

From about the mid-1970s, there have been a large number of other proposals for further modifying or liberalizing the CFF, including ones made by UNCTAD. Among those which have not hitherto found sufficient support in the Executive Board are the following: the calculation of the shortfall in real rather than in nominal terms; the provision of compensation for gross commodity shortfalls through a complementary facility instead of compensation only for a net shortfall in total exports; restriction of compensation to shortfalls in primary products exports only; application of a dependency threshold, particularly in respect of receipts from services; the provision of compensation for increases in the cost of imports of other items in addition to cereals; and application of first credit tranche conditionality to CFF drawings that would raise outstanding amounts under the facility above 50 per cent of a member's quota. Most of these proposals were considered but rejected at the time of the 1979 review.

The report by the UNCTAD Secretariat entitled "Commodity Issues: a review and proposals for further action" (TD/273, dated 1/11/83), which was prepared for consideration at UNCTAD VI in Belgrade in June contains the following paragraph suggesting modifications to the Fund's CFF:

"110. It would seem, therefore, that further action is called for to provide a more adequate volume of compensatory finance as well as to tailor the terms and conditions of the IMF facility more closely to the needs of developing countries in the present crisis situation. It is suggested, therefore, that this facility should be modified on the following lines:

(a) The limit on drawings as a proportion of quotas should be increased significantly from the current ceiling of 100 per cent of quota so as to provide for full coverage of shortfalls;

(b) Access to the facility should be made subject to lower conditionality by eliminating the current 50 per cent of quota threshold on outstanding drawings beyond which members must "satisfy" IMF regarding their policies;

(c) The repayment period should be extended from the current 3-5 years, perhaps to 4-10 years, as has been done for other IMF facilities;

(d) Shortfalls in export earnings should be calculated in real terms rather than in nominal terms, as at present;

(e) The formula used for calculating shortfalls should be revised to improve its ability to reflect the immediate impact of shortfalls on the balance-of-payments needs of commodity-exporting developing countries.

Special liberal arrangements should also be considered for the least developed countries by providing, in addition to the above, for the subsidization of their interest payments on outstanding drawings, and for the maximum repayment period suggested in (c) above."

At the fifth Ministerial Meeting of the Group of 77 in April 1983, similar modifications to the CFF were proposed for adoption at UNCTAD VI. These proposals are outlined in SM/83/89 (5/19/83).

World Cereal Situation and Outlook

In the discussions leading up to the establishment of the cereal facility in mid-1981, concern had been expressed over the outlook for declining supplies of cereals and rising prices. World production had declined in both 1979 and 1980, accompanied by a sharp increase in imports, a decrease in food aid, and a substantial rise in cereal prices--by 17-20 per cent over the period 1978/79 to 1980/81. At the same time, world stocks as a share of consumption had dropped below 17 per cent, the level considered by the FAO as the minimum safe level for world food security. This situation, however, was reversed in the course of 1981-82, as a recovery in world cereal supplies caused a significant easing of the supply situation.

World cereal production increased by 6 per cent in 1981 and by a further 3 per cent in 1982, with output increases of the same order being achieved by the developing countries (Table 1). Imports of the developing countries declined for the first time since 1975/76--by 2 per cent in 1981/82--and although estimated to rise by 7 per cent in 1982/83, the rate of increase in imports for the two years taken together--2 per cent--represents a significant slowdown in the annual rates of increase since the mid-1970s. At the same time, world cereal stocks rose by 20 per cent in both 1981/82 and 1982/83, reaching levels equivalent to 18 and 21 per cent of world consumption, respectively, the highest in more than 10 years. There was some increase in the volume of food aid in both years to levels accounting for roughly 10 per cent of the total cereal imports of developing countries. With the availability of more ample supplies, the prices of all major cereals declined substantially (Annex II Chart 1).

Wheat accounts for about 60 per cent of the cereal imports of developing countries. Although world production increased by 2 per cent in 1981 and by 5 per cent in 1982 to reach record high levels, wheat prices have not declined as rapidly as the prices of maize and rice, because international trade in wheat was at a high level through 1981/82. Prices actually increased by one per cent in 1981 before declining by 8 per cent in 1982. They increased somewhat in the latter part of 1982 and early 1983, but the market situation is such that, with record levels of stocks, a strong rise is unlikely in the near term. The only significant factor that could exert an upward pressure on prices is the implementation of various acreage-reduction programs by the United States, which is the world's largest wheat exporter.

Maize and other coarse grains account for about 30 per cent of the cereal imports by developing countries. World maize harvests also reached record high levels in 1981 and 1982, but international trade was weaker than that for wheat because demand for maize as a feed for livestock declined in 1981/82 and 1982/83 as a result of the adverse effects of the recession on demand for meat. The combination of record large production and reduced demand caused world maize stocks to increase by 30 million tons (or 61 per cent) in 1981/82 and by another 30 million tons in 1982/83. Prices declined by 17 per cent in 1982. By April 1983 they had recovered by about 40 per

Table 1. World Cereal Situation

(In millions of metric tons)

Year 1/	Production 2/ World	Production 2/ Developing Countries	Imports World	Imports Developing Countries	Food Aid	Ending Stocks 3/	Stocks/ Consumption	Export Prices (US$/ton) Wheat 4/	Export Prices (US$/ton) Rice 4/	Export Prices (US$/ton) Maize 4/
1973/74	1,273	527	135	60	5.6	186	.15	177	584	116
1974/75	1,236	539	134	62	8.4	179	.14	163	439	132
1975/76	1,260	579	150	56	6.9	187	.14	151	295	116
1976/77	1,372	596	148	58	9.1	245	.18	112	257	108
1977/78	1,355	590	163	72	9.2	237	.17	116	337	96
1978/79	1,473	627	175	82	9.5	274	.19	141	330	103
1979/80	1,429	637	198	91	8.9	255	.18	175	387	115
1980/81	1,428	641	207	99	8.9	231	.16	190	477	142
1981/82 5/	1,513	680	214	97	9.0	275	.18	170	390	118
1982/83 6/	1,557	690	201	104	9.2	329	.21	158 7/	274 7/	115 7/

Source: FAO, Food Outlook, various issues.

1/ Data refer to July/June year.

2/ Data refer to calendar year of first year shown.

3/ Stock data are based on an aggregate of national carryover levels at the end of national crop years.

4/ Average spot quotations for July-June. Wheat = U.S. No. 2, Hard Red Winter, Ordinary Protein, f.o.b., Gulf ports; Rice = Thai, White, 5 per cent broken, f.o.b., Bangkok; Maize = U.S. No. 2 Yellow, f.o.b. Gulf ports.

5/ Estimated.

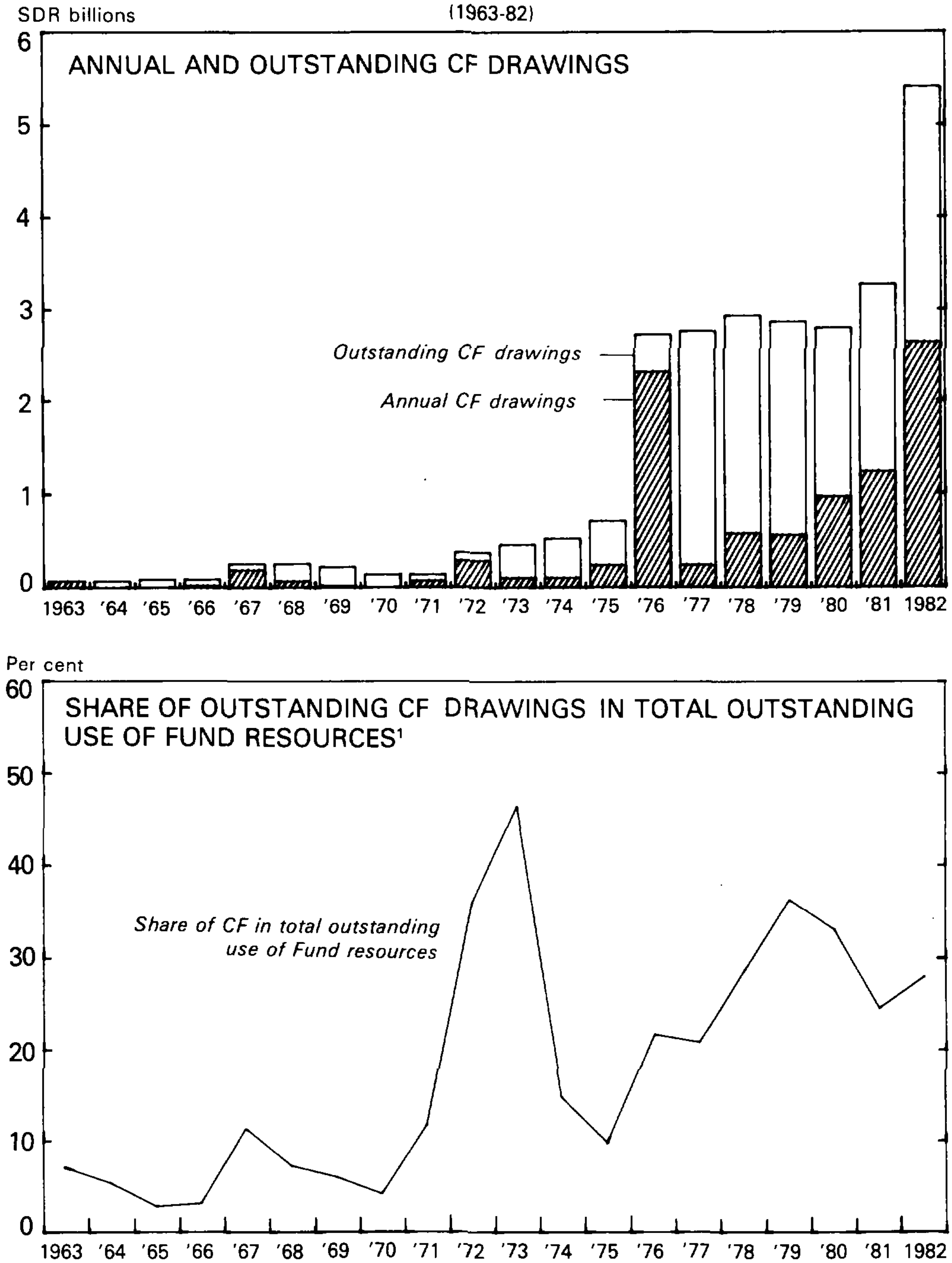
6/ Forecast.

7/ July/May.

CHART 2

USE OF FUND RESOURCES UNDER THE COMPENSATORY FINANCING FACILITY

(1963-82)



[1] Excluding reserve tranche purchases.

cent from the low reached in October 1982 as world output is expected to be substantially lower in 1983. In addition, the outlook for maize prices will also depend, to a relatively greater extent than wheat, on any recovery in world economic activity.

Rice accounts for the smallest share, about 10 per cent, of the cereal imports of developing countries. As world trade in rice usually accounts for only about 3 per cent of world production, relatively small changes in production, especially if they occur in major importing countries, can cause wide swings in international prices. For example, although world production in 1981 increased, a poor harvest necessitating large imports by one country, Korea, was largely responsible for a 12 per cent increase in world trade. Largely as a result of this development, rice prices rose by June 1981 to a level 21 per cent higher than a year earlier. Since mid-1981, prices have declined by about 50 per cent, as Korea and other major rice trading countries experienced relatively good harvests in 1982. The outlook for 1983 indicates a close balance between world supply and demand, although recent reports of a production shortfall in Indonesia, implying re-emergence of that country as a major importer, could be a dominant market factor in 1983-84.

It may be concluded from the above analysis that, in a global context, there has been a substantial improvement in the world food security situation in the two years since the Fund's cereal decision was adopted. This conclusion, however, does not imply that the food situation for a number of individual countries has not been or is not potentially serious for the coming years.

First, while fewer countries than before experienced food shortages over the past two years, the number of them that did is still quite large and for some the problem continues to be severe. For example, when the cereal decision was adopted, 31 countries were identified by the FAO as experiencing "abnormal food shortages." A year later in mid-1982, this number had dropped to 23, but has recently risen again to 28. This list is typically dominated by African countries, which account for 20 of the 28 countries in the most recent list. The situation in southern Africa is of particular concern, as many countries in that region are experiencing a second successive year of drought.

Second, the value of cereal imports of the non-oil developing countries as a share of their total export earnings averaged about 6 per cent in the 1970s. For about 20 countries, however, this ratio was over 20 per cent, and for a larger number of countries, the ratio exceeded 20 per cent in particular years. The value of cereal imports of non-oil developing countries grew at an annual average growth rate of almost 20 per cent during the 1970s, and this growth is not likely to diminish significantly in the 1980s. 1/

1/ See Thomas K. Morrison, "An Analysis of Recent Trends and Determinants of Cereal Imports by Developing Countries," DM/82/71 (10/25/82).

Third, the instability that characterized world trade in cereals during the 1970s has not diminished and is likely to continue during the 1980s. Weather-related shortfalls in output and the consequent fluctuations in trade will continue to be a source of instability in the world cereal market and a dominant factor in food security for individual countries. Thus, the current favorable phase of the cycle of world food security should be viewed as a welcome, though temporary phenomenon.

The Early Drawing Provision: Over- and Undercompensation

The attached three tables contain detailed information about each of the 69 early drawings made since January 1976.

Table 1 lists the 65 cases for which final calculations of the shortfall have been reported to the Board and the four cases for which final calculations have not yet been completed. The table, which lists drawings by chronological order, shows the number of estimated months, shortfall estimated at the time of purchase and the final shortfall calculated with actual data, the purchase, the amounts of under- or overcompensation and the related repurchases and date, where relevant.

Table 2 classifies the 65 cases for which final calculations have been completed into three categories: those that were overcompensated (16 cases); those that were undercompensated (6 cases), and those for which compensation was exact (43 cases). The table makes possible the analysis of overcompensation by reference to the number of estimated months and the size of the shortfall in relation to the drawing. Of the 43 cases of exact compensation, drawings were less than the estimated shortfalls (column (3)) in all but 2 cases (i.e., quota limit was the constraint). In contrast, in all of the undercompensation cases and in all but four of the overcompensation cases, drawings were equal to the estimated shortfalls. This analysis indicates that the risk of over--and undercompensation is much higher when the drawings is equal to the estimated shortfall. Column (7) of the table shows the amount of over- or undercompensation as per cent of the amount of the relevant drawing. In all three cases where the members were overcompensated for the full amounts of their respective drawings, data had been estimated for six months of the shortfall year.

When "estimated" shortfalls (column (1)) are compared with "actual" shortfalls (column (5)) for all the 65 cases considered, the shortfalls were underestimated in 29 cases and overestimated in 33 cases; in 2 cases the estimated and actual shortfalls were equal, and in one case an estimated shortfall was not calculated. In 6 of the 29 cases where actual shortfalls exceeded estimated ones, the members were undercompensated; in 16 of the 33 cases where actual shortfalls were less than estimated ones, the members were overcompensated.

Lags in the data required for calculations under the early drawing provision are shown in Table 3. The lag between the date of purchase and the date of reporting the final calculation to the Board (column (2)) has varied between four months and 18 months for the great majority of the cases but there were exceptions on both ends of this range: in three cases the lag was under 3 months, and in four cases the lag was in excess of 22 months. The data lags at the time of the final calculation of the shortfall (column (4)) was longer than the corresponding lags at the time of the request (column (3)) for the great majority of the cases; the lags were the same in only 7 cases out of 65, and were smaller by one to two months in another 7 cases.

Table 1. Early Drawings: Drawings and Final Calculation of Shortfalls

(January 1976 to end-May 1983)

	End of Short-fall Year (1)	No. of Months Est. (2)	Date of Drawing (3)	Shortfall Est. (4)	Shortfall Final (5)	Drawing Est. (6)	Drawing Per Cent of Quota (7)	Outstanding After Drawing Per Cent of Quota (8)	Under(-) or Over (+) Compensation (9)	Date Reported to Board (10)	Date of Repurchase (11)
				(In millions of SDRs)					(In millions of SDRs)		
1. Philippines	12/75	2	4/76	244.4	256.0	77.5	50	69	--	2/4/77	--
2. Morocco	6/76	4	4/76	--1/	115.01/	56.5	50	50	--	2/4/77	--
3. Peru	3/76	6	5/76	227.0	316.0	61.5	50	50	--	2/4/77	--
4. Zambia	12/75	3	6/75	269.0	285.0	19.0	25	50	--	2/4/77	--
5. Dominican Rep.	12/76	5	9/76	41.6	46.0	21.5	50	50	--	5/16/77	--
6. Togo	9/76	6	8/76	25.0	41.2	7.5	50	50	--	3/8/77	--
7. Guyana	12/76	4	12/76	22.6	18.6	10.0	50	50	--	12/27/77	--
8. Barbados	12/76	6	1/77	3.5	3.5	3.5	27	27	--	5/16/77	--
9. Congo, Peoples Rep.	12/76	6	2/77	19.1	7.0	6.5	50	50	--	9/1/77	--
10. Romania	6/77	3	9/77	77.1	63.5	47.5	25	75	--	1/20/78	--
11. Barbados	12/77	6	10/77	4.3	4.3	3.0	23	50	--	5/8/78	--
12. Zambia	3/78	3	5/78	84.2	107.6	48.8	35	75	--	11/16/79	--
13. Thailand	9/78	6	7/78	265.0	80.0	58.8	38	75	--	2/14/79	--
14. Bolivia	9/78	5	7/78	15.0	19.4	15.0	33	33	-4.4	11/16/79	--
15. Jamaica	6/78	3	6/78	19.9	26.1	15.8	21	75	--	9/12/79	--
16. Peru	6/78	6	9/78	99.0	108.0	61.5	38	75	--	11/16/79	--
17. Sudan	12/78	6	9/78	62.5	81.1	21.3	24	75	--	7/16/80	--
18. Senegal	12/78	6	11/78	100.5	90.8	21.0	50	50	--	8/31/81	--
19. Gambia, The	9/78	2	11/78	5.4	6.0	4.5	50	69	--	4/9/81	--
20. Western Samoa	12/78	4	11/78	1.3	1.0	1.3	42	75	0.3	3/25/80	6/9/80
21. Dominican Rep.	12/78	3	1/79	50.7	49.8	6.0	11	50	--	9/10/79	--
22. Tanzania	12/78	6	5/79	30.0	40.4	20.3	37	75	--	11/16/79	--
23. Nicaragua	9/79	6	8/79	22.9	-24.6	17.0	50	100	17.0	2/10/81	3/20/81
24. Jamaica	10/79	6	9/79	38.8	63.8	31.3	43	100	--	3/30/81	--
25. Dominican Rep.	12/79	6	9/79	51.7	-85.3	27.5	50	100	27.5	3/25/80	4/25/80
26. Sudan	12/79	6	11/79	99.5	62.2	36.0	41	100	--	7/16/80	--
27. Dominica	12/79	6	12/79	1.5	1.0	1.0	50	50	--	1/19/81	--
28. Guyana	12/79	5	1/80	14.1	17.8	6.3	25	100	--	5/6/81	--
29. Yugoslavia	12/79	3 2/	2/80	190.5	156.2	138.5	50	100	--	6/19/80	--
30. Turkey	12/79	2	2/80	132.8	181.8	71.6	36	100	--	6/19/80	--
31. Korea	6/80	2	7/80	210.0	203.0	160.0	100	100	--	12/19/80	--
32. Equatorial Guinea	5/80	2	7/80	6.4	5.0	6.4	64	64	0.6	2/27/81	3/24/81
33. Nepal	7/80	3	9/80	12.2	16.1	10.5	55	106	--	12/19/80	--
34. Tanzania	3/80	3	9/80	15.0	34.9	15.0	27	93	-4.0	5/15/81	--
35. Sudan	12/80	6	11/80	73.5	53.4	21.8	25	100	--	8/7/81	--
36. Sudan	12/80	2	4/81	45.7	31.6	45.7	35	98	14.1	8/7/81	2/23/82
37. Western Samoa	6/81	6	4/81	2.0	3.2	2.0	44	83	-0.8	10/6/81	--
38. Dominica	12/80	3	2/81	4.5	4.1	2.0	67	100	--	10/30/81	--
39. El Salvador	5/81	5	7/81	32.3	35.1	32.3	50	50	--	11/5/81	--
40. Grenada	12/80	3	4/81	2.1	1.4	2.1	47	47	0.7	11/16/81	8/11/82
41. Jamaica	12/80	4 3/	4/81	64.4	20.8	37.0	33	100	16.2	12/4/81	1/5/82
42. Malawi 4/	6/81	3 5/	9/81	12.0	1.5	12.0	42	109	10.5	1/25/82	4/2/82 6/
43. Malaysia	6/81	2	9/81	400.0	597.0	189.8	50	50	--	2/8/82	--
44. Mauritius	5/81	6	4/81	54.6	45.2	40.5	100	100	--	3/30/82	--
45. Papua New Guinea	6/81	6	11/81	65.1	69.2	45.0	100	100	--	3/30/82	--
46. Eithiopia	6/81	6	5/81	36.5	31.6	18.0	33	100	--	3/30/82	--
47. St. Lucia	3/81	6	4/81	4.0	1.2	2.7	50	50	1.5	7/1/82	11/8/82 7/
48. Gambia, The	6/81	5	6/81	12.1	10.8	9.0	67	100	--	7/29/82	--
49. Tanzania	6/81	6	6/81	15.9	-24.0	15.9	19	62	15.9	8/28/82	-- 8/
50. St. Vincent	12/80	3	3/81	2.9	1.4	1.3	50	50	--	--/--/--	--
51. Ivory Coast	12/81	6	9/81	358.7	191.5	114.0	100	100	--	10/1/82	--
52. Uganda	6/81	6	6/81	123.0	123.2	45.0	60	100	--	10/14/82	--
53. Central African Rep.	12/80	6	1/81	9.0	8.8	9.0	38	43	0.2	4/29/83	5/27/83
54. Bangladesh	3/82	6	2/82	60.0	36.9	60.0	26	26	23.1	7/15/82	8/13/82
55. Dominican Rep.	8/82	6	5/82	74.5	104.1	36.0	44	50	--	10/22/82	--
56. Morocco 4/	3/82	3	4/82	236.4	258.5	236.4 9/	105	124	-2.9	1/3/83	--
57. Sri Lanka	7/82	6	8/82	39.2	13.0	39.2	22	36	26.2	12/28/82	1/12/83
58. Fiji	3/82	6	2/82	15.0	15.7	13.5	50	50	--	1/25/83	--
59. Uruguay	9/82	5	8/82	55.3	44.1	55.3	44	44	11.2	1/25/83	2/23/83
60. Bangladesh 4/	9/82	6 10/	8/82	71.2	51.9	71.2 11/	31	47	19.3	2/10/83	3/14/83
61. Brazil	12/82	3	12/82	920.0	965.0	498.8	50	50	--	2/25/83	--
62. Zaire	12/81	6	3/82	214.9	302.4	106.9	47	50	--	4/22/83	--
63. Barbados	6/82	6 12/	10/82	12.6	11.7	12.6	49	49	0.9	4/18/83	4/25/83
64. Argentina	9/82	1	1/83	520.1	660.6	520.1	65	65	-140.5	4/19/83	--
65. Bolivia	12/82	3	1/83	17/9	37.7	17.9	27	32	-12.1	5/24/83	--

Purchases for which final shortfall has not been completed:

1. Chad	12/80	3	1/81	12.1	--	7.1	30	50			
2. Senegal	6/81	30 13/	9/81	50.8	--	42.0	67	100			
3. Kenya 4/	12/81	6 14/	6/82	65.8	--	60.4 15/	58	125			
4. Zimbabwe	12/82	6	3/83	56.1	--	56.1	37	37			

1/ No judgmental forecast was made at time of request: final shortfall is based on actual data for five years.
2/ Merchandise exports were estimated for one month and earnings from workers' remittances and travel were estimated for three months.
3/ Merchandise exports were estimated for four months and earnings from travel were estimated for three months.
4/ Drawing under the Decision No. 6860 (Cereal).
5/ Merchandise were estimated for three months: cereal imports were for the whole excess year.
6/ SDR 3.8 million was repurchased on 3/12/82 and SDR 6.7 million was repurchased on 4/2/82.
7/ SDR 0.47 million was repurchased on 10/12/82 and SDR 1.03 million was repurchased on 11/8/82.
8/ Only two repurchases of SDR 2.0 million each were made on 12/32/82 and 5/6/83.
9/ The drawing consists of a cereal component in an amount of SDR 123.4 million and an export component in an amount of SDR 113.0 million.
10/ Merchandise exports were estimated for six months and cereal imports were estimated for four months.
11/ The drawing consists of a cereal component in an amount of SDR 33.6 million and an export component in an amount of SDR 37.6 million.
12/ Earnings from travel were estimated for six months and earnings from merchandise were estimated for three months.
13/ Earnings from groundnuts and phosphates were estimated for three months and earnings from other exports were estimated for 30 months.
14/ Merchandise exports were estimated for six months: cereal imports were actual for the whole excess year.
15/ The drawing consists of a cereal component in an amount of SDR 31.6 million and an export component in an amount of SDR 28.775 million.

Table 2. Early Drawings: Over- or Undercompensation

(January 1976 to End-May 1983)

	Calculations Based on Estimated Data				Calculations Based on Actual Data		
			Drawings as Per Cent of	Number of Estimated		Over (+) or Under (-) Compensation	
	Shortfall (1)	Drawing (2)	Shortfall (3)	Months (4)	Shortfall (5)	Amount (6)	As per cent of drawing (7)
	(In millions of SDRs)				(In millions of SDRs)		
Overcompensation							
1. Western Samoa	1.3	1.3	100	4	1.0	0.3	23
2. Nicaragua	22.9	17.0	74	6	-24.6	17.0	100
3. Dominican Republic	51.7	27.5	53	6	-85.3	27.5	100
4. Equatorial Guinea	6.4	6.4	100	2	5.8	0.6	9
5. Sudan	45.7	45.7	100	2	31.6	14.1	31
6. Grenada	2.1	2.1	100	3	1.4	0.7	33
7. Jamaica	64.4	37.0	57	4 1/	20.8	16.2	44
8. Malawi	12.0	12.0 2/	100	3	1.5	10.5	88
9. St. Lucia	4.0	2.7	68	6	1.2	1.5	56
10. Bangladesh	60.0	60.0	100	6	36.9	23.1	39
11. Tanzania	15.9	15.9	100	6	-24.0	15.9	100
12. Sri Lanka	39.2	39.2	100	6	13.0	26.2	67
13. Uruguay	55.3	55.3	100	5 3/	44.1	11.2	20
14. Bangladesh	71.2	71.2 2/	100	6	51.9	19.3	27
15. Barbados	12.6	12.6	100	6 4/	11.7	0.9	7
16. Central African Republic	9.0	9.0	100	6	8.8	0.2	2
Undercompensation							
1. Bolivia	15.0	15.0	100	5	19.4	-4.4	29
2. Tanzania	15.0	15.0	100	3	34.9	-4.0	27
3. Western Samoa	2.0	2.0	100	6	3.2	-0.8	40
4. Morocco	236.4	236.4 2/	100	3	258.5	-2.9	1
5. Argentina	520.1	520.1	100	1	660.6	-140.5	27
6. Bolivia	17.9	17.9	100	3	37.7	-12.1	68
Exact Compensation							
1. Philippines	244.4	77.5	32	2	256.0	--	--
2. Morocco	5/	56.5	49	4	115.0 5/	--	--
3. Peru	227.0	61.5	27	6	316.0	--	--
4. Zambia	269.0	19.0	7	3	285.0	--	--
5. Dominican Republic	41.6	21.5	52	5	46.0	--	--
6. Togo	25.0	7.5	30	6	41.2	--	--
7. Guyana	22.6	10.0	44	4	18.6	--	--
8. Barbados	3.5	3.5	100	6	3.5	--	--
9. Congo, People's Rep.	19.1	6.5	34	6	7.0	--	--
10. Romania	77.1	47.5	62	3	63.5	--	--
11. Barbados	4.3	3.0	70	6	4.3	--	--
12. Zambia	84.2	48.8	58	3	107.6	--	--
13. Thailand	265.0	68.8	26	6	80.0	--	--
14. Jamaica	19.9	15.8	79	3	26.1	--	--
15. Peru	99.0	61.5	62	6	108.0	--	--
16. Sudan	62.5	21.3	34	6	81.1	--	--
17. Senegal	100.5	21.0	21	6	90.8	--	--
18. Gambia, The	5.4	4.5	83	2	6.0	--	--
19. Dominican Republic	50.7	6.0	12	3	49.8	--	--
20. Tanzania	30.0	20.3	68	6	40.4	--	--
21. Jamaica	38.8	31.8	82	6	63.8	--	--
22. Sudan	99.5	36.0	36	6	62.2	--	--
23. Dominica	1.5	1.0	65	6	1.0	--	--
24. Guyana	14.1	6.3	44	5	17.8	--	--
25. Yugoslavia	190.5	138.5	73	3 6/	156.2	--	--
26. Turkey	132.8	71.6	54	2	181.8	--	--
27. Korea	210.0	160.0	76	2	203.0	--	--
28. Nepal	12.2	10.5	86	3	16.1	--	--
29. Sudan	73.5	21.8	30	6	53.4	--	--
30. Dominica	4.5	2.0	43	3	4.1	--	--
31. El Salvador	32.3	32.3	100	5	35.1	--	--
32. Malaysia	400.0	189.8	47	2	597.0	--	--
33. Mauritius	54.6	40.5	74	6	45.2	--	--
34. Papua New Guinea	65.1	45.0	69	6	69.2	--	--
35. Ethiopia	36.5	18.0	49	6	31.6	--	--
36. Gambia, The	12.1	9.0	74	5	10.8	--	--
37. St. Vincent	2.9	1.3	45	3	1.4	--	--
38. Ivory Coast	358.7	114.0	32	6	191.5	--	--
39. Uganda	123.0	45.0	37	6	123.2	--	--
40. Dominican Republic	74.5	36.0	48	6	104.0	--	--
41. Fiji	15.0	13.5	90	6	15.7	--	--
42. Brazil	920.0	498.8	54	3	965.0	--	--
43. Zaire	214.9	106.9	50	6	302.4	--	--

1/ Merchandise exports were estimated for four months and earnings from travel were estimated for three months.
2/ Purchase under Decision No. 6860 (Cereal).
3/ Merchandise exports were estimated for six months and cereal imports were estimated for four months.
4/ Earnings from travel were estimated for six months, and earnings from merchandise were estimated for three months.
5/ No judgmental forecast was made at time of request, shortfall was based on actual data for five years.
6/ Merchandise exports were estimated for one month and earnings from workers' remittances and travel were estimated for three months.

Table 3. Early Drawings: Data Lags

(January 1976 to end-May 1983)

	Number of Estimated Months (1)	Date of Drawing to Date Reported to Board (2)	Lag in Data: At the Time of Request (3)	Lag in Data: At the Time of Calculation of Actual Shortfall (4)
Purchases for which final calculation of shortfall has been completed:				
1. Philippines	2	10	6	14
2. Morocco	4	10	2	8
3. Peru	6	9	8	11
4. Zambia	2	6	9	14
5. Dominican Republic	5	8	2	5
6. Togo	6	7	5	6
7. Guyana	4	12	4	12
8. Barbados	6	4	7	5
9. Congo, Peoples Rep.	6	7	8	9
10. Romania	3	4	6	7
11. Barbados	6	7	4	5
12. Zambia	3	18	5	20
13. Thailand	6	7	4	5
14. Bolivia	5	16	3	14
15. Jamaica	3	15	3	15
16. Peru	6	14	9	17
17. Sudan	5	22	3	19
18. Senegal	6	33	5	32
19. Gambia, The	2	29	4	31
20. Western Samoa	4	16	3	15
21. Dominican Rep.	3	8	4	9
22. Tanzania	6	6	11	11
23. Nicaragua	6	18	5	17
24. Jamaica	6	18	5	17
25. Dominican Republic	6	6	3	3
26. Sudan	6	8	5	7
27. Dominica	6	13	6	13
28. Guyana	5	16	6	17
29. Yugoslavia	3	4	5	6
30. Turkey	2	4	4	6
31. Korea	2	5	3	6
32. Equatorial Guinea	2	7	4	9
33. Nepal	3	3	5	5
34. Tanzania	3	8	9	14
35. Sudan	6	9	5	8
36. Sudan	2	4	6	8
37. Western Samoa	6	6	4	4
38. Dominica	3	8	5	10
39. El Salvador	5	4	7	6
40. Grenada	3	7	7	11
41. Jamaica	4	8	8	12
42. Malawi	3	4	6	7
43. Malaysia	2	5	5	8
44. Mauritius	6	11	5	10
45. Papua New Guinea	6	4	11	9
46. Ethiopia	6	10	5	9
47. St. Lucia	6	15	7	16
48. Gambia, The	5	13	5	13
49. Tanzania	6	14	6	14
50. St. Vincent	3	--	6	--
51. Ivory Coast	6	13	3	10
52. Uganda	6	16	6	16
53. Central African Rep.	6	27	7	29
54. Bangladesh	6	5	5	4
55. Dominican Republic	6	5	3	2
56. Morocco	3	9	4	10
57. Sri Lanka	6	4	7	5
58. Fiji	6	11	5	10
59. Uruguay	5	5	4	4
60. Bangladesh	6	6	5	5
61. Brazil	3	2	3	2
62. Zaire	6	13	9	16
63. Barbados	6	6	10	10
64. Argentina	1	3	5	7
65. Bolivia	3	4	4	5
Purchases for which final calculation of shortfall has not been completed:				
1. Chad	3	--	4	--
2. Senegal	30	--	33	--
3. Kenya	6	--	12	--
4. Zimbabwe	6	--	9	--

Source: Table 1.

Table 1. CF Drawings, Utilization Ratio, and Underlying Factors 1/

(1963-1982)

	Amount 2/	Number of Cases	Quota Limit 3/	Utilization Ratio and Underlying Factors: Utilization Ratios	Utilization Ratio and Underlying Factors: Rate of Change in Commodity Prices 4/	Utilization Ratio and Underlying Factors: Rate of Change in Industrial Production 5/	Remarks
	(1)	(2)	(3)	(4)	(5)	(6)	
	(SDR Millions)		- - (Per Cent) - -		(Per Cent Per Year)		
1963	76	2	25	6.6	5.7	5.7	1963 CF Decision.
1964	0	0	25	0.0	6.6	8.1	
1965	11	1	25	1.0	-2.1	6.8	
1966	24	2	31	1.3	3.5	7.1	Fourth review of quota; 1966 CF decision.
1967	181	9	50	5.8	-6.0	3.1	
1968	69	7	50	2.3	-0.8	7.1	
1969	13	2	50	0.4	7.4	7.8	
1970	3	1	50	0.1	3.4	2.4	
1971	69	4	50	1.6	-5.1	2.1	Fifth review of quota.
1972	299	10	50	6.9	4.7	7.0	
1973	113	5	50	2.7	39.5	8.7	
1974	107	6	50	2.6	26.9	-0.1	
1975	239	7	50	5.7	-18.9	-7.9	
1976	2,308	48	75	40.4	19.0	8.6	1975 CF decision.
1977	241	14	75	5.5	19.3	3.6	
1978	578	15	75	10.1	-11.1	4.1	Sixth review of quota.
1979	572	23	81	8.1	12.9	5.0	1979 CF decision.
1980	980	15	100	9.6	8.9	-0.5	
1981	1,230	29	100	7.3	-5.9	-0.5	Seventh review of quota.
1982	2,333	28	100	14.0	-6.1	-3.9	

1/ Based on 120 Fund member countries excluding 14 industrial countries and 12 oil-exporting countries.
2/ Excluding cereal components.
3/ Annual average.
4/ In SDR terms.
5/ Industrial countries.

Table 2. Alternative Quota Limits and Their Implications for Service Ratios 1/

(1984-88 average)

	Shortfalls				Projected Service Ratios with Alternative Quota Limits					
		Assumed Trend Exports								
Quota Limits (In per cent)					50	65	75	85	100	125
Projected Core Drawings (SDR billions)					1.04	1.33	1.51	1.70	1.94	2.25
Scenario	Amount (1)	Amount (2)	Underlying Annual Growth Rate (3)	Shortfall as Per Cent of Trend Exports (4)	(5)	(6)	(7)	(8)	(9)	(10)
	(In SDR billions)		- - (In per cent) - -		- - - - - (In per cent) - - - - -					
A	13	409	6	3.1	8	10	12	13	15	17
B	14	442	8	3.1	7	9	11	12	14	16
C	15	478	10	3.1	7	9	10	11	13	15
D	16	515	12	3.1	6	8	9	11	12	14
E	17	555	14	3.1	6	8	9	10	11	13

Note: Column (1) Column (2) multiplied by column (4) divided by 100.
Column (2) Average trend exports for 1984-88 based on the assumed growth ratios in column (3).
Column (3) Assumed annual growth rates in trend value of exports.
Column (4) From column (5) of Table 6 in the main text.
Columns (5) through (10) Service ratios based on alternative quota limits and growth rates in exports.

1/ A higher assumed growth rate implies larger shortfalls and a lower services ratio; in the simulation, it is assumed that larger shortfalls with a given quota limit would not increase drawings. To the extent that larger shortfalls cause a larger amount of annual drawings even with a given quota limit, the sensitivity of the service ratio to changes in the quota limit shown in the table may be an overestimate of its time magnitude.