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INTERNATIONAL LABOR MIGRATION AND WORKERS´ REMITTANCES

ISSUES AND PROSPECTS

A Background Note for WDR IV

October 28, 1980

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INTERNATIONAL LABOR MIGRATION AND WORKERS' REMITTANCES

ISSUES AND PROSPECTS*

Summary and Conclusions

This paper attempts to analyze the regional structure of and growth in remittances, and to identify the major determinants of these flows. It is shown that recorded remittance flows are substantial, a sample of developing countries of Europe, the Middle East, Asia, South and Western Africa and Central and South America, recorded about $23 billion in remittances in 1978/79; this is about 10% of the value of their exports of goods and services. For many countries, these remittances equal 50% to 80% of their merchandise exports.

The results of empirical remittances show that the level of and cyclical fluctuations in economic activity in the host countries explain 70% to 95% of the variation in remittances into the labor-exporting countries. A more detailed analysis of remittance flows into Greece, Yugoslavia and Turkey shows that the number of migrant workers abroad and their wages together explain over 90% of the variation in remittance inflows into these countries. Surprisingly (perhaps), relative rates of return on savings in the host and home countries, and incentive schemes (in the home country) such as the foreign-exchange deposit schemes and the premium-exchange rate, do not appear to have a significant impact on total remittances. These initial

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* This note draws heavily on a paper on the subject which will be available November.

results tend to dispute the traditional view that incentives offered by the home countries have a significant impact on total remittances. However, the incentives may lead to some reallocation of savings since there is evidence that deposits under the foreign exchange schemes have increased. It is also possible that demographic variables like length of actual or expected stay, and the number of dependents at home have greater influence on remittances than financial variables.

Based on these results, an attempt is made to predict the likely future growth in remittances. Since the number of workers (and their wages) is the most important determinant of remittances, the future growth in demand for labor is assessed in a qualitative way. It is suggested that demand for migrant workers is unlikely to increase substantially in the existing "poles" of immigration. Therefore, unless new "centres" of immigration develop, it appears likely that remittances are likely to stabilize; i.e., grow at the same rate as wages in the host country. Per capita remittances may decline as (and if) workers are increasingly integrated with the host society.

Given this scenario, it is fruitful to ask whether other sources of foreign exchange and more importantly, of employment and income can be found; i.e., specifically, can trade and investment capital movements compensate for labor movements? Although this paper has only a cursory look at the direction and magnitude of trade and capital movements from labor-receiving countries, it is clear that there are many constraints – of a structural and institutional character – which make it difficult to substitute trade or capital movements for labor movements. Empirically, there is little evidence that labor-receiving countries actively encourage trade with the labor exporters or that private direct investment is directed towards countries which are supplying labor. Nor is it entirely clear that such bilateral substitution would be efficient in a global sense.

Introduction

1.   The literature on international migration is substantial. It deals
with the history of major population movements which characterized the
development of several countries and continents in the past, with the micro-
economics of supply, and with the measurement of benefits and costs of
emigration to the home-country. This note attempts to study some of the
issues which have not been analyzed systematically in the literature although
occasional references exist. These issues generally deal with the balance of
payments effects of migration. Specifically, the study concerns itself with
the flows of remittances; i.e., the flow of foreign exchange which is at a
social premium in most developing countries. We attempt to understand the
regional structure of and growth in these flows in different parts of the
world.

2.   Secondly, we attempt to identify the determinants of these flows and
their response to the level of and fluctuations in economic activity in the
receiving countries, to (relative) rates of return on savings in the home and
host countries and to other exogeneous variables including various schemes
that the emigrant countries have designed to attract remittances.

3.   Third, based on the results of this analysis, we try to assess the
likely course of future remittances. The questions that need to be answered
are: (a) what is the likely nature and magnitude of future labor migration
(and hence remittances)? (b) what are the alternatives to migration in terms
of trade and investment capital movements? Under what conditions can movement
of people be substituted for by movements of goods and capital? If
remittances grow slowly or decline, can these other flows be expected to
compensate for the decline in foreign exchange earnings?

4.   Finally, we ask the question: Is there scope for national and international action to develop these alternatives to labor migration?

A. The Structure of and Growth in Workers' Remittances

5.   A number of "poles" of immigration can be identified in the world today. These "poles" and the associated countries of emigration are shown in Table 1. The list is not exhaustive; there are some areas in the world where emigration is unrecorded and very little data is available. However, the major emigration and receiving countries are well known and are listed in Table 1.

6.   Unfortunately, data on workers' remittances are not available for all these countries. Indeed, for most developing countries, migrants' remittances are not recorded separately from general private transfers. However, an idea of the magnitudes involved may be had from data on a sample of countries which includes the major labor-sending countries. Table 2 summarizes the results.

7.   Even given the inadequacy of data (which is particularly acute for Central and South America and Africa), in 1978-79, $23.8 billion were recorded to have been transferred from labor-receiving countries to labor-exporting countries. (In contrast, in 1968/69, only about 3 billion dollars constituted remittance inflows.) This is a substantial flow; it is equivalent to about 13% of the value of exports of goods and about 39% of the value of exports of non-factor services from the sample countries.

Table 1

Region	Labor Receiving Countries	Labor-Sending Countries
Europe	Germany, Switzerland,Turkey, France, Belgium, UK, Austria	Yugoslavia, Greece, Portugal, Spain, Italy, Morocco, Tunisia, Algeria
Middle East	Saudi Arabia, Kuwait, Qatar, UAE, Libya	Egypt, Jordan, Yemen A.R. Yemen P.D.R., Sudan, Syria, India, Pakistan, Korea, Taiwan, Bangladesh
Southern Africa	South Africa	Lesotho, Botswana, Swaziland, Mozambique Malawi (till recently)
Western Africa	Ivory Coast	Upper Volta, Mali, Benin, Guinnea.
North America	USA, Canada	Almost all the countries in the world. In particular workers come from Mexico, Jamaica, Bahamas, and South America.
Latin America	Argentina, Venezuela	Colombia, Ecuador, Peru, Bolivia, Paraguay, Uruguay, Chile.

Table 2: WORKERS' REMITTANCES: AGGREGATES FROM A SAMPLE NUMBER OF COUNTRIES

(billions of US dollars)

Region	1968/69	1978/79
Europe	2.20	14.10
Middle East	0.10	4.80
Asia	0.20	3.90
Central America a/	0.03	0.60
South America b/	0.05	0.10
Africa	0.01	0.30
TOTAL	2.59	23.80

a/ Includes only Mexico, Jamaica, Haiti, El Salvador and Guatemala.
b/ Includes only Colombia, Paraguay and Bolivia.

8.   For particular countries, of course, the share of these flows in their foreign exchange earnings is particularly large. In 1979, the percentage of remittances to exports (of merchandise) was 42.5% for Yugoslavia, 76.7% for Turkey, 69.2% for Portugal, and 51.3% for Morocco. Remittances have been important for many countries in the Middle-East; the percentage of remittances to exports was 88.0% for Egypt; for Yemen People's Democratic Republic, Yemen Arab Republic and Jordan, ,remittances were practically the only source of foreign exchange earnings. The percentage has been 76.5% for Pakistan, 20.0% for India, 59.6% for Upper Volta, 33.0% for Mali.

9.   The growth in nominal value of these remittances has differed widely. In Europe, the trend rate of growth ranged between 9% to 11% per year during 1960-79 for the traditional labor exporters, i.e., Algeria, Greece and Italy. For the "new" labor exporters, i.e. Yugoslavia, Turkey and Portugal, the growth rate was over 15%. This reflects the changing nationality composition of the foreign labor force in Europe. In particular, remittances into Italy have grown only at 9.5% per annum and there is evidence that Italy is now a net labor importer. Remittances into Algeria have also grown slowly, reflecting her prospects for domestic development. Remittances into Tunisia and Morocco have grown at over 20%, due to an increased number of workers in the oil-rich Arab countries.

10.   As expected, the rates of growth in remittances into the non-oil developing countries of the Middle East have been phenomenal. Remittances into Egypt, Yemen Arab Republic, Jordan and Sudan have grown at rates of over 30% since 1969. Pakistan's and Bangladesh's remittances have also grown at similar rates during 1972-79. India registered a growth rate of about 20% since 1967, while Taiwan and Korea have much lower growth rates.

11.   Labor-exporting countries of South and Western Africa have registered trend rates of growth in remittances ranging from 15 to 25% since 1967. Mexico's remittances have grown at the rate of 13.5% per annum since 1967, while remittances into Jamaica have grown at the rate of only 8.4%. Data on South American countries is particularly poor, recorded data shows increases of about 20% per year for Colombia and El Salvador since 1967 while no trend is visible for either Bolivia or Paraguay.

B. The determinants of Remittance Flows

12.   We start with a simple model of labor demand, supply and remittance flows. Basically, demand for migrant labor in country j is assumed to be a function of the level of economic activity and where relevant, cyclical fluctuations in such activity; i.e.,

$$D_j^L = f(GDPT_j \quad GDPDEV_j) \tag{1}$$

Supply of labor from country i is assumed to be a function of wages (W) in the two countries, k = costs of migration, and A = availability of jobs in the host country.

$$S_i^L = f(W_j, W_i, k, A_j) \tag{2}$$

and total supply equals demand.

$$\sum_{i=1}^{n} S_i^L = D_j^L \tag{3}$$

Remittances, then, are a function of the stock of workers (determined by demand and supply), their earnings and a number of other variables explained below.

13.   These latter variables reflect the demographic characteristics and economic environment of a migrant. A typical short-term migrant is supposedly a "target-saver", i.e., he is assumed to have as a primary motive of emigration, the accumulation of some "target" level of savings which he tries to accumulate in as quick a time period as possible and after which he returns home in order to eliminate the "psychic" costs of being away from home. Modifications to this basic model are of course possible; in particular, the longer the migrant stays or expects to stay, the more integrated he becomes with the social and economic life of the immigrant country and the less likely he is to send remittances home in a regular manner. In the extreme case of a permanent immigrant, who has or expects to have his family with him, these remittances may cease altogether.

14.   If we assume that this is a fair description of the motivations of a migrant/immigrant, it is still true that at any given time, the immigrant has the option of keeping his savings in the immigrant country utill he leaves (if he leaves) and remit only a part of it. If we control for the peculiar circumstances of the individual migrant described above, remittances may therefore be influenced by financial variables like: (a) the relative real rates of return on financial and real assets in the two countries, (b) exchange-rate fluctuations, and (c) any policies in the emmigrant country that offer incentives for remittances.

15.   Two variants of this model were estimated. First, for all countries for which data on remittances is available for 10 years or more (i.e., 7 labor-exporting countries in Europe, 6 in North Africa, 3 in West Africa, 3 in Southern Africa, 2 in the Middle-East and 4 in South Asia), the following regression equation was estimated.

$$REM_i = f(GDPT_j, GDPDEV_j) \qquad (4)$$

where REM_i = nominal value of remittances into country i.

         $GDPT_j$ = the trend value of GDP in the labor-receiving country j.

         $GDPDEV_j$ = the deviation of actual GDP from trend GDP expressed as a ratio, in country j.

16.   The model for the non-European countries does not contain the second explanatory variable, and the GDPT variable is proxied by other variables (exports, government expenditures) where they appear more relevant. The host-country was taken to be the major immigration pole in the area (see Table 1).

17.   The results indicate that the level of economic activity in the host country (and fluctuations in it) explain 83% to 97% of the variation in remittances into the Middle-East Countries, 80% to 95% in Africa, 77% to 90% in Central and South America, 74% to 95% into Asia and 80% to 96% of variation in remittances into Southern Europe and North Africa.

18.   These results are, of course, as expected. They indicate a strong influence of the level of economic activity in the labor-receiving countries (and therefore demand for migrant labor) on remittances. From these estimated regressions, the elasticity of remittances into a labor exporting country with respect to growth in GDP in the host countries can be derived. However, the elasticities are biased because the coefficients of $GDPT_j$ and $GDPDEV_j$ in the estimated regressions for individual labor exporters are biased. This bias arises because the model (4) is underspecified; i.e., it excludes variables which would have measured separately the effect of supply factors on the number (stock) of workers and hence on remittances. The effect of estimating the under-specified mdoel therefore is that a part of the influence of the left-out variable is captured by the included independent variables. In

short, the elasticities measure the effect of demand for labor and some part of the influence of supply factors on the stock of workers and hence on remittances. Since the demand pull in the labor receiving countries can be assumed to be the same for all labor-exporters, the different values of coefficients (and elasticities) of the included variables in the regressions for different labor exporters reflect, essentially, different supply responses. The higher the elasticity, the larger is the increase in the number of workers from that country (and hence remittances from abroad) associated with an increase in demand for labor in the host country.

19.   The estimated elasticities do show the expected differences; being around 1.6 for the "new" labor exporters in Europe; i.e., Yugoslavia, Turkey and Portugal, but closer to 1 for Greece, Italy and Spain, the "traditional" labor exporters, whose labor exports have tended to grow more slowly. The elasticity of remittances into the major non-oil countries of the Middle East and Asia with respect to government expenditures in the labor-receiving countries is around 1.3.

20.   The cyclicial deviation in economic activity in Europe appears to be a significant determinant of labor demand and, hence, of remittances. A one percent positive deviation in actual GDP from trend causes remittances to increase by $4 to $8 million in the different labor sending countries. Again, the smallest effects are felt in the traditional labor supplying countries, in fact, remittances into Italy are not influenced by such deviations.

21.   A second variant of the model attempts a more precise specification. Instead of GDPT and GDPDEV which are proxies for the number of foreign workers, actual data on the numbers of foreign workers is used. In addition, per capita earnings, and other exogeneous variables are included as explained below. The regression is estimated from time series data on

remittances into Greece, Yugoslavia and Turkey. These three countries account for nearly 60% of the migrant labor force in Germany. Conversely, 87% of Greek migrant workers, 78% of Turkish and 62% of Yugoslav workers in Europe are in Germany. It was hypothesized that differences in returns on financial and real assets in the two countries has some influence on the annual inflows of remittances.

22.   Each of these countries has had special schemes to attract remittances. Yugoslavia allows workers (and their families) to hold foreign exchange deposits in Yugoslavia on which interest is paid in foreign exchange. These interest rates have ranged around 9% in recent years, compared to about 4% on medium term savings deposits in Germany. Greece also has a similar scheme for all Greek workers abroad, offering interest rates of around 7%. Turkey instituted a similar scheme around 1969, offering premium interest rates of close to 20% in 1979.

23.   In Yugoslavia, holders of foreign exchange deposits are entitled to special privileges for imports and even for loans for buying/building/ remodelling apartments and small business places. In addition, starting in 1971, deposit holders were offered special bonds with even higher interest rates. Turkey has been offering a premium exchange rate for workers remittances, and the premium has ranged from 27% to 33% of the par-rate. In addition, Turkish workers were encouraged to start their own co-operative business ventures for which they were allowed special imports, including consumer durables. Greece also instituted a Workers Home Deposit Loan Scheme with provisions for interest payments in foreign exchange.

24.   On the other hand, there are some factors which could be hypothesized to work as disincentives to officially recorded transfers. One important negative influence is that of over valuation of the home

currencies. For example, black market rates for the Turkish Lira have deviated positively from the official rate by 20 to 30% in recent years. For Yugoslavia and Greece, the deviation has been around 3% to 5% in most years. It was hypothesized that the "black market" rate, when high enough, discourages transfers of funds through the organized channels. Another factor that could have a negative influence on officially recorded remittances is the rate of inflation in real-estate values in the home-country. It is known from several surveys conducted in many parts of the world that real-estate buying is a favored method for hedging against inflation by migrants.

25.   Initial results from a pooled regression are mixed. The number of workers and the wages they receive together explain over 90% of the variations in remittances. The relative interest rate variable, the premium exchange rate variable, and the black-market rate variable all turn out to be insignificant. The rate of inflation in real-estate has a significant negative effect on officially recorded remittances, suggesting that while workers increase their remittances when real-estate values go up, they tend to do this through unofficial channels, therefore reducing their remittances through official channels.

26.   We would like to stress that these are only the initial results, and there may be some need for improving the specification of the model and obtaining better data, although every attempt was made to include in remittances, flows which may be recorded elsewhere. For example, foreign exchange deposits of workers in Greece appear to be recorded separately from cash transfers (unlike in Yugoslavia). "Workers" imports into Turkey are recorded separately as well. The value of remittances into these countries was increased by the value of these deposits and imports. Nevertheless, our data on official remittances is probably an underestimate. In addition, of

course, remittances and savings flow through unofficial channels, and goods brought in by migrants when they return are rarely recorded, as they should be, under Migrants Transfers.

27.   These results need to be looked at keeping these limitations in view. However, foreign-exchange deposit schemes and exchange-rate incentives are designed to increase officially recorded remittances, and therefore the insignificance of the coefficients of these variables does offer fairly robust proof that such incentives are not effective. On the other hand, the real-estate variable has a significant negative impact showing that despite these incentive schemes remittances through official channels decline when returns on private real-estate investment rise.

28.   The results tend to dispute the traditional view that incentives offered by the home countries have a significant impact on total remittances. These incentives may lead to some reallocation of savings among different assets since there is evidence that deposits under the foreign-exchange deposit schemes have increased substantially in Yugoslavia and Greece.[1] Another possible explanation, and one that merits some analysis, is that demographic variables; i.e., length of actual or expected stay, and the number of dependents at home, have greater influence on remittances than financial variables. Unfortunately, time series data on such variables is not available.

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[1] Foreign currency deposits increased from about $35.5 million in 1966 to $1.5 billion in 1974; i.e., at a rate of nearly 60% per year. The percentage of remittances deposited in foreign exchange accounts has increased from 14.5% to 24.1% between 1966 and 1974.

C. Future Growth of Remittances

29.   The above analysis of the growth in and determinants of remittances leads to a few straightforward conclusions. They are:

(a)   demand for migrant labor is a function of economic activity,

(b)   given this demand, migration of labor from different countries is influenced by relative wages and other supply considerations,

(c)   the number of workers abroad, and their earnings are the two most important determinants of remittances into the labor exporting countries, and

(d)   once the scale variables are controlled for, incentive schemes of the home-country have only marginal and insignificant effect on total remittances.

30.   What are the implications of these results for future growth in remittances? Since the number of workers is one of the two most important determinants of remittances, it is fruitful to evaluate the determinants of demand for migrant labor in the developed countries; this is an area that has not been carefully studied. In particular, it is important to recognize some important shifts that have occurred in the structure of demand in the last twenty years. These developments are summarized below.

31.   Although international migration has been an important characteristic of development of many countries and continents in the past, much of the migration in the nineteenth and early twentieth centries can be termed "immigration" since it was characterized, by a sense of permanency of stay. While immigration in this sense continues today, most countries "recruit" their immigrants; i.e., select immigrants according to some established (but changable) priorities with respect to skill and education.

32.   A more recent phenomenon has been the recruitment of large numbers of migrant workers on a temporary but systematic basis to satisfy a long run excess demand for labor and cyclical fluctuations in it. As Suzanne Paine puts it: "The evolution of the system of temporarily recruited labor has meant that the host countries have been both able to utilize an extremely flexible supply of labor..... and to select a substratum out of these to fill vacancies which are expected to be permanent".2/

33.   Historically, the earliest example of such recruitment has been in South Africa, whose Chamber of Mines began to recruit migrant labor as early as 1896 to work in the gold and coal mines. These workers came mainly from Mozambique, Lesotho, Botswana and Swaziland. In Europe, from the beginning of the 1960's, large numbers of foreign workers have been recruited by Germany, France, Switzerland, Belgium and other countries including the United Kingdom from the neighboring relatively poorer countries of Greece, Turkey, Yugoslavia, Portugal, Spain and until recently, Italy. France, of course, has had a special advantage in the recruiting of Algerians.

34.   The most recent example of such recruitment has of course been the oil-rich countries of the Middle East. Saudi Arabia, Libya, Kuwait, United Arab Emirates, Qatar, Oman and to a small extent, Iraq, have large numbers of foreign workers from the neighboring Arab States of Yemen, Egypt, Jordan, Syria, Sudan and from India, Pakistan, Bangladesh and Korea. In Table 3, the number of foreign workers in these different regions are given. It can be seen that in 1975-77, there were close to 214 thousand migrant workers in South Africa, about 6.0 million (including border and seasonal workers) in Europe, and about 2 million in the oil-rich Middle East countries.

2/ Suzanne Paine, Exporting Workers, Cambridge University Press, 1974, p.8.

Table 3: NUMBERS OF MIGRANT WORKERS IN DIFFERENT REGIONS OF THE WORLD

(thousands)

	1936	1956	1966	1975	1977
Southern Africa					
South Africa	152.0	212.8	252.4	296.0 1/	214.0 2/
	(318.0)	(383.0)	(371.0)	(381.0)	(389.0)
Europe (Total)				5,554.0	4,914.0
Germany		98.8	1,164.4	2,171.0	1,888.6
France			2,000.0	1,900.0	1,584.0
Switzerland		241.0	577.0	553.0	492.8
Belgium		164.4 3/	181.6 4/	278.0	306.3
Middle East (Total)					1,852.4 5/
Iraq					8.4
Kuwait					211.4
Libya					261.0
Oman					71.8
Qatar					61.8
Saudi Arabia					768.8
United Arab Emirates					247.9

1/ The data is for 1972.
2/ The data is for 1976.
3/ The data is for 1961.
4/ The data is for 1966.
5/ The data is for 1975.

Note: (a) The data for France and Switzerland excludes seasonal and border
workers.
(b) In South Africa, the total number of black workers in mines is
larger as shown in parenthesis and the difference constitutes the
number of S. African black workers.
(c) Migration into the Middle East is a relatively new phenomenan and
data prior to 1975 are not readily available. It must be noted
however, that many of these countries; i.e., Kuwait, Bahrain,
Qatar, U.A.E. had significant numbers of foreigners even prior to
1973.

Sources: OECD - SOPEMI Reports.

W. R. Bohning, The Migration of Workers in the U.K. and the
European Community, 1972.

F. Wilson, Labor in South African Gold Mines, Cambridge University
Press, 1972.

W. Elkan, "Labor Migration from Botswana, Lesotho and Swaziland,"
Economic Development and Cultural Change, April 1980.

J. S. Birks and C. A. Sinclair, International Migration and
Development in the Arab Region, ILO, 1980.

35.　　Increasingly, it appears that countries facing excess-demand for labor are buying "man-hours" preferring to pay for a rolling stock of temporary labor whose demands on their social expenditures and whose integration with the indigeneous population are expected to be minimal. What are the long-term prospects for such migration? Can such recruitment be seen as a permanent solution to excess demand situations? From the point of view of the sending countries, does it mean that they can plan for a constant or rising number of their workers earning abroad and remitting foreign exchange?

36.　　The experience of Europe suggests that there is a limit to the number of foreign workers that a society will tolerate. Even France which had the most liberal policies towards her migrant workers, allowing them to attain permanent status after only 4 years of residence (as compared to 8 in Germany and 10 in Switzerland); "regularizing" workers who entered without permits; and allowing large numbers of dependents to enter, began to modify her procedures in 1968 towards more restrictive laws. Germany introduced a series of measures to discourage the use of migrant labor and in 1973 banned further recruitment. Switzerland attempted to "stabilize" its migrant labor force in 1971 and has progressively reduced its new recruitment.

37.　　Although these measures are attributed to the oil-crisis which undoubtedly played a part, there is evidence that there were other forces at work. An important factor is what Bohning[3] calls the "maturing" of the migrant population. Despite original intentions to import only man-hours, even the countries with the strictest laws found that (a) migration had taken on a circulatory character, i.e., the same workers returned repeatedly, (b) therefore many had acquired (or were eligible to acquire) permanancy status,

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[3] W. R. Bohning, The Migration of Workers in the U.K. and the European Community, Oxford University Press, 1972.

and (c) the age-sex composition of the migrant population was beginning to approach normal profiles i.e., the longer stay and increasing numbers of dependants were making demands on social services and infrastructure.

38.   These developments, along with the not unexpected opposition to immigration from local power groups, led in the 1970′s to a policy of "stabilization" which not only restricted new entries but also attempted to: (a) integrate foreign workers already in residence by speeding up family reunions; (b) reduce the time required to acquire an unlimited work permit; (c) increase family housing facilities, and (d) offer a financial grant to those workers who wished to leave permanently. These measures reflect the host countries′ desire to limit, stabilize, and integrate their foreign populations.

39.   Recent developments in the Middle East suggest that these countries are experiencing the same kinds of problems. Indeed the problems may be more intense for two reasons. Firstly, in none of the countries in Europe (with the possible exception of Luxemburg) was the proportion of foreigners in the labor force as large as in the countries of the Middle East. In 1975, Saudi Arabia′s migrant population accounted for nearly 50% of the labor force, in Libya and Oman, the proportion was nearly 40%, in the gulf states of Kuwait, Qatar and UAE, it was over 85%. Secondly, a study on labor migration and manpower in the Middle East[4/] asserts that for certain expatriate nationalities in the Middle East, nearly normal population (age-sex) profiles are obtained. As a consequence of this demographic evolution, the requirements of infrastructure and social services have increased. These countries are therefore in the process of revising their immigration policies

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[4/]   The World Bank, December 1979, p.19.

towards more conservative laws. In general therefore, it seems that the social and demographic changes that occur with (and within) even a temporarily recruited labor force are such that migration tends to become permanent immigration and forces the labor-importing countries to limit further recruitment.

40.   These developments suggest that the prospects for substantial increases in the demand for migrant workers in these regions are dim. Therefore, unless new "poles" of immigration develop, the labor-exporters are likely to find that remittances will tend to stabilize or grow at the same rate as wages in the immigrant country. Remittances may even decline if a program of "integration" in the immigrant countries succeeds in reuniting and settling families of workers already in the country as is happening in Europe. (Although our results do not demonstrate conclusively that these demographic factors are important determinants of remittances, the insignificant coefficients of the financial variables in the estimated regression suggest, by default, that they are.)

41.   Given these rather modest projections of growth in demand for migrant labor and hence of remittances, it is important to look at possible alternative sources of foreign exchange. The benefits of migration of course go beyond that of earning foreign exchange; the benefits most importantly include the generation of employment and earnings for large numbers of people. In a fundamental sense, therefore, it is worthwhile asking whether there are alternative ways of generating this employment and income. Specifically, the issue is whether foreign direct investment and trade are substitutes for labor movements.

42.   Theoretically, this question has not and perhaps cannot be answered in the sense that there is no unique solution to a system where all factors of

production are freely mobile and trade is free. Most of traditional trade
theory assumes that factors of production are immobile across national
boundaries and that, therefore, comparative advantage is reflected in trade.
On the other hand, "if all factors are mobile and move to the location of
highest reward, the system is indeterminate ultimately, and the fixing factors
are those of historical incident and of natural locational advantage."[5]

43.   Empirically, of course, the existence of trade, investment capital
movements and labor migration suggests that there are constraints on the free
flow of at least one of these factors in any given situation. These
constraints may be institutional or structural as conceptualized below. In
either case, the effect of such a constraint is to increase the mobility of
the other factor or product.

44.   For example, a large part of the migrant labor force in Europe is
employed in manufacturing (63% in Germany, 61% in Austria, 47% in
Switzerland). They are concentrated in the manufacture of labor intensive
goods - textiles, clothing, paper, leather, chemicals, wood and non-ferrous
metals - in which these countries have been losing their comparative advantage.[6]
Clearly, an alternative would be to import these goods. Not only have quotas;
i.e., institutional constraints restricted such imports, but in addition,
their labor imports have come from countries other than those which offer
competition in these industries. Thus, textile industries in the U.S. use
Mexican labor while they face competition from South Korea, and Germany uses
Turkish, Greek and Yugoslav labor in industries that face competition from the
NICs such as Taiwan, Hong Kong and Singapore. Indeed, the direct trade

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[5]   Robert Lucas, "International Migration Economic Causes, Consequences,
      Evaluation and Policies", Boston University (mimeo), March 1979.

[6]   Heimenz U., Trade in Place of Migration, ILO, Geneva, 1979.

relationship between the major labor receiving and sending countries in Europe has hardly changed. The share of Germany in the exports of her major labor-suppliers (excluding Italy) was 5% in 1963, in 1977 it was only marginally higher at 5.8%. The percentage of her exports to the labor-suppliers has also remained roughly constant at around 3.5%.

45. Thus it appears that quotas and tariffs restrict the substitution of labor imports by commodity imports even when such substitution is possible and advantageous from the point of view of global efficiency. Further, the labor imports do not necessarily come from the countries which have a special advantage in producing the importable commodity but rather from a third set of countries who are, usually, geographically and culturally closer to the labor-importing country. This means that even if the institutional constraint was removed and imports allowed to substitute for locally manufactured commodities, the countries who are exporting labor may not be the countries that benefit from increased exports.

46. In the Middle East countries, on the other hand, the constraint on substitution is of a structural character. In contrast to the European situation, the largest proportion of migrant workers are employed in construction (34%) and services (23%), i.e., they are involved in the production of non-tradables. In this situation, of course, trade cannot be a substitute for migration. Indeed, it is argued that in these countries with small population-bases, any process of growth is constrained by labor availability, in contrast to Europe where migrant labor's contribution to the GDP has on the average been less than 5%.

47. It appears therefore that the extent of substitution between trade and migration is constrained by the nature of excess demand for labor. There can be little substitution when excess demand for labor exists in the

non-tradable sectors and this is true also in the case of a large proportion of immigration that is characterized as the "brain-drain". In addition, institutional constraints limit such substitution and it is not clear that even if they were removed, the countries which were exporting labor would benefit from compensating increases in exports.

48.   The possibilities for substituting migration with investment capital movements are equally constrained, although the nature of constraints may be different.

49.   The movement of investment capital in recent years has been associated largely with multi-national corporations and must be seen as a move to take advantage of the lower labor costs in less developed countries. However, it is well-known that investments made abroad by the labor-receiving countries make their way only to a very limited extent to their man-power supplying countries. The major immigration countries (excluding UK) account for about 35% of total foreign direct investment, but the greater part of these investments are made in Latin America and other NICs. This also accounts for the fact that during 1965-69, the emigration countries of Southern Europe accounted for only 1.4% of the profits transferred from developing countries as a whole. Of the total direct investments made abroad by Germany since the 1950s, only 12% has been directed towards the major labor-supplying partners. More than half of this has been made in Spain (in tourism), one-third in the developed part of Italy, and the remaining one-sixth in the remaining countries.[7]

50.   As with trade, therefore, there appear to be constraints on the mobility of investment capital although some of these constraints may be

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[7]   OECD, Migratory Chain, 1978, p.22.

imposed by the developing countries seeking to obtain a significant degree of control over foreign investors. This whole area of the relationships between the markets for labor, capital and commodities needs to be explored much more systematically. However, a superficial look at the data suggests little evidence that labor receiving countries actively encourage trade with the labor-exporters, or that private direct investment is directed towards labor-supplying countries.

SAUDI ARABIA: IMPORT FUNCTIONS

Presented below are the results of an attempt to fit import functions for data for Saudi Arabia which is a major country in the WDR/IMF classification of capital surplus oil exporting countries. This forms part of an attempt to understand the economy of Saudi Arabia and quantify some of the important macro-economic relationships.

Saudi Arabia offers better data, and on the whole, a more stable environment for development and was therefore chosen for analysis. The data on imports are from U.N. and GATT sources, and the SITC codes have been aggregated to conform to the categories used in the WDR tables. Import price indices are as follows:

Machinery and Transport Other Manufactures }	Deflator memo, 1980: Table 14. (Bilateral Weights)
Fuels }	IFS Statistics for Saudi Arabia.
Food Non-Food Metals and Minerals }	Export Price Indices of Primary Commodities for Developing Countries, (Handbook of International Trade, UN, 1979)
Services }	Total Export Index, UN Handbook, 1979.

The income variable is represented by two alternatives, i.e., GDP and Total Government Expenditures. The reason for the alternative use of government Expenditures is the reported unreliability of GDP figures. The data for expenditures are presumably more reliable since they are presented as part of the annual budgets of the country.

Nominal import values have been deflated by the relevant price indices to obtain real values. All other variables have been deflated by the GDP deflator. The functional form therefore is:

$$\text{Log RIMP}_i = f\ (\text{log RGDP}, \text{log}\ \frac{\text{PINDEX}_i}{\text{GDPDEF}})$$

where:

    RIMP   = the real value of imports,

    i   = commodity groups,

    RGDP = real GDP with the alternate specification using real
              government expenditures instead, i.e., RGOVEXP,

  PINDEX = the export price index as explained earlier,

  GDPDEF = the GDP deflator.

Note that the functional form is double-log, and that all price indices have been based to 1977=100. The data covers the period 1966-1977.

Results

These are presented in Tables 1 and 2. The first table presents the results of using the GDP variable in the functional form, while Table 2 presents the results of using government expenditures.

Table 1 shows that the income elasticity for all the commodity groups except Metals and Minerals are significant. The magnitude of the elasticity for Food and Non-food commodities is low as we would expect, while it is close to or greater than one for Machinery and Transport and Other Manufactures, which have the largest shares in imports. Services also have an elasticity close to 1.

The price elasticity for Food is low and not very significant, while the price elasticities for Non-food, Metals, Machinery and Transport and Services are all greater than one and significant.

The equation for Fuels shows both the elasticities to be high and significant - Saudi Arabia appears to be more responsive to energy-price than the western world! The low $\bar{R}^2$ and intution suggests however that the equation may be spurious.

Table 2 shows that the general effect of using government expenditures rather than GDP is to increase the magnitude and significance of the income-elasticities, and decrease the magnitude of the price elasticities. The significance of the price elasticities is also reduced in the case of Food, Non-food, Metals and Minerals, and Other Tanufactures. The t-values for the price terms increase in the case of Machinery and Transport, Fuels, (!) and Services.

The results need to be analyzed further, and the equations may need re-estimation in some cases. But even these preliminary results show that reasonable elasticities can be obtained for this country's imports, and that their import demand is price-elastic, particularly for machinery as well as for services, which are important categories of imports.

(Irma Jacobsen helped with the data, and K. Nguyen did the regressions.)

Table 1

ELASTICITY ESTIMATES FOR IMPORTS INTO SAUDI ARABIA

	Income (GDP) Elasticity	Price Elasticity	R^2	DW
Food	0.53** (3.57)	−0.46 (−2.04)	0.82	0.85
Non-food	0.54* (2.58)	−1.07* (−2.27)	0.66	1.62
Metals and Minerals	0.18 (0.32)	−1.78* (−2.64)	0.72	2.36
Machinery and Transport	1.07** (4.07)	−1.05* (−2.52)	0.90	1.23
Other Manufactures	1.42** (3.92)	−0.82 (−1.44)	0.89	1.16
Fuels	0.78* (2.90)	−1.74* (−3.19)	0.43	2.30
Services	0.93* (2.74)	−1.85** (−4.35)	0.95	1.97

Note: t-values in parenthesis.

*   Single stars represent 5% confidence intervals.
** Double stars represent 1% confidence interval.

Table 2

ALTERNATIVE ELASTICITY ESTIMATES FOR IMPORTS INTO S. ARABIA

	Government Export Elasticity	Price Elasticity	$\bar{R}^2$	DW
Food	0.71** (8.06)	−0.22 (−1.67)	0.95	1.13
Non-food	0.80** (5.59)	−0.60 (−1.86)	0.87	2.04
Metals and Minerals	0.56 (0.93)	−1.38 (−1.94)	0.74	2.45
Machinery and Transport	1.30** (10.78)	−0.79** (−4.20)	0.98	1.15
Other Manufacture	1.65** (5.25)	−0.52 (−1.08)	0.93	1.33
Fuels	0.61** (4.49)	−1.16** (−4.30)	0.66	2.48
Services	0.89* (3.36)	−1.82** (−5.02)	0.96	1.24

Note: t-values in parenthesis.

*   Single stars represent 5% confidence interval.
**   Double stars represent 1% confidence interval.

OFFICE MEMORANDUM

TO: Distribution Below   DATE: June 11, 1982

FROM: Gurushri Swamy, EPDIT

SUBJECT: Project LINK New York Post-Meeting Forecast, June 11, 1982

1.   Please find enclosed Project LINK's latest projections for the 18
OECD countries (including Greece and Spain), the centrally planned economies,
and four developing country regions. These are revisions to the forecasts
presented at their New York meeting in March 1982 which were summarised in my
memo to you dated March 17, 1982. As the covering note to the forecasts
explains, while they have not changed substantially the growth picture for the
OECD countries, the developing countries real growth forecasts has been
revised downwards for 1982 by a full percentage point, i.e., from 4.6% to
3.6%. For the period 1983-84, however, the current projections are slightly
more optimistic than before, for both the OECD and developing countries.

2.   Also, because of the more rapid (than expected) decline in U.S.
inflation, these forecasts have a lower rate of inflation in OECD for 1982.

3.   An article by L. R. Klein, R. Simes and P. Voisin on "Coordinated
Monetary Policy and the World Economy," is available on request.

Distribution:
    Mr. Gulhati (EAVNP)
    Mr. deAzacarate (WANVP)
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GSwamy:ss

April 15, 1981

Mr. Robert E. Evenson
Economic Growth Center
Yale University
Box 1987, Yale Station
New Haven, Connecticut

Dear Bob,

Please find enclosed the write-up on Consumer Demand Systems for the report. Also attached are two tables, one on estimated expenditure elasticities and the other on compensated price elasticities. Hans has read the write-up and says it is O.K.

With best regards,

Gurushri Swamy

V. CONSUMER DEMAND COMPONENT

A major requirement for the policy-impact analysis of the study is a set of income and price elasticities of demand for the major food-grains in India. A review of past work indicated that these elasticities have been typically estimated from single equations and that own-price and cross-price effects have not been adequately specified and estimated. The only study which estimates a system of demand equations uses the Linear Expenditure System 1/ which makes restrictive assumptions about the underlying utility function. In particular, it requires all goods to be gross substitutes, and all income elasticities to be positive.

The model can be implemented only for broad aggregates; therefore the study has estimated demand equations for broad groups of commodities in India of which food-grains is only one. The results are inadequate for the purposes of this analysis.

Our study therefore attempts a more disaggregated analysis; demand equations are estimated for Rice, Wheat, Inferior Cereals, and Other Commodities. The elasticities are computed from a complete set of demand equations with cross-equation constraints on the income and price terms. Three new flexible functional forms were developed and are used. They satisfy all the conditions of demand theory, do not suffer from the restrictive assumptions of the Linear Expenditure System and are particularly well suited to our needs as explained below.

The functional forms are linear in parameters, making estimation relatively simple. They allow for the estimation of cross-price elasticities within a group of close substitutes or complements and are therefore suitable for estimation of our level of disaggregation. They also allow for positive, negative, increasing or decreasing income elasticities. The flexibility of the income term allows "inferior" cereals to have a negative income elasticity. In addition, it allows for all food grains to have increasing or decreasing income elasticities since with food grain consumption, it is unrealistic to assume that the elasticity will be constant across income levels.

These functional forms have been fitted to two data sets. The first is a pooled cross-section of time series data covering 10 states in India and twenty years. The data on consumption or "availability" are derived from production data by adjusting the data for (a) seed, feed and wastage, (b) changes in government stocks, and (c) inter-state movements of grain by rail. Unfortunately, data on private stocks and inter-state movements by road are not available and therefore the "availability" estimates are not adjusted for

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1/ Radhakrishna, R. and K. N. Murthy, "Food Demand Model for India," Sardar Patel Institute of Economics and Social Research, Ahmedabad, 1978.

these. The price data consists of averages of wholesale price quotations for individual commodities from several markets in each state. For nearly 10 years, Indian food procurement policies resulted in the zoning off of surplus states from the deficit ones. Therefore inter-state variations in prices were substantial and this data set takes advantage of these distortions for estimation.

The second data set consists of two (pooled) N.S.S. sample surveys (1960-61 and 1973-74) on consumer expenditures. In these surveys, data on per capita total expenditures, expenditures on specific commodities and per capita quantity consumed have been recorded for several expenditure classes separately for rural and urban areas, (along with data on the average family size in each class). The implicit price is therefore derived for each expenditure class and shows, as can be expected, a positive correlation with total expenditures. This indicates that higher expenditure classes consume higher "quality" varieties of the grain.

The second (N.S.S.) data set therefore offers a richer variety of data. Observations are expenditure class specific, the number of states c covered is double that in the first data set, there is a rural-urban differentiation and there is data on household size. In addition, the implicit prices clearly contain information on preferences for "quality."

In order to exploit this detail, the functional forms were extended in two directions. Firstly, the family size variable is included in the specification. Secondly, the system of demand equations includes one on expenditures on "quality", i.e., the difference between the recorded expenditures on food and expenditures that would result if the average (within a state) price had been paid.

The results of estimating one of the three functional forms (which conforms best to the restrictions of demand theory) with the first data set are given in Table ___. (All elasticities are estimated at predicted means of the dependent variable). It can be seen that the income elasticities for Rice and Wheat are high, while the income elasticity for inferior cereals is small but positive. (The estimated regressions were also used to predict shares and elasticities at expenditures levels ranging from 40% to 180% of the mean level.)

The matrix of compensated price elasticities (Table ____) shows that all the own-price elasticities are negative and they were seen to compare reasonably well with single-equation estimates. The table also presents a complete set of cross-price elasticities, perhaps the first such estimates for India. It is shown that most of the commodities are substitutes except for Wheat and Other Commodities. However this elasticity is not significantly different from zero.

The first stage of estimation with the second data set is complete and the results are being studied.

Although this study is not part of the work on the core components of the project, it provides data essential for the full analysis of the impact of technological change on consumption. A full set of price and income elasticities of demand are estimated from a complete set of demand equations. These estimates should be valuable not only for this particular project, but for any future work involving the measurement of income and price effects.

Although this study is not part of the work on the core components of the project, it provides data essential for the full analysis of the impact of technological change consumption. A full set of price and income elasticities of demand are estimated from a complete set of demand equations. These estimates should be valuable not only for this particular project, but for any future work involving the measurement of income and price effects.

B.   Expenditures Elasticities (at Predicted Mean of Sample)

	Elasticity	t-value
Rice	0.873	6.34
Wheat	1.245	6.90
Inferior Cereals	0.404	2.25
Other Commodities	1.065	—

Note: T-values for the price and expenditure elasticities for "other commodities" are not estimated since they contain no independent information.

Table 5: SELP: COMPENSATED OWN AND ACROSS-PRICE
ELASTICITIES AT PREDICTED MEANS

	Rice	Wheat	Inferior Cereals	Commodities
Rice	-0.5815 (-7.95)	.1275 (2.49)	0.1444 (2.73)	0.3096 (4.54)
Wheat	0.2266 (2.49)	-0.2259 (-1.81)	0.0516 (0.54)	-0.05227 -(0.53)
Inferior Cereals	0.2432 (2.73)	0.0489 (0.54)	-0.6297 (-5.10)	0.3376 (3.14)
Other Commodities	0.0585 (4.54)	-0.0056 (-0.53)	0.0379 (3.14)	-0.09086 —

Note: (i) t-values in paranthesis.

(ii) Symmetry conditions ensure that the price terms are symmetric. But the elasticities are different because they are computed at sample means.

Table 1: HISTORICAL AND PROJECTED GLOBAL CURRENT ACCOUNT BALANCES a/

(billions of current US dollars)

Regions	1970	1971	1972	1973	1974	1975	1976	1977	1978	1980	1985		1990	
											Low	High	Low	High
Oil Importers	-8.6	-10.7	-5.3	-7.3	-33.1	-38.6	-26.8	-22.9	-25.5	-63.3	-73.7	-85.0	-105.9	-135.6
Low Income Countries	-1.7	-2.5	-1.5	-3.1	-6.0	-5.4	-2.4	-1.6	-5.1	-10.4	-14.9	-20.2	-22.3	-35.5
Middle Income Countries	-7.0	-8.2	-3.8	-4.2	-27.1	-33.2	-24.4	-21.3	-20.4	-52.9	-58.8	-64.8	-83.6	-100.1
Oil Exporters	-2.2	-2.9	-3.6	-2.6	19.3	-2.5	-0.3	-5.5	-17.6	4.7	-16.3	-13.9	-27.1	-28.5
All Developing Countries	-10.9	-13.6	-8.9	-9.9	-13.8	-41.1	-27.1	-28.5	-43.1	-58.7	-90.0	-98.9	-132.9	-164.1
Capital Surplus Oil Exporters	2.8	n.a.	1.9	6.7	43.3	30.8	36.3	33.5	19.8	102.2	96.4	100.6	38.4	82.3
Centrally Planned Economies	1.6	n.a.	n.a.	n.a.	n.a.	-7.0	-3.5	-1.1	-0.2	-0.1	-3.4	-5.2	-5.5	-7.6
Industrialized Countries	11.6	15.0	14.9	17.5	-10.0	20.6	1.9	-4.2	26.4	-32.3	26.1	31.7	149.3	138.9
Total b/	5.2	n.a.	n.a.	n.a.	n.a.	3.3	7.6	-0.2	2.9	11.2	29.1	28.2	49.3	49.6

a/ Excluding official transfers. The data for the years 1972 to 1974 for the developing countries are not strictly comparable to the years starting 1975 because the former data are strictly IMF while the latter include estimates made in EPD for countries missing in the IMF files.

b/ The total does not appear in those years for which data on the Centrally Planned Economies are not available.

Source: Preliminary WDR High and Low Cases.

March 5, 1981
EPDIT

Table 2:   Current Account (excluding offocial transfers), as Percentage of GNP a/

Regions	1970	1975	1976	1977	1978	1980	1985 Low	1985 High	1990 Low	1990 High
Oil Importers	-2.4	-5.2	-3.2	-2.4	-2.3	-4.5	-3.0	-3.2	-2.6	-2.9
Low income countries	-1.9	-3.9	-1.6	-1.0	-2.6	-4.3	-3.7	-4.7	-3.5	-5.1
Middle income countries	-2.6	-5.5	-3.5	-2.7	-2.3	-4.5	-2.8	-2.9	-2.4	-2.5
Oil Exporters	-2.2	-0.9	-0.1	-1.5	-4.4	0.9	-1.7	-1.4	-1.6	-1.5
All Developing Countries	-2.4	-4.0	-2.3	-2.2	-2.9	-3.1	-2.6	-2.7	-2.3	-2.5
Capital Surplus Oil Exporters	19.7	35.1	34.2	26.3	14.0	51.0	24.1	24.5	5.9	11.9
Centrally Planned Economies	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Industrialized Countries	0.6	0.5	0.0	-0.1	0.5	-0.4	0.2	0.3	0.8	0.7

a/   This percentage is not calculated for the years 1971-74 because data on current account balances are incomplete, see footnote to Table 1.

March 5, 1981
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Table 3

A: BOP PER CAPITA
(US dollars)

	1980	1985	1990
Capital Surplus Oil Exporters			
High Case	3637	3076	2183
Low Case	3637	2948	1019
Industrialized Countries			
High Case	-48.1	46.2	197.7
Low Case	-48.1	40.3	217.5

B: REAL VALUE OF BOP
(at 78 prices, billion US dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1980	1985 Low	1985 High	1990 Low	1990 High
All Developing Countries	-23.3	-21.1	-16.1	-15.8	-20.0	-53.0	-34.0	-32.9	-43.1	-48.9	-51.0	-56.0	-56.2	-69.5
Capital Surplus Oil Exporters	6.0	n.a.	3.4	10.7	62.8	39.8	45.5	38.6	19.8	85.1	54.6	57.0	16.3	34.9
CPE	3.4	n.a.	n.a.	n.a.	n.a.	-9.0	-4.4	-1.3	-0.2	-0.1	-1.9	-2.9	-2.3	-3.2
OECD	24.8	23.2	27.0	28.0	-14.0	26.6	2.4	-4.8	26.4	-26.9	14.8	18.0	63.2	58.8
Total a/ (including fuel & gold)	11.1	n.a.	n.a.	n.a.	n.a.	4.3	9.5	-0.2	2.9	9.3	16.5	16.0	21.0	21.0
Total a/ (excluding fuel & gold)	7.7	n.a.	n.a.	n.a.	n.a.	-6.3	-0.4	-9.9	-4.6	-9.9	-8.0	-7.1	-8.1	-6.9

a/ Totals are not given for these years in which data for the CPE countries are not available.

March 5, 1981
EPDIT

Table 3

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(US dollars)

	1980	1985	1990
Capital Surplus Oil Exporters			
High Case	3637	3076	2183
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Industrialized Countries			
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B: REAL VALUE OF BOP
(at 78 prices, billion US dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1980	1985 Low	1985 High	1990 Low	1990 High
All Developing Countries	−23.3	−21.1	−16.1	−15.8	−20.0	−53.0	−34.0	−32.9	−43.1	−48.9	−51.0	−56.0	−56.2	−69.5
Capital Surplus Oil Exporters	6.0	n.a.	3.4	10.7	62.8	39.8	45.5	38.6	19.8	85.1	54.6	57.0	16.3	34.9
CPE	3.4	n.a.	n.a.	n.a.	n.a.	−9.0	−4.4	−1.3	−0.2	−0.1	−1.9	−2.9	−2.3	−3.2
OECD	24.8	23.2	27.0	28.0	−14.0	26.6	2.4	−4.8	26.4	−26.9	14.8	18.0	63.2	58.8
Total a/ (including fuel & gold)	11.1	n.a.	n.a.	n.a.	n.a.	4.3	9.5	−0.2	2.9	9.3	16.5	16.0	21.0	21.0
Total a/ (excluding fuel & gold)	7.7	n.a.	n.a.	n.a.	n.a.	−6.3	−0.4	−9.9	−4.6	−9.9	−8.0	−7.1	−8.1	−6.9

a/ Totals are not given for these years in which data for the CPE countries are not available.

March 5, 1981
EPDIT

Table 1: HISTORICAL AND PROJECTED GLOBAL CURRENT ACCOUNT BALANCES a/

(billions of current US dollars)

Regions	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980 c/	1985 Low	1985 High	1990 Low	1990 High
Oil Importers	-8.6	-10.7	-5.3	-7.3	-33.1	-38.6	-26.8	-22.9	-25.5	-44.4	-69.6	-71.7	-86.1	-101.3	-141.3
Low Income Countries	-1.7	-2.5	-1.5	-3.1	-6.0	-5.4	-2.4	-1.6	-5.1	-7.2	-10.9	-14.0	-20.2	-20.4	-34.7
Middle Income Countries	-7.0	-8.2	-3.8	-4.2	-27.1	-33.2	-24.4	-21.3	-20.4	-37.2	-58.7	-57.7	-65.9	-81.0	-106.6
Oil Exporters	-2.2	-2.9	-3.6	-2.6	19.3	-2.5	-0.3	-5.5	-17.6	5.1	1.0	-12.6	-9.3	-28.3	-32.1
All Developing Countries	-10.9	-13.6	-8.9	-9.9	-13.8	-41.1	-27.1	-28.5	-43.1	-39.3	-68.6	-84.4	-95.4	-129.6	-173.4
Capital Surplus Oil Exporters	2.8	n.a.	1.9	6.7	43.3	30.8	36.3	32.9	18.8	56.7	102.2	96.4	100.6	38.4	82.4
Centrally Planned Economies	1.7	n.a.	n.a.	n.a.	n.a.	-7.0	-3.5	-1.1	-0.2	-0.8	-0.1	-3.4	-5.2	-5.5	-7.6
Industrialized Countries	12.1	15.5	16.0	18.9	-8.5	22.0	3.9	-1.5	29.9	-9.5	-40.3	14.6	20.6	128.8	128.8
Total b/	5.7	n.a.	n.a.	n.a.	n.a.	4.7	9.6	1.9	5.4	7.1	-6.8	23.2	20.6	32.0	30.2

a/ Excluding official transfers. The data for the years 1971 to 1974 for the developing countries are not strictly comparable to the years starting 1975 because the former data are strictly IMF while the latter include estimates made in EPD for countries missing in the IMF files.

b/ The total does not appear in those years for which data on the Centrally Planned Economies are not available.

c/ The data for 1980 are the latest estimates and as such differ from the projections reported earlier in the WDR IV Low and High Cases.

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