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Friedman UNCTAD Files – Geneva Meeting on Supp. Finance / Staff papers Feb., 1967

Mr. Sarma

February 3, 1967

Bela Balassa

Supplementary Finance & Compensatory Finance

I read your note of January 11th and Fleming's reply of January 18th. It seems to me that Fleming's purpose is to briefly restate his views on the differences between the compensatory and the supplementary financing schemes and on the difficulties of negotiating a balance-of-payment policy package under the latter. I would object to his statement that "the supplementary financing scheme is conceived in terms of discontinuous revision of plans" since the scheme in fact tries to help countries to carry out their medium-term plans and to avoid a downward revision of targets. Also, the formulation restricting the policy package to policies relating to the balance-of-payments is overly narrow; under the scheme the Agency would review policies designed to implement the plan. As regards Fund's role in carrying out the supplementary finance scheme, I am not sufficiently familiar with earlier discussions on the subject to be able to offer suggestions on Fleming's statements.

Concerning your own note, I am puzzled by the statement that "supplementary finance is viewed as part of basic finance." Both the compensatory and supplementary finance schemes provide ex post assistance to help the country in balance-of-payments difficulties. As I see it, the main differences between them lie in the methods used to determine eligibility (deviations from trends vs deviations from projected values), in the time-span of the two schemes, and in the rules on repayment.

BBalassa/pam

cc: Mr. Friedman
Mr. Kamarck

Form No. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman

DATE: January 17, 1967

FROM: Bela Balassa

SUBJECT: Comments on Papers Relating to the Supplementary Financing Schemes

Commodity Projection Work

I read an earlier draft of this paper and have few comments to make on the revised version. It appears desirable to delete the paragraph immediately following the subtitle on p. 4 which is rather unclear and in part inaccurate. Also, a few words may be changed here and there in the text.

But the major problem is the link between commodity and country projections. Inasmuch as the projections used in the study on the Supplementary Finance Scheme have been based on country projections, the latter are of especial interest. My suggestion would be to add a short section of 2 - 3 pages to indicate the use of commodity projections in the country studies and retitle the paper accordingly. A possible title may be "Export Projections at the World Bank".

Unexpected Changes in Import Prices

While I find little to quarrel with the conclusions of this paper, its methodology is open to objections on several grounds. Accordingly, the paper requires extensive revisions.

On p. 4 we read that "one alternative /for measuring deviations from the trend/ was to define the trend as a linear or log linear curve that fitted most closely all the data for each country or area for the entire period 1954-1965". This alternative was subsequently rejected because, in most instances the results were not statistically significant. It was then suggested that, "a more realistic alternative ... was to use as the 'trend' whatever smooth curve showed the closest fit to the annual data." (p. 5). But, by increasing the terms of the regression equation, the deviations are automatically reduced, and the use of a third degree curve should be predicated on its economic meaning rather than the closeness of the fit.

The basic error seems to be in the choice of a period which is 2 - 3 times longer than the average period of projection. My suggestion would be to make calculations for 4 or 5 years instead. At the same time, it is questionable that one would project constant import prices for 4 - 5 years ahead as was done in the second exercise. (p. 8). Rather, it appears reasonable that the planners would assume the continuation of past trends in import prices. Correspondingly, one may calculate the average change in prices over a five year period and extrapolate the results for the next five years. These calculations can be repeated for several 5-year periods -- data for 1954-1959 would provide the projected trend for 1959-1963, 1955-1959 for 1960-1964, etc. -- and the deviations from the trends calculated.

It should further be emphasized that data on the prices (actually, unit values) of imports into developing countries are highly unreliable and this fact will tend to magnify the deviations from the trend. I suggest therefore that a second calculation be made by replacing these data with a weighted average of world export prices, the weights being the composition of imports into the individual countries. In the paper, the average world prices of manufactured goods have been used in supplementary calculations but this will hardly suffice since many developing countries also import petroleum and other primary products which are subject to larger price fluctuations than are manufactured goods. The commodity composition of imports, then, provides a clue to possible deviations of import prices from a projected trend in the individual countries.

The Contribution of 'Invisibles' to Foreign Exchange Earnings

This paper presents much interesting information but it could be improved through a more careful presentation and analysis of the results. For example, ~~total receipts from invisibles averaged 17 percent of current account receipts rather than 19.4 percent as indicated in the text.~~ (p. 3). ~~Also,~~ Table IV has little usefulness in its present form while in Table III it would be necessary to indicate all cases where receipts are reported on a net rather than on a gross basis. Neither is it clear what is meant by the statement that receipts from travel are "usually significant" (p. 4) when for 14 countries travel accounted for less than 1 percent of current account receipts and in the majority of cases it was under 3 percent.

Furthermore, in addition to calculating the average growth of service earnings for the 44 developing countries under consideration, and the deviations therefrom, it would be desirable to provide such data on a country-by-country basis. The averages have been greatly influenced by special cases (chiefly Mexico, Panama, Israel, Jordan, and Korea) and may not be representative of the group developing countries as a whole. It would also be appropriate to give an explanation for the special cases (U.S. military spending in Korea, gifts from the world's Jewry to Israel, etc.)

BBalassa/pam

"UNEXPECTED" CHANGES IN IMPORT PRICES

The record of post-war international discussions of the problem arising from instability in the foreign trade of developing countries will show that the focus of attention with regard to prices has been largely on the export side; but the question of prices of imports has not been neglected. The UNCTAD resolution concerning supplementary finance concentrated on finding solutions to the problem of the uncertainty of export earnings. The resolution also asked that import prices be kept in mind as a potential source of disruption of development programs.

In considering this matter the IBRD Report on Supplementary Financial Measures called attention to the difficulties, in practice, of measuring changes in import prices within a reasonable margin of error. The report went on to say that the problem is particularly acute with respect to measuring changes in prices of capital goods, a category which bulks large in the total import bill of developing countries.

The report, however, took no definitive position on the issue of import prices, although it did note that movements in the weighted index of import prices of all developing countries had not been such as to significantly affect the order of magnitude of the estimated financial cost of the Scheme outlined in the report.

In response to further inquiries on the subject during the April, 1966 meeting of the Committee on Invisibles and Finance, additional empirical investigation was undertaken, based on available indexes published in the UN Statistical Yearbook and the Monthly Bulletin of Statistics.

For this purpose, import price indexes for 26 developing countries or areas and weighted indexes relating to five regional groupings of such countries were used. No attempt was made to examine the validity of the indexes themselves; this would necessarily involve a separate major operation. The existing indexes may be considered as relevant, however, inasmuch as they presumably would serve as the basis for any operations involving import price adjustments that might be undertaken under the Scheme in its initial period.

To be consistent with the export portion of the Scheme and with the Scheme's purpose of preventing disruption of soundly conceived development plans, any allowance for changes in import prices would only take into account "unexpected" changes in import prices, and would ignore predicted changes. The object of this investigation was to shed some light on what might be the amplitude of such "unexpected" changes, and in particular, adverse changes in the import prices of developing countries. While no definitive answers could be expected from this study, it was hoped that the results might provide some evidence as to whether fluctuations in import prices might be of such amplitude as to reduce significantly the real value of transfers made under the proposed Scheme, or otherwise substantially to impair the Scheme's objectives.

Ideally, it would have been desirable to compare quantitative projections of import prices made in past years with the subsequent course of import prices actually experienced by the individual countries. The difference between the two sets of data would then have provided a direct indication of the possible magnitude of unexpected fluctuations, on the

basis of the particular periods observed. Such projections, however, are not available and in their absence any direct investigation of the problem in question requires devising arbitrary definitions of what a forecaster might have expected or projected in past years. Such a procedure clearly leaves much to be desired, since it is impossible to determine at this date what a group of economists would have projected in 1960 or earlier if they had been asked to forecast the development of import prices ~~(for twenty-six~~ individual developing countries in the light of the information then available regarding past developments and experience and whatever was then known about the future import requirements and other relevant factors pertaining to each country. Even if there were plentiful documentation on the information ~~that~~ was available to such a group in 1960 or earlier, one could not be certain how that group would have interpreted that information at that time.~~)~~ However, rather than do nothing at all, it was decided to set up two exercies so as to obtain a range of estimates based upon specific but nevertheless arbitrary assumptions as to the methods and accuracy of such forecasts.

The first exercise was designed to obtain some idea of the minimum possible size of the problem of import price deviations. This study was devised to determine whether the year to year fluctuations in import prices were of sufficient amplitude so as substantially to impair the Scheme's objectives even if forecasters had been successful in predicting the overall trend in such prices. The assumption was made that trend values of import prices had been forecast correctly, and that "unexpected" changes were annual deviations from trend. The average annual percentage deviations

of the available indexes (twenty-six for individual countries and five for regional groupings) from their respective trends were then computed.

The average annual percentage fluctuations from trend of the available indexes of export unit values of manufactured goods were also measured. For this purpose, indexes relating to the exports of manufactured products from the major developed exporting countries were used.

The period used for the exercise was 1954 to 1965 or the latest available year. Years earlier than 1954 were excluded because of the great number of discontinuities and inconsistencies in the data for most countries for those years. A number of countries had to be excluded because data on their import unit values ceased to be reported some time ago and sufficient data were not available for statistical analysis.

In deciding how to measure the percentage deviations from trend a choice had to be made as to how to define "trend". One alternative was to define the trend as a linear or log-linear curve that fitted most closely all the data for each country or area for the entire period 1954-1965. On attempting this, however, it was found that in almost every case the results were statistically non-significant, i.e. that the "fit" was well below the usual standard of acceptability. Measuring deviations from such a curve, therefore, would have tended to exaggerate the situation. Indeed, in the context of the discussions on supplementary financing, the exaggeration would have been all the more inappropriate since they would have reflected an underlying assumption that for practical purposes import price projections would be made for ten or eleven years ahead and would not be subject to adjustments for that entire period.

A more realistic alternative method, it was felt, was to use as the "trend" whatever smooth curve showed the closest fit to the annual data. The results of this method tend to understate the extent of the variations, but it was believed that such understatement was considerably less serious in degree than the degree of exaggeration that would have resulted from the first method described. This procedure also would seem to correspond more faithfully to the practical problems being dealt with and to probable practice in the administration of the Scheme. In effect it assumes: (a) that projections would be made for shorter periods than ten or eleven years (and indeed we have been speaking of projections for no more than five-year periods) and (b) that such projections might be subject to revision and/or need not necessarily be entirely linear or log-linear. The procedure adopted also has the advantage of approximating the results that would be obtained on the implicit assumption that we were measuring deviations from trend for every possible combination of medium-term periods during the period 1954-1965.

The principal element of understatement inherent in this procedure lies in the implicit assumption (which is required by the exercise in some form but not necessarily in the precise form subsumed in our particular approach) that the medium-term trend (as measured post-facto) would have been forecast accurately whatever its shape.

Table 1 presents the results of computing the annual average percentage deviations from trend in the import price indexes. It also shows the form of the equation used for each country or area in finding the trend curve that yielded the best fit to the data.[1/] As already mentioned, it will

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1/ In the case of the data for Malaya and Ceylon, however, even the best fitting curve was a poor one in terms of statistical significance, but the results were included anyway.

be noted that in only one case, that of Argentina, did the best fitting curve correspond to a log-linear trend line and in only five cases (out of the 31 shown) did the best fitting curve correspond to a linear trend line. In the other cases, either a parabolic or third degree curve was obtained.

As might be expected, the percentage deviations from trend are greater in the case of individual countries than for the regional groupings. Turning only to the results for individual countries, which are those of chief interest, it will be noted that the entire range of average deviations extends only from about 1/2% per year to less than 5% per year.[1/] However, the average deviation in the typical case for this group of countries was less than 2% per year and for over 80% of the countries listed the average deviation in import prices was less than 3% per year. The following table shows the distribution of countries in terms of the average annual deviation in their import prices from the projected values:

Average annual percentage deviation	0 to 0.99	1.00 to 1.99	2.00 to 2.99	3.00 to 3.99	4.00 to 4.99
Number of countries in class interval:	7	10	5	2	2
Countries in class interval as proportion of total:	27%	38%	19%	8%	8%

1/ In computing this average, a positive deviation of 1% and a negative deviation of 1% do not cancel each other, but are instead counted as two deviations of 1%.

The above findings were consistent with the magnitude of fluctuations in the unit value of manufactures exported by the developed countries. These were computed in the same fashion as those shown in Table 1 and are presented in Table 2. It will be noted that the export unit values of manufactured products fluctuated even more narrowly than the import unit prices of the developing countries. The difference undoubtedly can be attributed in part to the fact that the latter include primary commodities as well as manufactured goods.

To obtain confirmation of the general impression created by these findings, the annual percentage deviations of the price indexes from the fitted trend indexes of each of the 26 countries were also examined. This procedure yielded the results shown in Table 3. Table 3 indicates that, for all the countries shown, almost 70% of the deviations in import prices, regardless of direction, were less than 3%, and over 90% of the deviations were under 5%. Only 4% of the observations were adverse fluctuations, i.e. changes having a positive sign, of greater than 5%, and only 1% were adverse fluctuations greater than 8%.

It seems clear from the foregoing evidence that for the developing countries the year to year fluctuations in import prices from the overall trend in such prices were not of sufficient magnitude as to pose a major problem with regard to the effectiveness of the proposed Supplementary Financing Scheme. Any difficulties would come from deviations of the actual trend from the predicted trend rather than from year to year fluctuations about the trend.

The foregoing estimates relate largely to the probable minimum differences that might develop between reasonable expectations and subsequent

individual specialists who are versed in the basic analytical techniques, have an intimate and up to date knowledge of all economically significant aspects of individual commodities, and are sufficient in numerical strength to permit a high degree of individual specialization (adequate clerical and data processing support is subsumed). In addition to enabling better anticipation of future significant structural changes, this approach also makes possible the necessary continuous review of existing projections.

actual events. As was stated previously, attempting to obtain some idea of the most probable differences or the probable maximum differences was conceptually difficult due to the impossibility of reconstructing what forecasters would have considered to be reasonable expectations for import prices for given countries had they made such projections five years earlier. An overestimate of the size of probable differences can be obtained by assuming that no attempt is made to forecast a trend, and that in each case it was assumed that import prices would remain constant for five years at the level of the year prior to the projection period. Strictly speaking, this is not a maximum estimate of possible errors in forecasting since it is conceivable, for example, that more trends would be predicted in the wrong direction than in the correct direction. Nevertheless, it is reasonable to assume that competent forecasters, familiar with the economic forces at work in individual countries and the world as a whole, would be able to predict import prices more accurately than achieved by the assumption that they will remain constant.

An examination was made of the import price indexes for the years 1959-1963 for the 22 countries included in the previous exercise, for which the data for all years were available. In this case "unexpected" changes were defined as deviations from the price levels prevalent in 1958. The following table shows the distribution of countries in terms of the average annual variation in their import prices:

Average annual percentage deviation	0 to 0.99	1 to 1.99	2 to 2.99	3 to 3.99	4 to 4.99	5 to 5.99	6 to 6.99	7 to 7.99	8 to 8.99	--	14 to 14.99
Number of countries in class interval:	-	3	2	5	3	2	2	3	1	--	1
Countries in class interval as proportion of total:		14%	9%	23%	14%	9%	9%	14%	4%	--	4%

As would be expected, the range and typical magnitude of the average deviation in country import price indexes from the 1958 level are much greater than were observed for deviations from the fitted trend. In the previous exercise the range was from 0.46% to 4.72%, with 80% of the countries having average deviations of under 3%. In the present exercise, one country had an average deviation of 14.2%, and 40% of the countries had average deviations greater than 5%. The annual deviations of price indexes from the 1958 level as shown in Table 4 are summarized below, and compared with the annual deviations from the fitted trend.

Size of Deviation	Percent of Annual Deviations	
	From the Fitted Trend Line	From the 1958 Level
Less than 3%	79%	32%
Less than 5%	93%	64%
Adverse deviation greater than 5%	4%	17%
Adverse deviation greater than 8%	1%	9%

Any conclusions drawn from the two exercises described above must be tentative for several reasons. In the first place there is no guarantee that import prices will behave in a particular future period in a manner similar to their behavior in a particular period in the past. Secondly, the validity of the import price indexes themselves is subject to doubt, especially with regard to taking proper account of qualitative

improvements. And finally, the impossibility of reconstructing what forecasts would have been made for import prices forced us to make various arbitrary assumptions. However, the above data would lead us to expect that depending upon the ability of those who were forecasting import prices, the majority of annual deviations from predicted values would probably be under 5%, and could perhaps be under 3%. Nevertheless, in spite of good performance on the part of those forecasting import prices, there could be a few countries which would experience unexpected adverse changes in import price levels of significant magnitude. What should be done to alleviate the problems of these countries cannot be determined by a statistical exercise, but instead requires a pragmatic consideration of the problems and delays in the implementation of the Scheme which would be caused by the attempt to include allowance for movements in import prices, ~~and of the alternative facilities available to meet the problems caused by such changes in import prices.~~

"UNEXPECTED CHANGES IN IMPORT PRICES

The attached study was undertaken in response to a request made during the April 1966 meeting of the UNCTAD Committee on Invisibles and Finance that the Bank investigate the impact on the Scheme of fluctuations in import prices. Compliance with this request was difficult since the proper performance of this study would require a history of prior predictions of import prices which could be compared with actual results. In the absence of such data, various arbitrary assumptions had to be made, and, therefore, any conclusions drawn from this study can only be tentative.

The data included below would seem to indicate that the year to year fluctuations in import prices from the overall trend in such prices were not of sufficient magnitude as to pose a major problem with regard to the effectiveness of the proposed Supplementary Finance Scheme. Any difficulties would come from deviations of the actual trend from the predicted trend rather than from year to year fluctuations about the trend. While the majority of annual deviations from predicted values would probably be small, there could be a few countries which would experience unexpected changes in import prices of significant magnitude. What should be done to alleviate the problems of these countries cannot be determined by a statistical exercise, but instead requires a pragmatic consideration of some of the following questions:

1) If import prices were to be considered in the Scheme:

a) Would the Scheme use import price adjustments for the total amounts of exports or only for the shortfall amounts?

b) Are import price indexes sufficiently reliable so as to provide a reasonable basis for inclusion in the Scheme?

c) Would actual import price data be available at the time when an export shortfall became apparent?

d) Would an attempt to include import prices at the initial stage of the Scheme delay significantly the implementation of the Scheme?

2) What facilities other than the Scheme are available to meet the problem?

Table 1

Import unit prices of selected areas and countries: average annual percentage deviation from trend, 1954-1965.

Country or area	Form of equation used for computation	Average deviation from trend in percent
Morocco	$y = a + bt + ct^2$	3.64
Cyprus	$y = a - bt - ct^2 + gt^3$	1.05
India	$y = a - bt - ct^2 + gt^3$	1.99
Malaya	$y = a + bt + ct^2 - gt^3$	2.62
Taiwan	$y = a - bt - ct^2 + gt^3$	1.49
Viet-Nam	$y = a - bt$	2.84
Ghana	$y = a + bt - ct^2 - gt^3$	1.56
Nigeria	$y = a + bt + ct^2$	1.37
Argentina	$\log y = a - bt$	0.66
Brazil	$y = a - bt + ct^2 + gt^3$	4.36
Chile	$y = a - bt - bt^2$	1.65
Colombia	$y = a - bt - ct^2$	0.90
El Salvador	$y = a - bt - ct^2 + gt^3$	1.31
Ceylon	$y = a - bt + ct^2 + gt^3$	3.00
Pakistan	$y = a + bt - ct^2$	1.45
Philippines	$y = a + bt + ct^2$	0.76
Thailand	$y = a - bt - ct^2$	1.51
Jamaica	$y = a + bt - ct^2 + gt^3$	2.65
Mauritius	$y = a - bt - ct^2 + gt^3$	0.95
Fed. of Rhodesia and Nyasaland	$y = a + bt$	1.13
Peru	$y = a + bt + ct^2 - gt^3$	0.80
Malta	$y = a + bt$	4.72
Angola	$y = a + bt - ct^2$	0.95
Portuguese Guinea	$y = a - bt$	2.83
Sao Tome and Principe	$\log y = a - bt$	0.46
Trinidad and Tobago	$y = a + bt - ct^2 - gt^3$	2.40
Developing countries	$y = a - bt - ct^2 + gt^3$	0.69
Africa	$y = a - bt - ct^2 + gt^3$	1.17
Latin America	$y = a - bt - ct^2 + gt^3$	0.52
Asia	$y = a - bt + ct^2$	1.10
Middle East	$y = a - bt - ct^2 + gt^3$	1.37

Table 2.

Export unit prices of selected countries: average annual percentage deviation from trend, 1954-65.

Country or area	Form of equation used in computation	Average deviation from trend in percent
Weighted index for countries below	$y = a + bt - ct^2 + gt^3$	0.62
U.S.A.	$y = a + bt - ct^2$	0.61
Fed. of Germany	$\log y = a + bt$	0.24
U.K.	$y = a + bt - ct^2$	0.74
France	$y = a - bt - ct^2 + gt^3$	1.58
Japan	$\log y = a - bt$	0.39
Belgium-Luxembourg	$y = a - bt - ct^2 + gt^3$	0.86
Canada	$y = a - bt - ct^2 + gt^3$	1.22
Italy	$y = a - bt + ct^2$	2.06
Netherlands	$y = a + bt$	1.03
Switzerland	$y = a + bt + ct^2$	0.85
Sweden	$y = a + bt - ct^2 + gt^3$	0.64

Table 3

Annual Percentage Deviations in Import Unit Prices from Fitted Trend, by Country and Magnitude, 1954-1965

Country	0 to .99		1.00 to 1.99		2.00 to 2.99		3.00 to 3.99		4.00 to 4.99		5.00 to 5.99		6.00 to 6.99		7.00 to 7.99		Over 8.00 (amount of deviation	
	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
Argentina 1/	3	6	0	1	1	0	0	0	0	0	0	0	0	0	0	0		
Brazil 1/	1	0	1	0	0	0	2	3	1	1	0	0	0	0	0	0	8.2% - 10.31%	
Chile 1/	2	1	4	2	0	1	0	1	0	0	0	0	0	0	0	0		
Colombia 1/	2	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0		
El Salvador 1/	3	2	4	0	0	1	0	0	0	1	0	0	0	0	0	0		
Peru 2/	5	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0		
Ceylon 1/	0	2	2	0	0	4	1	0	0	0	0	0	0	1	0	0	8.8%	
India	4	0	0	2	1	1	0	0	1	0	2	0	0	1	0	0		
Malaya	4	0	1	2	0	0	0	1	1	2	0	0	0	0	1	0		
Pakistan 1/	2	3	2	1	0	1	0	1	1	0	0	0	0	0	0	0		
Philippines 1/	4	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0		
Taiwan	0	5	2	1	1	2	1	0	0	0	0	0	0	0	0	0		
Thailand 1/	0	2	2	4	2	1	0	0	0	0	0	0	0	0	0	0		
Viet Nam (Republic)	2	1	1	0	1	1	2	0	0	1	1	2	0	0	0	0		
Ghana 1/	3	0	2	3	1	0	0	1	0	0	0	0	0	0	0	0		
Morocco	0	1	0	2	1	1	1	0	2	1	1	2	0	0	0	0		
Nigeria 1/	2	2	3	1	0	1	1	1	0	0	0	0	0	0	0	0		
S. Rhodesia, Zambia Malawi 2/	2	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0		
Angola 3/	3	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0		
Portuguese Guinea 3/	0	1	1	0	1	2	0	0	0	1	1	0	0	0	0	0		
Sao Tome and Principe 3/	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cyprus	4	2	1	4	0	0	1	0	0	0	0	0	0	0	0	0		
Jamaica 1/	3	1	0	2	0	0	2	1	0	0	1	0	0	0	0	1		
Malta 2/	0	2	0	2	2	0	0	0	1	1	0	0	0	0	0	0	11.4% - 18.40%	
Mauritius 2/	4	3	0	1	1	1	0	0	0	0	0	0	0	0	0	0		
Trinidad and Tobago 3/	1	1	2	0	0	1	0	0	1	0	0	1	0	0	0	0		
Totals	56	54	38	37	12	18	11	9	8	8	6	5	0	2	1	1	3	2
Percent of total observations																		
Percent of total observation	21	20	14	14	4	7	4	3	3	3	2	2	0	1	0	0	1	1

1/ 1965 not available 2/ 1964 & 1965 not available 3/ 1961-1965 not available

Table 4

Annual Percentage Deviations in Import Unit Prices from 1958 Levels by Country and Magnitude, 1959 - 1963

	-9% through -11%	-6% through - 8%	-3% through -5%	2% through -2%	3% through 5%	6% through 8%	9% through 11%	12% through 15%	16% through 20%	Average Annual Deviation
Argentina	-	3	2	-	-	-	-	-	-	6.2
Brazil	-	1	1	-	1	-	1	1	-	7.4
Chile	1	2	1	1	-	-	-	-	-	5.6
Colombia	-	-	1	4	-	-	-	-	-	1.4
El Salvador	-	1	-	3	1	-	-	-	-	2.2
Peru	-	-	-	1	3	1	-	-	-	4.6
Ceylon	-	-	-	3	1	-	1	-	-	3.0
India	-	2	1	2	-	-	-	-	-	3.8
Malaya	-	-	1	4	-	-	-	-	-	1.6
Pakistan	-	-	1	4	-	-	-	-	-	1.4
Philippines	-	-	-	1	1	2	-	1	-	7.0
Taiwan	1	4	-	-	-	-	-	-	-	7.6
Thailand	-	-	2	3	-	-	-	-	-	2.4
Viet Nam (Republic)	-	2	3	-	-	-	-	-	-	5.4
Ghana	-	-	-	2	1	2	-	-	-	3.2
Morocco	-	-	-	1	-	-	-	1	3	14.2
Nigeria	-	-	-	2	2	1	-	-	-	3.6
S. Rhodesia, Zambia, Malawi	-	-	1	1	2	1	-	-	-	3.2
Cyprus	-	1	3	1	-	-	-	-	-	4.6
Jamaica	-	-	-	2	-	1	-	-	2	8.6
Malta	-	-	1	-	3	1	-	-	-	4.2
Mauritius	-	3	2	-	-	-	-	-	-	6.0
Total	2	19	20	35	15	9	2	3	5	
Percent of Total Observations	2%	17%	18	32%	14%	8%	2%	3%	4%	

THE CONTRIBUTION OF "INVISIBLES" TO FOREIGN EXCHANGE EARNINGS

The purpose of this note is to examine what role "invisibles" play in the aggregate exchange earnings of developing countries, what their composition is and how they have behaved in the past.[1/]

Invisibles are defined to include the following broad categories of transactions and are identified in the balance of payments as formulated by the IMF in the following manner:

Item 3 - Freight and Insurance

This relates to freight received by domestic carriers on shipments to foreign countries as also to freight received for transport of goods between any two foreign countries. Similarly, insurance covers insurance receipts on international shipments.

Item 4 - Other Transportation

This covers receipts from foreigners for services rendered by inland waterways, coastal shipping, railways and airlines, e.g. passenger fares, bunkerage, stevedoring, port dues, etc.

Item 5 - Travel

The main component of this is "tourism" but it also includes receipts from foreign business travelers, students, government officials and other travelers.

Item 6 - Investment Income

Receipts under this head cover transferred income from financial investments abroad and include undistributed earnings of corporate direct investment enterprises, other undistributed dividends as also interest payable but added to principal amounts of outstanding assets.

1/ For purposes of this paper developing areas are defined according to UN practices as Africa, Asia and Latin America, excluding South Africa, Japan, and the centrally-planned economies.

Item 7 - Government Transactions Not Included Elsewhere

Under this head are included domestic expenditures by foreign governments in respect of their diplomatic and military personnel, payments received for services rendered under foreign aid programs, sale proceeds from purchases of real estate by foreign governments, etc.

Item 8 - Other Services

This item comprises a variety of payments received for services such as non-merchandise insurance premia, wages and salaries received by nationals from foreign non-governmental employers, management fees, underwriting commissions, etc.

The above six categories of 'invisibles' are characterized as "services" and constitute, along with merchandise exports and non-monetary gold, the goods and services account of the balance of payments. Quite frequently, the concept of a current account is also used; it includes besides the items referred to above, "private transfers".

Private transfers cover all non-governmental transactions which lack a 'quid pro quo'. They include such receipts as tax refunds received by private nationals, other taxes and fees, pensions and, most importantly, so-called migrants' remittances, besides voluntary contributions received by private persons and institutions.

Statistical Limitations

There are numerous difficulties in assessing the precise contribution of receipts from "invisibles" to a country's foreign exchange earnings. The complexity of the transactions involved despite the formalized classification adopted by the IMF makes reporting difficult. Quite frequently no

breakdown of the various components of "services" is given and in some instances no data whatsoever are available. A less frequent but serious difficulty arises from the fact that figures for the various items are shown on a net basis: this leads to an understatement of "gross receipts" since a credit figure under one head might be net of some payments and a 'debit' figure does not necessarily mean that the country earned nothing whatsoever from that source. A further difficulty stems from the not uncommon practice of combining receipts from more than one source or of including them in the catch-all "other services". For example, earnings from freight and insurance are sometimes included with those from "other transportation" or under "other services".

Analysis of Data

Despite these limitations, the data are sufficiently reliable to reveal what relationship receipts from 'invisibles' bear to total current account earnings and which are the more important items. Data were compiled for 41 developing countries for the period 1956-1963[1/] and the summary results are shown in Annex Table 1. The Table indicates that total receipts from invisibles as a percentage of total current account (exports plus invisibles) for the period were on an average 19.4% for the 41 countries. Earnings from "services" for these countries amounted on average to $3,335 million in the 8 years 1956-1963 and correspond to 20.4% of their earnings from merchandise exports, inclusive of non-monetary gold. If private transfer payments are also taken into account, their average annual receipts from "invisibles" rises to $3,933 million or 24.0% of exports.

1/ The Federation of Rhodesia and Nyasaland comprising the present Malawi, Rhodesia and Zambia is treated as one ~~country~~ area for the period in question.

For the period in question, the data also indicate that the average rate of growth in earnings from invisibles has been greater than that in merchandise exports per se, e.g. during 1956-63 exports rose by 3.4% annually, whereas earnings from invisibles rose by 4.3%. Consequently, the weight of "invisibles" in gross external earnings had risen somewhat: in 1956 they corresponded to about 18.6% of aggregate receipts on current account; by 1963 the proportion had risen to 19.6%.

Except in the recession year 1958, earnings from invisibles displayed a steadily upward trend during the period as a whole. (vide Table II). The most rapid rate of growth among the various sources of earnings from invisibles was in 'private transfers' category, which averaged 9.7% per year during the period. This was followed by receipts from freight (7.0% per year) and travel (5.6% per year).

(being verified) Average annual deviation from trend were of markedly less amplitude in invisibles (3.1% per year) than in merchandise exports (4.5% per year).

The relative contribution of each item in the invisible earnings of each of the 41 countries is summarized in Table III. The picture that emerges is broadly as follows:

"Travel"[1/] is the most important constituent accounting for some 22.3% of aggregate receipts from "invisibles". However, only in the case of Mexico was "travel" of overriding significance, contributing around nine-tenths of aggregate receipts from invisibles. For the rest of the countries studied, the contribution of "travel" to invisibles receipts, though usually significant, was only rarely above 25%.

1/ Source: International Travel Statistics, 1963; International Union of Official Travel Organizations.

"Freight, Insurance and Other Transportation" is the next largest source of income from invisibles in the countries studied. Together they constitute one-fifth of the aggregate earnings from invisibles. For some countries, e.g. Argentina, Ceylon, Chile, U.A.R., receipts from this item were by far the most important in their total receipts from services.

An equally important source of invisible earnings for most countries studied is the catch-all item "other services". It accounted for nearly 20% of the annual invisibles earnings for these countries.

The next largest single source of income is "Government Transactions Not Included Elsewhere". Receipts under this head constituted the most significant item in the aggregate invisible earnings for a few countries, e.g. Korea, Libya, Morocco, Pakistan, Philippines, Thailand.

Investment income receipts form but a relatively minor part of total earnings from invisibles of the less developed countries (LDCs) for the 41 countries studied, such receipts constituting, on average, about 5.9% of their gross earnings from invisibles. Nevertheless, it is significant that they were about the most volatile element in "invisible" earnings; the year-to-year fluctuations in their case being much sharper than in other items of invisibles receipts. Data also indicate that over the period 1956-1963 as a whole, the annual average receipts from this source, in contrast to other items, declined by a small amount for the group of 41 countries taken together.

Private transfers contributed on average about $598 million to the 41 countries in 1956-63 or 15.2% of total invisibles.

The relative importance of all these variables is summed up in Table IV.

Table V shows the relative weights of invisibles in the total current account receipts of the 41 countries ranked according to the share of invisibles in total earnings. In eight of these countries (viz. Morocco, Vietnam, Mexico, Libya, Panama, Israel, Jordan and Korea) average receipts from invisibles over the period 1956-63 were over one-third of their total receipts on current account. For Panama, Israel, Jordan and Korea the contribution of invisibles was over 60%. For Panama and Jordan "other services" were of overriding importance, for Israel "private transfers", and for Korea "Government Transactions not included elsewhere".

However, it is interesting to note that for a majority of these countries (25 out of 41), the average contribution of invisibles over the period 1956-63 to total current account was less than 19.4%, which is the average for all 41 less-developed countries taken together. The average contribution of invisibles to the total current account of these 25 countries taken together was only 10%.

Table I

Summary Statement of Gross Receipts from Merchandise Exports, Non-monetary Gold and "Invisibles" of 41 Less Developed Countries

-Calendar year data in millions of U.S. dollar equivalent-

	1956	1957	1958	1959	1960	1961	1962	1963	Annual Average 1956-63
Exports of merchandise and non-monetary gold	15,294	15,778	14,711	15,502	16,465	16,575	17,416	19,109	16,357
Gross receipts from services									
of which:	3047	3307	3123	3025	3382	3431	3540	3820	3335
Travel	737	817	736	809	902	961	997	1066	878
Government n.i.e.	698	726	690	568	601	578	637	718	652
Investment income	238	231	200	198	245	289	219	216	231
Freight, insurance and other transportation	602	631	631	656	821	858	930	952	760
Other services	773	902	864	794	812	743	756	864	814
Total goods and services	18,341	19,085	17,835	18,527	19,848	20,006	20,955	22,929	19,692
Private transfers	448	423	435	578	627	677	763	827	598
Total gross receipts from merchandise exports and invisibles	18,789	19,508	18,270	19,104	20,474	20,682	21,719	23,756	20,290
Total Invisibles	3495	3730	3558	3603	4009	4108	4303	4647	3933

N.B. Totals may not add up because of progressive rounding.

Source: IMF Balance of Payments Year Books.

Table II

Annual Percent Changes in Gross Receipts from
Invisibles and Merchandise Exports of 41 countries, 1956-63

	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	Cumulative Annual Average 1956-63
Freight, Marine Insurance and Other Transportation	4.8	0	4.0	25.2	4.5	8.4	2.4	7.0
Travel	10.9	-9.9	9.9	11.5	6.5	3.7	6.9	5.6
Investment Incomes	-3.0	-13.4	-1.0	23.7	18.0	-24.2	-1.4	-.2
Government, n.i.e.	4.0	-5.0	-17.7	5.8	-3.8	10.2	12.7	.9
Other Services	16.7	-4.2	-8.1	2.3	-8.5	1.7	14.3	2.0
Total Services	8.5	-5.6	-3.1	11.8	1.4	3.2	7.9	3.4
Private Transfers	-5.6	2.8	32.9	8.5	8.0	12.7	8.4	9.7
Total Invisibles	6.7	-4.6	1.3	11.3	2.5	4.7	8.0	4.3
Merchandise Exports and Non-monetary gold	3.2	-6.8	5.4	6.2	.7	5.1	9.7	3.4
Total Receipts	3.8	-6.4	4.6	7.2	1.0	5.0	9.4	3.5

N.B. A minus (-) sign is for a decline.

Source: IMF Balance of Payments Yearbooks.

Table III

Average Annual Receipts from Merchandise Exports and Invisibles, 1956-1963

-in $ million-

	Experts including non-monetary gold	Freight insurance and other Transportation	Travel	Investment Income	Government n.i.e.	Other Services	Total Services (2-6)	Private Transfers	Total Invisibles (7+8)	Total Current Account Receipts
Argentina	1068	92	6	20	10	31	157	4	161	1229
Bolivia	66	*	1	*	2	1	4	1	5	71
Brazil	1337	46	14	3	25	66	154	15	169	1506
Burma	236	4	*	4	7	6	22	2	24	260
Ceylon	363	24	2	6	8	10	50	1	52	415
Chile	445	24	20	-	12	7	62	7	69	514
China (Taiwan)	188	11	2	1	11	5	30	10	40	228
Colombia	533	37	16	1	4	30	88	5	93	626
Costa Rica	84	3	7	*	2	6	18	2	20	104
Dominican Republic	149	6	5	1	2	5	18	2	21	170
Ecuador	139	-	4	*	3	3	10	1	11	150
El Salvador	124	1	5	1	2	5	12	2	14	138
Ethiopia	75	4	2	2	8	1	17	3	20	95
Ghana	301	8	3	12	3	22	49	*	49	350
Guatemala	119	2	6	1	4	3	16	1	17	136
Haiti	37	2	6	-	3	1	12	5	17	54
Honduras	74	1	1	1	1	2	6	*	7	81
India	1380	88	32	36	86	78	320	129	449	1829
Indonesia	771	16	*	7	4	19	46	*	46	817
Iran	800	4	6	2	22	20	54	3	57	857
Iraq	600	20	18	11	10	*	60	1	61	661
Israel	203	61	24	11	7	29	131	199	330	533
Jordan	14	2	9	2	4	17	34	3	37	51
Korea	37	5	1	4	68	3	81	31	111	148
Libya	70	3	2	2	34	13	54	1	55	125
Malawi, Rhodesia, Zambia	560	14	9	31	2	25	81	30	111	671
Mexico	828	*	539	-	11	41	591	5	596	1424
Morocco	351	18	26	6	136	8	195	11	206	557
Nicaragua	77	7	2	*	3	4	16	*	16	93
Pakistan	376	15	1	8	39	31	94	12	106	482
Panama	55	7	29	2	4	44	86	3	89	144
Paraguay	38	1	1	-	2	2	5	1	7	45
Peru	417	11	20	*	7	20	57	9	66	483
Philippines	542	5	3	7	58	52	125	54	179	721
Sudan	189	2	1	5	6	10	23	1	24	213
Syria	146	24	11	-	13	10	58	9	67	213
Thailand	401	10	6	7	19	11	53	5	58	459
UAR	476	156	9	16	4	79	263	13	276	752
Uruguay	151	4	27	1	3	3	36	*	37	188
Venezuela	2467	25	2	14	2	66	110	-	110	2577
Vietnam	69	5	-	6	3	20	33	15	48	117
Total	16356	768	878	231	654	809	3331	596	3931	20,287

* Indicates an amount less than 1.

N.B. Discrepancy in totals due to rounding.

Source: IMF Balance of Payments Yearbooks

Table IV

Average Annual Gross Receipts from Invisibles of 41 countries

-as % of

	Services	Services and Private Transfers	Non-monetary gold and Exports	Current Account Receipts
Freight, Marine Insurance and Other Transportation	22.8	19.3	4.6	3.7
Travel	26.3	22.3	5.4	4.3
Investment Income	6.9	5.9	1.4	1.1
Government n.i.e.	19.6	16.6	4.0	3.2
Other Services	24.4	20.7	5.0	4.0
Private Transfers	17.9	15.2	3.7	2.9

Source: IMF Balance of Payments Year Books

Table V

Invisibles as % of Total Current Account for 41 countries
(Annual Average, 1956-63)

	Total Invisibles	Total Current Account	Invisibles as % of Total Current Account
Venezuela	110	2577	4.3
Indonesia	46	817	5.6
Iran	57	857	6.7
Bolivia	5	71	7.2
Ecuador	11	150	7.5
Honduras	7	81	8.8
Burma	24	260	9.2
Iraq	61	661	9.2
El Salvador	14	138	10.1
Brazil	169	1506	11.2
Sudan	24	213	11.3
Dominican Republic	21	170	12.4
Guatemala	17	136	12.5
Ceylon	52	415	12.6
Thailand	58	459	12.6
Argentina	161	1229	13.2
Chile	69	514	13.5
Peru	66	483	13.7
Ghana	49	350	14.0
Colombia	93	626	14.8
Paraguay	7	45	15.6
Malawi, Rhodesia, Zambia	111	671	16.5
Nicaragua	16	93	17.2
China	40	228	17.6
Costa Rica	20	104	19.2
Uruguay	37	188	19.7
Ethiopia	20	95	21.1
Pakistan	106	482	22.0
India	449	1829	24.6
Philippines	179	721	24.8
UAR	276	752	27.2
Haiti	17	54	31.4
Syria	67	213	31.6
Morocco	206	557	37.0
Vietnam	48	117	41.0
Mexico	596	1424	41.9
Libya	55	125	44.0
Panama	89	144	61.8
Israel	330	533	61.9
Jordan	37	51	74.0
Korea	111	148	75.0

Source: Table III

FORM NO. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman

DATE: January 16, 1967

FROM: N. A. Sarma

SUBJECT: Supplementary Finance : Additional papers for UNCTAD

The draft papers attached hereto have been looked into by Professor Frank and others of the Group.

1. Commodity Projection Work in IBRD : This is prepared by Mr. Macone. We think it may be useful to append two or three individual Commodity studies done in the Bank earlier, such as on cotton, rubber and coffee, as illustrative exercises of the general approach and methodology described in the note.

2. Unexpected changes in import prices: This is prepared by Mr. Gassner, largely on the basis of certain earlier drafts by Mr. Macone. As no projections for import prices are available, the study makes certain arbitrary assumptions. The question still remains for discussion whether it is practicable to take into account import prices, and how it would affect cost of the scheme.

3. Invisibles : This is prepared by Mr. Jalan, using the material collected earlier by Mr. Badri Rao. The note presents available statistics for a number of individual countries from balance payments data, and helps to point up the importance of particular items in a few cases.

January 4, 1967

Dear Dr. Prebisch:

Mr. Woods has asked me to acknowledge receipt of your letter TDO 280/1 of December 23, 1966 and to thank you for having invited the Bank to participate in the second session of the Intergovernmental Group on Supplementary Financing starting at 11 a.m., Monday, February 6, 1967 at the Palais des Nations in Geneva.

I am pleased to inform you that the Bank will be represented by Mr. Irving S. Friedman, the Economic Advisor to the President, and by Messrs. N. Sarma and Bimal Jalan. I would appreciate it if you could have any documentation for this session sent to Mr. Friedman at the Bank's headquarters in Washington.

Sincerely yours,

Federico Consolo
Special Representative
for
United Nations Organizations

Dr. Raul Prebisch
Secretary General
United Nations Conference on
Trade and Development
Palais des Nations
Geneva, Switzerland

cc: Mr. Friedman ✓
Mr. Sarma
Mr. Jalan
Mr. Steckhan

FC:bmb

Mr. Consolo

January 3 1967

Irving S. Friedman

IBRD Representatives at 2nd Session UNCTAD Intergovernmental Group

With reference to your note of December 29, 1966, attaching the letter of invitation from Mr. Prebisch for the Intergovernmental Group on Supplementary Financing, the Bank will be represented by myself, and Mr. N. Sarma and Mr. Bimal Jalan.

cc: Mr. Sarma
" Jalan

Form No. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman

DATE: December 13, 1966

FROM: N. A. Sarma and R. M. Sundrum

SUBJECT: Papers on Supplementary Finance

Attached hereto are the following four papers we discussed yesterday.

1. Supplementary Finance: "Form and Terms of Assistance"
2. The Policy Package of the Supplementary Finance Scheme
3. Shortfalls and "Overages" in the Supplementary Finance Scheme
4. Financial Requirements of the Supplementary Financing Scheme

These papers were forwarded to Messrs. Cavanaugh and Graves the end of last week. We have had a useful discussion with Mr. Cavanaugh, especially on the paper on "Forms and Terms". The present draft incorporates a few suggestions made by him.

FORM NO. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman

DATE: December 29, 1966

FROM: N. A. Sarma

SUBJECT: Supplementary Financing: Additional papers

At the first meeting of the Intergovernmental Group in October 1966, our representative indicated that some papers were under preparation by the Bank staff, with a view to elaborating and explaining certain aspects of the Scheme. The concept of 'overages', the forms and conditions for financial assistance, methodology of projections, the question of import prices, considerations relevant to 'policy package', the availability of resources in relation to requirements, were among the main questions that came up for discussion at the meeting of the Intergovernmental Group. Some of the questions that were raised are dealt with in the three papers we have forwarded to the UNCTAD Secretariat: Supplementary Finance - Form and Terms of Assistance; Shortfalls and Overages in the Supplementary Finance Scheme; Policy Package of the Supplementary Finance Scheme.

Mr. Macone and his colleagues are working on three other papers: 1) Import Prices; 2) Invisibles; and 3) Our Export Projections.

The following studies were requested by the Group at its first session: a brief comment is made in respect of each study.

1. The relative importance of export shortfalls and other causes of instability in the external financing of development and, to the extent possible, estimates of the effects of these causes on selected countries.

You have a brief note on this from Mr. Gassner. This was prepared in consultation with Mr. Sundrum and myself, and will be discussed next week in our group. As you are aware, it is my view that such a study is not required for purposes of supplementary finance, at this stage. In particular, private capital flows into less developed countries present a problem; the unreliability of the available data, the large variations from year to year in private capital flows even in recent years; the fact that larger private capital flows are into a few countries only and in one or two directions. However, we may attempt a study, for internal purposes, on the lines indicated in Mr. Gassner's memo, and see what emerges.

2. The Group invites the Bank and the Fund to communicate to the Group any views they may feel able to express on how supplementary finance would fit into the existing international financial system.

In our Policy Package paper we have referred to ways in which the experience and advice of the World Bank Group and the International Monetary Fund could be utilized by the agency administering the Supplementary Financing Scheme. Further discussions with the Fund on this subject would be necessary, and in my view are of high priority, in preparation for the February meetings of the Intergovernmental Group.

3. A revision (to include data as recent as possible) of Table I, "Adequacy of external liquidity to finance fluctuations in exports of some Fund members", on page 19 of the study produced in 1963 by the International Monetary Fund.

I understand from Mr. Fleming that they are shortly forwarding this to UNCTAD.

4. An estimate of the effects of recent changes in the Fund's compensatory financing facility on the annual cost of the Scheme.

This is mainly the responsibility of the Fund staff, but our assistance is needed. I had mentioned this to Mr. Macone earlier. We have just received a draft memo from Mr. Fleming. On his return next week, Mr. Macone will take this up.

Whatever be the precise estimate arrived at, as now stated in our Shortfalls paper, overages occurring subsequent to the use by a country of the Fund compensatory financing facility would first be available to effect repurchases under that facility as they fall due. The net effect of the compensatory facility and overages together on the cost of the Scheme is likely to be smaller than was envisaged in our study ($400 million).

5. A study of the differences between and the respective merits of the methods used for the determination of export shortfalls.

This has been prepared by the Secretariat of the UNCTAD, in consultation with the Fund and the Bank staff.

6. A presentation of the methods used by the Bank staff in arriving at its estimates of the annual cost of the Scheme (in quantitative terms).

On various considerations, we have taken the view that the presentation of such a paper for circulation to the Group would not serve a necessary or useful purpose at this stage. However, this was referred to by several delegates at the first session of the Group, and was particularly stressed by the Japanese and the Germans. We may expect, therefore, that this would come up rather prominently for discussion at the forthcoming meetings of the Group. While we should be prepared for an explanation of how the estimate of financial requirements at $300 - $400 million a year for the initial five-year period was derived in the study, it may be helpful if specific

and pointed discussion of this item were deferred for a later session of the Group. It is to be noted that at the first session of the Intergovernmental Group concern was expressed that, considering the existing trend of external assistance, resources allocated to supplementary finance may be at the expense of the normal flow of basic finance. It was also indicated that some governments would wish to give priority to the replenishment of IDA and would be able to consider resources for supplementary finance only in the light of the scale, terms and conditions of IDA replenishment. We may also point out that there is an advantage, in this initial phase of consultations, in considering the underlying principles and purposes of the Scheme, the framework and procedures and, after a broad concensus is reached on these matters, consideration could be given more meaningfully to the question of the scale of finances required.

cc: Messrs. Kamarck
Isaiah Frank
Sundrum
Macone
Jalan
Gassner

FORM NO. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman DATE: December 22, 1966

FROM: H. Gassner

SUBJECT: SUPPLEMENTARY FINANCE - Comparative Significance of Various Causes of Foreign Exchange Shortfall

It was suggested at the first meeting of the Intergovernmental Group on Supplementary Financing that a study be made of the relative importance of export shortfalls and other causes of instability in the external financing of development. The following paper suggests some approaches to attempting to measure relative importance. Whatever the results of these studies may show as to the comparative importance of shortfalls of export earnings, aid, and foreign private investment, a case can and should be made for concentrating attention on export shortfalls due to the greater amenability of this problem to solution through international action than is the case with regard to shortfalls of foreign private investment or aid.

I - Comparative Magnitude of Export Shortfalls, "Aid Shortfalls", and "Private Investment Shortfalls".

Mr. T. Sears of USAID, has demonstrated that decreases from the previous year's level of private capital inflow exceeded similar decreases in export earnings in ten out of the twelve developing countries studied. However, the proposed Supplementary Finance Scheme is not aimed primarily at smoothing over year to year variations in foreign exchange availability, but rather at avoiding disruption in soundly conceived development programs. To compare the importance of unexpected changes in various sources of foreign exchange in disrupting development programs, it would be beneficial if deviations from predicted values of these foreign exchange sources could be measured over a five year period. However, while the Bank's economic reports provide for many developing countries a source of five year projections of export earnings prepared independently of national political pressures, which can be compared with actual results, there is no source of similar projections for flows of public assistance or private capital. It is therefore proposed to try to guess what levels of public assistance and private capital flows a reasonable prognosticator would have chosen in 1958, and to compare the shortfalls from these "hypothetical projections" for the period 1959-1963 with the shortfalls of export earnings from the values projected in 1958 Bank economic reports. The eighteen countries included in sample 2 (1959-1963) of the simulation exercise for studying the magnitude of export shortfalls would be the sample employed. While this procedure is not fully satisfactory, it is the best alternative available in light of the absence of actual 1958 predictions of public assistance and foreign private investment levels.

In order to prevent the 1958 "hypothetical projections" from being too distorted by hindsight, it is suggested that a rule of thumb for projection be applied to all countries. If we assume that the average level of aid to the developing countries for the period 1950-55 was attained in 1953, then the increase in aid over the period 1953-58 was at the average rate of 15% per year. The average rate of annual increase in private capital flow between the period 1950-55 and the period 1956-59 (excluding the oil countries) was 10% a year. It is tentatively suggested that the basis of the "hypothetical projections" for each country for the period 1959-1963 be a 15% annual increase in aid and a 10% annual increase in private capital inflow from assumed 1957 values of the average level of aid (or capital inflow) for the period 1956-58.

No immediate decision need be taken on this study, since Statistical Division cooperation is not required.

II - Examination of Regression data

Due to the somewhat arbitrary nature of the above approach, it is suggested that in addition partial correlation coefficients be employed to measure the relative effect on government investment and imports of capital goods, intermediate products, and raw materials of year-to-year changes in exports, aid, and foreign private investment. The necessary data appears to be available for the period 1958-64 for 25-30 countries. For each country and for all countries combined the regression equations and the partial correlation coefficients would be obtained using the following equations:

$$I_g = a_1 X_{-1} + b_1 X + c_1 P_{-1} + d_1 P + e_1 A + f_1 R_{-2}$$

$$M_K = a_2 X_{-1} + b_2 X + c_2 P_{-1} + d_2 P + e_2 A + f_2 R_{-2}$$

$$M_{K+R} = a_3 X_{-1} + b_3 X + c_3 P_{-1} + d_3 P + e_3 A + f_3 R_{-2}$$

where

X = exports

A = bilateral and multilateral assistance

P = private capital inflows plus private transfers

R = reserves

I_g = government investment

M_k = imports of capital goods

M_{k+r} = imports of capital goods, intermediate products, and raw materials.

to allow data from various countries to be combined, all variables would be expressed as a percentage of the average value of that variable over the period 1958-64 for the particular country.

Work would proceed in two stages. For each country a correlation matrix would be obtained, and variables would be eliminated when necessary in order to eliminate collinearity. Then the regression equations and partial correlation coefficients would be calculated.

This statistical approach was discussed with Mr. Sundrum before his departure. During informal discussions with the Statistics Division it was estimated that this process would take about two to three weeks from the time that the required data was submitted. It was also implied that this would not be an undue burden. Your approval is requested for asking the Statistics Division to perform the study as outlined above.

Form No. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman

DATE: November 22, 1966

FROM: Bimal Jalan

SUBJECT:

In the attached letter to Mr. Kamarck, Mr. Dell has suggested that the documents on supplementary finance that we are preparing should be in the hands of UNCTAD people in Geneva by the middle of December '66 for distribution to the Inter-governmental Group. Mr. Kamarck has asked me to prepare the draft of a reply from you to Mr. Dell. What should I say?

The following four papers have been discussed in detail by our group, and the final drafts will be available, for your consideration and approval, by Monday, the 28th November:

1. Financial Requirements of the Scheme
2. "Policy Package" (with an appendix on "World Bank's evaluation of performance").
3. Form and Terms of Assistance.
4. Shortfalls and Overages.

The following three papers are now under preparation:

1. Import Prices
2. Invisibles
3. Bank methodology on Export Projections

Mr. Macone, who is writing the first draft of these papers tells us that the first two should be available for discussion by the group in the middle of December, the one on 'export projections' will be available by end of December. We expect the final drafts of these three papers to be in your hands for approval by the middle of January. Meanwhile, we are also considering the paper on "causes of disruption" sent by Mr. Jo Saxe.

November 21, 1966

Mr. Sidney Dell
Director, New York Office of UNCTAD
United Nations, New York

Dear Sidney:

This is to acknowledge your letter of 18 November. I already let you have my comments on the paragraphs you sent me. Irving Friedman will be writing to you on the timing of the new documents that we are preparing.

Sincerely yours,

Andrew M. Kamarck
Director
Economics Department

AMK:nme

cc: Mr. Jalan
Please draft an appropriate reply to Mr. Dell for Mr. Friedman's signature.

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REFERENCE: TDS 241(1)
Sup.Fin.Mtgn.
Feb. 1967

18 November 1966

Dear Andy,

You will recall that several of the delegations to the inter-governmental group on supplementary financing emphasized the need for the more important new documents to be in the hands of governments not less than six weeks before the opening of the meeting. That means that documents should be distributed at least in the original language on December 26, which in turn implies that documents should be in the hands of the distribution people in Geneva by the middle of December.

I realize that this schedule may involve difficulties for you, and conceivably the margins could be shaved somewhat. If, however, you foresee any delay in the submission of major documents, I should appreciate your letting me know, as one or two of the delegations indicated, during the first session, that the second session would not be fruitful if governments had not had time to study the papers that were requested.

This does not, of course, apply necessarily to every single document that was asked for, but I am sure you are aware of the particular papers to which the greatest importance was attached.

You hoped to be able to let me have comments on the paragraphs I sent you under cover of my letter of 28 October by last Monday. I am sorry to raise the matter again, but I really would not like to hold up the distribution beyond next week.

Yours sincerely,

Sidney

S. Dell, Director
New York Office of UNCTAD

Mr. Andrew Kamarck
Director, Economics Department
International Bank for Reconstruction
and Development
1818 H Street NW
Washington D.C. 200433

Form No. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman DATE: November 28, 1966

FROM: N. A. Sarma and R. M. Sundrum Sarma 11/28

SUBJECT: Papers for the Supplementary Finance Group

We are enclosing herewith new drafts of four papers:

1. Shortfalls and Overages in the Supplementary Finance Scheme.
2. Policy Package.
3. Forms and Terms of Assistance.
4. Financial Requirements of the Scheme.

These papers have been considered by our group, i.e. Professor Frank, Messrs. Jalan, Macone, Sarma and Sundrum, who have agreed that they are in a suitable form to be sent to the UNCTAD Expert Group, subject to your comments. Mr. Pereira-Lira participated in our discussions and has seen the new drafts.

It is for your consideration whether, at this stage, the draft paper by Sundrum on Bank Evaluation of Performance is to be appended to the Policy Package paper and forwarded to the Intergovernmental Group.

no - want

FORM NO. 57 | INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Irving S. Friedman

DATE: October 31, 1966

FROM: Andrew M. Kamarck

SUBJECT: The UNCTAD Study for the Supplementary Finance Working Group

Sidney Dell of the UNCTAD Secretariat called me on October 26th to say that they had begun work on the study that the Intergovernmental Group had asked of UNCTAD, that is to say, the comparison between the Fund and the Bank methods of arriving at shortfalls. He said that they were going to point out the differences between what the Fund was trying to arrive at, namely a shortfall from a trend, and the Bank's shortfall, which is a shortfall from expectations that would have an impact on the development program. He said that the method they were beginning with was to take several hypothetical cases and to work out the arithmetic of them; that is to say, rising exports, falling exports, different rates of growth.

He asked me what my initial reaction to this was and I said that it seemed like the proper thing to do but that this was just a very quick reaction. He asked us to send him any comments we might have.

FINANCIAL REQUIREMENTS OF THE SUPPLEMENTARY FINANCING SCHEME

- A Note on the Estimate Presented in the Bank Staff Report on Supplementary Financial Measures -

1. In order to arrive at an estimate of what the proposed Scheme might cost in an initial five-year period of operation, a simulation exercise was carried out, comparing merchandise export projections for individual countries made by the Bank for various periods since 1950 with the actual export earnings experience of the same countries in the corresponding years. Additional adjustments were then made to take into account factors which could not be treated in the simulation exercise.

2. It was recognized that the simulation exercise, which is explained in detail in Annex IV of the Report, could only indicate the broad order of magnitude of the gross aggregate shortfalls of the developing countries. A number of estimates of such shortfalls were made in the simulation exercise, using two groups of countries in three different time periods. One group comprised a sample of fourteen countries for which observations were available for the periods 1957-63, 1957-61 and 1959-63. The second group comprised an enlarged sample of eighteen countries (the original fourteen plus an additional four) for which observations were available for the period 1959-63. The observed aggregate gross shortfalls for each of these samples for each time-period were then extrapolated on the basis of the share of the respective samples in the export trade of the developing countries as a whole. These estimates indicated that the gross aggregate shortfalls of the developing countries could have amounted to between $1 billion and $2 billion per year.

3. The gross aggregate shortfalls could be estimated only by a broad range, but in order to make a number of subsequent adjustments that were necessary to assess the probable needs of the Scheme for an initial period of operation, it was considered useful to start from a single figure. For this purpose, the report adopted the estimate of $1.6 billion per year, which is approximately at the midpoint of the range and corresponds most nearly to the experience of the larger, eighteen-country sample, in the most recent period 1959-63 for which data were available.

4. As part of the simulation exercise, estimates were made of the effects of the use of overages and the IMF's Compensatory Financing Facility. This took the form of additional calculations to determine to what extent the gross shortfall might be reduced if overages and drawings under IMF's Compensatory Financing Facility were used as offsets. It will be recalled that for this purpose it was assumed that overages realized by one country were not available for offsetting shortfalls experienced by other countries. The simulation of the Fund's Compensatory Financing Facility was designed to follow as closely as possible the basic rules of that Facility (the Facility, of course, was non-existent before 1963).

5. Utilizing results based on the same countries and time periods as those used in deriving the global estimate of the aggregate gross annual shortfall and applying the same extrapolative procedure, it was found, as detailed in Annex IV, that, after crediting both overages and drawings under the IMF's Compensatory Financing Facility, the global net shortfalls would have amounted to about $900 million to $1,500 million per year.

Within this range, the figure corresponding to the global gross annual shortfall of $1.6 billion per year was $1.2 billion per year, which was cited in the main body of the report.

6. The difference of $400 million per year between the above gross and net figures can be apportioned between overages and the Compensatory Facility only on a very approximate basis, since the quantitative results obtained for the two country samples in the various time periods mentioned above varied widely. In general, the contribution toward reducing the gross shortfall that was attributable to the Compensatory Financing Facility was smaller and varied within a narrower range of values than the contribution of overages. A division consistent with the gross and net values given above and also in line with the average relationship observed for all observations would be $250 million per year for overages and $150 million for the IMF compensatory tranche.

7. After taking account of the overages and the use of the IMF Compensatory Facility, several other adjustments had to be made to arrive at an estimate of the financing requirement of the Agency. They were the number of developing countries likely to utilize the Scheme in the first five years, the likely improvement in the preparation and use of export projections as compared to the periods of the simulation exercise, the extent to which the developing countries will be expected to meet shortfalls on their own and finally, the possible contribution to meet export shortfalls from sources of finance other than the IMF Compensatory Facility.

8. It was clear from the beginning that, given the nature of the problem, it was not possible to quantify these factors in any exact way. But, on the other hand, to estimate even the rough order of magnitude of the amount of resources that would be necessary to run the Agency during an initial period, it was necessary to attribute some orders of magnitude to the different factors mentioned above. On this basis, it was estimated that the effect of taking these factors into account would be to reduce the net shortfalls of $1.2 billion to the annual requirements of $300 - $400 million for the initial five years.

Probable Extent of Utilization of the Scheme by Countries

9. The Supplementary Finance Scheme is based on the assumption that a developing country can present its case for aid to the international community in an articulate way. This implies that the country has an operational development plan, indicating the targets which the country intends to pursue, backed by specific projects and by a set of policies which will allow the achievement of the proposed targets. Besides the fact that the plan has to be feasible - i.e., within the capacity of the country to implement the plan, it has also to be financially viable. Not only must the required domestic savings be available, but there must also be a reasonable expectation that the amount of basic development finance from external sources being counted upon will materialize, assuming that the economic performance is satisfactory. Given this basic framework for the operation of the Supplementary Finance Scheme, it did not seem reasonable to expect that all developing countries would be in a position to utilize the Scheme as soon as it was established. It was felt that such utilization would

increase over the years of the initial period, as more and more countries have operational plans which had been discussed with the donor countries.

10. To estimate the effect of this factor on the financial requirements of this Scheme, it was felt that the oil-exporting countries (whose reserve position is generally good), accounting for 22% of the exports[1/] of the less developed countries in the period 1962-1964 were unlikely to need to avail themselves of the Scheme during the initial period of five years. On the other hand, a number of developing countries, with 19% of the exports of the less developed world in the period 1962-1964, already had a mechanism for discussion of their development efforts and aid requirements with the donor countries. These countries were, therefore, in a position to qualify for use of the Scheme from the very first year of its operation. Of the remaining countries, accounting for 60% of the exports of the less developed world in the period 1962-1964, there was considerable variation in the state of their development planning. Thus, countries with about half of these exports might be in a position to avail themselves of the Scheme from the beginning. Assuming, therefore, that the possible users would increase from a group of countries, accounting for about 45% of the exports of the less developed world, in the first year, to countries accounting for about 75% of such exports in the last year of the initial five-year period,

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1/ Merchandise exports only; the developing countries included are India, Pakistan, Colombia, Nigeria, Sudan, Tunisia, Thailand, Malaysia, Ecuador, Turkey and Greece; exports of the less developed world include Africa (excluding South Africa), Asia, Western Hemisphere (excluding United States and Canada) and Greece, Turkey and Yugoslavia from Europe; export data according to IFS-IMF.

the Scheme would have to be prepared to meet the needs of countries accounting for an average of 60% of exports of the less-developed world. This proportion, however, should be regarded as a rough, and not a precise, indicator.

Export Projections

11. On the basis of the simulation exercise, it was estimated that in the period 1959-63, developing countries as a whole had an annual average gross shortfall of $1.6 billion. At the same time, it was found that the total overages of all developing countries was also of the same order of magnitude. This indicates that, for all developing countries taken together, the World Bank's export projections were neutral on balance. However, in practice, it is generally not possible to get estimates so close to the actual average for individual countries. As a result, in the simulation exercise, overages predominated for some countries while shortfalls predominated in others. Hence, according to the suggested rules of the Scheme, whereby the overages of any country would be offset against that country's shortfall during a projection period, the amount of overages available to compensate the shortfalls was estimated to be about $0.25 billion a year. When this experience is used to extrapolate future requirements of the Scheme, two factors have to be considered - the possible improvements in the making of export projections for individual countries and the adherence by the country to the policies which underlie a projection.

12. Better Projections - Part of the shortfalls estimated in the simulation exercise may have resulted from the fact that the projections which were used could have been improved, if more time and personnel had been devoted to them. This would certainly be the case if the Supplementary

Finance Scheme were in operation and, consequently, it may be expected that export projections, receiving a new operational significance as the basis of the Scheme, would approximate actual exports in individual countries more closely and hence reduce the amount of unexpected shortfalls requiring assistance from the Scheme. Moreover, the export projections which were used for the purposes of the simulation were in many instances of the simple kind, in which only the terminal year was directly estimated, the projections for the intermediary years being assumed to follow a straight line. This may have contributed to over-estimating the deviations from the projections. For purposes of the Scheme, export projections, where feasible, would probably be prepared for every individual year of the projection period, using to the full extent the available information.

13. Policy Adherence - The second factor which has to qualify the use of estimates of shortfalls based on past projections is the extent to which countries deviated in the subsequent years of a projection from the policies which were assumed to underlie the projection in the first place. This factor is particularly difficult to evaluate. The indication of the policies which supported an export projection was not explicit, in many instances. On the other hand, it is to be supposed that the whole mechanism of the Supplementary Finance Scheme will put a premium on a closer adherence to the enunciated policies with which the country hopes to achieve the export targets, among others.

14. Although one can be sure that the two reasons mentioned above would contribute to make shortfalls in the future smaller than they would otherwise be, there is no quantitative basis to estimate their possible effects. To the extent that it was felt that they would be operative,

an adjustment was made to correct the experience of the past for purposes of estimating the future by an amount of $0.1 billion for each of the two factors: better projections and better policy adherence. Together, these notional amounts correspond to 25% to 30% of the $0.7 billion of estimated shortfalls after "overages" and the IMF Compensatory Financing Facility, for the countries participating in the Scheme ($1.2 billion adjusted for the 60% factor for extent of utilization of the Scheme).

Shortfalls Met by the Developing Countries

15. Under the Supplementary Finance Scheme, a developing country is supposed to meet the problem of an unexpected export shortfall to some extent with its own means, which include the use of its own reserves and internal adjustments involving a reduction in demand for foreign exchange. It is understood that these actions could be undertaken in a number of cases without disrupting the development effort in which the country was engaged. Although the extent to which each individual country could be expected to make this contribution would vary from case to case, an attempt was made to assess the probable order of magnitude of the effort which might be considered reasonable when all developing countries are grouped together.

16. Use of Reserves - An estimate of the amount of reserves which it was reasonable to expect the less developed countries to use for purposes of meeting export shortfalls was made, taking into account the level at which their reserves stood at the end of 1964, and the fact that there were other shortfalls for which the country had to provide, outside the Scheme. On this basis, it was thought feasible for the countries participating

in the Scheme as a group, to use $250 million of their reserves, over a five-year period to meet unexpected export shortfalls, averaging $50 million a year. The level of reserves of the less developed countries at the end of 1964 was about $10 billion. The position of individual countries varied greatly; the oil-exporting countries and some others had been consistently gaining reserves since 1959-1960, whereas other countries were in the opposite situation. Operating with the assumption previously introduced that only 60% of the developing countries - on an average over the first five years - would be making effective use of the Scheme and assuming that probably half of the countries would be subject to shortfalls,[1/] it follows that the assumed use of reserves would represent some 5 to 10 per cent of their reserve levels available at the end of 1964, for the participating countries who might have export shortfalls, taken together.

17. Reduction in Foreign Exchange Expenditures during Shortfalls - Imports of consumer good manufactures and other manufactures excluding capital goods and base metals accounted for some 30% of total imports of less developed areas in 1960, on a f.o.b. basis. This was roughly true not only for the areas taken as a whole, but for different regional groupings, such as Latin America, Southeast Asia, the Middle East. For the other non-industrial countries, including mainly Africa, the proportion was somewhat higher.[2/] Total imports of less developed countries over the 1962-1965 period - with the same coverage that was used when dealing with their exports[3/] - averaged $35 billion, on a c.i.f. basis. Using the same

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1/ Supplementary Financial Measures - Annex IV - A Simulation Exercise - Tables 1 and 4.

2/ Gatt, International Trade 1961, Tables II, III and IV of Appendix.

3/ See footnote on page 5; data from IMF International Financial Statistics.

percentage mentioned above, it was estimated that imports of less developed countries as a whole which would receive the major impact of internal adjustment measures subsequent to a shortfall, without disrupting their development efforts, could be estimated at an annual average of about $10 billion, for the period 1959-1963. Out of this, the amount of imports of this type for those countries which may be expected to utilize the Scheme in the initial period (taken as countries accounting for 60% of the exports of the less developed world) and which are likely to have shortfalls (which may be taken as half of these countries) would be about $3 billion a year. It must be noted that the level of such imports would already have been reviewed in the course of the initial understanding in relation to the development program; therefore, the possibility of further reduction in these imports following an export shortfall is likely to be small. Hence, the extent to which foreign exchange expenditures may be adjusted on this account may be placed at about $0.050 billion a year.

18. The two items which account for the actions which the developing countries themselves would undertake to meet the shortfalls (use of reserves - $0.050 billion a year and reduction in foreign exchange expenditures during shortfalls - $0.050 billion a year) represent roughly 15% of the shortfalls of the participating countries - after "overages" and IMF Compensatory Financing Facility ($0.700 billion) in the initial period.

Other Sources of Finance

19. The Bank Staff Report contemplated the possibility that sources of finance, other than the IMF Compensatory Facility, might contribute to the financing of the unexpected shortfalls, such as the "emergency foreign

trade loans" advanced by the Export-Import Bank of Washington and program loans as well as the "Food for Peace" Program of the United States AID. The Export-Import Bank of Washington alone made emergency foreign trade loans to developing countries at an average of $0.180 billion a year, during the fiscal years 1958 to 1965. For purposes of determining the financing requirements of the Agency, a figure of $0.050 billion a year available from bilateral sources was adopted. This figure, however, is not based on any indication that such an amount would, in fact, be available.

20. The following table summarizes the effect of all these considerations on the estimated financial requirements of the Scheme for an initial five-year period:

Financial Requirements for Supplementary Finance
- initial five-year period -
US$ billion per year

		Requirements adjusted for different factors
Gross Shortfalls		1.6
Deductions:		
overages	- 0.25	
IMF Compensatory Facility	- 0.15	1.2
Countries not likely to utilize the Scheme in the initial period	- 0.5	0.7
better projections	- 0.1	
better policy adherence	- 0.1	0.5
use of reserves	- 0.05	
internal adjustment (reduction in consumption)	- 0.05	0.4
other sources of finance	- 0.05	0.35

21. On this basis, the Bank Staff estimated that the financial requirements for the Agency administering the Supplementary Finance Scheme, in its initial period of operation, would be of the order of $300 to $400 million per year.

22. A few additional remarks about this estimate are in order. It should be noted that in the period for which the simulation exercise was carried out, the export fluctuation of the developing countries has not been much influenced by commodity agreements. As such agreements are put into execution, besides the one which now regulates the coffee market, there should be a net contribution to reduce future shortfalls. To this extent, the financial requirements estimate has an implicit safety factor.

23. On the other hand, two other factors have to be considered. The need to make an adjustment for scale to take into account the growth in the exports of the developing countries will become increasingly important, because the simulation exercise considered the magnitudes only up to 1963. In addition, as time elapses, the number of developing countries which will be in a position to utilize the Scheme readily because they have operational plans discussed with the donor countries will tend to increase. This may mean that the extent of utilization which would have to be contemplated for an initial five-year period of the Agency might be higher than the 60 per cent which was adopted for the present estimate.

24. The estimation exercise was based on exports measured as trade exports, without the inclusion of invisibles. There was no basis for including invisibles in the simulation exercise. The evidence which is being prepared in relation to invisibles has still to be examined to

determine to what extent this might affect the original estimate, although the working hypothesis at the time that the estimate was made was that the inclusion of invisibles would not fundamentally alter the results. Further, in accordance with the position taken in relation to the import prices question in the Study, the estimate does not take into account the possible effects of unexpected fluctuations in this item.

25. In reaching this estimate of the financial requirements of the Scheme for an initial period of five years, two of the deductions from the estimate of gross shortfalls relate to overages and to the use of the Compensatory Financing Facility of the International Monetary Fund. Insofar as countries use overages to any extent to make repurchases under the Compensatory Financing Facility, the entire amount of overages cannot be deducted from the gross shortfalls in deriving the financial requirements of the Scheme. Hence, to this extent, the requirements of the Scheme will be increased.

26. No attempt has been made in this memorandum to make a new calculation of the financial requirements of the Scheme; this memorandum only seeks to give the explanation of the estimate made in the Bank Staff Study at the time it was prepared. It is necessary to emphasize, as was done in the Study, that the magnitudes of financial requirements and of the various factors involved are only rough estimates; no precise calculations are possible because the Scheme deals with the uncertain and the unpredictable. It may happen that, in the event, the actual needs for any year may prove to be either larger or smaller than now estimated. Therefore, the estimate given in the Study cannot be taken as referring to the needs in each year, but as the average annual requirements over an initial experimental period of five years, which corresponds to the normal duration of development programs.

SUPPLEMENTARY FINANCE: CONSIDERATION OF IMPORT PRICES

1. The UNCTAD resolution suggested that 'adverse effects from significant rises in import prices' would be one of the relevant economic circumstances to be examined. The Bank Staff Study recognized that, ideally, export shortfalls should be calculated in real terms; that this could be done by concentrating attention on unforeseen deviations in the international purchasing power of exports. The Study points out, however, it may not be practicable in many cases to measure changes in import prices within a reasonable margin of error. In estimating the likely scale of operations under the Scheme, it was noted that consideration of import prices would probably make little difference.

2. The question of import prices came up for general discussion at both the meeting of the Committee on Invisibles in April 1966 and the first session of the Intergovernmental Expert Group in October 1966. The principal questions emerging out of these discussions can be summarized as follows:

(a) Is it possible to obtain an estimate of the additional cost that might be incurred by the proposed Scheme if provision were made to take adverse movements in import prices into account in the administration of the Scheme.

(b) In what way could a provision that movements in import prices be taken into account in determining the amount of aid that the Scheme should make available to a given country be administered.

(c) What is the availability and character of existing import price indexes for the developing countries and what are the solutions to the statistical problems that these may present.

3. The crucial question is whether import price indexes constitute a sufficiently accurate measure of price movements to warrant their use in any mechanism for adjusting transactions under the Scheme. A survey of the results of recent research by the Bank staff on the subject of both export and import price indexes indicates that existing indexes are used widely as a useful tool for analyzing general world trade problems. Any conclusions derived from such use, however, are subject to qualification regarding the weaknesses and limitations of the indexes; the available indexes leave much to be desired, particularly if an attempt is to be made to use them for critical measurements.

4. The principal problem lies in the inherent difficulty of devising a true indicator of price movements for a group of manufactured products, particularly capital goods, i.e. a statistical measure whose movements would reflect only changes in price and not also other changes, such as the utility or efficiency of the individual products or changes in the composition of the group. This problem still remains to be solved.

5. For a developing country the composition of imports, and particularly manufactured goods, can change rapidly. In Brazil, for example, the share of transport equipment (in terms of value) varied between 45% and 13% of total imports of manufactures in the period 1959-1963, and within the transport category, the share of motor vehicles dropped from 49% in 1959 to a negligible proportion in 1963 while the share of airplanes rose from 10% to 38%. Such shifts in composition cause price indexes to give a distorted view of the true situation. Frequent changes of index weights, under such circumstances, can also lead to exaggeration of the extent of changes in prices.

6. Another main difficulty relates to measuring price changes in the individual components of the index. Unit value indexes of machinery, for example, are frequently based on declared value divided by weight. In such a case, as the machinery becomes lighter and more efficient, its index price would automatically rise. In cases where unit values were computed by reference to numbers, a shift toward the purchase of fewer but larger machines of equal capacity would also result in an incorrect price signal. Beyond these machanical difficulties there lies the further problem of taking account of improved quality of new products. The most familiar illustrations regarding the difficulties of reflecting quality changes are automotive tires and batteries, which have shown a continuous improvement in efficiency and service life for which, however, no adjustment is made in the unit prices used in an index.

7. Thus, the statistical difficulties involved in including a full-scale consideration of import prices in working out the Scheme are indeed real. An attempt should, of course, continue to be made for improving the data, but this is a separate and time-consuming process. Assuming this were done, should they be considered an integral part of the Scheme's approach and calculations?

8. At the time a country's development program is formulated and subsequently agreed upon for purposes of arriving at an understanding regarding basic development finance, the entire balance of payments prospects for the Plan period are considered; the import requirements are a main part of this exercise, and certain assumptions regarding the course of import prices would have been made by the country and built into the

estimation regarding import needs. There can of course be uncertainty regarding this aspect, as there can be in respect of other aspects, such as development aid and private capital flows. The Scheme itself, however, is based on the finding that export shortfalls have been a main factor of uncertainty, that they are disruptive of development, and that they are measurable. It so happens there is considerable experience in the World Bank in this area of export projections for a period of one to several years. The UNCTAD resolution addressed itself to this specific cause of disruption of the development program and seeks a remedy to it. Accordingly, the Scheme does not purport to make good shortfalls from any or all causes but only from this major one. If the Scheme, and the underlying calculations, were extended to cover other aspects like import prices, the statistical underpinning would become questionable, and implementation, therefore, might be rendered significantly more difficult.

9. At the same time, it must be recognized that for particular countries, from time to time, a significant rise in import prices may pose a difficult problem. Conversely, when a country suffers an export shortfall, simultaneously it may have been afforded considerable relief by a fall in import prices. This particular aspect merits further consideration by the Group; i.e. whether the administering agency should consider such cases, on an individual basis, after the export shortfall has occurred, on the basis of the available prices data for imports of a particular country. Here again, the question arises whether sufficiently reliable import price data would be available at the time the export shortfall became apparent. There is, of course, the other question: would import price adjustments be for total exports or only for shortfall amounts?

10. Another possible approach, in view of such statistical and other difficulties, would be not to bring into the Scheme the consideration of import prices in the initial 5 years, and based on the actual working of the Scheme in the initial period, subsequently to consider these other refinements and considerations.

FINANCIAL REQUIREMENTS OF THE SUPPLEMENTARY FINANCING SCHEME

- A Note on the Estimate Presented in the Bank Staff Report on Supplementary Financial Measures -

1. In order to arrive at an estimate of what the proposed Scheme might cost in an initial five-year period of operation, a simulation exercise was carried out, comparing merchandise export projections for individual countries made by the Bank for various periods since 1950 with the actual export earnings experience of the same countries in the corresponding years. Additional adjustments were then made to take into account factors which could not be treated in the simulation exercise.

2. It was recognized that the simulation exercise, which is explained in detail in Annex IV of the Report, could only indicate the broad order of magnitude of the gross aggregate shortfalls of the developing countries. A number of estimates of such shortfalls were made in the simulation exercise, using two groups of countries in three different time periods. One group comprised a sample of fourteen countries for which observations were available for the periods 1957-63, 1957-61 and 1959-63. The second group comprised an enlarged sample of eighteen countries (the original fourteen plus an additional four) for which observations were available for the period 1959-63. The observed aggregate gross shortfalls for each of these samples for each time-period were then extrapolated on the basis of the share of the respective samples in the export trade of the developing countries as a whole. These estimates indicated that the gross aggregate shortfalls of the developing countries could have amounted to between $1 billion and $2 billion per year.

3. The gross aggregate shortfalls could be estimated only by a broad range, but in order to make a number of subsequent adjustments that were necessary to assess the probable needs of the Scheme for an initial period of operation, it was considered useful to start from a single figure. For this purpose, the report adopted the estimate of $1.6 billion per year, which is approximately at the midpoint of the range and corresponds most nearly to the experience of the larger, eighteen-country sample, in the most recent period 1959-63 for which data were available.

4. As part of the simulation exercise, estimates were made of the effects of the use of overages and the IMF's Compensatory Financing Facility. This took the form of additional calculations to determine to what extent the gross shortfall might be reduced if overages and drawings under IMF's Compensatory Financing Facility were used as offsets. It will be recalled that for this purpose it was assumed that overages realized by one country were not available for offsetting shortfalls experienced by other countries. The simulation of the Fund's Compensatory Financing Facility was designed to follow as closely as possible the basic rules of that Facility (the Facility, of course, was non-existent before 1963).

5. Utilizing results based on the same countries and time periods as those used in deriving the global estimate of the aggregate gross annual shortfall and applying the same extrapolative procedure, it was found, as detailed in Annex IV, that, after crediting both overages and drawings under the IMF's Compensatory Financing Facility, the global net shortfalls would have amounted to about $900 million to $1,500 million per year.

Within this range, the figure corresponding to the global gross annual shortfall of $1.6 billion per year was $1.2 billion per year, which was cited in the main body of the report.

6. The difference of $400 million per year between the above gross and net figures can be apportioned between overages and the Compensatory Facility only on a very approximate basis, since the quantitative results obtained for the two country samples in the various time periods mentioned above varied widely. In general, the contribution toward reducing the gross shortfall that was attributable to the Compensatory Financing Facility was smaller and varied within a narrower range of values than the contribution of overages. A division consistent with the gross and net values given above and also in line with the average relationship observed for all observations would be $250 million per year for overages and $150 million for the IMF compensatory tranche.

7. After taking account of the overages and the use of the IMF Compensatory Facility, several other adjustments had to be made to arrive at an estimate of the financing requirement of the Agency. They were the number of developing countries likely to utilize the Scheme in the first five years, the likely improvement in the preparation and use of export projections as compared to the periods of the simulation exercise, the extent to which the developing countries will be expected to meet shortfalls on their own and finally, the possible contribution to meet export shortfalls from sources of finance other than the IMF Compensatory Facility.

8. It was clear from the beginning that, given the nature of the problem, it was not possible to quantify these factors in any exact way. But, on the other hand, to estimate even the rough order of magnitude of the amount of resources that would be necessary to run the Agency during an initial period, it was necessary to attribute some orders of magnitude to the different factors mentioned above. On this basis, it was estimated that the effect of taking these factors into account would be to reduce the net shortfalls of $1.2 billion to the annual requirements of $300 - $400 million for the initial five years.

Probable Extent of Utilization of the Scheme by Countries

9. The Supplementary Finance Scheme is based on the assumption that a developing country can present its case for aid to the international community in an articulate way. This implies that the country has an operational development plan, indicating the targets which the country intends to pursue, backed by specific projects and by a set of policies which will allow the achievement of the proposed targets. Besides the fact that the plan has to be feasible - i.e., within the capacity of the country to implement the plan, it has also to be financially viable. Not only must the required domestic savings be available, but there must also be a reasonable expectation that the amount of basic development finance from external sources being counted upon will materialize, assuming that the economic performance is satisfactory. Given this basic framework for the operation of the Supplementary Finance Scheme, it did not seem reasonable to expect that all developing countries would be in a position to utilize the Scheme as soon as it was established. It was felt that such utilization would

increase over the years of the initial period, as more and more countries have operational plans which had been discussed with the donor countries.

10. To estimate the effect of this factor on the financial requirements of this Scheme, it was felt that the oil-exporting countries (whose reserve position is generally good), accounting for 22% of the exports[1/] of the less developed countries in the period 1962-1964 were unlikely to need to avail themselves of the Scheme during the initial period of five years. On the other hand, a number of developing countries, with 19% of the exports of the less developed world in the period 1962-1964, already had a mechanism for discussion of their development efforts and aid requirements with the donor countries. These countries were, therefore, in a position to qualify for use of the Scheme from the very first year of its operation. Of the remaining countries, accounting for 60% of the exports of the less developed world in the period 1962-1964, there was considerable variation in the state of their development planning. Thus, countries with about half of these exports might be in a position to avail themselves of the Scheme from the beginning. Assuming, therefore, that the possible users would increase from a group of countries, accounting for about 45% of the exports of the less developed world, in the first year, to countries accounting for about 75% of such exports in the last year of the initial five-year period,

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1/ Merchandise exports only; the developing countries included are India, Pakistan, Colombia, Nigeria, Sudan, Tunisia, Thailand, Malaysia, Ecuador, Turkey and Greece; exports of the less developed world include Africa (excluding South Africa), Asia, Western Hemisphere (excluding United States and Canada) and Greece, Turkey and Yugoslavia from Europe; export data according to IFS-IMF.

the Scheme would have to be prepared to meet the needs of countries accounting for an average of 60% of exports of the less-developed world. This proportion, however, should be regarded as a rough, and not a precise, indicator.

Export Projections

11. On the basis of the simulation exercise, it was estimated that in the period 1959-63, developing countries as a whole had an annual average gross shortfall of $1.6 billion. At the same time, it was found that the total overages of all developing countries was also of the same order of magnitude. This indicates that, for all developing countries taken together, the World Bank's export projections were neutral on balance. However, in practice, it is generally not possible to get estimates so close to the actual average for individual countries. As a result, in the simulation exercise, overages predominated for some countries while shortfalls predominated in others. Hence, according to the suggested rules of the Scheme, whereby the overages of any country would be offset against that country's shortfall during a projection period, the amount of overages available to compensate the shortfalls was estimated to be about $0.25 billion a year. When this experience is used to extrapolate future requirements of the Scheme, two factors have to be considered - the possible improvements in the making of export projections for individual countries and the adherence by the country to the policies which underlie a projection.

12. Better Projections - Part of the shortfalls estimated in the simulation exercise may have resulted from the fact that the projections which were used could have been improved, if more time and personnel had been devoted to them. This would certainly be the case if the Supplementary

Finance Scheme were in operation and, consequently, it may be expected that export projections, receiving a new operational significance as the basis of the Scheme, would approximate actual exports in individual countries more closely and hence reduce the amount of unexpected shortfalls requiring assistance from the Scheme. Moreover, the export projections which were used for the purposes of the simulation were in many instances of the simple kind, in which only the terminal year was directly estimated, the projections for the intermediary years being assumed to follow a straight line. This may have contributed to over-estimating the deviations from the projections. For purposes of the Scheme, export projections, where feasible, would probably be prepared for every individual year of the projection period, using to the full extent the available information.

13. Policy Adherence - The second factor which has to qualify the use of estimates of shortfalls based on past projections is the extent to which countries deviated in the subsequent years of a projection from the policies which were assumed to underlie the projection in the first place. This factor is particularly difficult to evaluate. The indication of the policies which supported an export projection was not explicit, in many instances. On the other hand, it is to be supposed that the whole mechanism of the Supplementary Finance Scheme will put a premium on a closer adherence to the enunciated policies with which the country hopes to achieve the export targets, among others.

14. Although one can be sure that the two reasons mentioned above would contribute to make shortfalls in the future smaller than they would otherwise be, there is no quantitative basis to estimate their possible effects. To the extent that it was felt that they would be operative,

an adjustment was made to correct the experience of the past for purposes of estimating the future by an amount of $0.1 billion for each of the two factors: better projections and better policy adherence. Together, these notional amounts correspond to 25% to 30% of the $0.7 billion of estimated shortfalls after "overages" and the IMF Compensatory Financing Facility, for the countries participating in the Scheme ($1.2 billion adjusted for the 60% factor for extent of utilization of the Scheme).

Shortfalls Met by the Developing Countries

15. Under the Supplementary Finance Scheme, a developing country is supposed to meet the problem of an unexpected export shortfall to some extent with its own means, which include the use of its own reserves and internal adjustments involving a reduction in demand for foreign exchange. It is understood that these actions could be undertaken in a number of cases without disrupting the development effort in which the country was engaged. Although the extent to which each individual country could be expected to make this contribution would vary from case to case, an attempt was made to assess the probable order of magnitude of the effort which might be considered reasonable when all developing countries are grouped together.

16. Use of Reserves - An estimate of the amount of reserves which it was reasonable to expect the less developed countries to use for purposes of meeting export shortfalls was made, taking into account the level at which their reserves stood at the end of 1964, and the fact that there were other shortfalls for which the country had to provide, outside the Scheme. On this basis, it was thought feasible for the countries participating

in the Scheme as a group, to use $250 million of their reserves, over a five-year period to meet unexpected export shortfalls, averaging $50 million a year. The level of reserves of the less developed countries at the end of 1964 was about $10 billion. The position of individual countries varied greatly; the oil-exporting countries and some others had been consistently gaining reserves since 1959-1960, whereas other countries were in the opposite situation. Operating with the assumption previously introduced that only 60% of the developing countries - on an average over the first five years - would be making effective use of the Scheme and assuming that probably half of the countries would be subject to shortfalls,[1/] it follows that the assumed use of reserves would represent some 5 to 10 per cent of their reserve levels available at the end of 1964, for the participating countries who might have export shortfalls, taken together.

17. Reduction in Foreign Exchange Expenditures during Shortfalls - Imports of consumer good manufactures and other manufactures excluding capital goods and base metals accounted for some 30% of total imports of less developed areas in 1960, on a f.o.b. basis. This was roughly true not only for the areas taken as a whole, but for different regional groupings, such as Latin America, Southeast Asia, the Middle East. For the other non-industrial countries, including mainly Africa, the proportion was somewhat higher.[2/] Total imports of less developed countries over the 1962-1965 period - with the same coverage that was used when dealing with their exports[3/] - averaged $35 billion, on a c.i.f. basis. Using the same

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1/ Supplementary Financial Measures - Annex IV - A Simulation Exercise - Tables 1 and 4.

2/ Gatt, International Trade 1961, Tables II, III and IV of Appendix.

3/ See footnote on page 5; data from IMF International Financial Statistics.

percentage mentioned above, it was estimated that imports of less developed countries as a whole which would receive the major impact of internal adjustment measures subsequent to a shortfall, without disrupting their development efforts, could be estimated at an annual average of about $10 billion, for the period 1959-1963. Out of this, the amount of imports of this type for those countries which may be expected to utilize the Scheme in the initial period (taken as countries accounting for 60% of the exports of the less developed world) and which are likely to have shortfalls (which may be taken as half of these countries) would be about $3 billion a year. It must be noted that the level of such imports would already have been reviewed in the course of the initial understanding in relation to the development program; therefore, the possibility of further reduction in these imports following an export shortfall is likely to be small. Hence, the extent to which foreign exchange expenditures may be adjusted on this account may be placed at about $0.050 billion a year.

18. The two items which account for the actions which the developing countries themselves would undertake to meet the shortfalls (use of reserves - $0.050 billion a year and reduction in foreign exchange expenditures during shortfalls - $0.050 billion a year) represent roughly 15% of the shortfalls of the participating countries - after "overages" and IMF Compensatory Financing Facility ($0.700 billion) in the initial period.

Other Sources of Finance

19. The Bank Staff Report contemplated the possibility that sources of finance, other than the IMF Compensatory Facility, might contribute to the financing of the unexpected shortfalls, such as the "emergency foreign

trade loans" advanced by the Export-Import Bank of Washington and program loans as well as the "Food for Peace" Program of the United States AID. The Export-Import Bank of Washington alone made emergency foreign trade loans to developing countries at an average of $0.180 billion a year, during the fiscal years 1958 to 1965. For purposes of determining the financing requirements of the Agency, a figure of $0.050 billion a year available from bilateral sources was adopted. This figure, however, is not based on any indication that such an amount would, in fact, be available.

20. The following table summarizes the effect of all these considerations on the estimated financial requirements of the Scheme for an initial five-year period:

Financial Requirements for Supplementary Finance
- initial five-year period -
US$ billion per year

		Requirements adjusted for different factors
Gross Shortfalls		1.6
Deductions:		
overages	- 0.25	
IMF Compensatory Facility	- 0.15	1.2
Countries not likely to utilize the Scheme in the initial period	- 0.5	0.7
better projections	- 0.1	
better policy adherence	- 0.1	0.5
use of reserves	- 0.05	
internal adjustment (reduction in consumption)	- 0.05	0.4
other sources of finance	- 0.05	0.35

21. On this basis, the Bank Staff estimated that the financial requirements for the Agency administering the Supplementary Finance Scheme, in its initial period of operation, would be of the order of $300 to $400 million per year.

22. A few additional remarks about this estimate are in order. It should be noted that in the period for which the simulation exercise was carried out, the export fluctuation of the developing countries has not been much influenced by commodity agreements. As such agreements are put into execution, besides the one which now regulates the coffee market, there should be a net contribution to reduce future shortfalls. To this extent, the financial requirements estimate has an implicit safety factor.

23. On the other hand, two other factors have to be considered. The need to make an adjustment for scale to take into account the growth in the exports of the developing countries will become increasingly important, because the simulation exercise considered the magnitudes only up to 1963. In addition, as time elapses, the number of developing countries which will be in a position to utilize the Scheme readily because they have operational plans discussed with the donor countries will tend to increase. This may mean that the extent of utilization which would have to be contemplated for an initial five-year period of the Agency might be higher than the 60 per cent which was adopted for the present estimate.

24. The estimation exercise was based on exports measured as trade exports, without the inclusion of invisibles. There was no basis for including invisibles in the simulation exercise. The evidence which is being prepared in relation to invisibles has still to be examined to

determine to what extent this might affect the original estimate, although the working hypothesis at the time that the estimate was made was that the inclusion of invisibles would not fundamentally alter the results. Further, in accordance with the position taken in relation to the import prices question in the Study, the estimate does not take into account the possible effects of unexpected fluctuations in this item.

25. In reaching this estimate of the financial requirements of the Scheme for an initial period of five years, two of the deductions from the estimate of gross shortfalls relate to overages and to the use of the Compensatory Financing Facility of the International Monetary Fund. Insofar as countries use overages to any extent to make repurchases under the Compensatory Financing Facility, the entire amount of overages cannot be deducted from the gross shortfalls in deriving the financial requirements of the Scheme. Hence, to this extent, the requirements of the Scheme will be increased.

26. No attempt has been made in this memorandum to make a new calculation of the financial requirements of the Scheme; this memorandum only seeks to give the explanation of the estimate made in the Bank Staff Study at the time it was prepared. It is necessary to emphasize, as was done in the Study, that the magnitudes of financial requirements and of the various factors involved are only rough estimates; no precise calculations are possible because the Scheme deals with the uncertain and the unpredictable. It may happen that, in the event, the actual needs for any year may prove to be either larger or smaller than now estimated. Therefore, the estimate given in the Study cannot be taken as referring to the needs in each year, but as the average annual requirements over an initial experimental period of five years, which corresponds to the normal duration of development programs.