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CONFIDENTIAL

October 30, 1989

To: Members of the Executive Board

From: The Secretary

Subject: Review of the Decision Relating to the Compensatory and Contingency Financing Facility

Attached for consideration by the Executive Directors is a paper on the review of the compensatory and contingency financing facility (CCFF). Summary and conclusions appear on pages 30 and 31.

This subject has been tentatively scheduled for discussion on Monday, November 20, 1989.

Mr. Aghevli (ext. 7177), Mr. Kaibni (ext. 7721), Mr. Stuart (ext. 4579), or Mr. Kincaid (ext. 7356) is available to answer any technical or factual questions relating to this paper prior to the Board discussion.

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INTERNATIONAL MONETARY FUND

Review of the Decision Relating to the Compensatory and Contingency Financing Facility

Prepared by the Exchange and Trade Relations and Research Departments

(In consultation with other Departments)

Approved by L.A. Whittome and Jacob A. Frenkel

October 27, 1989

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I. Introduction

The compensatory and contingency financing facility (CCFF) was established by the Executive Board on August 23, 1988. 1/ The CCFF replaced the former compensatory financing facility for export fluctuations (CFF) and the associated decision on the financing of fluctuations in the cost of cereal imports. The new facility preserved the basic features of compensatory financing, namely, the timely compensation of temporary export shortfalls or excesses in cereal import costs that are attributable to factors largely beyond a member's control. In addition, the facility provides for contingency financing from the Fund with a view to helping members maintain the momentum of Fund-supported adjustment programs in the face of unanticipated external shocks.

In the Executive Board discussions leading up to the establishment of the facility, Directors stressed that while the contingency financing element would be based on a number of key principles, many of its operational aspects would have to be developed at the time each arrangement was framed, on an experimental and case-by-case basis. It was agreed that there would be a general review of the facility before December 1, 1989.

To date, contingency financing arrangements under the CCFF have been attached only to arrangements with Trinidad and Tobago and the Philippines. No contingency purchases have been made. In the case of Trinidad and Tobago, the symmetry provisions have been activated. Under the compensatory element, one purchase has been made in relation to export shortfalls and two purchases have been made in relation to excesses in cereal import costs as well as export shortfalls. In addition, four members made compensatory purchases under the transitional provisions of the CCFF decision, which permitted purchases under the old CFF decision through November 1, 1988. 2/

Significant manpower resources have been devoted to the development and the implementation of the CCFF. Estimates of the time spent by national authorities in exploring the possible use of the facility are not available, but there are rough estimates that during FY 1989 as much as 23 man-years of Fund staff time may have been devoted to the formulation of the CCFF and to country operations relating to the facility, including the compensatory element. Based on recent departmental projections, it

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1/ Executive Board Decision No. 8955-(88/126) (EBS/88/146, Supplement 1, 8/3/88). See also "The Final Version of the Chairman's Summing Up of the Discussions on the Compensatory and Contingency Financing Facility Concluded at Executive Board Meeting 88/105, July 15, 1988" (Buff 88/113, 7/15/88).

2/ In the case of Trinidad and Tobago, a waiver was granted to permit a purchase after November 1, 1988 under the former compensatory financing decision.

was estimated that Fund manpower resources devoted to the CCFF may increase slightly in FY 1990.

This paper reviews the experience with the CCFF and proposes certain modifications in its features. The staff believes that the basic concept underlying the establishment of the contingency element--to help sustain adjustment efforts in the face of adverse external developments--remains valid. The proposed modifications to the contingency element are designed to make contingency mechanisms more effective in supporting programs that may be vulnerable to external shocks. The approach would be to identify the key exogenous factors that are likely to be critical to the successful implementation of particular adjustment programs. By identifying these and devising appropriate contingency plans, including specific policy responses and possible additional financing from the Fund, members would be better able to safeguard their adjustment effort against unforeseen external developments. Indeed, it is important that all programs identify the key exogenous factors that are critical to the successful implementation of adjustment policies and formulate plans to deal with unforeseen developments in these factors; accordingly the staff intends to give increased attention to the integration of contingency planning into the design of programs.

Specific modifications to Fund contingency mechanisms are proposed in Section II. The experience with the compensatory element of the CCFF decision is reviewed and approaches to the issues of conditionality and access are considered in Section III. A review of the cereal element is provided in Section IV. Annex I reviews contingency provisions in recent Fund arrangements (including those outside the context of the CCFF). Annex II discusses the use of market instruments for hedging against unexpected external shocks. 1/ Finally, Annex III examines possible overcompensation between the compensatory and contingency elements of the facility.

In light of the guidance given by the Board's discussion of the issues raised in this paper, the CCFF decision might require substantive and technical amendments. In this event, the staff would submit to the Executive Board for discussion a draft of proposed amendments to the decision. The present guidelines to the staff on the implementation of the facility would also be amended accordingly.

II. Contingency Financing

1. Review of the experience

Since the establishment of the CCFF in August 1988, two members have requested contingency mechanisms under the CCFF--Trinidad and Tobago

1/ The staff was requested to examine this issue at the time of the Executive Board discussion of managing financing risks (EBM/88/157).

(under a stand-by arrangement (EBS/88/262 and Supplements 1 and 2) approved in January 1989) and the Philippines (under an extended arrangement (EBS/89/59 and Supplements 1, 2, and 3) approved in May 1989). This outturn needs to be considered against the fact that during the period 38 countries had arrangements that could have been eligible for contingency mechanisms. Excluding those arrangements for which negotiations had been largely completed by the time the CCFF decision was finalized, there were still a total of 29 arrangements to which a contingency mechanism could potentially have been attached. 1/

It is difficult to assess accurately how contingency mechanisms would have worked for the 29 arrangements concerned, given data limitations and other technical problems involved in determining the extent to which a larger than expected variation in the balance of payments could be attributed to factors that were beyond the authorities' control. Nevertheless, the staff's preliminary assessment suggests that out of a sample of 12 programs, 2/ 5 appear to have experienced external shocks well above a threshold of 10 percent of quota. There were favorable shocks in two cases, and adverse shocks in three cases. In two of the three cases where adverse shocks occurred, the unexpected deterioration in the current account was offset by larger than expected debt relief; and, in the third case, the program was off track owing to fiscal slippage, although the slippage was, in part, related to external factors.

The main exogenous factors contributing to the divergence between the actual and projected current account balances in 1988-89 programs included higher than expected international interest rates, oil import prices, non-fuel commodity prices, and economic growth in industrial countries. In many cases, these individual factors had offsetting effects on the current account balances of the countries concerned.

Many of the difficulties that might arise in incorporating contingency mechanisms into program design were well recognized from the outset. Still, the limited use of this element of the facility suggests that, in its present form, it is not attractive to the membership. This section reviews those aspects of the design and implementation of the contingency element that seem to have been an important deterrent to its more widespread use. The staff has also reviewed in Annex I the two cases for which contingency mechanisms were approved (Trinidad and Tobago, and

1/ Of this total, 7 were stand-by arrangements (SBAs), 3 were under the Extended Fund Facility (EFF), 13 were under the Structural Adjustment Facility (SAF), and 6 were under the Enhanced Structural Adjustment Facility (ESAF).

2/ The sample excludes SAF arrangements, one stand-by and one ESAF arrangement for which information was not readily available. It also excludes countries where the contingency mechanism could have been attached only after April 1989, as the period for evaluating the extent to which the external environment differed from the projections underlying the program was too short.

the Philippines) and the cases in which contingency provisions have been incorporated in Fund arrangements but not in the framework of the CCFF (Chile, Mexico, Nigeria, and Venezuela).

The principal concerns about the facility relate to: (a) coverage--that is, the variables to be included in the mechanism; (b) the development of a baseline scenario; (c) the need for parallel contingency financing from other sources; (d) the cost of CCFF resources for low-income countries; (e) the symmetry provisions; (f) access; and (g) the procedure for activation.

a. Coverage

In the Executive Board discussions leading to the establishment of the CCFF, consideration was given to whether contingency financing should be provided on the basis of developments in a comprehensive indicator of balance of payments need, such as the current account balance, or on the basis of developments in selected exogenous components of the current account. A major concern regarding the former approach was that a comprehensive indicator would complicate the task of determining the extent to which unforeseen changes in financing need are the result of exogenous factors. For example, to the extent that performance criteria did not encompass the entire range of economic policies, the failure to meet the current account objective would not necessarily be for reasons beyond a member's control, even if all performance criteria were met. Conversely, a failure to meet performance criteria could reflect exogenous developments outside the control of the member.

In the event, it was decided that contingency mechanisms should focus on exogenous variables, with the understanding that these variables would cover a substantial proportion of current account transactions so as to provide assurance that the mechanism would protect programs from a wide range of external developments and at the same time provide compensation only when exogenous factors had a negative net effect on the current account. It was agreed, however, that efforts to ensure broad coverage should not result in complications that could substantially delay agreement on programs, or activation of the contingency mechanisms.

In at least nine cases where the authorities opted not to incorporate a contingency mechanism in their arrangements, they indicated that a major difficulty lay in the requirement of broad coverage, given data shortcomings and the difficulty of developing proxies both for forecasting and for monitoring purposes. It was particularly difficult to develop detailed contingency plans to cover all possible deviations in import prices and noncommodity export earnings on the basis of proxy variables and imprecise analytical relationships. Several members opted for contingency provisions outside the CCFF. These provisions, which did not involve possible additional Fund financing, were based on either a single key export price (Chile, Nigeria, and Venezuela) or on a single key export price and interest rates (Mexico). Coverage ranged from 12 percent to 45 percent of current account transactions. These arrangements introduced substantial automaticity in the adjustment of program targets and the use (or build-up) of international reserves in the event that the key variables behaved differently from the basic assumptions of the program (Annex I).

The contingency mechanism for Trinidad and Tobago (EBM/89/4, 1/13/89) focused on a few key exogenous variables--export unit values of petroleum and petroleum products and interest payments on variable rate external debt. Several Directors considered that the coverage of the variables included in that contingency request, which accounted for about 30 percent of current account transactions, was too limited. In particular, they considered that the contingency mechanism should have included a broader coverage of export and import prices. Directors noted that if the contingency mechanism were triggered on the basis of the specified variables, a careful review of other exogenous variables and the overall need for contingency financing would have to be undertaken at the time of the mid-term review of the associated arrangement, or during a review prior to possible triggering of the mechanism.

In the subsequent case of the Philippines (EBM/89/62, 5/23/89), more than 50 percent of current account transactions were covered and an additional 10 percent of transactions were considered not to be vulnerable to external shocks. However, this broadening of coverage was achieved at considerable cost in terms of the complexity of the resulting mechanism and the required monitoring. Broader coverage involved greater reliance on proxy variables, which did not necessarily move in tandem with the actual data; for example, the unit values of most imports were to be estimated on the basis of non-oil export unit values of partner countries as calculated by Fund staff.

The use of such proxy variables has given rise to difficulties because various proxies often give widely differing results. For the mid-term review of the arrangement for Trinidad and Tobago, when the symmetry provisions of the contingency mechanism were activated, the staff experimented with three possible indicators of movements in import unit values (the addition of import prices to the contingency would have broadened the coverage by an additional 40 percent of current account transactions). 1/ These three indicators suggested substantially

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1/ Import prices had initially been excluded from the contingency mechanism of Trinidad and Tobago because the published import unit value index exhibited a high degree of volatility arising from quarterly variations in coverage and in the quality of the data. The constructed indices were: (1) a trade-weighted average of the export unit value series for four trading partner countries (covering 63 percent of Trinidad and Tobago's imports in 1987); (2) the export unit value series for the largest trading partner, the United States (covering 42 percent of imports in 1987); and (3) an average of the Fund's non-oil commodity price index and manufactures unit value index (weighted by the share of primary products and manufactures in Trinidad and Tobago's imports in 1987).

different deviations from the baseline scenario, with one index indicating a net favorable deviation and the other two indices a net unfavorable deviation. In addition, all three indicators were found to exhibit a very low correlation with the published import unit value index of Trinidad and Tobago. Similar difficulties are likely to be encountered in the development of indicators of demand for nontraditional exports. The use of proxies--unless they accurately reflect developments relevant to the country--could introduce an element of spurious precision into the calculation of contingent deviations.

During the Board's mid-term review of the arrangement with Trinidad and Tobago, some Directors who favored broad coverage took note of the technical difficulties encountered by the staff in extending the coverage of the contingency mechanism to imports and nonpetroleum exports. These Directors requested that, in future cases with narrow coverage, the staff should provide an explanation of the difficulties that broader coverage would entail. Other Directors stressed the importance of maintaining the simplicity of the mechanism in determining coverage.

In the case of Trinidad and Tobago, difficulty was also experienced in defining an international reference price that satisfactorily tracked the prices of crude oil and petroleum products (the major export item), reflecting the inadequacy of information on transfer pricing, lags, and discounts. In the event, the construction of the reference price involved collection of 25 oil and related price series. In the case of the Philippines, problems were encountered in separating forward sales, value added in manufactured exports, and trade transactions financed through external aid, all of which were needed to prespecify the net cash effects of unexpected movements in external variables. This process required the development of new data sources, again with substantial cost in terms of the complexity of the resulting mechanism and the required monitoring.

In the course of the first year of the facility's operation, a question arose concerning the timing of coverage under the contingency element. Under the CCFF decision, contingency financing would be provided only for external contingencies that occurred during the period following Executive Board approval of the associated arrangement. At the time of the Board discussion of Trinidad and Tobago's request for a stand-by arrangement, the staff noted that in situations where the period of the member's economic program began in advance of the associated Fund arrangement, or when contingencies occurred prior to approval of the arrangement but had their balance of payments effects during the arrangement period, this provision could result in incomplete compensation of the member for the shortfall in net cash receipts during the program period. Therefore, the CCFF decision was amended on May 19, 1989 to provide financing for adverse external contingencies that have an effect on the member's balance of payments during the period of the member's economic program. Such contingencies would include events which occurred before the arrangement took effect and were not taken into account in the balance of payments projections and other objectives of the program. 1/

b. Baseline scenarios

The assumptions regarding exogenous factors, in particular the prices of key commodity exports and imports, as well as international interest rates, are important elements in framing Fund-supported programs. The possibility that program targets and access to Fund resources might be adjusted on the basis of deviations of certain variables from program assumptions necessarily gives additional operational significance to these assumptions.

In the discussions on contingency mechanisms, Directors emphasized the need to ensure that the baseline projections remain realistic and are not subject to prolonged negotiations (see EBS/88/100, 5/24/88, page 6). It was subsequently agreed that the staff "would draw on World Economic Outlook (WEO) forecasts of key variables, supplemented as appropriate by country-specific variables, and taking into consideration the country's circumstances" (see the Chairman's July 15, 1988 summing up). 2/ Implicit in this approach was an understanding that WEO data might differ from the data specific to any individual member on account of locational and quality factors, and that country-specific projections should be used, where feasible, in establishing baseline scenarios.

Following the establishment of the CCFF, frequent revisions of WEO projections have been undertaken to provide missions with an up-to-date outlook for key variables; considerable attention has also been paid to checking the consistency of WEO and country-specific projections. This process has helped improve the quality of these projections. However, excessive emphasis on refining assumptions could also lead to delays in the agreement of programs, often in circumstances where delay entails substantial costs. In at least five cases, the authorities indicated that the contingency mechanism introduced an element of inflexibility by requiring the authorities and the staff to agree on specific projections. In some other instances, frequent revisions of forecasts created additional problems as changing projections needed to be incorporated into programs.

The additional analysis that would go into the development of assumptions and contingency plans should improve program design. It should also help to identify the potential effects of exogenous factors on the prospects for attaining program objectives and quantitative performance criteria, and facilitate any necessary adjustments in policies

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1/ Decision No. 9153-(89/59) (EBS/89/98, 5/15/89).

2/ WEO projections refer to projections made at the time of Board discussion of the World Economic Outlook and to updates, particularly with regard to commodity prices, made at more frequent intervals by the staff.

and financing. However, the experience highlights the importance of striking an appropriate balance between ensuring useful contingency arrangements and avoiding an excessive degree of detail and precision that complicates and prolongs the discussions with authorities on policies and financing.

c. Parallel financing

In the Chairman's summing up of July 15, 1988, it was noted, in connection with Fund contingency financing, that every effort would be made to obtain parallel contingency financing from other creditors, and that contingency mechanisms would not be activated unless the program continued to be adequately financed. However, the cases of Trinidad and Tobago and the Philippines have demonstrated the difficulties of arranging parallel financing from other sources. As a means of limiting possible increases in Fund exposure to risks of a rise in interest rates if parallel financing was not arranged at the time of activation of the mechanism, it was provided that the interest rate deviation that would be financed by the Fund would be limited to 2 percentage points.

Difficulties are likely to be encountered in arranging parallel financing in the complex environment surrounding negotiations between many debtor countries and their commercial bank creditors, including cases involving debt and debt service reduction. A contingency arrangement with banks would introduce an inevitable element of uncertainty regarding the amount of financing that the banks would be expected to provide. In addition, discussion of contingency financing might change the nature of negotiations with bank creditors. For example, in the case of Trinidad and Tobago, the contingency element introduced the possibility of new money into a discussion that previously had been limited to the rescheduling of principal, and contributed to delays in reaching the rescheduling agreement. For countries that have maintained access to international capital markets, existing lines of credit could be tapped as a form of parallel contingency financing in the event of adverse shocks.

At the Board's mid-term review of the arrangement with Trinidad and Tobago, Directors expressed dissatisfaction with the reluctance of commercial banks to provide parallel contingency financing. The Chairman affirmed that management and staff would continue to stress the importance of parallel contingency financing in members' discussions with their commercial bank creditors.

d. Cost of resources for low-income countries

Purchases under the CCFF are financed with the general resources of the Fund and therefore carry standard charges. The cost of these resources was identified as one reason for the limited interest of low-income countries, especially African countries, in seeking possible contingency financing.

e. Symmetry provisions

In the Executive Board discussions leading to establishment of the CCFF, there was strong support for symmetry in the contingency element. The decision stipulated that part of the gain coming from unexpected favorable external factors should be set aside to accumulate international reserves, to reduce purchases under the associated arrangement, or to undertake repurchases of earlier contingency purchases. Experience suggests that in at least three cases this provision was a deterrent to the use of the facility. The authorities of some countries did not welcome the constraints that might be placed on the use of international reserves in the event of an unexpected improvement in the current account. Symmetry also created uncertainty as regards access to Fund resources. The authorities were particularly concerned about this issue when they considered staff projections to be pessimistic and thus likely to lead to the invoking of the symmetry provisions.

f. Access

In some cases (including Bolivia, Mexico, and Venezuela), limited access under the contingency element relative to the impact of potential external shocks reduced interest in a Fund contingency mechanism. For example, in the case of Mexico, coverage of a $2 deviation in the price of oil over one year, or of 2 percentage points in the interest rate on external debt, would exhaust cumulative access to Fund contingency financing of 65 percent of quota. In the absence of parallel contingency financing from other sources and given the perceived complexities of the contingency element, possible contingency financing by the Fund was not seen as an attractive option.

g. Activation procedure

As noted in the Chairman's summing up of the discussion on the CCFF, it was expected that contingency mechanisms would generally be activated on the basis of a review by the Executive Board. Only in exceptional cases would the Executive Board give approval for disbursement of contingency financing without further Board review. In discussions of a possible contingency mechanism, the Mexican and Venezuelan authorities indicated their preference for a mechanism that incorporated automatic adjustment instead of activation based on Board review. 1/

1/ In the 1989 extended arrangement with Mexico (EBS/89/9, Supplement 2, 6/6/89), it was indicated that the precise modalities for adjustments to performance criteria would need to be examined at the time of the first review. The necessary adjustments were included in the proposed decision to complete the review of the arrangement (EBS/89/78, 9/1/89).

2. Staff proposals

Fund financial support to its members has traditionally been provided within a general framework, subject to broad guidelines such as the need to ensure uniformity of treatment. In the design and implementation of the contingency element of the CCFF, however, a rather formalistic approach was adopted. This approach, which has involved a high degree of detail and precision, has largely proven to be unworkable. In light of the experience described above, the staff is of the view that a major modification of the modalities for operating contingency mechanisms is warranted; specific proposals are set out in subsection (b) below. It should be noted that the proposed changes do not address all problems raised by the membership; it is difficult to predict the extent to which the raised contingency element will be used, even if all proposed changes were implemented.

Before turning to the proposals, however, it may be noted that the suggested changes would leave in place many of the provisions of the package agreed by Executive Directors in establishing the CCFF; the reasons for retaining these provisions are provided in subsection (a). Specifically, the proposed changes would not alter the provisions with respect to overall access, the procedure for activating a contingency mechanism, symmetry, and the need for an appropriate mix of adjustment and financing. The staff is also of the view that this is not an opportune time to review the possibility of attaching contingency mechanisms to the procedures for enhanced surveillance.

a. Unchanged features

(1) Overall access

As noted above, there were some indications that the level of access was a factor in limiting interest in this element of the facility. However, given the importance that Executive Directors attached to access limits, the staff does not propose to change them. Likewise, it is proposed to maintain the guidelines for contingency access under individual arrangements--generally 70 percent of the associated arrangement--and the flexible approach to the distribution of access among the years of multi-year arrangements.

(2) Activation procedure

There is no substantial reason to change the principle that activation should normally be on the basis of a review by the Board, in particular if the Board were to accept some of the proposed changes to contingency mechanisms set out below. However, the staff would propose that the possibility be left open, as noted in the Chairman's summing up of July 15, 1988, that in exceptional cases the Executive Board could give advance approval for the disbursement of contingency financing without further Executive Board review.

(3) Adjustment and financing mix

A key principle underlying possible Fund contingency financing is that additional financing be provided in combination with adaptations in the member's program to ensure an appropriate mix of financing and adjustment. Under the CCFF decision, the proportion of the net sum of deviations to be financed is to be specified at the time the mechanism is approved; the proportion is subject to change, at the request of the member at the time of activation of the mechanism, if the program is being affected by shocks of a nature that make the originally-decided split between financing and adjustment inappropriate. Also, in the period immediately after an adverse shock, the Fund would normally finance a substantial proportion of the adverse deviation. The staff is of the view that these features of the contingency element should be maintained.

(4) Symmetry provisions

The arguments in favor of incorporating symmetry provisions in contingency mechanisms are unchanged. There is general agreement that in many countries the level of international reserves should be built up, in order to cushion their economies from the effects of adverse external developments. While the symmetry provisions may have deterred some members from using the contingency element of the facility, others have accepted the importance of incorporating symmetry into their economic programs; the contingency arrangements developed in Chile, Mexico, Nigeria, and Venezuela all involve changes in the programs' reserve targets in the event of unexpected favorable developments. It may also be noted that in the most recent review of conditionality (EBM/89/76-77, 6/19/89), Executive Directors emphasized that, in the special cases of single commodity exporters, a build-up of a stabilization fund during times of favorable developments would help cushion the economy against adverse shocks.

(5) Contingency mechanisms and enhanced surveillance

In the February 1989 Executive Board discussion on experience with enhanced surveillance (EBM/89/13, 2/8/89), Directors examined the question of the possible attachment of contingency financing under the CCFF to enhanced surveillance procedures. It was the prevailing view that such an attachment raised complex issues affecting the very nature of enhanced surveillance, and that it was inopportune to proceed further on the issue at this time. The Chairman's summing up (SUR/89/8, 2/13/89) indicated that at the time of the review of the CCFF, consideration could be given to whether or not the possible application of contingency financing to enhanced surveillance should be examined further. 1/

1/ Since the Board's review of enhanced surveillance, the procedures have been terminated in the cases of Venezuela and Yugoslavia, and remain in force only for Uruguay through the end of 1989. Furthermore, in the recent period the Fund's role in facilitating multi-year restructuring agreements (MYRAs) has become less important than in the past, and most recent bank covenants have not required countries to request enhanced surveillance.

The staff notes that the proposed changes in the contingency element discussed in this paper would not affect the basic complications related to the possible application of contingency financing to enhanced surveillance. Contingency mechanisms would still aim at supporting programs meeting upper credit conditionality, and such programs would differ in important ways from programs underlying enhanced surveillance.

A quantified program underlying enhanced surveillance essentially represents policies formulated by the member, with no presumption regarding either a convergence of views between the Fund and the authorities, or the satisfaction of Fund standards of upper credit tranche conditionality. 1/ Deviations from performance criteria established under Fund upper credit tranche arrangements are a cause for automatic suspension of conditional purchases, while under enhanced surveillance serious divergences of the member's policies from the underlying program can persist without causing formal prejudice to a member's enhanced surveillance procedures. Other substantive differences regarding the operational and policy aspects of Fund involvement in the two situations were detailed in EBS/88/247 (12/2/88). The attachment of a contingency mechanism to enhanced surveillance would, therefore, raise questions with regard to the uniformity of treatment of Fund members in the use of Fund resources. In light of these considerations, the staff considers that further examination of the possible application of contingency financing to enhanced surveillance is not warranted at this time.

b. Proposed modifications

This section reviews those features of the contingency element that might be modified to encourage the incorporation of contingency mechanisms into Fund-supported programs. Generally speaking, the proposal is to rely on experience and judgment to identify ex ante the key exogenous variables which represent key points of vulnerability of the program to external developments and whose effects on the balance of payments and other program objectives are likely to be substantial, and can readily be assessed. At the same time, steps would be taken to provide assurances that movements in identified variables were not clearly offset by other exogenous factors and that Fund financing was provided in line with the required financing of the program. Thus, an assessment would be made of the effects of changes in other (excluded) exogenous current account variables relative to projections, on an ex post basis, at the time the activation of the mechanism is being considered, and purchases would be subject to a test of need in relation to the original projection for the overall balance of payments.

1/ At the time of the last review of the enhanced surveillance procedures, Directors believed that "the Fund should continue to stand ready to provide this service at a member's request, under the specific circumstances prescribed in the procedure, to help it normalize its relations with creditors" (SUR/89/8).

The staff believes that this approach would, by focusing on the principal identifiable and measurable sources of vulnerability, better serve the objective of protecting members' programs from adverse external developments. At the same time, it would address the concern of Executive Directors that relatively narrow coverage could result, in the case of offsetting developments in non-covered components in the balance of payments, in additional access to Fund resources that might not be fully justified. The section also re-examines the question of making concessional resources available to low-income countries to compensate for the effects of adverse external shocks.

(1) Coverage

An important obstacle to more frequent use of Fund contingency mechanisms has been the provision that the variables included in these mechanisms cover a substantial proportion of the current account transactions. Difficult problems have arisen in specifying the relationship between a broad range of exogenous variables and specific elements of a member's economic program and the current account, as well as in dealing with data limitations that complicate the detailed monitoring of many exogenous events on a timely basis. Thus, it has proven difficult for the authorities and Fund staff to develop contingency mechanisms.

In order to overcome this difficulty, the staff proposes that the Fund's approach to contingency financing be adapted to permit limiting coverage to those key exogenous components of the current account that are judged most likely to affect the member's ability to implement adjustment programs, if they behave differently than expected, and that can be readily identified and monitored. Such judgments would be made by the staff and the authorities, drawing on historical experience and taking into account the current structure of the member's economy. With such an approach, it should be possible to integrate more effectively the policy and balance of payments implications of unforeseen movements in the variables covered under contingency mechanisms into members' economic programs--including policy adaptations and adjustments to performance criteria that might be appropriate in the event of unexpected external developments. 1/

The selected variables would continue to include, as appropriate to the case, the prices of key commodity exports, the prices of main imports (for example, petroleum), and net interest payments. The net sum of deviations used for purposes of activating the mechanism and determining the amount of Fund financing would be calculated on the basis of developments in these selected variables.

1/ The relative ease of integrating a few variables into the economic program probably explains in large measure the kinds of contingency provisions outside the CCFF that members have incorporated in their Fund-supported programs. See Annex I for further details.

The suggested approach leaves open the possibility that unforeseen movements in external variables not included in the mechanism could move the adjustment effort offtrack. But experience suggests that it is not very practical to implement a mechanism that provides protection against a broad array of possible external shocks, however small the shocks are likely to be. Furthermore, the disadvantages of a limited coverage could be relatively small provided that the mechanism covers factors that are likely to be important, drawing on the historical experience of the country. Thus, a mechanism that permits relatively narrow coverage may be seen as a practical approach that could result in more effective use of the contingency element of the facility and thus a greater degree of protection of members' programs. Moreover, authorities would in any case retain the option of requesting changes in the underlying arrangement, including the possibility of an augmentation of access to Fund resources, in the event a program is affected by external shocks not covered by the contingency mechanism.

If such an approach were adopted, account would need to be taken of the possibility that adverse developments in variables covered by the contingency mechanism may be offset by favorable developments in excluded variables. To address this possibility, the staff proposes that any recommendation to the Board for activation of a contingency mechanism present a comparison of the effects of exogenous external variables not included in the mechanism to those of covered variables. To facilitate this comparison, the main assumptions about the variables not covered and the general world economic environment would be outlined in the member's economic program. However, an ex ante assessment of the effects on the balance of payments and the member's economic program of these broadly defined factors would not be specified in detail. 1/

1/ In addition to the problems associated with assessing the effects of a broad range of exogenous factors on economic programs, difficulties were encountered in specific cases in adjusting particular price and volume series to ensure that they provided an accurate measure of the effects of exogenous disturbances. This process required a detailed netting out, at the outset of the program, of such factors as: the volume of exports or imports already contracted for by forward transactions; adjusting final product exports for their import content in order to ensure that a decline in foreign demand for exports did not overstate the impact on the balance of payments; and adjusting imports for their aid and project-financed components. Where clearly necessary, adjustments of this kind would still be made and incorporated in the baseline for purposes of calculating the net sum of deviations; when easily identifiable, the adjustments could be made at the time of framing the program. However, in many instances, the technical work of developing the program would be facilitated by dispensing with the prespecification of many of these adjustments, and instead incorporating them in the calculation of the net sum of deviations at the time of the review for possible activation of the mechanism.

Under the proposed approach, once the net sum of deviations for the key exogenous variables exceeds the threshold, there would be a presumption that the contingency mechanism would be activated. However, before a purchase could be made, the staff and the authorities would evaluate the overall current account position to ascertain the extent to which there had been any offsetting movements in the current account owing to other exogenous factors. If the calculations clearly suggested that major movements in these other factors had largely offset the effects of movements in the key variables covered by the contingency mechanism, the need for contingency financing would be reassessed by the Executive Board. This approach would sometimes involve a good deal of judgment--much the same as that used in applying the procedures under the compensatory element to assess whether or not an export shortfall is largely beyond the control of the member. In making this assessment, the benefit of the doubt would be in favor of recommending activation of the mechanism. In order to ensure that contingency purchases do not exceed the financing requirements stipulated in the program, the staff proposes that purchases under the contingency mechanism be limited to the amount by which the actual balance of payments outturn falls short of the amount targeted in the original economic program.

In cases in which there are clear indications that adverse movements in external factors not covered by the contingency mechanism had largely offset a favorable net sum of deviations as measured under the contingency mechanism, the appropriateness of invoking the symmetry provisions would need to be reconsidered.

The contingency mechanisms for the Philippines and Trinidad and Tobago include Fund charges as part of their coverage of interest costs. In the Board discussion on the contingency mechanism for Trinidad and Tobago, Executive Directors requested that the appropriateness of the inclusion of Fund charges be considered at the time of the review of the CCFF. The staff is of the view that Fund charges should be included in Fund contingency mechanisms where coverage of interest costs is provided. Exclusion of Fund charges would represent an arbitrary distinction between Fund charges and other variable interest costs in their effects on the member's adjustment program and the balance of payments. Also, exclusion of Fund charges could weaken the position of the Fund in urging commercial bank creditors to provide parallel contingency financing to cover, inter alia, unforeseen movements in the interest charges on floating rate debt to banks.

(2) Threshold and deductibility

Under the CCFF, the contingency mechanism is to be activated only when the effects of external shocks exceed a certain threshold level. In the Chairman's summing up, it was indicated that, until the facility was reviewed, the staff would work with a threshold of 10 percent of quota, but management would have the freedom to propose a lower or higher figure in what were expected to be the relatively few cases where this was deemed necessary. In the case of the Philippines, the threshold was set at 15 percent of quota and, in a number of cases where a contingency mechanism was contemplated, a threshold different from 10 percent of quota could have been appropriate. As noted in Annex I, the non-CCFF contingency provisions in Fund arrangements include thresholds that differ substantially from 10 percent of quota. Thus, the staff is of the view that it would be appropriate to maintain the flexibility for management to propose a threshold other than 10 percent. For example, a higher threshold might be considered in countries where a threshold of 10 percent of quota would be triggered by a relatively small shock which might be quickly reversed, while a lower threshold might be appropriate where the financing constraint was particularly tight and the authorities had little room to maneuver.

The appropriate size of the threshold may be influenced by other considerations, for example the need to allow for flexibility in the setting of baselines. In general, adjustment programs should be based on unbiased projections of key external variables, and the staff is of the view that the WEO exercise, supported by frequent updates, remains a useful basis for such projections. However, it might not be possible in all cases for the member and the Fund to agree on incorporating the Fund staff's projections into the adjustment program.

For example, in exceptional circumstances a Fund-supported program might include an outlook for a country's export prices that is more optimistic than projected by the Fund staff, on the understanding that the member would adopt corrective policy action if the outturn were less favorable than projected in the program. In this case, it might not be appropriate to design a contingency mechanism that provided for additional financing should export prices turn out to be lower than projected under the program but still higher than an unbiased projection would have yielded. In these cases, the contingency mechanism might be designed to include a threshold that was large enough to require the member to implement contingency policy actions within a range of export price developments, while protecting the adjustment effort with additional financing against deviations in export prices beyond that range.

Similarly, in cases where program assumptions were less optimistic than projected by the Fund staff, it might be appropriate to include a substantial threshold in a contingency mechanism before symmetry provisions were activated. However, if the prospects for medium-term external viability were seen as highly tenuous, a contingency mechanism might aim at conserving a large part of any favorable deviation.

The CCFF decision provides for the deduction of 4 percent of quota from the net sum of deviations before calculating the financing to be made available or before applying the symmetry provisions. As noted in the Chairman's summing up, this deductibility was assumed to be an amount covered in all basic programs through appropriately flexible policies and/or financing. The staff is of the view that a more appropriate measure of the margin built into programs is the threshold, as the program would be expected to absorb the effects of shocks up to the size of the threshold. Moreover, failure to deduct the threshold before calculating contingency financing could imply an abrupt discontinuity in the provision of Fund financing. In this case, the member would be expected to adjust to an unfavorable shock within the threshold, but once the threshold was crossed the member would be compensated for part of the threshold; similar considerations apply in the application of the symmetry provisions. 1/ Therefore, in the staff's view, the financing proportion should be applied to the net sum of deviations only to the extent that the deviation exceeds the threshold. Such an approach would represent a substantial simplification of this aspect of contingency mechanisms.

If this proposed simplification is not favored by the Board, the staff would propose the following alternative. For cases where the threshold is 10 percent of quota, the staff would propose to eliminate the deductibility of 4 percent of quota. The small deductibility that differs from the threshold represents an added complication to contingency mechanisms and the rationale for such a deduction is difficult to explain to potential users of this element of the facility. For cases in which the threshold is substantially higher than 10 percent of quota, and nondeductibility of the threshold could lead to marked discontinuity in the mix of financing and adjustment, the staff proposes that management be given the discretion to propose a deductible up to the full amount of the threshold.

(3) Sublimit for interest rate contingency

As regards the sublimit of 35 percent of quota on the financing of unexpected changes in international interest rates, the staff would reiterate its earlier view, expressed in the discussion leading up to the establishment of the CCFF, that a specific limitation on Fund financing to cover interest rate contingencies complicates the operation of the facility and is largely unnecessary given the limitations that apply to global access to contingency financing. Executive Directors might want to reconsider the appropriateness of maintaining the 35 percent of quota sublimit, with a view to reducing the complications in the facility's modalities.

1/ As an example of such discontinuity, consider the case of a contingency mechanism with a threshold of 20 percent of quota and a Fund financing proportion of 50 percent of the net sum of deviation. With a deductible equal to the threshold, a shock resulting in a net sum of deviations of 19 percent of quota would be absorbed by the basic economic program; a shock with a net effect of 21 percent would result in financing of 0.5 percent of quota. Without deductibility, the incremental shock that raised the net sum of deviations from 19 to 21 percent of quota would result in contingency financing of 10.5 percent of quota, even though the basic economic program included margins to absorb a shock of up to 20 percent of quota.

(4) Parallel financing

The staff proposes to maintain the principle that in connection with Fund contingency financing all reasonable effort be made to obtain parallel contingency financing from other creditors. In cases where members were negotiating concerted lending packages from bank creditors, it might prove possible to arrange contingency facilities from banks. However, in cases where countries had retained normal market access, or where negotiations with bank creditors were limited to rescheduling agreements, the issue of contingency financing could substantially complicate the member's relations with bank creditors. In general, the staff is of the view that in most cases it is likely to continue to be difficult in the present situation in international financial markets to secure agreement on parallel contingency financing from commercial bank creditors.

As noted above, in the contingency mechanisms for Trinidad and Tobago and the Philippines, the interest rate deviation that would be financed by the Fund would be limited to 2 percentage points pending the arrangement of parallel financing from commercial bank creditors. Such an approach would provide an incentive for commercial banks to share in the financing of contingency deviations related to interest rates, but not to deviations limited to an adverse movement in the terms of trade. The approach has the effect of imposing a further sublimit on the financing of deviations in interest rates--in cases where the effects of deviations in interest rate of 2 percentage points are less than the limit of 35 percent of quota provided under the CCFF--and could lead to anomalies. 1/

As an alternative approach, the staff proposes that in countries where commercial banks have a large exposure and countries are vulnerable to unexpected increases in interest rates, the Fund's contingency mechanism could be designed on the assumption that parallel financing will be forthcoming from bank creditors. For example, the proportion of the net sum of deviations that would be financed by the Fund could be set at a level that would allow for an appropriate contribution from bank creditors.

The staff proposes that contingency mechanisms could be approved without requiring parallel contingency financing to be in place, on the understanding that after an adverse shock the contingency mechanism would not be activated unless the program continued to be fully financed and other creditors continued to make an appropriate contribution to the revised financing needs of the program. The arrangement of parallel contingency financing could be incorporated into the Fund's general policy

1/ For example, when a sharp increase in interest rates is offset only partially by a rise in export prices, an interest rate cap could lead to the invoking of symmetry provisions when the overall effect of changes in the external environment on the member's balance of payments was clearly adverse.

on financing assurances. Activation of the contingency mechanism and purchases under the facility could be approved, on a case-by-case basis, where prompt Fund support was judged as essential and it could be expected that a financing package consistent with external viability including, as necessary, additional financing from other creditors could be agreed in a reasonable period of time.

(5) Timing of request for contingency mechanisms

The CCFF decision allows a member to request a Fund contingency mechanism only at the time of approval of the associated arrangement. Thus, a member could not request such a mechanism at the time of program review. 1/ The staff believes that this provision discriminates arbitrarily between a series of one-year stand-by arrangements and annual programs under multi-year arrangements, and could leave members without contingency financing at a crucial point of the adjustment process. The staff proposes that members be allowed to request a contingency mechanism from the Fund either at the time of approval of the associated arrangement or at the time of completing the Executive Board review of annual programs under multi-year arrangements. The staff also proposes that, if the CCFF decision is revised, transitional provisions be established to permit members with existing arrangements, including those with contingency mechanisms under the current decision, to request a contingency mechanism under the terms of the revised decision at the time of a review of the arrangement.

(6) Possible use of concessional resources for contingency financing

In the discussions on the establishment of the CCFF, it was agreed that it would be desirable to permit contingency mechanisms to be attached to SAF and ESAF arrangements. In view of the limited amount of resources available to the Special Disbursement Account (SDA) and the ESAF Trust, it was also decided that financing for this purpose would need to be provided from the Fund's general resources. Nevertheless, it was agreed that the possibility of providing for concessionality in contingency financing for low-income countries would be reviewed at a later date.

For SAF arrangements, use of SDA resources for contingency financing would continue to be precluded because of the limited availability of these resources and because of the need to provide access on a uniform basis for each potential user. 2/ As regards ESAF arrangements, it might be recalled that the supported programs normally target a build-up of

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1/ The transitional provisions of the CCFF decision allowed members with arrangements approved prior to November 1, 1988 to request a contingency mechanism when completing a review of a Fund arrangement.

2/ The 1980 decision on the Trust Fund (Decision No. 6704-(80/185) called for the use of SDA resources on a uniform basis.

international reserves to facilitate continued implementation of the program. In this way, a cushion against unforeseen exogenous developments is already provided. Moreover, there is flexibility concerning the ESAF access level in that the amount of resources committed under a three-year arrangement and the amounts for the second- and third-year arrangements are subject to review at the time of consideration of each annual arrangement. 1/ Thus, there is scope for taking into account external developments in the determination of access for the subsequent annual arrangements. Moreover, in case of urgent need, it would also be possible to advance the approval of the subsequent annual arrangement.

Beyond this, direct use of ESAF Trust resources for contingency financing in ESAF arrangements could also be considered by providing for possible augmentation of semi-annual disbursements in the event of deviations from a prespecified baseline projection, through rephasing the amount available within the three-year period. Semi-annual augmentation could result in some frontloading and might in some cases lead to annual disbursements in excess of the current ESAF guidelines. 2/ Such an approach might be justified if adverse external developments were of a temporary and reversible nature, and it would be expected that policies would be appropriately strengthened. With semi-annual augmentation and no change in access for the three-year period of the arrangement, immediate questions regarding the adequacy of ESAF Trust resources would not arise, but amendment to the ESAF Trust instrument would be required. This possibility could be examined further at the next comprehensive review of the ESAF when the adequacy of ESAF Trust resources would be reassessed.

III. Compensatory Financing of Export Shortfalls

The main issues that have arisen with respect to compensatory financing of export shortfalls relate to access and conditionality. This section also provides a brief review of modifications concerning the financing of export shortfalls introduced in the CCFF decision.

1. Access and the guidelines on cooperation

In considering recent requests for purchases under the compensatory element of the CCFF, two questions in respect of access and the requirement of cooperation have been raised by the Executive Board. The first relates to the meaning of the term "Fund arrangement" in the CCFF

1/ Instrument to Establish the Enhanced Structural Adjustment Facility Trust, Section II, paragraph 2(d) (Selected Decisions, Fourteenth Issue, April 1989, page 26).

2/ See "Chairman's Summing Up of the Discussion on the Enhancement of the Structural Adjustment Facility - Operational Arrangements," (Buff 87/260, 12/17/87). Disbursement in the first year is to be limited generally to a maximum of 40 percent of the total amount over the three-year period.

decision, and the second to the circumstances that would determine whether a member's request for a compensatory purchase would be governed by the provisions of paragraph 12(a) or paragraph 12(b) of the Decision. 1/ The first issue was raised in the discussion of the request for a compensatory purchase by Algeria, and the second in the discussion of the request by Jordan.

a. Meaning of the term "Fund arrangement" 2/

At the Board meeting to consider the Algerian request for compensatory financing (EBM/89/67, 5/31/89 (EBS/89/89, 5/5/89)), the issue was raised as to whether the term "Fund arrangement" in paragraph 12(a)(ii) had been intended to refer exclusively to an arrangement in the upper credit tranches (or an extended arrangement, or to a SAF/ESAF arrangement where the program would meet the criteria for use of credit in the upper tranches), or whether it also encompassed a stand-by arrangement in the first credit tranche.

The condition for use of the optional tranche under paragraph 12(a)(ii), where a member does not have a Fund arrangement, is that its current and prospective policies "are such as would, in the Fund's view meet the criteria for use of the Fund's general resources in the upper credit tranches." In the staff's view, it would be desirable to adopt a consistent approach by requiring that also where a member does have a Fund arrangement, it should still satisfy upper credit tranche conditionality in order for the member to qualify for use of the optional tranche. Under to this approach, a stand-by arrangement in the first credit tranche would meet the condition for a purchase of up to 40 percent of quota as provided by paragraph 12(a)(i); that is, it would meet the requirement that the member "will cooperate with the Fund in an effort to find, where required, appropriate solutions for its balance of

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1/ These issues also have a bearing on use of the cereal element under Section IV of the Decision. Section IV of the CCFF decision describes the conditions governing access to the 17 percent of quota provided for the compensatory financing of fluctuations in the cost of cereal imports and also the conditions that would govern access to the optional tranche of 25 percent of quota for this purpose.

2/ Paragraph 10(a) of the CCFF decision states in full: "Wherever used in this Decision, the expression "Fund arrangement" will mean a stand-by or an extended arrangement. It will also mean a Structural Adjustment Facility (SAF) or an Enhanced Structural Adjustment Facility (ESAF) arrangement, provided that the Fund shall decide to provide financing on the basis of a SAF or ESAF arrangement only if the program supported by the arrangement, at the time of the decision, meets the criteria for the use of the Fund's general resources in the upper credit tranche." The term "Fund arrangement" also appears in paragraphs 12(b)(ii), 12(b)(iii), and 12(d) concerning export shortfalls and paragraphs 36(b)(ii), 36(c)(ii), and 36(e) concerning cereal excesses.

payments difficulties." However, a first credit tranche arrangement would permit the use of the optional tranche, only if the supporting program, in the Fund's view, met the requirement of upper credit tranche conditionality.

Paragraph 12(b)(ii), stipulating access up to 40 percent of quota, contains language identical to that of paragraph 12(a)(ii) for members covered by paragraph 12(b). The considerations noted above suggest that the term "Fund arrangement" in paragraph 12(b)(ii) should also be restricted to arrangements satisfying upper credit tranche conditionality. A similar approach may be applied to access of up to 65 percent of quota under paragraph 12(b)(iii) which requires completion of a review of an arrangement, or where there is no arrangement, that the member's current and prospective policies continue to meet the criteria for use of Fund resources in the upper credit tranches.

If Directors agree with the above approach suggested by the staff, the staff will propose for Board consideration amendments to the relevant paragraphs of the CCFF decision.

b. Application of paragraph 12(a) or 12(b)

During the Board discussion on Jordan (EBM/89/89-90, 7/14/89), a number of questions were raised by Executive Directors regarding the determination of access to compensatory financing. The main issue centered on the classification of members with an upper credit tranche arrangement under paragraphs 12(a) and 12(b). Some Directors remarked that the discussion of the application of paragraphs 12(a) and 12(b) had given rise to certain ambiguities and that it would be desirable to return to the issue at the time of the general review of the CCFF.

The issue relates specifically to those upper credit tranche arrangements in which imbalances at the outset of a program are very large, the member's corrective policy actions are to be phased-in gradually, and the evidence of the strength of commitment to sustaining these policies would emerge only over time. Two approaches can be identified for dealing with these particular cases, as regards access to compensatory financing. Under the first approach, a member would automatically have access to resources up to 65 percent of quota, so long as the member's record of cooperation in the recent past was considered to be satisfactory. A consequence of this approach, however, could be a substantial frontloading of use of Fund resources, even in cases in which the size of the initial imbalances and the envisaged pace of adjustment might justify a more gradual provision of Fund support.

Alternatively, a phased approach to access could be adopted for those particular cases, as described above, in which access of 65 percent of quota may lead to an excessive frontloading of Fund resources. Under this approach, 40 percent of quota would be made available in such cases upon approval of an upper credit tranche arrangement. Access in such cases could be raised to 65 percent of quota after completion of a review of the arrangement. Linking the use of the optional tranche to a review of the arrangement in appropriate circumstances would give the Fund an opportunity to assess the member's adjustment effort in relation to that envisaged in the program, thus permitting the Fund a degree of judgment as regards the frontloading of the use of Fund resources. In papers analyzing requests for compensatory financing purchases, the staff would set out the considerations relevant to the evaluation of the member's policies and its record of cooperation that had led to the recommendation relating to the member's access under the CCFF. The staff believes that this latter approach would be preferable, as it would allow more flexibility in determining the appropriate mix of financing and adjustment in specific cases.

If the Board favors the latter alternative, the staff will propose relevant revisions to the CCFF decision.

2. Determination of the shortfall

The method of calculating an export shortfall introduced in 1979 under the CFF was retained in the CCFF with one important modification that affected the projection of exports in the post-shortfall period. In determining the size of the compensable shortfall under the CCFF, the value of projected exports in the two post-shortfall years is limited to 20 percent over the value of exports in the two preshortfall years. 1/ In recommending that the limit on the growth of exports in the post-shortfall period be set at 20 percent of the average level in the preshortfall period, the staff took account of the prevailing price trends of exports of countries likely to be the major users of the facility. 2/ Developments concerning export prices since the introduction of the projection limit suggest that the basis on which the limit of 20 percent was determined has not changed. The staff, therefore, proposes no change in this limit at this time.

3. Avoidance of overcompensation and undercompensation

An additional amendment to the compensatory financing element of the CCFF, as compared with compensatory financing under the former CFF, is the requirement that there be an adjustment to avoid overcompensation or undercompensation in successive compensatory purchases where a subsequent purchase takes place within the two-year projection period of an earlier purchase. None of the purchases made since the establishment of the CCFF

1/ The shortfall is calculated by deducting from exports in the shortfall year the geometric average of five years of exports centered in the shortfall year.

2/ Since its introduction, the projection limit has been effective only in the case of Mexico. The shortfall, when unconstrained by the projection limit, amounted to SDR 845.9 million (72.5 percent of quota); when adjusted, the shortfall amounted to SDR 282.3 million. The actual purchase of SDR 282.3 million was equivalent to 24.2 percent of quota.

were affected by this provision and the staff believes that the procedures outlined in Section III of the paper "Compensatory and Contingency Facility (CCFF)--Operational Guidelines" (SM/88/238, 9/27/88) remain appropriate.

4. Adjustment for double compensation between compensatory and contingency elements 1/

In establishing the CCFF it was recognized that, as the facility combines compensatory and contingency elements, double compensation could arise if the conditions triggering the contingency mechanism also resulted in an export shortfall. As the two elements of the facility may cover different variables, it was also acknowledged that procedures to avoid double compensation across the two elements of the facility would only need to be applied to exports and other variables that both triggered the contingency mechanism and contributed to the shortfall during the same period (or part of the same period). There would be no presumption of double compensation if the contingency mechanism was triggered by factors other than exports and other variables included in the calculations for compensatory financing. The need to adjust purchases to avoid double compensation across the two elements has therefore not arisen so far. The staff believes that the procedures for avoiding double compensation in contingency and compensatory financing set out in Section IV of the paper on operational guidelines for the CCFF remain appropriate.

IV. Compensatory Financing of Fluctuations in Cereal Import Costs

Section IV of the CCFF decision contains the provisions covering the compensatory financing of fluctuations in the cost of cereal imports and replaces the 1981 cereal decision, as amended. 2/ The provisions of Section IV, which were to have expired on May 12, 1989, were extended by the Executive Board until December 1, 1989 (Decision No. 9101-(89/30), adopted March 7, 1989). This section of the paper summarizes the main

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1/ The issue of possible overcompensation between compensatory and contingency elements is discussed in Annex III.

2/ On May 13, 1981 (EBM/81/81-82), Decision No. 6860-(81/81)--Compensatory Financing of Fluctuations in the Cost of Cereal Imports--was adopted by the Executive Board for a period of four years. The Decision was reviewed by the Executive Board (EBM/83/104-105) on July 18, 1983 (SM/83/131 and Cor. 1, 6/6/83). On May 3, 1985 (EBM/85/69-70), the Executive Board decided to extend the Decision without modification for a further four-year period until May 13, 1989 (SM/85/98, 4/5/85). The Decision was again reviewed by the Executive Board on May 6, 1987 (SM/87/86, 4/8/87) and retained without modification. Certain aspects of the cereal decision were discussed by the Executive Board in May 1987 (EBM/87/73) and November 1987 (EBM/87/156-158) in the context of the review of the CFF (EBS/87/165, 7/28/167 and in Annex VI, Supplement 1).

features of Section IV of the CCFF decision and reviews operations under the 1981 cereal decision and under Section IV of the CCFF decision.

1. Main features of Section IV of the CCFF decision

The 1981 cereal decision (Decision No. 6860-(81/81)) provides members in balance of payments need with timely assistance related to temporary increases in the costs of their cereal imports. The basic features of this decision have been incorporated into Section IV of the CCFF decision.

Under Section IV of the CCFF decision, as in the earlier cereal decision, an excess in cereal imports is calculated as the c.i.f. cost of cereal imports (excluding concessional imports) in a given 12-month period, less the arithmetic average cost of these imports for the 5-year period centered on the year in which the cereal import excess occurs (paragraphs 32 and 33 of the CCFF decision). 1/ The financing of the cost of cereal imports is integrated with the compensatory financing of export shortfalls so that compensation is based on the net amount of the cereal import excess and the export shortfall. Once a member opts to purchase under the cereal decision, any calculation of the net shortfall for subsequent compensatory financing purchases by the member during the following three years would have to include excesses in cereal imports. To facilitate timely assistance, the calculation of the cereal import excess may be based on estimated data for up to 12 months of the excess year, with the provision that the purchasing member would be expected to make a prompt repurchase of any overcompensation in light of actual data.

The main difference between the 1981 cereal decision and Section IV of the CCFF decision pertains to access limits and the requirement of cooperation affecting levels of access depending on the member's circumstances. Where a member's balance of payments position, apart from the effects of the cereal import excess and export shortfall, is satisfactory, access limits under Section IV of the CCFF decision have been maintained at the same level as under the former cereal decision. The separate limits are 83 percent of quota each for a cereal import excess and an export shortfall, while the joint limit for cereal import excesses and export shortfalls is 105 percent of quota. Where a member's balance of payments difficulties go beyond the effects of an excess in cereal import costs, paragraph 36 of Section IV of the CCFF decision provides that the member may purchase up to 17 percent of quota or up to 42 percent of quota, including the optional tranche. The policy requirements associated with these access limits are similar to those discussed above in Section III, Subsection 1(b), dealing with application of paragraph 12(a) or 12(b).

1/ Cereals covered by the decision are those classified under SITC 041-047, namely, wheat, rice, and coarse grains, including maize, barley, sorghum, and millet, and flour from these grains.

2. Use of Fund resources for compensatory financing of cereal import costs

In the eight years since May 1981, when the cereal decision was adopted, members have made 14 purchases under the 1981 cereal decision and 2 purchases under Section IV of the CCFF Decision (Table 1). Total purchases on account of excesses in the cost of cereal imports under the two decisions amounted to SDR 742 million.

Of the 16 purchases made since 1981, 4 were solely on account of cereal import excesses, 8 were related to both export shortfalls and cereal import excesses, while the remaining 4 were solely on account of export shortfalls. 1/ In the 12 cases involving excesses in cereal import costs, the excesses were largely due to increases in volume attributable to the effects of adverse weather on domestic cereal production (Table 2). Volume increases accounted for more than 90 percent of the excess in cereal import costs in eight cases and for over 60 percent in the remaining four cases.

The magnitude of compensatory financing purchases on account of excesses in cereal import costs has been much lower than envisaged in 1981, when the cereal decision was adopted. For most of the eight years since the 1981 cereal decision has been in effect, the overall global food situation has generally been satisfactory and cereal prices have followed a downward trend. Despite these favorable overall trends, however, some countries, especially in Africa, have experienced prolonged declines in their food production and have suffered acute shortages. These shortages were largely met through food aid, which is excluded in the calculation of excesses in cereal import costs. Other Fund members with excesses in the costs of commercial cereal imports may not have been able to meet the conditions governing access to Fund resources under the former cereal decision or, in the more recent period, under Section IV of the CCFF decision. Some members may also have refrained from using the cereal option because of the rule that requires members making a purchase on account of an excess in cereal import costs to include cereal imports in any subsequent request for a compensatory financing purchase for a period of three years.

During the Executive Board discussions leading up to the establishment of the CCFF, some Directors favored the deletion of the three-year rule and the creation of a separate facility as means of encouraging greater use of the cereal option. The balance of support, however, was in favor of retaining the three-year rule and the continued integration of cereal import excesses with export shortfalls. As a result, both of these aspects of the cereal decision were retained in the CCFF decision.

1/ The last four cases involved requests for compensatory financing of export shortfalls that were made within three years of purchases relating to cereal import costs.

Table 1. Purchases Under the 1981 Cereal Decision and Section IV Under the CCFF Decision, 1981/82-88/89

Country	Date of Purchase	Shortfall and Excess: Net shortfall (1)	Shortfall and Excess: Export shortfall (2)	Shortfall and Excess: Cereal import excess (3)	Purchase: Total (4)	Purchase: Export component (5)	Purchase: Cereal component (6)	Outstanding After Purchase: Total CFF/CCFF (7)	Outstanding After Purchase: Export component (8)	Outstanding After Purchase: Cereal component (9)
		(In millions of SDRs)						(In percent of quota)		
Total		3,668	2,953	1,323	1,924	1,182	742			
First year (1981/82)		355	113	712	355	113	242			
1. Malawi 1/	9/81	12	-7	19	12	--	12	109	67	42
2. Korea	1/82	106	-464	570	106	--	106	104	62	42
3. Morocco 1/	4/82	236	113	123	236	113	123	124	69	55
Second year (1982/83)		149	88	65	144	79	65			
1. Kenya 1/	6/82	66	34	32	60	29	32	125	94	31
2. Bangladesh 1/	8/82	71	38 2/	34	71	38	34	47	33	15
3. Malawi	3/83	12	16 3/	-4	12	12	--	103	98	5
Third year (1983/84)		--	--	--	--	--	--			
Fourth year (1984/85)		848	779	172	464	377	87			
1. Korea	6/84	557	626	-69	280	280	--	105	82	23
2. Malawi	8/84	14	16 4/	-2	14	14	--	78	74	4
3. Ghana	12/84	112	103	9	58	49	9	87	83	4
4. Jordan	1/85	57	34	23	57	34	23	78	47	31
5. Bangladesh	4/85	108	-32	140	55	--	55	50	23	27
Fifth year (1985/86)		168	57	137	153	42	111			
1. Morocco	9/85	130	57	73	115	42	73	105	46	59
2. Kenya	12/85	38	-25	63	38	--	38	64	18	46
Sixth year (1986/87)		--	--	--	--	--	--			
Seventh year (1987/88)		94	100	-6	40	40	--			
1. Kenya	10/88	94	100	-6	40	40	--	55	28	27
Eighth year (1988/89) 5/		2,053	1,816	237	769	532	237			
1. Mexico	6/89	1,017	846 6/	171	454	282	171	39	24	15
2. Algeria	6/89	1,036	970	66	315	249	66	51	40	11

Source: International Monetary Fund, Treasurer's and Research Departments.

1/ Purchase under the early drawing procedure; original calculations.
2/ Net of double compensation. The gross shortfall amounted to SDR 56 million.
3/ Net of double compensation from a buffer stock purchase made in December 1981. The gross shortfall amounted to SDR 17 million.
4/ Net of stock adjustment. The gross shortfall amounted to SDR 29 million.
5/ Purchases under the CCFF decision.
6/ This shortfall was constrained to SDR 282 million by the requirement that projected exports in the post-shortfall period not exceed 20 percent of their average level in the preshortfall period.

Table 2. Contributions of Value, Volume, and Unit Value in Excess in Cereal Imports

	Country	Date of Purchase	Purchase: Total	Purchase: Cereal component	Relative Contribution to Cereal Import Excess: Volume	Relative Contribution to Cereal Import Excess: Unit value
			(In million SDRs)		(In percent)	
1.	Malawi	9/21/81	12	12	94	6
2.	Korea	1/27/82	106	106	72	28
3.	Morocco	4/29/82	236	123	100	--
4.	Kenya	6/14/82	60	32	99	1
5.	Bangladesh	8/30/82	71	34	100	--
6.	Malawi 1/	3/3/83	12	--	--	--
7.	Korea 1/	6/13/84	280	--	--	--
8.	Malawi 1/	8/9/84	14	--	--	--
9.	Ghana	12/6/84	58	--	100	--
10.	Jordan	1/24/85	57	23	100	--
11.	Bangladesh	4/15/85	55	55	99	1
12.	Morocco	9/17/85	115	73	72	28
13.	Kenya	12/9/85	38	38	62	38
14.	Kenya 1/	10/26/88	40	--	--	--
15.	Mexico	6/1/89	454	171	77	23
16.	Algeria	6/5/89	315	66	100	--

Source: International Monetary Fund, Research Department.

1/ Although a cereal import shortfall was calculated for these cases, the purchases were made under the cereal decision because of the three-year rule.

The access limits with respect to the cereal component were not a constraint for any of the purchases made. 1/ However, outstanding purchases under the cereal decision reached the joint quota limit for the export shortfall and the excess in cereal import costs on three occasions (Kenya, 125 percent of quota in 1982; Korea, 105 percent of quota in 1984; and Morocco, 105 percent of quota in 1985), and were close to it on one other occasion (Morocco, 124 percent of quota in 1982) (see Table 1). In these four cases and in four others, the cereal decision nevertheless provided members with more assistance than was available under the former CFF decision for export shortfalls (Decision No. 6224-(79/135)). Similarly, in the two purchases made under the CCFF decision (Mexico, 39 percent of quota in May 1989, and Algeria, 51 percent of quota in May 1989), the inclusion of a cereal import component provided members with more assistance than would have been available under the export shortfall component alone (i.e., excluding use of the optional tranche). 2/

The present outlook for the world food security situation is not as favorable as it was as recently as two years ago. While cereal production can be expected to recover in 1989 from the drought-reduced level of 1988, forecasts made by the FAO indicate that the recovery in production would not be sufficient to both meet consumption and replenish stocks to the minimum level required for world food security. In view of this, the outlook for world food supply and demand is expected to remain tight at least through 1990. As the level of world cereal stocks to consumption is relatively low, a sharp upward movement in cereal prices is a distinct possibility if production shortfalls in a major cereal-producing region should occur. Given this outlook, an increase may be expected in the number of countries experiencing payments difficulties associated with higher cereal import costs.

It is the view of the staff that Section IV of the Decision on the CCFF continues to serve its purpose and the staff recommends that the provisions of this section be extended for a further period of four years.

1/ Through December 1983, the quota limits were 100 percent of quota on outstanding CF purchases relating to export shortfalls, 100 percent in relation to cereal import excesses, and 125 percent of quota in relation to the two components; following the increase in quotas under the Eighth General Review of Quotas, the limits were reduced to 83 percent for either export shortfalls or excesses in cereal imports, and to 105 percent jointly.

2/ In the case of Mexico, application of the 20 percent projection limit for export shortfalls reduced the compensable export shortfall to 24 percent of quota while inclusion of the cereal import excess raised total access to 39 percent of quota. Algeria met the criteria for a purchase of 40 percent of quota on the basis of an export shortfall, and the inclusion of the cereal import excess had the effect of raising access to 51 percent of quota.

V. Summary and Conclusions

This paper has reviewed the experience with the CCFF as called for under Executive Board Decision No. 8955-(88/126) adopted August 23, 1988. It has also reviewed the provisions covering the compensatory financing of fluctuations in the cost of cereal imports, which shall expire on December 1, 1989 (Decision No. 9101-(89/30), adopted March 7, 1989) unless the Executive Board decides to extend it.

1. The staff's proposals to modify the contingency element of the CCFF can be summarized as follows:

a. The contingency mechanism would cover those key exogenous components of the current account that are highly volatile and easily identifiable. At the time of the Board review to consider the activation of the contingency, there would be an evaluation of the extent to which the effects of movements in the variables covered by the mechanism had been offset by other exogenous factors. Contingency access would be limited to the amount by which the actual balance of payments outturn falls short of the amount targeted in the original program.

b. There would be greater flexibility in the setting of the size of the threshold. The staff proposes that the financing proportion only be applied to that part of the net sum of deviations that exceeds the threshold. If this approach is not favored by the Board, the staff proposes for cases where the threshold is 10 percent of quota that the deductible be eliminated; for cases where the threshold is substantially in excess of 10 percent of quota, management would have the discretion to propose a deductible up to the amount of the threshold.

c. Executive Directors have also been asked to reconsider the retention of the 35 percent of quota sublimit on the financing of interest rate contingencies.

d. Parallel contingency financing would continue to be vigorously pursued, but Fund contingency mechanisms would generally be approved even if such financing were not in place. There would be an understanding that the Fund contingency mechanism would not be activated unless other creditors were making an appropriate contribution to the revised financing needs of the program.

e. Attachment of contingency mechanisms to Fund arrangements would be possible at the time of Board reviews of annual programs under multi-year arrangements.

f. Under the ESAF, annual access could be raised to take account of the effects of adverse external shocks and the possibility of augmenting access at the time of semi-annual reviews would be examined at the time of the next comprehensive review of the ESAF.

2. The staff's proposals with respect to the compensatory element of the CCFF can be summarized as follows:

a. The term "Fund arrangement" in paragraphs 12 and 36 of the CCFF decision would mean a stand-by arrangement in the upper credit tranches, or an extended arrangement, or a SAF/ESAF arrangement when the program meets the criteria for use of the Fund's general resources in the upper credit tranches.

b. The application of the provisions of paragraph 12(a) or paragraph 12(b) has given rise to questions of interpretation. One interpretation would be that all compensatory requests accompanied by Fund arrangements would qualify for maximum access under the provisions of paragraph 12(a), unless the member's record of cooperation is considered to be unsatisfactory. An alternative interpretation would be that in cases in which the size of the initial imbalances and the envisaged pace of adjustment justify a more gradual provision of Fund support, access under the compensatory element should be phased in accordance with paragraph 12(b), even if the member's record of cooperation is considered satisfactory. The staff believes that this latter approach is preferable as it allows more flexibility in determining the appropriate mix of financing and adjusting in specific cases.

c. In the calculation of the amount of compensatory financing in respect of export shortfalls, the existing provisions, including the projection limit in the post-shortfall years, the avoidance of overcompensation and undercompensation, and adjustment for double compensation, would remain unchanged.

3. The staff proposes that compensatory financing for excess cereal import costs continue to be available to members for a further period of four years.

Contingency Provisions in Recent Fund Arrangements

Since the establishment of the CCFF in August 1988, two members have attached contingency mechanisms under this facility to Fund arrangements--the Philippines and Trinidad and Tobago. Contingency provisions outside the CCFF were incorporated in three other arrangements, although access to financing was not contemplated (Mexico, Nigeria, and Venezuela). Similar provisions were developed before the CCFF decision came into effect for Chile (1985) and Mexico (1986). This annex describes the experience with these provisions.

1. Contingencies under the CCFF

Table 3 summarizes the characteristics of the contingency mechanisms developed for the Philippines and Trinidad and Tobago. These mechanisms differed in certain aspects, reflecting adaptations to the particular circumstances of each member:

(a) The coverage of transactions was about one third of current account transactions in the case of Trinidad and Tobago and slightly over one half in the case of the Philippines. Prices for main commodity exports and interest rates were covered in both cases. In addition, in the case of the Philippines, the export volume of nontraditional manufactures (net of imported inputs) and import prices were also covered.

At the Board discussion of Trinidad and Tobago's request for an arrangement with contingency financing, Executive Directors requested that if the contingency mechanism were activated, the behavior of factors affecting a broader coverage of current account transactions should be examined. This was done when higher than programmed export prices of crude oil and petroleum products triggered the symmetry provisions of the mechanism in the second quarter of 1989. For purposes of the analysis, the coverage was expanded to include the prices of merchandise imports and export prices for urea, methanol, sugar, and steel--covering, in effect, about 90 percent of current account transactions. The staff noted the difficulties it had encountered in expanding coverage in this case 1/ and the program adjustments required by the mechanism were calculated on the basis of the three items that were specified at the time the contingency mechanism was attached to the arrangement.

(b) The calculations of the sums of net deviations that trigger disbursements under the CCFF are expected to be done on a quarterly basisin the case of Trinidad and Tobago and semi-annually in the case of the Philippines. These frequencies, which mirror the phasing of

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1/ Three separate import price indices were constructed. Each indicator produced a substantially different deviation from the baseline scenario, ranging from a positive 6 percent of quota to a negative 7 percent of quota. None of these indices were closely correlated to the import unit value index published by Trinidad and Tobago.

Table 3. Contingency Mechanisms Under the CCFF

	Trinidad and Tobago 1989	Philippines 1989
Associated arrangement	Stand-By arrangement covering 1/13/89-2/28/90 for SDR 99 million (58 percent of quota)	Extended arrangement covering 5/23/89-5/22/92 for SDR 660.6 million (150 percent of quota)
Nature of mechanism	Symmetrical	Symmetrical
Covered variables	Export prices for crude oil and petroleum products, and interest rate on variable rate external debt	Export prices for coconut oil, copper metal and copper concentrate; partner countries' volume of non-oil imports as it affects Philippine export volume of nontraditional manufactures (net of imported inputs); import prices for petroleum and petroleum products; partner countries' non-oil export prices as they affect Philippine non-oil import prices; and interest payments on net external debt at variable interest rates.
Coverage (in proportion of current account transactions)	30 percent	53 percent
Additional financing under the contingency provisions	Fund - maximum access of SDR 42.5 million or 25 percent of quota Commercial bank creditors - commercial bank package not yet finalized	Fund - maximum access of 65 percent of quota (SDR 286.3 million) under the arrangement, of which a maximum of 25 percent of quota (SDR 110.1 million) could be provided during the initial baseline period (April 1, 1989 - March 31, 1990) Commercial bank creditors - commercial banks package not yet finalized
Targets or performance criteria affected by adjustment	Net international reserves and net domestic assets of the central bank (the latter to be adjusted in an amount equivalent in magnitude and opposite in direction to the former)	In the case of favorable deviations the net international reserves target would be adjusted upwards. In the case of unfavorable deviations criteria relating to net international reserves, the borrowing requirement of the monitored public sector, and the limit on external non-concessional borrowing will be adjusted.
Threshold	SDR 17 million or 10 percent of quota	SDR 66 million or 15 percent of quota
Cap on interest rate deviations	A sublimit of 2 percentage points (equivalent to 5 percent of quota) will be applied to interest rate deviations if parallel financing from commercial banks is not forthcoming.	A sublimit of 2 percentage points (equivalent to about 35 percent of quota) will be applied to interest rate deviations if parallel financing from commercial banks is not forthcoming.
Deductible	4 percent of quota	4 percent of quota
Percent of deviation to be financed	75 percent for deviations caused by the initial shock in the same quarter; 50 percent of the spillover deviation in the next quarter; and 25 percent of the spillover deviation in the third quarter	50 percent of the deviations caused by the initial shock in the same semester; 30 percent of the spillover deviation in the next semester.

disbursements of other Fund resources in the respective arrangements, imply in the case of the Philippines a lesser need for quick financial support in the event of adverse developments, reflecting the country's relatively more comfortable international reserves position. Similarly, considerations related to the likely magnitude of external shocks and the availability of a cushion of international reserves account for differences in thresholds--10 percent of quota in the case of Trinidad and Tobago and 15 percent in that of the Philippines.

(c) In the event of an adverse shock, the Fund is expected to finance a substantial proportion of the deviation in both cases, and differences in the percentage of deviations to be financed and in the phasing of disbursements over time partly reflect the relative tightness of the financing constraint in each case (see Table 3). In both cases, financing proportions were scheduled to be relatively high in the initial period and to decline subsequently, on the expectation that policy adjustments would take their corrective effect over time.

(d) Both members made vigorous but as yet unsuccessful attempts to secure parallel contingent financing from commercial bank creditors. For Trinidad and Tobago, the increase in interest rates to be counted in the net sum of deviations was limited to 2 percentage points (equivalent to 5 percent of quota) until parallel financing is obtained. The same 2 percentage point sublimit applies for the Philippines; however, in this case the sublimit is equivalent to 35 percent of quota, or equal to the more general sublimit applicable under the facility for compensation of deviations in interest rates.

(e) In the event of an adverse exogenous shock, adjustments would result in a lower net international reserves target and a correspondingly higher target for domestic credit expansion, and vice versa if events are more favorable than anticipated. In both cases, it is envisaged that the authorities would consult with the Fund to reach agreement on the appropriate policy adaptations and adjustments to the quantitative program targets and performance criteria, in light of the magnitude of contingency financing from the Fund and the financing that could become available from other creditors.

2. Contingency provisions outside the CCFF

The technical characteristics of contingency provisions outside the framework of the CCFF are summarized in Table 4. In contrast with the contingencies under the CCFF, the overriding concern in these cases--with the exception of Mexico in 1986--has not been to obtain external financial support in the event of unfavorable exogenous events, but rather to provide for adjustments in program targets if events with regard to one or two key exogenous variables were different than programmed.

Table 4. Contingency Mechanisms in Fund Arrangements Outside the CCFF

	Mexico 1986	Chile 1988	Nigeria 1/ 1989	Mexico 1989	Venezuela 1989
Associated arrangement	Stand-By arrangement covering 11/19/86-4/1/88 for SDR 1,400 million (120 percent of quota)	Extended arrangement covering 8/15/85-8/14/88, extended to 8/14/89 for SDR 750 million (170 percent of quota) and SDR 75 million, extended (17 percent of quota)	Stand-By arrangement covering 2/03/89-04/30/90 for SDR 475 million (56 percent of quota)	Extended arrangement covering 05/26/89-05/25/92 for SDR 2,797 million (240 percent of quota)	Extended arrangement covering 6/23/89-6/22/92 for SDR 3,703 million (270 percent of quota)
Nature of mechanism	Symmetrical	Symmetrical	Symmetrical	Symmetrical	Activated only when oil receipts higher than projected
Covered variables	Oil prices	Copper prices	Oil prices	Unit value of petroleum products and interest rates on variable rate external debt	Unit prices and volumes of oil exports
Coverage (in proportion of current account transactions)	12	16	36	17	45
Additional financing under the contingency provisions	Fund - lesser of US$600 million or SDR 600 million (51 percent of quota). Commercial bank creditors - up to US$1200 million 2/	Fund - Nil Commercial bank creditors - Nil	Fund - Nil Commercial bank creditors - Nil	Fund - Nil Commercial bank creditors - Nil	Fund - Nil Commercial bank creditors - Nil
Targets or performance criteria affected by adjustment	Net international reserves and net domestic assets of the monetary authorities, the overall public sector borrowing requirement, the operational balance of the non-financial public sector, the net credit to the non-financial public sector, and the primary fiscal balances	Net international reserves, net domestic assets of the Central Bank and the public sector deficit	International reserves, quarterly expenditure warrants, net credit to the Federal Government	Net international reserves of the monetary authorities; in addition, net domestic assets of the monetary authorities, net public sector credit from the Bank of Mexico, the overall public sector borrowing requirement, the operational deficit of the nonfinancial public sector (will be adjusted in an amount equivalent to and opposite in direction to the adjustment to net international reserves); net credit to the nonfinancial public sector, and primary balance (only for oil prices)	Net international reserves, net domestic assets of the Central Bank, and the public sector borrowing requirement
Threshold	Nil	Copper price movement of 4 cents per pound equivalent to US$160 million or 28 percent of quota	Nil	Cumulative effect of deviations (in the price of oil from the baseline level of US$12 a barrel and LIBOR of 10.5 percent a year) in excess of US$475 million or 31 percent of quota through 6/30/89; US$712.5 million or 47 percent of quota through 9/30/89; and US$950 million or 63 percent of quota through 12/31/89	Deviation in oil export receipts in excess of 10 percent over the baseline projections, i.e., in excess of US$205 million or 11 percent of quota through 3/31/89; in excess of US$410 million or 23 percent of quota through 6/30/89; and in excess of US$630 million or 35 percent of quota through 9/30/89

Table 4 (concluded). Contingency Mechanisms in Fund Arrangements Outside the CCFF

	Mexico 1986	Chile 1988	Nigeria 1/ 1989	Mexico 1/ 1989	Venezuela 1989
Deductible amount	Nil	Same as the threshold	Nil	Same as the threshold	5 percent of oil receipts, i.e., US$105 million or 6 percent of quota through 3/31/89; US$205 million or 11 percent of quota through 6/30/89; US$315 million or 18 percent of quota through 9/30/89
Percent of deviation to be adjusted/ financed and cap on adjustment financing	Oil price fluctuations between US$9 to US$14 per barrel in a given calendar quarter were to be reflected in a full adjustment of the quarterly ceilings on credit to the public sector, the public sector borrowing requirement, and the operational balance of the nonfinancial public sector. The target on net international reserves and net domestic assets was to be adjusted by 100 percent of the revenue deviation in the first quarter of the implementation of the program; 75 percent of the revenue deviation in the second quarter; 50 percent in the third quarter and 25 percent in the fourth quarter. 100 percent adjustments were to be made to performance criteria for oil prices higher than $14. Adjustments for deviation for oil prices lower than $9 per barrel had no cap in the first 6 months; in the 9 months ending 12/31/87 adjustments to relevant targets and ceilings owing to an oil price lower than $9 per barrel limited to 80 percent of revenue loss in the first quarter; 60 percent in the second quarter; and, 40 percent in the third quarter	50 percent for deviations in the price of copper between 4 cents to 10 cents per pound; 100 percent for deviations above 10 cents per pound. Adjustment for lower copper prices was to be limited to the accumulated balance in the copper stabilization fund	Program entailed an adjustment to performance criteria equivalent to 50 percent for oil price deviation between US$14.50 per barrel to US$16 per barrel; and, 100 percent for deviations above US$16 per barrel; 100 percent for deviations between US$14.50 and US$13 per barrel. Adjustment for lower oil prices was automatic up to an oil price of US$13 per barrel for any two-week period. Reduction in petroleum prices below US13 per barrel was to automatically trigger a consultation with Fund management to consider the restructuring of the program	100 percent of deviations were to be adjusted. Adjustment for lower oil prices and higher international interest rates was to be limited to the equivalent of 49 percent of quota up to 6/30/89; the equivalent of 79 percent of quota up to 9/30/89; the equivalent of 99 percent of quota up to 12/31/89	100 percent of deviations were to be adjusted

1/ Original program for 1989.

2/ Cumulative financing under the oil contingency mechanism was to be covered (a) entirely by the Fund for the initial US$200 million and (b) by banks and the Fund in a 3 to 1 ratio for any amount in excess of US$200 million. In addition to the oil contingency mechanism, the program also included a supplementary capital expenditure contingency mechanism of up to US$500 million for 1987.

In the countries involved, the public finances are heavily dependent on export receipts from one commodity with a price that is subject to considerable volatility (generally, petroleum products). The potential difficulty in program design posed by such volatility is addressed by programming a range of adjustment paths corresponding to a spectrum of possible prices for the key export commodity. The baseline scenario incorporates the amount of external support that is likely to become available during the program period. Adverse exogenous events would be financed within certain limits through a drawdown of reserves, and beyond those limits by additional adjustment. A precondition for the use of these kinds of provisions would thus be the availability of a reasonably strong level of international reserves.

In some respects, these mechanisms are similar to the contingency mechanisms under the CCFF. For example, they incorporate adjustments to performance criteria designed to maintain the original program objectives (after allowing for the effects of the external shocks) and symmetry provisions. In the cases of Trinidad and Tobago, and the Philippines, activation is subject to Executive Board review, whereas in the case of the contingency mechanisms outside the context of the CCFF, activation of the mechanism and adjustment of performance criteria are generally more automatic. 1/ The contingency provisions outside the CCFF generally have a more limited coverage of external variables, and they typically do not contemplate additional external financing from other creditors in the event of adverse developments.

There are also other differences: (a) mechanisms under the CCFF have a threshold while this is not the case under the contingencies with Mexico (1986) and Nigeria; and (b) mechanisms under the CCFF have a deductible amount, while those with Nigeria and Mexico (1986) do not.

1/ In the 1989 extended arrangement for Mexico (EBS/89/91, Supplement 2, 6/6/89), it was indicated that the precise modalities of the adjustment to performance criteria would be examined at the time of the first review. In the subsequent staff paper for the review of the arrangement (EBS/89/78, 9/1/89), changes in the performance criteria resulting from these adjustments were included in the draft decision.

Contingency Financing and the Use of Futures Markets

1. *Introduction*

During the Executive Board meeting on managing financial risks (EBM/88/157, 10/24/87), Directors discussed the relationship between contingency financing and the use of futures markets. In the Chairman's summing up (Buff 88/216, 11/1/89), it was emphasized that the issue of integrating the use of market-related hedging instruments with the use of the CCFF should be investigated further.

This annex discusses the risks relating to the prices of commodities exported or imported by members and to interest rates on members' floating rate debt that could be hedged on futures markets through the two main kinds of market instruments--namely, futures contracts and options. The mode of operation of these instruments is contrasted with the benefits that can be obtained from the operations of the contingency mechanism. The main conclusion is that, although market hedging can reduce external economic risks, it is likely to provide limited protection, and should, therefore, be regarded as a complement to contingency financing.

2. Risks that could be hedged on the futures markets

Until the early 1970s, the types of risks that could be hedged relatively easily on the international futures markets related mainly to primary commodities. Commodity futures go back over a century with established markets covering many food commodities, agricultural raw materials, metals, and petroleum. Futures markets for financial assets started with currency futures in the 1970s, and trading volume in financial futures increased sharply during the 1980s. 1/ Corresponding to futures contracts, there are widely traded options for a variety of agricultural products, metals, and energy products as well as for financial assets, including interest-bearing assets and foreign currencies. 2/

Before noting the main features of market instruments, several general issues concerning futures markets should be noted. First, market hedging can be carried out by a developing country independently of the Fund. However, if market hedging is undertaken by a country that has also requested possible access to contingency financing under the CCFF, the extent of the use of the market instruments may need to be taken into account in measuring deviations from baseline projections.

1/ The face value of Eurodollar contracts, used for hedging interest risks, increased from under \$10 billion in 1982 to around \$100 billion by 1984 and over \$700 billion by mid-1989.

2/ An option gives the holder the right, but does not impose the obligation to buy or sell a commodity or financial asset at a specified price at or until a particular date.

Secondly, unlike contingency financing, which can be accessed only by the national authorities, hedging is open to all participants, public and private alike. What is hedged may depend on who does the hedging. For example, a central bank's main concern may be to hedge against interest rate risks on the country's external floating rate debt; commodity marketing boards may hedge against changes in prices of export commodities; and public or private sector enterprises may hedge against interest rate increases if they rely directly on external funding. An implication of a diversity of institutions undertaking hedging is that it may make the supervision and regulation of hedging activities by national authorities a difficult task.

Thirdly, and related to the second issue, is the sequencing of the use of futures markets. As a country accumulates experience in the use of market instruments, it can enter into and benefit from more complex hedging contracts. In practice, the availability of expertise for using specific instruments may dictate the sequence in which the instruments are used. For instance, central bank staff familiar with forward exchange markets may find it relatively easy to expand their operations to financial futures markets. 1/ This could enable the central bank to use these financial instruments, even though financial instruments may be regarded as somewhat more complex than commodity futures. The World Bank has found that, in the countries where hedging has been successfully undertaken, it is the country's central bank that has taken the lead in hedging the external debt.

A final issue concerns the fact that the markets for hedging are mostly located in industrial countries, and developing country market participants would have to take into account the external variables affecting international transactions and the operations of the futures markets. Exchange rate changes, for instance, could exercise a very significant impact on the outcome of any hedging activity.

The extent to which futures markets can be used for hedging by developing countries would also be governed by the following factors: (1) In the case of commodities, contracts traded in the futures markets are for quite specific commodities and grades. Countries producing different grades can still benefit from the use of futures, as in many cases price differentials among different grades are relatively stable, but the less stability in these differentials, the less the benefits from hedging. (2) Despite the extensive range of commodities for which there are futures and options markets, there are a large number of commodities that have no such markets, or for which the markets are very thin. The relative depth of markets would be an important consideration in deciding to use market hedging on any significant scale. (3) For both commodities and assets, the period over which price risks can be hedged may be quite

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1/ For a succinct discussion of the financial futures for hedging interest rate risk, see K. Chandrasekhar and L. Seigel, "Interest Rate Hedging Tools," Mimeograph (World Bank, September 1987).

limited--for commodities, generally not exceeding one year or so, and for several financial assets, less than three months. 1/

3. Hedging using futures markets

a. Mode of operation

The two main ways of hedging are through futures contracts and through options. This section notes the salient features of the operations of futures markets. It is followed by a discussion of the options markets. 2/

Under a futures contract, a party agrees to deliver or receive a standardized quantity and quality of a commodity or financial asset, at a stated price, and at a specified future date. Futures contracts are traded for a wide variety of commodities and assets on many different exchanges located in various cities around the world. The objective, and the benefit, of a futures contract is to eliminate the uncertainty stemming from price fluctuations. There are four fundamental aspects of futures operations:

(1) The institution or individual undertaking hedging offsets either an anticipated future transaction in the spot market or a current position with an equal but opposite transaction in futures. Thus, the hedger reduces the risks associated with price changes.

(2) Hedging should only be considered if the futures-implied price is desirable. The relevant criterion is not whether the futures-implied cash price is attractive relative to the current cash price, but rather whether it is attractive relative to the current cost of production or to the expected future cash price.

(3) A hedge should only be maintained as long as the implied price protection is deemed necessary or desirable.

(4) Hedging does not remove uncertainty completely; in the case of commodities, for instance, there is still "basis-price" uncertainty. (The basis is the difference between a futures price and the

1/ In many cases, a number of contracts can be "stacked" to hedge for a period considerably longer than the hedge provided by an individual contract. For instance, although a Eurodollar contract has a maturity of under three months, four contracts can be "stacked" to obtain a hedge for a year. However, this type of stacking procedure may not always be possible.

2/ For a detailed discussion of the operations of the futures and options markets, see Mathieson, D. J., et. al (1989) Managing Financial Risks in Indebted Developing Countries, Occasional Paper 65, IMF, June 1989. This paper also discusses the use of options-related instruments such as interest rate caps for hedging interest rate risks.

cash price of the underlying commodity or asset involved. For instance, even as a contract approaches maturity date, the cash and futures prices may differ because of the difference in delivery points.) But this basis-price uncertainty is far smaller than the outright price uncertainty in an unhedged position.

It is worth emphasizing that by using futures contracts to reduce price uncertainty, the hedger may forego the possibility of benefiting from a favorable price change. 1/ This symmetry in the operations of futures markets--reducing the effects of unfavorable developments but also foregoing the benefits of favorable ones--could be one of the reasons why institutions in developing countries, public or private, have been reluctant to use futures markets.

b. Costs involved in using the futures markets

The costs involved in using futures contracts to hedge against price uncertainty can be divided into the following categories:

(1) Brokerage and administrative fees

This is probably the smallest element of the cost of operating on the markets. To give an illustration: To buy and sell one Eurodollar futures contract with a face value of US$1 million would cost approximately $25. It should be noted, however, that moderate as they are, commission costs can mount with volume.

(2) The cost of operating on the market

In the case of futures markets, money has to be deposited with brokers before transactions begin. These deposits, termed "margins", are usually equal to 5-10 percent of the contract value. Commodity exchanges set minimum margin requirements for each of their contracts, but many brokerage houses frequently require higher margin contracts. In general, users of the market are required to allocate around three to five times the minimum margin requirements to reduce the chances of experiencing a severe loss. Although meeting the margin requirements seldom implies lost interest income, for many institutions and individuals the cash flow requirements of posting margins could be an important consideration in their decision on whether or not to use the futures markets.

1/ This assumes that the hedge is not lifted until the contract matures.

(3) Cost of resources required to monitor market developments

A third cost concerns the cost of resources required to monitor developments in the relevant futures markets, and more generally, to manage the futures portfolio. While day-to-day management can be undertaken by brokerage firms, it would still be prudent for a participant to monitor and review developments in markets frequently. In some cases it may take considerable time before the necessary expertise is established to monitor these developments.

(4) "Risk premium"

The final element of cost is the so-called "risk premium," which may have to be paid to obtain insurance via the markets. In broad terms, it is the cost of shifting the risks of commodity or asset price volatility from the hedger to the speculator. 1/ This cost would be zero if the futures price at any given time is equal to the expected spot price at the time of maturity of the contract. 2/ Empirical evidence suggests that in certain markets the cost is indeed close to zero, but that in others, especially in markets where the volume of trading is limited, the cost can be considerable. How high this cost is may dictate whether or not it is desirable to use the futures markets.

4. Options markets

An option gives the holder the right, but does not impose the obligation, to buy or sell a commodity or financial asset at a specified price (the "strike price") at or until a particular date (the expiration date). The use of options is equivalent to buying an insurance policy against adverse price developments. As with an insurance policy, a premium has to be paid up front to obtain the insurance. If the adverse developments do not materialize, the option is not exercised and the premium paid for the option is forfeited. If adverse developments do materialize, however, the benefit from the option can be considerable.

There are two basic types of option. A "call" option gives the buyer the right to buy a particular good or asset, while a "put" option gives the holder the right to sell. An option would be purchased in anticipation of its being advantageous to exercise the option (to carry out the purchase or sale of the option to which the holder is entitled) at or before its expiration date.

1/ Both hedgers and speculators are assumed to be risk averse.

2/ This assumes that there is no market failure, that is, the futures prices incorporate all available information efficiently. If this is not the case, then even if there is no risk premium (for instance, because both hedgers and speculators are risk neutral), there will be an efficiency cost to using the market.

As the option gives the holder the right but not the obligation to trade, it potentially offers an asymmetrical risk/reward profile. The holder's maximum possible loss is equal to the premium paid for the option. In the case of a call option, the maximum loss would occur if the strike price is above the prevailing price of the underlying asset or commodity on an option held until expiration. On the other hand, the profit would be greater the lower the strike price relative to the price of the underlying asset or commodity. Similarly, in the case of a put option, the maximum loss is limited to the premium paid and the profit would be greater the higher the strike price is relative to the price of the underlying asset or commodity.

Options on several financial assets, including interest-bearing assets, foreign currencies, and stocks and stock indices, are widely traded. *Futures options--options to buy or sell futures contracts* in commodities or financial assets--are also widely traded. There are also options to buy or sell commodities directly, but these are less common on organized markets. Many options, like all futures contracts, are exchange traded and have the advantage of standardized contracts, strike prices, and expiration dates, as well as trading procedures. This standardization brings with it the benefits of liquidity and price competition. Some options, however, are traded over-the-counter (OTC) and, rather than being standardized, can be tailored to the needs of the individual hedger. To tailor options to individual needs would, of course, add to the cost of hedging.

The modus operandi of options operations can be summarized as follows:

(1) For any producer of a commodity, use of a put option can eliminate the risks of a price fall; the producer can still benefit from an increase in price. Similarly, an importer can use a call option to eliminate the risks of price rise.

(2) Options should only be considered if the strike price is attractive relative to the risks of adverse developments.

(3) Options for a large number of commodities or assets may be exercised at any time until they expire. (These are the so-called "American" options. The "European" options may be exercised only at the time they expire).

As for futures contracts, the costs of using options include the commission fees, costs of resources required to monitor market developments, and in addition, the premium fee. 1/ The premium is paid up front, and can be quite substantial and dwarf the other two costs. It is

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1/ It might be noted that this premium fee is quite distinct from the costs due to "risk premium" noted earlier. These costs are equally applicable in the case of options.

perhaps these premia which explain why institutions and individuals in developing countries have made so little use of options. Indeed, despite the attractive feature of options, which allows for asymmetric risks/reward profile, it appears that to the extent that developing countries have used market instruments, they have used futures contracts.

5. Contingency financing and market instruments

In very broad terms, both contingency financing and the use of market hedging instruments may serve a similar purpose--that is, to reduce the risks that adverse external economic shocks disrupt adjustment efforts. It is important, however, to note the differences between the two. The main difference is that under the CCFF, the effect of unexpected price volatility is reduced through additional financing from the Fund and other creditors together with additional adjustment, while under market hedging, the uncertainty of price volatility itself is reduced. A second difference is that while in the case of contingency mechanism favorable external developments benefit a member, in the case of hedging through futures contracts the hedger foregoes the possibility of a windfall gain in order to avoid the possibility of an unexpected loss. 1/ In the case of hedging via options, the potential for such a gain is not ruled out, but this potential has to be offset against the substantial premia that have to be paid up front. A third difference is that, while contingency mechanisms and hedging both require baseline projections to be made as to the future outcome, it is only in the case of the contingency mechanism that the Fund staff and authorities would be involved. Fourthly, as the futures and options markets are volatile, the precise time at which the market hedge is placed can have a critical bearing on the eventual benefit that the hedgers can derive. Timing is, of course, not irrelevant to the contingency mechanism, but the outcome is generally not as sensitive as it is in the case of hedging.

Despite the above differences, there can be a wide range in the overlap between the contingency facility and the use of market mechanisms for hedging. Fund arrangements, to the extent possible, may incorporate market mechanisms to hedge against an uncertain future, and to that extent this would be taken into account in any design of the contingency mechanism. Similarly, if a country is already using markets to hedge a substantial portion of its external debt, it may not be appropriate to include interest rates in the contingency. The program itself, however, may have to take into account the cash flow implications of the hedging activity.

1/ This, of course, assumes that the hedger is not "active"--that is, the hedge is not lifted before the contract matures.

Overcompensation Between Compensatory and Contingency Elements

During the discussions leading to the establishment of the CCFF one Executive Director noted that, in addition to providing for an adjustment to avoid double compensation across the compensatory and contingency elements, it may also be appropriate to require an adjustment for any overcompensation of a compensatory purchase arising on account of baseline projections subsequently established for the contingency element. More specifically, when baseline projections established for a contingency mechanism overlap with the post-shortfall projection period of a previous compensatory purchase, it is conceivable that the use of new baseline projections may indicate that the compensatory purchase had been overcompensated or undercompensated. As present procedures for avoiding overcompensation or undercompensation require that subsequently there be an actual compensatory purchase rather than just a change in projections, the contingency mechanism would also need to be activated in order for an adjustment to be made in respect of overcompensation or undercompensation in a previous compensatory purchase.

As the adjustment in the case of successive compensatory purchases also allows for an increase in compensation if the previous purchase is found to be undercompensated, it might also be appropriate to allow for an increase in the contingency purchase to the extent that the previous compensatory purchase was found to have been undercompensated as a result of the projections underlying the contingency purchase. However, in considering whether to allow for an adjustment to avoid overcompensation across the two elements of the facility, Directors may wish to bear in mind that over time this mixing of the two elements may reduce the effective amount available for contingency financing, and therefore the financial protection that the Fund can offer in support of the member's adjustment effort.

Depending on how exports are developing in the post-shortfall years relative to projections, members might be unwilling to incorporate a contingency mechanism in an arrangement if they expect a large part of any contingency purchase to be reduced on account of earlier overcompensation of a compensatory purchase. Of course, it could be argued that if the issue of overcompensation arises and the member has already received financing to which it was not really entitled, it would be appropriate, one or two years down the road, for that member to forego financing which at that time may be warranted by events. However, such a consideration might be of little consolation to a member facing an immediate balance of payments need resulting from an external contingency.

The staff will monitor CCFF cases closely to determine whether this issue gives rise to operational problems that may warrant a change in procedures.