C E P A L

Economic Commission for Latin America

INCREASED PRICES FOR WORLD OIL AND THE OIL-DEFICIT ECONOMIES
OF LATIN AMERICA AND THE CARIBBEAN, 1973-1978

Joseph W. Mullen */

*/   The author is an Economist in the Division of Natural Resources.
      The views expressed in this work are the sole responsibility of
      the author and do not necessarily coincide with those of the
      Organization.

INTRODUCTION

Background

In its Meeting in La Paz, Bolivia, on 26 April 1979, the Economic Commission for Latin America instructed the CEPAL Secretariat, in co-operation with specialized agencies in Latin America, _inter alia_, "... to include in its notes for the Economic Survey of Latin America, starting in the current year, a detailed analysis of the impact of the rise in the commercial prices of hydrocarbon energy products on the principal economic variables in Latin American importing countries...".

This note is a response to that instruction. The orientation of this brief discussion is to the oil-deficit countries of the region as a group, as opposed to a forthcoming study of CEPAL which will examine, country by country, the principal effects of oil price increases on the region's oil-deficit economies, the economic problems posed by those price increases, and the policy responses of Latin America's oil-deficit countries to them.

Objective

In order to estimate the impact of "... the rise in the commercial prices of hydrocarbon energy products on the principal economic variables in the Latin American importing countries ...", two basic steps would be required:

(a) First, the "principal economic variables" would have to be specified and a quantitative measure of their performance calculated for the periods prior to and following 1973. The critical variables would be total real output, the domestic price level, employment, and unemployment. Consideration of these variables, in turn, requires an examination of a series of additional and important variables such as changes in real exchange rates and in the key accounts of the balance of payments together with changes in domestic savings and investment, the level of external debt, and the annual service on that debt, changes in the terms of trade and in the purchasing power of imports.

/(b) Changes

(b) Changes since 1973 in these variables would then be simulated
    for each oil-deficit economy, holding constant real world oil
    prices at their pre-1973-level. For each variable, the
    difference between actual and simulated change would report
    the impact on that variable of the increased price of world
    oil.

It is empirically impossible to implement this methodology for
Latin America's oil-deficit countries. Some of these countries, such
as the smaller islands of the Caribbean, for example, do not publish
time series on total real output, prices, employment, or unemployment.
Many of the remaining economies of the region lack time series on at
least one, and generally more than one, of these variables. Time series
on employment and unemployment since 1973 are particularly deficient. Even
when the required time series are available, lags in their publication
are typically prohibitive from the point-of-view of timely analysis.
Separate and apart from the availability of time series on the variables
themselves, however, the wealth of supporting data required for
econometric simulation, in an empirically convincing way, is simply
unavailable for most of the oil-deficit countries of Latin America.

In view of these obstacles, an alternative, less rigorous approach
must be adopted. The pattern of change in the key economic variables
for the region's oil-deficit countries will be specified, and a general
explanation will be provided for that observed pattern of change. The
objective is to document and explain the overall pattern of macro-
economic adjustment of the region's oil-deficit countries as a group
to the higher prices that they have faced for world oil since 1973.
Unfortunately, because of prohibitive data limitations on changes in
employment and unemployment in Latin America's oil-deficit countries
since 1973, changes in these two critical variables will not be treated
in this report.

/The macroeconomic

The macroeconomic choices posed by the increased
price of world oil

Between 1973 and 1979, the average price for term sales of Saudi Arabian light crude oil increased from $ 2.20 to $ 16.87 per barrel, FOB, Persian Gulf (Exhibit 1). By January, 1980, that price had risen to $ 23.85 per barrel, and in February, 1980, it was $ 26.00 per barrel. In dollars of 1970, the average price of this key crude oil increased from $ 1.55 in 1973 to an estimated $ 5.88 per barrel in 1979, or by 279%. Spot prices in the world oil market increased even more after 1973 than did term prices, and many of Latin America's oil-deficit countries came to depend more heavily on the spot market for their crude oil imports after 1973 than before. Obviously, price increases of this magnitude for such an economically critical commodity as world oil constitute a massive shock to oil-importing countries throughout the world.

The twelve-fold increase in the price of Saudi Arabian light crude oil between 1973 and February, 1980, did not take place smoothly over time. Two periods of major price increase took place. The first of these occurred during 1973-1974, when the market price of Saudi Arabian light crude oil increased from $ 2.20 to $ 8.42 per barrel, or by 283%. The second major price increase took place in steps between 1978 and December 1979, during which period the price of this benchmark crude oil increased from $ 12.70 to $ 23.85 per barrel, an 88% increase.

Adjustment to the direct economic effects of the first major price increase, during 1973-1974, was probably completed within two or three years thereafter, to the extent that there was, of course, a full cost pass-on to consumers in the first place. However, the second series of price increases, after 1978, are so recent that the adjustment to their direct effects, obviously, has yet to be realized completely in the markets of the oil-deficit economies. In this case, the adjustment period for direct price effects is still in progress. In terms of empirical evidence, recorded statistics thus reflect, for the most part, the direct and part of the indirect impacts of the first major price increase of 1973-1974, but, probably, not to any great extent, either the direct or the indirect effects of the second, more recent price increases. The indirect effects of both major price

/increases have

increases have yet to be felt fully in Latin America's oil-deficit
economies because many of the induced changes in consumption and in
production techniques and volumes take relatively long periods of time
to take effect.

The increased price of world oil triggered a surge in the share
of oil in the total imports of Latin America's oil-deficit countries
between 1973 and 1979 that ranged from 3.4 to 4.5 percentage points, as
in the cases of Uruguay and Nicaragua,to 20.8 percentage points, as in
the case of Brazil (Exhibit 2). On the average, the share of oil
imports in the total imports of each of the group of countries shown in
Exhibit 2 increased by 10 percentage points during 1973-1979. Unless
major losses in (non-oil) import capacity such as have been recorded in
Latin America's oil-deficit countries since 1973 are not offset by other
factors, operating largely through the balance of payments of these
countries, then the oil-importing country inevitably faces a choice
between two macroeconomic alternatives: first, the relatively milder
one of real devaluation; or, second, the economically harsher alternative
of deflation, introduced to restrict growth in imports by braking growth
in aggregate demand.

These two alternatives can be avoided only if growth in export
earnings, capital imports, drawdowns in foreign reserves, improved terms
of trade and/or in the purchasing power of exports provide the financial
strength for the oil-deficit country to withstand the shock of increased
payments for its imported oil over time. If these sources of financial
strength prove inadequate, then the oil-deficit country faces the
inevitable choice between real devaluation or deflation. Initially,
real devaluation may be chosen as the less drastic of these two policy
options. However, if real devaluation is pursued, but has only a small
positive impact on the balance of payments, then deflation inevitably
lies ahead.

/The macroeconomic

The macroeconomic record

Basic performance

What was the pattern of macroeconomic change in Latin America's oil-deficit countries during 1973-1978, the period of initial adjustment following the quadrupling of world oil prices in 1973-1974 but prior to the further sharp increases in those prices recorded after 1978? How did total real output, the balance of payments, real exchange rates and domestic prices change in these countries during 1973-1978? 1/ Examination of the record on these matters reveals the following basic facts:

(a) Weighting equally each of the region's thirteen oil-deficit countries covered in Exhibit 3, the average rate of growth in the group's total real output declined from 6.1% during 1968-1973 to 4.1% during 1973-1978, a deceleration of 33%. Nevertheless, several of the region's oil-deficit countries did record relatively rapid rates of growth in total real output during 1973-1978, despite the markedly increased cost of their oil imports; and three of them recorded an acceleration in their average annual growth rate during 1973-1978 vis-a-vis 1968-1973: Uruguay (by 150%), El Salvador (20%), and Chile (15%).

On the other hand, ten Latin American oil-deficit countries recorded decelerated growth during 1973-1978; relatively mild deceleration was recorded in the cases of Honduras (by 1%), Paraguay (4%), and Guatemala (5%). Much stronger deceleration was recorded in the cases of Nicaragua (10%) and Costa Rica (21%), while very strong deceleration was recorded in Haiti (27%), Brazil (39%), the Dominican Republic (54%), and Panama (81%). Of the thirteen oil-deficit countries

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1/   The scarcity of data on employment and unemployment in Latin
      America prohibits detailed consideration of changes in these
      two key variables during the period under consideration.

covered in Exhibit 3, only Jamaica recorded a negative growth
rate in total real output during 1973-1978, and in Honduras,
Jamaica and Panama, real output per capita was lower in
1978 than in 1973.

(b) Every Latin American oil-deficit country for which data are
presented in Exhibit 4 recorded accelerated average rates
of inflation during 1973-1978 vis-a-vis 1968-1973.

(c) The real exchange rate of most of the region's oil-deficit
countries depreciated during 1974-1978 vis-a-vis 1968-1972
(Exhibit 5). Additionally, the figures in Exhibit 5 show
that, in general, the extent of this depreciation was
relatively mild, on the average, in most country cases
during 1974-1978.

Two questions are now raised: first, what lies behind the fact
that a few of the region's oil-deficit countries recorded a relatively
strong record of economic growth in total real output during 1973-1978
while others recorded decelerated growth, despite the fact both groups
of countries confronted sharply increased payments for their imported
oil supplies? And, second, to what extent was accelerated inflation
in Latin America's oil-deficit countries during 1973-1978 tied to the
sharply increased payments by these countries for their imported oil
supplies?

Total real output

General expansionary forces

Two factors promoted growth in total real output during 1973-1978,
not only in those few oil-deficit countries of the region that recorded
accelerated growth but, also, in the many oil-deficit economies that
recorded decelerated growth. These broadly impacting, growth-promoting
factors were the following:

(a) A boom in the value of exports, a phenomenon tied, in some
cases, to rapid growth in traditional exports; in others,
to rapid growth in non-traditional exports; and, in some

/cases, to

cases, to a boom in both simultaneously (Exhibit 6). Almost
every one of the thirteen oil-deficit countries covered in
Exhibit 6 recorded, at least, a doubling of its exports
(in current prices) during 1973-1978. This impressive
record of growth in exports is traceable fundamentally to
four factors: first, the rapid and   accelerated
growth that took place in world trade during this period; 1/
second, the favorable record of prices for many, but not all,
of the key commodities exported by the region's oil-deficit
countries (Exhibit 7), a factor that, in turn, helped to
mitigate the degree of deterioration that occurred in some
of these countries' terms of trade and/or the purchasing
power of their exports 2/ (Exhibits 8 and 9); third, in
some of the region's oil-deficit countries, the subsidization
of exports provided a significant stimulus to their growth;
and, fourth, real devaluation constituted a powerful
stimulus to export growth in various of the region's oil-
deficit countries (Exhibit 5).

(b) The second factor that promoted growth in total real output
in virtually every oil-deficit country of Latin America
during 1973-1978 was the sharp step-up in the rate of
capital inflow brom abroad (Exhibit 10). In turn, this
factor lies, in large part, behind the rapid increase in
the level of external indebtedness, both private and public,
that took place in these countries during 1973-1978
(Exhibit 11); it also provides part of the explanation
for the sharply increased claim of debt service on export
earnings in many of the region's oil-deficit countries
(Exhibit 12); and it was also a significant force behind

1/   The average annual growth rate in world imports was 14%
     during 1968-1972 and 22% during 1973-1978. Source: IMF,
     International Financial Statistics, 1980 (Annual), p. S-67
     (in Spanish).
2/   In fact, the terms of trade and the purchasing power of
     exports improved significantly in some years in some of the
     region's oil-deficit countries during 1973-1978, helping
     them, to this extent, to contend with higher prices for
     world oil.

/accelerated inflation

accelerated inflation in some of the region's oil-deficit
countries during 1973-1978. Exhibit 13 shows the sharp
increase in the claim of oil and foreign debt service on
the export earnings of Latin America's oil-deficit countries
during 1973-1978, underscoring the critical importance of
foreign capital inflows in sustaining vigor in the balance
of payments and economic growth of the oil-deficit countries
of the region during these years.

(c) The sharp increase in the rate of capital inflow into the
region's oil-deficit countries during 1973-1978 was also
a major force behind the concomitant increase in domestic
investment rates which promoted growth in productive
capacity and, in some cases, in total real output. The
data in Exhibit 14 show that, while domestic savings
rates faltered, or declined absolutely, in some of Latin
America's oil-deficit countries during 1973-1978, domestic
investment rates increased in most of them.

Special growth-promoting forces

While the export boom and increased rate of capital inflow
promoted growth in Latin America's oil-deficit countries in general
during 1973-1978, the ability of some of these countries to record
accelerated growth is also traceable to the operation of two additional
factors:

(a) Broad-ranging changes in domestic economic policy that
promoted increased economic efficiency in resource allocation
and use and, thereby, contributed to output-stimulating
productivity gains.

(b) A second special factor, analytically incorporated in the
first, but deserving special emphasis, was the relative
success that some countries had in controlling inflation.

/Special forces

Special forces in the growth-decelerating countries

By way of comparison, the oil-deficit countries of the region
that recorded decelerated rates of growth in total real output during
1973-1978 vis-a-vis 1968-1973, seem to have done so, despite impressive
export growth and generally vigorous rates of capital inflow and
domestic investment rates, under one or more of the following pressures:

(a) Increased rates of inflation impacted negatively on consumption
and investment expenditures in some of the region's oil-
deficit countries, and, therefore, on their rates of growth
(Exhibit 4). Both consumption and investment might have risen
even more rapidly if scarce foreign exchange had not been
diverted to pay for higher oil import bills in these economies.
In fact, the deceleration observed in the growth of total real
output in some of Latin America's oil-deficit countries since
1973 was often the result of deflationary policies introduced
specifically to retard domestic inflation in these economies,
a phenomenon that, while obviously tied, in some part, to
increased world oil prices, had other, more powerful causes
behind it as well.

(b) In various oil-deficit countries of the region, declines in
their terms of trade and/or purchasing power of exports
(Exhibits 8 and 9) increased the pressure on their balance
of payments with negative consequences for their economic
growth.

(c) Significant economic setbacks were recorded in some oil-deficit
economies of the region due to political uncertainty and
natural disasters. Earthquakes, droughts, floods, and
hurricanes occurred sporadically throughout Central America
and the Caribbean during 1973-1978. Growth in real output
would have been higher and inflation less rapid in the absence
of these natural disasters.

(d) In some

(d) In some oil-deficit countries, administered prices often
increased less rapidly than inflation, exerting a depressing
effect on the growth rate of total real output.

Inflation

Inflation in the region's oil-deficit countries accelerated during
1973-1978 vis-a-vis 1968-1972. What is the basic explanation for this
pattern of accelerated inflation, and how important was increasing prices
for world oil in it?

Chief among the factors promoting inflation in Latin America's oil-
deficit countries during 1973-1978 were the following:

(a) The straight pass-on to Latin America's oil-deficit economies
of accelerated rates of inflation in the U.S. and world
economy. 1/ This was obviously the case with the Central
America and the Caribbean economies, many of which maintained
constant nominal rates of exchange for their currencies against
the dollar (Exhibit 5). In these countries, the increased
local currency cost of their imports from countries the
currencies of which were appreciating against the dollar
exacerbated domestic inflationary pressures even further.
On the other hand, in those oil-deficit countries that
devalued their currency against the dollar in nominal terms,
upward price pressure was generated above and beyond that due
to accelerating U.S. and world inflation alone.

(b) Inflation was also intensified in some oil-deficit countries
by a relatively heavy reliance on money issues (Exhibit 15)
to finance central government deficits (Exhibit 16) as
opposed to relatively greater reliance on tax levies and
debt issues. This factor was particularly pronounced in the
case of Central America's and Caribbean economies.

1/ During 1968/69-1972/73 and 1973/74-1977/78, the average annual rate
of change in consumer prices in the developed countries increased
from 5.5% to 9.3%. During this same period, the average annual rate
of change in the price (CIF) of exports from the developed countries
of commodities in (revised) SITC categories 5-8 increased from
10.4% to 13.3%. Sources: IFS, International Financial Statistics,1979
(Annual), S-59, (in Spanish); and IBRD, Commodity Trade and Price
Trends (1979 Edition), Report Nº EC-166/79, p.32.

(c) Additionally, strong growth in net capital inflows from
abroad promoted increased levels of international reserves
in some oil-deficit countries (Exhibit 10) which, together
with inflationary financing of public sector deficits,
operated through the commercial banking system to produce
vigorous increases in the supply of money and credit, and
this, in turn, put domestic prices in these countries under
upward pressure.

Exhibit 15 shows the pattern of change in the money supply
that occurred during 1973-1978 in Latin America's oil-deficit
countries. The figures reveal a sharp acceleration in the
rate of increase in the stock of money (M_1 plus M_2) during
1973-74/1977-78 vis-a-vis 1968-69/1972-73, far beyond that
explainable by the concomitant growth in total real output
(or by velocity changes) during this period (Exhibit 3).
Increases in the money supply, linked in the case of some
oil-deficit countries to coverage of public deficits, on the
one hand, and to marked increases in the rate of net capital
inflows in general, on the other, must surely be ranked among
the critical factors behind the pattern of widespread,
accelerated inflation in various Latin America's oil-deficit
countries during 1973-1978, although it is clear that changes
in these two factors were, in turn, dynamically related, in
part, to the increased price of world oil in the first place.

(d) Production losses due to natural disasters, on the one hand,
or the lifting of price controls in inflationary circumstances,
on the other, also put prices under upward pressure in several
of the region's oil-deficit countries at various times during
1973-1978.

(e) Increased

(e) Increased prices for world oil obviously created upward price
pressure during 1973-1978 in the region's oil-deficit countries.
However, it is obviously not the case that increased prices
for world oil during 1973-1978 provide the sole explanation
for accelerated inflation during that period. There is no
evidence of anti-inflationary programmes being introduced in
these countries during that period with the exclusive purpose
of arresting the impact of increased prices for world oil on
domestic prices in general. As already noted, other powerful
forces in part tied to increasing prices for world oil, were
also accelerating inflation in Latin America's oil-deficit
countries during 1973-1978.

The inflationary impact of increased prices for world oil requires
amplification at this point. It was simply impossible to quantify accurately,
country by country, the degree of upward pressure on the national price
deflator, the most aggregate measure of domestic prices, owing exclusively
to increases in the cost of world oil, year by year, during 1973-1978.
There are some dozen-and-a-half oil-deficit countries in Latin America,
and each is clearly distinct in terms of its economic structure and in
terms of both the degree and the timing with which increased prices for
world oil and other primary energy sources were passed forward to
domestic energy consumers. Additionally, the lack of statistical data
required to model cost pass-throughs convincingly in these economies
prohibits an econometric tracking, year-by-year, of domestic price
pressures associated with increases in the cost of primary energy
supplies during 1973-1978. Finally, the extent of individual reliance
by these countries on purchases of oil in term and spot markets is not
known, and the actual mix of such purchases obviously impacts on the
extent of increase in the average prices paid for oil imports during
1973-1978; and this, in turn, affects the estimate of potential
inflationary pressures triggered by higher oil prices under the assumption
of an immediate and full-cost pass-through.

/In view

In view of these severe limitations, a less rigorous, but, nevertheless, useful quantitative approximation will be made of the potential direct upward pressure on the GNP price deflator triggered by increased prices for world oil, year-by-year, during 1973-1978. The quantitative argument underlying this estimate is detailed in Exhibit 17.

Given these assumptions, the calculations shown in Exhibit 17 suggest that the direct, once-and-for-all, potential upward pressure on the GNP price deflator in 1973-1974 owing to the increased price of world oil (and primary energy supplies, in general) was about six percent. This once-and-for-all, upward price pressure was less than one percent in each year thereafter through 1978. It is impossible to calculate, convincingly, the indirect effects of oil price increases on the national price deflator; but, at the outside, they might be, more or less, on the same order of magnitude as the direct price effects as estimated in Exhibit 17. This assumption would suggest a potential 12% total upward price pressure in 1973-1974 and a 2% increase annually during 1974-75 to 1977-78. When this estimate of total, potential upward price pressure, including both direct and indirect price effects, is compared with actual rates of change in the national price deflator of Latin America's oil-deficit economies since 1973 (Exhibit 4), it is clear that the effect of increased costs for oil and primary energy supplies in general provide only a part of the overall explanation for the inflationary record of Latin America's oil-deficit countries during 1973-1978.

This estimate of the combined, potential upward pressure on the national price deflator during 1973-1978, due to both direct and indirect effects of oil price increases, is a very rough one, and its weaknesses should be made very clear at this point. First, not all oil-deficit countries of the region increased the price of refined oil products in their domestic economies pari passu with increases in the price of oil in the international market. In fact, the data in Exhibit 18 indicate that the general pattern has been that many of the region's oil-deficit countries maintained lower prices for these products than would be the case if they had set domestic prices for refined oil products at

/international parity

international parity. The result is that, on this account, the estimate
of the upward pressure on the national price deflator due to increases
in domestic prices for refined oil products as shown in Exhibit 17
contains an upward bias. In this same vein, to the extent the domestic
prices for fuels other than oil increased less rapidly than if they had
been priced domestically on an opportunity cost basis; this same
upward bias would be contained in the estimates presented in
Exhibit 17. Second, part of the substitution processes in both production
and consumption triggered in the domestic market of the oil-deficit
countries of the region by increased oil and energy prices in general
would tend to ease, not aggravate, price pressure; the calculations
shown in Exhibit 17 do not take this factor into account, and, to this
extent, they contain an upward bias. Third, the calculations in
Exhibit 17 assume that the increase in the national price deflator due
to increased domestic energy prices occurs in the same year in which
the latter occurs (i.e. no time lags); this is surely erroneous. It
might take two or three years for the direct price effects of an oil
price increase to work themselves out, and much longer in the case of
indirect price effects. Fourth, the calculations in Exhibit 17 assume
implicitly that the direct effects of increased prices for energy products
to final consumer and the indirect price effects associated with the
higher prices that consumers pay for the goods and services that they
purchase, do not provoke cost-price spirals. This is surely a weak
assumption, and so the estimates of total upward price effects discussed
above are undoubtedly downward biased on this account; and, probably,
the extent of this downward bias is quite significant in the case of
those oil-deficit countries in the region in which these cost-price
spirals were actually set in motion. Fifth, the estimate of upward
pressure on the national price deflator shown in Exhibit 17 was
calculated using 1973 weights. If weights of a more recent year had
been used, then the calculated upward price pressure would be higher
than those generated using 1973 weights. Such distortion is

/statistically inevitable

statistically inevitable. Weights of 1973 were employed simply because a fairly good estimate of them could be made while this was not the case for more recent years. Sixth, the assumption that the indirect effects of increased prices for fuels in the domestic market are equal to the direct effects of these price increases is an arbitrary one, and it surely contains considerable error when considered country-by-country. However, it is simply impossible to estimate the indirect effects of these price increases for each of the many oil-deficit countries of the region. Probably, this rough assumption is on the high side for many of these countries, but the extent of the error contained in this assumption is simply unknown. Therefore, the estimate of potential total upward price pressure stemming from increased oil prices as shown in Exhibit 17 should be taken as a very rough, and far from precise, approximation.

However, even when these various sources of bias and error are taken into consideration, some working to increase and others to decrease the estimated, potential upward pressure on the national price deflator, the conclusion seems fairly sound that increased prices for fuels in the domestic markets of the region's oil-deficit economies does not provide the major part of the explanation for accelerated inflation in these economies during 1973-1978. Other more powerful forces, and particularly increases in domestic money supplies and the pass-on to these countries of worldwide inflation, have contributed importantly to accelerated inflation in them since 1973; but, it should also be underscored that even these two additional inflation-promoting forces are also dynamically linked to the increased price of world oil.

Summary

There have been two major phases of increases in the price of internationally traded crude oil since 1973. The first occurred during 1973-1974 and the second after 1978. The direct effects of the first, but not the second, price increase have, by now, more or less worked

/themselves out,

themselves out, assuming full cost pass-throughs in the first place. The indirect effects of both price increases have yet to be worked out fully.

This report has examined the impact of the increase in the price of world oil, in 1973-1974, on the principal economic variables of the oil-deficit economies of Latin America during 1973-1978. Two impact variables were isolated for analysis: total real output and the domestic price level. A variety of other critical economic variables were also considered, including changes in the balance of payments, real exchange rates, the terms of trade and purchasing power of exports, domestic savings and investment rates, changes in the level of external indebtedness and in the annual service payments on that debt.

The share of oil in total imports of the region's oil-deficit countries increased, on average, by ten percentage points during 1973-1979. If an oil-deficit country cannot alleviate the pressure on its balance of payments due to increased payments for its oil imports, then it faces the choice between real devaluation, on the one hand, or deflation, on the other.

To-date, Latin America's oil-deficit countries, in general, have chosen the adjustment mechanism of real devaluation, having successfully avoided the more painful one of deflation. In general, most of these countries were able to avoid deflation through 1978 because a combination of vigorous export growth and capital inflows gave them the financial strength, on balance of payments account, to avoid it.

The increased price of world oil certainly meant lost growth for the region's oil-deficit countries. Export earnings that otherwise might have been applied productively in their economies had to be diverted to cover the increased cost of their imported oil supplies. Of the thirteen oil-deficit countries of the region for which data on real growth are available, ten recorded a deceleration in their average annual growth rate during 1973-1978 vis-a-vis 1968-1973; only three recorded accelerated growth; and the rate of growth in total real output of the group of thirteen, taken as a whole, decelerated on the order of roughly one-third.

The reasons for this diverse pattern of growth in total real
output vary country-by-country, of course. However, generalizing for
the region's oil-deficit countries as a group, strong growth in export
earnings and capital inflows from abroad promoted growth in virtually
every one of them during 1973-1978, separate and apart from whether they
finally recorded deceleration or acceleration in their average growth
rates. Additional factors underlying the pattern of accelerated and
decelerated growth were certainly at work, above and beyond export
growth and capital inflows, and these have been discussed in the text.

Increased prices for world oil during 1973-1978 have undoubtedly
contributed to inflation in Latin America's oil-deficit countries since
then. However, the extent of this contribution has probably been far
less than that due to other powerful forces working in this same
direction. The direct price effect of the oil price increase in late
1973, assuming a full-cost pass-on of increased energy costs to
consumers, would probably have meant a potential increase in the
national price deflator of roughly six percent during 1973-1974; and,
in the subsequent five years, the direct effect would probably have
been on the order of one percent or less per year. Indirect price
effects might be on the same order of magnitude as the direct price
effects, and this would imply a potential 12% price increase during
1973-1974 and a 2% increase thereafter annually during 1974-75/1978-79.
When the overall pattern of potential upward price pressure is compared
with actual increases in the national price deflator during 1973-1979
in the region's oil-deficit countries, it is clear that an explanation
for inflation in these countries must be sought largely in the operation
of other factors, two of which were especially important: the pass-on
to these countries of accelerated world-wide inflation and changes in
their domestic money supplies.

By way of conclusion, in the face of sharply increased prices
for world oil, many of Latin America's oil-deficit countries during
1973-1978 chose the relatively milder adjustment mechanism of real

/devaluation.

devaluation. In general, the extent of real devaluation was rather
modest in many of the region's oil-deficit countries during 1974-1978.
These countries were able to avoid the harsher option of deflation
during 1973-1978, fundamentally because of vigorous performance on
balance of payments account. Prices for traditional exports remained
highly favourable, and strong growth in the value of non-traditional
exports, combined with accelerated rates of capital inflow, were the
underlying sources of the financial strength required to avoid deflation
or far more severe real devaluation than was recorded in the region's
oil-deficit countries in general during 1973-1978.

Looking toward the future, however, the threat is clear: should
import demand in the industrialized countries wane, as a result, say,
of a recession or the imposition of tighter import-restrictions by
these countries, or should the export prices of the region's oil-deficit
countries fall sharply, or should the rate of capital inflow decline
significantly, then Latin America's oil-deficit countries would,
perforce, be moved that much closer toward the painful option of
deflation. In this sense, although the oil-deficit countries of
Latin America have, by and large, weathered the storm of increased
prices for world oil rather successfully to-date, there is nothing
in that past record of success that implies its continuance in the
future. Painful adjustment may still lie ahead.

/Exhibit 1

Exhibit 1

CURRENT DOLLAR AND REAL PRICES OF SAUDI ARABIAN LIGHT CRUDE OIL,
1951 (avg.) - FEBRUARY, 1980

(In US$ per barrel, FOB, Persian Gulf, as indicated)

Year	Term price, FOB, Persian Gulf, in current US$ per barrel (1)	International price deflator (1970=100)a/ (2)	Estimated real FOB term price ($ 1970 per barrel)b/ (1:2)
1951	1.71	85	2.01
1952	1.71	87	1.97
1953	1.81	83	2.18
1954	1.93	82	2.35
1955	1.93	82	2.35
1956	1.93	85	2.77
1957	1.93	87	2.22
1958	1.83	88	2.08
1959	1.70	88	1.93
1960	1.53	90	1.70
1961	1.45	90	1.61
1962	1.42	90	1.58
1963	1.40	90	1.56
1964	1.33	92	1.44
1965	1.33	95	1.40
1966	1.33	95	1.40
1967	1.33	96	1.39
1968	1.30	90	1.44
1969	1.28	90	1.42
1970	1.26	100	1.26
1971	1.33	108	1.23
1972	1.75	119	1.47
1973	2.20	142	1.55
1974	8.42	176	4.78
1975	10.81	202	5.35
1976	11.51	206	5.59
1977	12.40	220	5.64
1978	12.70	254	5.00
1979	16.87	287	5.88
1979 (December)	23.85		
1980 (January)	23.85		
1980 (February)	26.00		
1980 (III Q)	30.21		

Source: Column 1: 1951-1976, J.W. Mullen, World Oil Prices: Prospects
and Implications for Energy Policy-Makers in Latin America's...

(Continued)

/Oil-Deficit

Exhibit 1 (conclusion)

<u>(Cont.)</u>

... <u>Oil-Deficit Countries</u>, CEPAL, Santiago, Chile, p.10,
Exhibit 4; 1977-1978 and 1980 (III Q), <u>Petroleum Intelligence
Weekly</u>, November 10, 1980, p.11; 1979 (December), and 1980
(January), <u>Petroleum Intelligence Weekly</u>, January 21, 1980;
1980 (February), <u>Petroleum Intelligence Weekly</u>, February 18,
1980; 1980 (III Q), <u>Petroleum Intelligence Weekly</u>,
November 10, 1980, p.11. Column 2: 1951-1959, IBRD,
<u>Commodity Trade and Price Trends</u>, August, 1979, Report #EC
166/79 (English edition); 1960-1979, IBRD, <u>Commodity Trade
and Price Trends, August</u>, August, 1980.

<u>a/</u> This IBRD-reported series is for the unit value of exports (FOB)
from developed market economies of products in (Revised) S.I.T.C.
Groups 5-8 (chemicals, manufactured goods classified by material,
machinery and transport equipment and miscellaneous manufactured
articles). The series was taken from: IBRD, <u>Commodity Trade and
Price Trends</u>, August, 1980 (English edition). This time series
is taken as a proxy measure of changes in the general international
purchasing power of the US dollar.

<u>b/</u> This series is the result of dividing the price series in current
dollars for a given period (Column 1) by the international price
index value for that period (Column 2).

/Exhibit 2

Exhibit 2

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES: OIL IMPORTS AS A PERCENT OF TOTAL IMPORTS, 1968-1979 a/

(In percent)

Oil-deficit countries	1968	1973	1978	1979
South America:				
Brazil	13.6b/	14.1b/	30.7b/	34.9
Chile	5.5	6.3	16.0	21.1
Paraguay	5.1	4.6	11.3	11.1
Uruguay	13.5b/	15.7b/	26.0b/	19.1
Central America:				
Costa Rica	2.3	3.8	8.5	12.0
El Salvador	4.7	5.9	7.4	11.0
Guatemala	0.2	6.3	6.8	...
Honduras	4.3c/	8.2	10.9	13.6
Nicaragua	3.2	5.2	10.2	9.7
Panama	18.9b/	17.5b/	22.1b/	25.4b/
Caribbean:				
Haiti	5.4	4.7	12.2	17.5⋆
Jamaica	6.9	10.5	23.5	27.7⋆
Dominican Republic	7.7	9.7	18.6	22.6

Source: IMF, International Financial Statistics, 1980 (Yearbook) and
March 1981; and CEPAL, División de Estadística, for the cases
of Chile, Haiti, and the Dominican Republic.

a/   Includes imports of crude oil and refined products unless otherwise
specified.
b/   Includes crude petroleum only.
c/   1969.
... Means not available.
⋆/   Estimated.

Exhibit 3

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES: AVERAGE ANNUAL GROWTH RATES IN TOTAL REAL OUTPUT a/
AND LEVELS OF REAL PER CAPITA INCOME b/
(In units as indicated for the periods shown)

	Average Growth Rates:			Real Per Capita Income ($ 1970)		
	1968-69/1972-73	1973-74/1977-78	1978-79	1973	1978	1979
	%	%	%			
South America:						
Brazil	11.5	7.0	6.4	600	744	773
Chile	2.1	2.6	8.2	837	858	913
Paraguay	9.4	9.0	10.7	389	507	543
Uruguay	1.4	3.5	8.4	909	1 061	1 142
Central America:						
Costa Rica	7.1	5.6	4.3	757	879	895
El Salvador	4.4	5.3	(3.1)	415	463	436
Guatemala	6.0	5.7	4.5	453	512	519
Honduras	3.8	3.6	6.8	293	292	301
Nicaragua	4.2	3.8	(24.8)	407	412	300
Panama	6.7	1.3	5.7	961	897	926
Caribbean:						
Haiti	4.5	3.3	1.9	120	127	126
Jamaica	6.7	(3.6)	...	745	590	...
Dominican Republic	11.1	5.1	3.6	426	478	483

Source: Data on total real output from CEPAL on the basis of official data.
Data on population from CELADE, Boletín Demográfico, Nº 27.

a/ At factor cost, in dollars of 1970.
b/ Mid-year population.
... Means not available.
( ) Means negative.

/Exhibit 4

Exhibit 4

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES, PERCENTAGE CHANGES IN THE NATIONAL PRICE DEFLATOR:
AVERAGE CHANGES AND ANNUAL CHANGES FOR SELECTED PERIODS
(In percentages)

Oil-deficit countries	Average for 1968-69/1972-73	Annual Changes						Average for 1973-74/1977-78
		1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	
South America:								
Brazil	18.7	31.5	32.7	41.9	42.2	38.5	59.4	37.4
Chile	123.0	653.7	349.4	249.9	103.9	56.4	44.5	282.7
Guyana	6.2	39.2	17.9	(9.3)	4.0	15.3	...	13.4
Paraguay	8.1	23.7	6.6	5.0	9.2	10.4	20.6	11.0
Uruguay	49.0	73.3	74.0	51.4	48.2	46.5	67.5	58.7
Central America:								
Costa Rica	7.1	23.2	24.5	16.6	17.0	7.9	9.8	17.8
El Salvador	3.3	11.3	8.9	21.7	17.6	1.8	...	12.3
Guatemala	3.7	15.7	13.1	11.5	16.5	5.5	8.6	12.5
Honduras	3.6	11.5	8.6	7.4	10.2	10.1	11.5	9.6
Nicaragua	5.3	23.3	2.4	10.6	14.1	3.0	...	10.7
Panama	3.7	21.4	4.8	3.9	4.0	4.2	...	7.7
Caribbean:								
Haiti	6.4	14.5	19.4	18.9	12.3	(3.1)	...	12.4
Jamaica	7.2	31.7	19.7	11.2	12.3	27.1	...	20.4
Dominican Republic	3.6	17.6	17.1	2.9	9.1	0.9	...	9.5

Source: CEPAL, on the basis of official data.

... Means not available.
( ) Means negative.

Exhibit 5

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES:AVERAGE EXCHANGE RATES,1974-1979
(Price of U.S. dollars in local currency;index numbers,average 1968-72 = 100)

Oil-deficit countries	Nominal Exchange Rate	Real Exchange Rate a/
South America:		
Brazil	304	127
Chile	1 142 b/	242 b/
Guyana	122	159 (130) c/
Paraguay	100	79
Suriname	97	122
Uruguay	1 372	110
Central America:		
Costa Rica	128	114
El Salvador	100	110 d/
Guatemala	100	119
Honduras	100	149 (141) c/
Nicaragua	106	120 c/
Panama	100	109
Caribbean:		
Barbados	102	89
Dominican Republic	100	120
Haiti	100	116
Jamaica	137	120

Source: IMF, International Financial Statistics, 1980 (Annual and 1981 March);
for consumer and wholesale price indexes and nominal exchange rates.
CEPAL data on national price deflators. For international prices,
the index of unit value of exports from developed market economies of
products in (Revised) SITC groups 5-8 was used. This series was
obtained from: IBRD, Commodity-Export Projects Division, Commodity
Trade and Price Trends, August 1980, p. 32, Column 7, and its commodity
coverage has been specified in Exhibit 1, footnote (b).

a/   The real exchange rate is equal to the nominal exchange rate times the
ratio of international to domestic prices. The index of unit value of
exports of products in (Revised) SITC groups 5-8 was used as a proxy for
international prices. Where available, the wholesale price index for each
country was used as a proxy for domestic prices. Otherwise, the consumer
price index was used. It is quite likely that the use of the consumer
price index, because it includes services, underestimates the extent of
price inflation for tradable goods in the 1974-78 period. To the extent
that the use of domestic price indexes (either the wholesale or retail
price indexes) employed here understate the actual change in price of...

/tradable goods

Exhibit 5 (conclusion)

(Cont.)

      tradable goods, then the calculated values for the real exchange rate
presented here understate the extent of real revaluation and overstate
the extent of real devaluation. The methodology used in the case of
Chile is different from that used in all other country cases and it
it is explained in footnote b/.

b/   In the case of Chile, the nominal exchange rate is a weighted average
of legal exchange rates, and its value for each year, 1968-1972/1974-
1978, was taken from: IBRD, Chile: An Economy in Transition, Report
Nº 2390-CH, June 21, 1979, pp. 27,83 and 98. The international price
index is a weighted average of the CIF index of prices of developed
country manufactured exports and the IBRD price indexes for
agricultural exports and thirty-four commodities; the source for this
series is: Ibid., pp. 27,83 and 98. An IBRD-adjusted consumer price
index was used for measuring changes in domestic prices in Chile, this
series being taken from Ibid., Table 9.2, p. 222 and Table 9.3a, p.223.

c/   The statistic without parenthesis is based on the use of the consumer
price index as a proxy for domestic prices, and the statistic shown in
parenthesis is based on the use of the implicit GDP deflator, no other
price index being available. In the cases of Guyana and Nicaragua, the
deflator statistic is for 1974-1978.

d/   The wholesale price index in this case excluded coffee.

Exhibit 6

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES: TOTAL, TRADITIONAL, AND NON-TRADITIONAL EXPORTS, FOB
(In millions of U.S. dollars)

| | 1968 | | | 1973 | | | 1974 | | | 1978 | | | 1979 | | |
	Total	Traditional	Non-Traditional	Total	Traditional	Non-Traditional	Total	Traditional	Non-Traditional	Total	Traditional	Non-Traditional	Total	Traditional	Non-Traditional
South America															
Brazil	1 881	1 006	875	6 199	3 109	3 090	7 951	3 588	4 363	12 659	4 719	7 940	15 244	5 126	10 118
Chile	858	756	102	1 231	1 072	159	2 481	1 725	756	2 408	1 282	1 126	3 763	1 910	1 853
Guyana	114	91	23	128	105	23	271	232	39	296	253	43	291	248	43
Paraguay	47	35	12	124	93	31	166	122	44	253	214	39	299	259	40
Uruguay	179	155	24	322	244	78	382	249	133	688	258	430	788	253	535
Central America															
Costa Rica	171	119	52	345	239	106	407	261	146	844	527	317	925	581	344
El Salvador	212	108	104	358	196	162	462	243	219	848	541	307	1 128	772	356
Guatemala	231	144	87	445	269	176	582	349	233	1 113	721	392	...	...	...
Honduras	179	120	59	262	200	62	295	180	115	608	434	174	733	500	233
Nicaragua	162	98	64	277	151	126	380	204	176	646	415	231	...	...	...
Panama	100	86	14	138	114	24	211	178	33	245	181	64	288	205	83
Caribbean															
Barbados	40	18	22	50	16	34	86	26	60	130	23	107	151	29	122
Haiti	36	21	15	54	31	23	80	39	41	152	74	78	185	90	95
Jamaica	220	177	43	390	290	100	706	581	125	639	517	122	765	580	185
Dominican Republic	183	145	38	442	397	45	637	584	53	675	577	98	866	762	104

Source: I.M.F., International Financial Statistics, 1980 (Annual) and March, 1981.

Notes:- "Traditional" exports are defined as those product exports, the values for which were shown separately on the country pages of the I.M.F.'s International Financial Statistics. "Non-traditional" exports is the difference between the sum of "Traditional" exports and "Total exports". With these definitions in mind, all values were taken from the I.M.F.'s International Financial Statistics, 1970 and 1980, annual edition. Exchange rates were taken at the end of the period.
... Figures not available.

Exhibit 7

SELECTED COMMODITY PRICES 1968-80

Commodity	I.M.F. Ref. Line	Units	Average 1968-72	1973	1974	1975	1976	1977	1978	1979	1980
Aluminium	76 drz	¢ Lb.	27	27	35	39	40	52	60	70	85
Bananas Latin America (U.S. Ports)	76 u.z.	¢ Lb.	7	7	8	11	12	12	13	15	17
Bauxite; Guyana (Baltimore)	76 brz	$/metric ton	46	61	72	105	117	135	138	153	212
Beef-frozen (Argentina)	74 kaz	¢ Lb.	36	71	84	39	41	53	53	87	...
Beef-corned (Argentina)	74 kdz	¢ Lb.	50	82	113	75	74	75	76	119	...
Coffee-Brazil (N.York)	76 ebz	¢ Lb.	46	69	73	83	149	267	165	178	209
Coffee-Brazil	74 e.z.	¢ Lb.	37	53	57	50	122	204	142	155	...
Coffee-Colombia (N.York)	76 e.z.	¢ Lb.	50	73	78	82	158	240	185	183	179
Coffee-El Salvador	74 e.z.	¢ Lb.	40	50	61	54	115	207	161	146	...
Coffee-Colombia	74 e.z.	¢ Lb.	46	67	68	62	119	217	167	139	...
Copper-United Kingdom	76 cz	¢ Lb.	57	81	93	56	64	59	62	90	99
Cotton-Mexico	74 f.z.	¢ Lb.	28	42	50	51	90	63	70	74	...
Fishmeal-Peru	74 zz	$/metric ton	135	386	322	212	278	420	416	376	...
Hides-United St.(Chicago)	76 pz	¢ Lb.	17	34	24	23	34	37	47	73	46
Iron-Ore-Brazil	76 gaz	$/metric ton	13	17	19	23	22	22	19	23	27
Lead-United States	76 v.z.	¢ Lb.	15	16	22	22	23	31	34	53	44
Sugar-Caribbean (N.Y.)	76 iaz	¢ Lb.	4	9	30	20	12	8	8	10	29
Sugar-Brazil	74 i.z.	¢ Lb.	5	9	25	29	12	8	8	9	...
Sugar-Dominican Republic	74 iz	¢ Lb.	6	8	14	27	12	9	9	9	...
Sugar Import Price (N.Y.)	76 iaz	¢ Lb.	8	10	29	22	13	11	...	...	...
Tin-Bolivia	74 q.z.	¢ Lb.	160	208	361	313	344	476	567	672	...
Zinc-Peru	74 t.z.	¢ Lb.	6	10	17	16	15	13	...	...	...
Zinc-U.S. (New York)	76 t.z.	¢ Lb.	16	21	36	39	38	35	32	38	38

Source: IMF, _International Financial Statistics_, 1980 (Annual) and March, 1981.

Note: Lines 76 gives wholesale prices and lines 74 gives unit values.
... means not available.

/Exhibit 8

Exhibit 8

SELECTED LATIN AMERICAN OIL DEFICIT COUNTRIES, TERMS
OF TRADE: 1973-1979

Country	1973	1974	1975	1976	1977	1978	1979 a/
South America:							
Brazil	107	91	85	93	101	88	78
Chile	83	88	53	57	51	50	53
Paraguay	135	119	106	111	140	124	111
Uruguay	153	81	65	62	62	64	68
Guyana	101	135	139	113	115	122	112
Central America:							
Costa Rica	91	73	83	94	128	114	104
El Salvador	107	89	89	120	157	127	120
Guatemala	82	69	67	74	92	87	75
Honduras	96	97	91	99	114	110	99
Nicaragua	103	98	79	97	129	115	100
Panama	109	113	111	87	81	77	84
Caribbean:							
Haiti	86	90	95	124	188	181	166
Jamaica	88	114	134	119	127	121	117
Dominican Republic	94	107	149	100	104	94	97
Barbados.	109	146	181	105	98	97	95

Source: CEPAL, on the basis of official data.

a/ Preliminary.

' Exhibit 9

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES: CHANGES
IN THE PURCHASING POWER OF EXPORTS, 1973-1979

(1970 = 100)

	1973	1974	1975	1976	1977	1978	1979 a/
South America:							
Brazil	158	132	135	149	174	169	170
Chile	89	114	66	88	82	85	109
Guyana	85	121	130	101	89	96	85
Paraguay	157	144	130	154	235	246	228
Uruguay	120	76	71	99	97	106	99
Central America:							
Costa Rica	117	104	114	136	181	178	168
El Salvador	125	108	122	166	210	174	205
Guatemala	107	99	96	110	149	132	124
Honduras	118	104	94	116	135	152	170
Nicaragua	127	131	113	157	174	160	134
Panama	101	103	118	90	92	89	83
Caribbean:							
Barbados	111	118	148	116	129	149	153
Haiti	104	99	99	129	166	178	139
Jamaica	102	140	134	106	115	112	104
Dominican Republic	160	180	224	171	176	141	164

Source: CEPAL, on the basis of official data.

a/ Preliminary

Exhibit 10

SELECTED BALANCE OF PAYMENTS DATA FOR VARIOUS LATIN AMERICAN OIL-DEFICIT COUNTRIES,
CUMULATIVE 1968-1972 AND CUMULATIVE 1974-1978, (IN US$ BILLIONS),
AND TOTAL INTERNATIONAL RESERVES, SELECTED YEARS (IN US$ MN.)

| Country/period | Balance of payments items: | | | | | | | Memo: in million US$, end of period total international reserves | | |
| | Net trade balance | Net invisible balance | Current account balance | Oil imports CIF | Capital inflows: | | | | | |
					Total	Direct capital investment	All other short and long-term capital inflows	1968	1972	1978
South America										
Brazil										
1974-1978	(11.9)	(21.4)	(33.3)	13.9	39.4	7.4	32.0	257	3 852	9 154
1968-1972	-	(4.3)	(4.2)	1.9	7.7	1.1	6.6			
Chile										
1974-1978	1.1	(3.1)	(1.9)	1.4	1.9	0.3	1.6	208	137	885
1968-1972	0.7	(1.6	(0.9)	0.2	1.2	0.2	1.0			
Guyana										
1973-1977	-	0.3	0.3	0.2	0.2	-	0.2	24	34	45
1968-1972	-	(0.2)	-	-	-	-	-			
Paraguay										
1974-1978	(0.2)	(0.2)	(0.5)	0.2	0.9	-	0.9	12	29	358
1968-1972	-	(0.1)	0.1	-	0.1	-	0.1			
Suriname										
1973-1976	0.1	(0.2)	(0.2)	-	0.2	-	0.2	28	43	100
1968-1972	-	-	-	-	-	-	-			
Uruguay										
1973-1977	(0.2)	(0.3)	(0.4)	0.7	0.7	-	0.7	167	187	348
1968-1972	0.1	(0.3)	-	0.4	0.2	-	0.2			
Central America										
Costa Rica										
1974-1978	(0.8)	(0.6)	(1.3)	0.2	1.3	0.3	1.0	21	39	152
1968-1972	(0.3)	(0.1)	(0.3)	-	0.3	0.1	0.2			
El Salvador										
1974-1978	-	(0.6)	(0.5)	0.2	0.5	-	0.5	62	76	223
1968-1972	0.1	(0.2)	-	-	-	-	-			
Guatemala										
1973-1977	(0.2)	(0.5)	(0.3)	0.5	0.8	0.3	0.5	66	124	587
1968-1972	-	(0.3)	(0.1)	-	0.2	0.1	0.1			
Honduras										
1974-1978	(0.3)	(0.5)	(0.6)	0.2	0.8	-	0.8	32	32	142
1968-1972	-	(0.2)	(0.1)	-	0.2	-	0.2			
Nicaragua										
1974-1978	(0.1)	(0.5)	(0.7)	0.3	0.5	-	0.5	48	74	40
1968-1972	-	(0.2)	(0.2)	-	0.2	-	0.2			
Panama										
1974-1978	(2.0)	1.3	(0.7)	0.7	1.1	-	1.1	11	40	115
1968-1972	(1.0)	(0.7)	(0.3)	0.3	0.7	0.1	0.6			
Caribbean										
Bahamas										
1974-1978	(1.4)	1.5	-	0.4	0.2	0.2	-	44	34	45
1968-1972	-	-	-	-	-	-	-			
Barbados										
1974-1978	(0.7)	(0.4)	(0.2)	0.2	-	-	-	16	26	46
1968-1972	(0.3)	0.1	(0.2)	-	-	-	-			
Haiti										
1974-1978	(0.2)	(0.1)	(0.1)	-	0.1	-	0.1	3	17	30
1968-1972	-	-	-	-	-	-	-			
Jamaica										
1974-1978	(0.2)	(0.7)	(0.9)	0.7	0.8	-	0.8	120	147	41
1968-1972	(0.6)	(0.3)	(0.7)	0.1	0.8	0.6	0.2			
Dominican Republic										
1974-1978	(0.2)	(1.2)	(1.2)	0.6	0.9	0.2	0.7	36	54	122
1968-1972	(0.2)	(0.3)	(0.4)	-	0.5	0.2	0.3			

Source: IMF, International Financial Statistics, August, 1975, August, 1979 and 1979 (Annual). The data on end-of-year
   total international reserves were taken from IFS, Ibid, 1979 Annual, p. S-45 (in Spanish).
Note: () means negative balance. Dash indicates not available. Totals may not tally due to rounding.

Exhibit 11

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES, EXTERNAL PUBLIC AND PRIVATE DEBT 1968, 1973, 1977 AND 1978
(In millions of dollars)

	1968			1973			1977			1978		
	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total
Oil-deficit countries:	2 246	5 581	7 827	7 541	9 162	16 703	21 024	17 703	38 727	30 376	19 967	50 343
South America:	1 836	4 617	6 453	6 301	7 160	13 461	17 914	12 079	29 993	26 628	13 398	40 026
Brazil	984	2 855	3 839	4 631	4 546	9 177	14 661	8 561	23 222	22 003	9 755	31 758
Chile	677	1 425	2 102	1 386	1 954	3 340	2 145	2 453	4 598	3 444	2 312	5 756
Guyana	18	74	92	89	172	261	241	257	498	211	424	635
Paraguay	27	75	102	47	196	216	159	374	533	238	471	709
Uruguay	130	188	318	148	319	467	708	434	1 142	732	436	1 168
Central America:	246	648	894	732	1 396	2 128	2 223	3 997	6 220	2 861	4 698	7 559
Costa Rica	51	119	170	104	238	342	515	785	1 300	639	977	1 616
El Salvador	14	85	99	12	171	183	28	422	450	61	606	667
Guatemala	60	102	162	33	164	197	10	652	662	8	782	790
Honduras	6	106	112	19	196	215	92	720	812	115	803	918
Nicaragua	75	151	226	178	315	493	488	658	1 146	433	711	1 144
Panama	40	85	125	386	312	698	1 090	760	1 850	1 605	819	2 424
Caribbean:	164	316	480	508	606	1 114	887	1 627	2 514	887	1 871	2 758
Bahamas	27	19	46	50	24	74	33	25	58	25	25	50
Barbados	12	-	12	23	15	38	20	59	79	26	77	103
Haiti	13	31	44	12	41	53	5	212	217	4	244	248
Jamaica	87	65	152	301	200	501	573	726	1 299	496	867	1 363
Dominican Republic	25	201	226	122	326	448	256	605	861	336	658	994

Source: IDB, External Public Debt of the Latin American Countries, July, 1980.

Exhibit 12

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES, SERVICE PAYMENTS ON
EXTERNAL PUBLIC DEBT AS PERCENTAGE OF EXPORTS OF GOODS a/
AND SERVICES, b/ 1968, 1973 AND 1978

(Percentages)

	1968	1973	1977	1978
Oil-deficit countries:				
South America:				
Brazil	15.3	11.9	19.5	28.5
Chile	19.8	10.9	34.4	43.0
Guyana	6.1	6.9	14.2	19.3
Paraguay	10.3	10.0	6.4	7.6
Uruguay	19.0	22.9	28.1	46.7
Central America:				
Costa Rica	12.1	10.3	9.0	23.4
El Salvador	2.6	5.3	5.7	3.1
Guatemala	7.9	3.6	1.2	1.8
Honduras	2.1 c/	3.7	7.2	8.6
Nicaragua	7.8	19.5	13.9	17.3
Panama	3.1	16.8	18.6	62.0
Caribbean:				
Bahamas	...	1.3	0.5	0.4
Barbados	1.3	2.7	3.4	6.9
Haiti	2.0 c/	7.7	6.9	5.9
Jamaica	3.1	6.0	15.4	27.2
Dominican Republic	7.5	5.6	6.9	10.2

Source: IDB, External Public Debt of the Latin American Countries, July,
1980, Table 52.

a/ Experts f.o.b.
b/ Excluding "investment income"
c/ 1969.
... Not available.

Exhibit 13

LATIN AMERICA: SELECTED OIL-DEFICIT COUNTRIES, SHARE OF OIL IMPORTS (CIF) IN TOTAL EXPORTS FOB
AND SHARE OF SERVICE PAYMENTS ON EXTERNAL DEBT a/ IN TOTAL EXPORTS, FOB
(Percent as indicated)

	1968			1973			1977			1978		
	Oil	Debt	Total	Oil	Debt	Total	Oil	Debt	Total	Oil	Debt	Total
South America:												
Brazil	13.9	15.3	29.2	14.7	11.9	26.6	32.7	19.5	52.2	33.4	28.5	61.9
Chile b/	5.5	19.8	23.8	6.4	10.9	17.3	20.5	34.4	54.9	19.9	43.0	62.9
Guyana b/	9.5	6.1	15.6	13.0	6.9	19.9	19.9	14.2	34.1	23.9	19.3	43.2
Paraguay	5.5	10.3	15.8	3.8	10.0	13.8	6.8	6.4	13.2	9.4	7.6	17.0
Uruguay	9.0	19.0	28.0	10.9	22.9	33.8	21.4	28.1	49.5	22.0	46.7	68.7
Central America:												
Costa Rica	2.4	12.1	14.5	4.1	10.3	14.4	9.2	9.0	18.2	10.0	23.4	33.4
El Salvador	4.3	2.6	6.9	4.7	5.3	10.0	6.6	5.7	12.3	7.7	3.1	10.8
Guatemala	0.2	7.9	8.1	5.1	3.6	8.7	5.7	1.2	6.9	6.5	1.8	8.3
Honduras	4.2 c/	2.1 c/	6.3 c/	7.3	3.7	11.0	13.7	7.2	20.9	12.6	8.6	21.2
Nicaragua	3.1	7.8	10.9	4.8	19.5	24.3	10.6	13.9	24.5	7.5	17.3	24.8
Panama	15.6	3.1	18.7	17.0	16.8	33.8	28.5	18.6	47.1	22.6	62.0	84.6
Caribbean:												
Haiti b/	5.4 c/	2.0 c/	7.4 c/	7.4	7.7	15.1	22.1	6.9	29.0	17.0	5.9	22.9
Jamaica	6.4	3.1	9.5	11.2	6.0	17.2	24.7	15.4	40.1	22.6	27.2	49.8
Dominican Republic b/	7.7	7.5	15.2	10.7	5.6	16.3	22.1	6.9	29.0	33.2	10.2	43.4

Source: The value of oil imports were taken from I.M.F., International Financial Statistics, 1980 (Annual) and March, 1981; the value of
total exports were taken from the source indicated in Exhibit 12. The percentage figures in the case of "debt" are taken from
Exhibit 12. In the case of Guyana, oil imports and total exports were taken from: The Statistical Bureau, Ministry of Economic
Development, Georgetown, Guyana, External Trade, issues of December, 1968, December, 1974, and December, 1978. In the cases of
Chile, Haiti, and the Dominican Republic, the data on oil imports and total exports were provided by the Division of Statistics,
CEPAL. In all cases, data on external public debt were taken from: IDB, External Public Debt of the Latin American Countries,
July, 1980, Table 52.

a/ Includes interest and amortization payments.
b/ Includes fuel oil and lubricant imports.
c/ 1969.

Exhibit 14

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES, AVERAGE ANNUAL RATES
OF DOMESTIC SAVINGS AND INVESTMENT

(In percentage as shown for the periods indicated)

Oil-deficit countries	Average annual rate of savings a/		Average annual rate of investment b/	
	1968-1973	1973-1978	1968-1973	1973-1978
South America				
Brazil	22.8	21.7	25.2d/	26.0d/e/
Chile	...	13.6f/	...	16.3f/
Paraguay	11.8	18.0	16.0	23.7
Uruguay	11.0	10.5	11.5	14.0
Central America				
Costa Rica	13.2	13.7	21.8	24.8
El Salvador	12.5	16.5	14.2	22.0
Guatemala	11.3	14.8	13.5	18.8
Honduras	13.7	13.0	18.7	22.5
Nicaragua	12.5	15.8	13.8	22.6
Panama	21.8	20.8	27.5	29.7
Caribbean				
Haiti	4.8	6.2	8.5	12.3
Jamaica	21.4c/	12.6	32.8c/	21.5
Dominican Republic	11.5	16.2	18.7	23.3

Source: CEPAL, Division of Statistics, on the basis of official data.

a/ GNP less (private plus public consumption) ÷ GNP = Domestic saving rate.

b/ (Gross fixed capital formation plus change in inventories) ÷ GNP = Domestic investment rate.

c/ 1969-1973.

d/ Changes in inventories included in 1973 and 1974 but not during 1975-1978, during which period they are included in private consumption expenditure.

e/ Excluding change in inventories beginning in 1974.

f/ 1974-1978.

... Not available.

Exhibit 15

CHANGES IN THE MONEY SUPPLY, SELECTED LATIN AMERICAN COUNTRIES, SELECTED YEARS

(In percent changes as indicated)

Oil-deficit countries	Average for: 1968/69- 1972/73	Average for: 1973/74- 1977/78	Average for: 1973/74- 1978/79	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
South America:									
Brazil	33.8	40.8	45.7	33.7	40.2	37.1	43.5	49.5	70.4
Chile	162.3	196.2	173.7	338.0	256.5	165.8	130.1	90.8	60.7
Guyana	15.2	19.8	17.8	15.6	41.2	9.1	22.8	10.3	7.5
Paraguay	19.3	26.5	26.1	20.9	26.2	23.4	31.5	30.5	24.2
Uruguay	51.0	85.2	85.2	70.7	91.5	97.1	78.0	89.3	84.7
Central America:									
Costa Rica	20.7	32.5	32.6	33.0	37.8	38.0	27.0	26.9	33.0
El Salvador	13.6	19.1	17.4	17.1	22.4	31.0	14.0	11.0	8.8
Guatemala	15.8	20.6	18.8	15.4	21.3	30.9	21.9	13.3	9.8
Honduras	15.9	17.9	16.3	3.5	11.9	32.0	19.4	22.5	8.4
Nicaragua	21.1	10.5	...	14.2	1.0	30.7	6.4	0.2	...
Panama	18.5	14.0	15.6	18.0	3.8	10.6	10.8	26.9	23.3
Caribbean:									
Haiti	19.7	24.3	...	19.8	25.9	38.2	19.9	17.6	...
Jamaica	15.6	16.3	15.9	22.4	18.9	7.2	16.0	17.2	13.8
Dominican Republic	18.9	15.6	15.8	42.6	17.3	2.3	15.0	0.8	16.6

Source and Notes: The concept of money used here is $(M_1 + M_2)$, as given statistically on lines 34 (M_1) and 35 (M_2) of the International Financial Statistics of the IMF, 1980 (Annual) and March, 1981. Brazil: before 1962, data include claims on exporters and small, longer term foreign assets which, after this year, are not included. Panama: beginning 1961, loans to non-residents are included in foreign assets. Jamaica: prior to November 1973, demand deposits and time and savings deposits include non-resident deposits. After this date, they are not included.

... Means not available.

/Exhibit 16

Exhibit 16

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES, 1973-1979: CENTRAL GOVERNMENT (DEFICITS) OR SURPLUSES
(In units as indicated for the year ending 31 December as shown)

	Units	1973	1974	1975	1976	1977	1978	1979
Oil-Deficit Countries:								
South America								
Brazil	MN. Cruz	295	3 882	73	423	1 043	4 872	2 296
Chile	MN. Pesos	(95)	(405)	157	1 804	(6 288)	(5 022)	...
Paraguay	MN. Guaraníes	(39)	1 736	(558)	(2 223)	1 551	2 899	...
Uruguay	MN. New Pesos	(31)	(174)	(359)	(291)	(299)	(280)	(30)
Central America								
Costa Rica	MN. Colones	(359)	(262)	(461)	...	...	...	...
El Salvador	MN. Colones	12	(54)	(25)	(21)	180	(122)	(122)
Guatemala	MN. Quetzales	(37)	(46)	(7)	(97)	(41)	7	(168)
Honduras	MN. Lempiras	(16)	(6)	(48)	(31)	3	(30)	(79)
Nicaragua	MN. Cordobas	(257)	(585)	(646)	(512)	...	(1 115)	...
Panama	MN. Balboas	(145)	(195)	(148)	(164)	(90)	(75)	(250.6)
Caribbean								
Dominican Republic	MN. Pesos	(21)	(42)	56	13	12	...	...
Haiti	MN. Gourdes	1	10	(81)	(64)	(166)	...	...
Jamaica	MN. Jam.Dls.	(91)	(168)a/	(206)	(418)	(428)	(625)	...

Source: IMF, International Financial Statistics, 1980 (Yearbook) and March, 1981.

a/ Beginning June 1974 the coverage of the data has been expanded to include the transactions of the
Capital Development Fund.

... Means not available.

( ) Means negative.

/Exhibit 17

Exhibit 17

ESTIMATED DIRECT EFFECT ON NATIONAL PRICE DEFLATOR OF INCREASES IN THE PRICE OF WORLD OIL, 1973-1979
(In units as indicated)

GNP value-added structure, 1973:		Estimated change in GNP price deflator:					
Input category	% Structure	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
Primary energy	2.00	7.67	2.57	2.13	2.15	2.05	2.66
All other inputs	98.00	98.00	98.00	98.00	98.00	98.00	98.00
Total GNP	100.00	105.67	100.57	100.13	100.15	100.05	100.66
GNP Price deflator, 1973 = 100		106	106	106	107	107	108

Note: The methodology used in this exhibit is as follows. It is assumed that primary energy supplies
constitute two percent of total output immediately prior to the sharp increases in world oil prices
after 1973, and that all primary energy supplies rise in price pari passu with changes in the price
of world oil, implying the additional assumption that all fuels are priced domestically on an
opportunity cost basis. This 2% assumption for 1973 may be compared with the data shown in
Appendix A for other countries prior to 1973. This 2% ratio is held constant so that, effectively,
1973 weights are being used to measure the impact of increased energy prices on the national price
deflator (if more recent year weights were used, the increase of the national price deflator would
be higher than those estimated here). The percentage increases in the current dollar term price of
Saudi Arabian crude oil (Exhibit 1), column 1), year by year from 1973-1974 forward, were then
applied to the two percent base share of primary fuels in total output. For 1973-1974, the
calculation is as follows: (8.42/$2.20) (0.2)=7.67%; for 1974-1975, the calculation is ($10.81/
$8.42) (0.2)=2.57%; and so on. The share of resource inputs other than primary fuels (i.e., 98%)
is held constant to isolate the direct effect on the national price deflator due to increased prices
for primary fuels alone. The sum of the direct price effect, rooted to the use of the 2% base, and
the constant prices assumed for all inputs other than primary fuels, rooted to the 98% base, yields
an approximate measure of the direct price effect of increased prices for primary energy supplies on
the national price deflator: for 1973-1974, the calculation is 7.67% plus 98.00%=105.67%, rounded
to 106%. Additional economic assumptions underlying these calculations are discussed in the text.
Finally, treatment of the indirect price effects of oil price increases are also discussed in the
text.

/Exhibit 18

Exhibit 18

SELECTED LATIN AMERICAN OIL-DEFICIT COUNTRIES, RETAIL
PRICE OF SELECTED REFINED OIL PRODUCTS AS A PERCENT OF
THEIR (FOB) EXPORT PRICE IN THE CARIBBEAN a/

(Percentage)

Country	Year	Gasoline		Kero-sene	Diesel Oil	Fuel Oil
		Regular	Premium			
Brazil	1970	398	389	313	...	140
	1973	228	104	219	...	100
	1974	174	230	116	...	37
	1975	323	405	199	191	61
	1976	429	496	203	212	74
	1977	183	444	216	222	116
Chile	1970	250	307	117	...	317
	1973	443	1 198	305	...	392
	1974	183	252	21	...	198
	1975	244	299	100	204	205
	1976	248	291	95	218	247
	1977	234	304	137	202	218
Paraguay	1970	484	...	329	...	441
	1973	445	570	339	...	429
	1974	431	497	217	239	244
	1975	436	503	217	241	223
	1976	427	476	211	229	230
	1977	387	432	203	208	195
Uruguay	1970	688	612	162	...	105
	1973	664	761	242	...	250
	1974	371	448	98	...	95
	1975	372	450	150	127	109
	1976	399	471	165	157	124
	1977	405	477	218	193	133
El Salvador	1970	529	455	191	...	193
	1973	406	392	145	...	257
	1974	268	273	137	...	119
	1975	230	237	128	148	115
	1976	245	241	130	141	119
	1977	252	248	166	128	124
Panama	1970	347	304	191	...	160
	1973	366	354	177	...	...
	1974	230	238	99	...	150
	1975	233	240	99	111	138
	1976	271	278	142	154	...
	1977	258	264	130	133	139

(Cont.)

Exhibit 18 (conclusion)

Country	Year	Gasoline Regular	Gasoline Premium	Kero-sene	Diesel Oil	Fuel Oil
Jamaica	1970	376	381	152	...	127
	1973	294	320	119	...	193
	1974	295	304	91	...	129
	1975	293	307	83	148	134
	1976	304	306	88	118	102
	1977	443	434	83	128	109
Dominican Republic	1970	401	353	305	...	303
	1973	367	430	129	...	409
	1974	195	216	251	...	180
	1975	...	235	197	148	170
	1976	...	222	164	141	175
	1977	...	237	196	141	168
Exxon-Aruba (Export price FOB) b/	1970	9.3	11.6	10.5	10.2	2.00
	1973	12.8	14.2	12.4	11.9	2.35
	1974	34.8	36.2	35.9	32.7	9.30
	1975	34.4	35.8	35.9	32.4	10.05
	1976	35.1	37.8	36.9	34.0	9.85
	1977	38.8	41.7	38.5	37.5	11.65

Source: U.S. Department of the Interior, International Petroleum Annual (various issues); and, for Caribbean export prices (FOB): Petroleum Economist (various issues).

a/ The prices are for 31 July of each year with the exception of 1965, in which case they are for 31 December.

b/ In US¢ per gallon with the exception of fuel oil, which is given in US$ per barrel.

Note: A ratio of 100 would imply a domestic price lower than internation. parity insofar as the (FOB) Exxon-Aruba export price does not include international freight and insurance, domestic freight, product-processing, marketing, storage, and other domestic costs.

... Indicates not available.

Appendix A

SELECTED DATA ON THE CONSUMPTION OF PRIMARY ENERGY SOURCES
IN VARIOUS COUNTRIES
(In percent as indicated)

| Country | Year | Primary energy consumption by sector as a percent of GNP | | |
		Final demand	Intermediate industries	Total
Austria	1964	0.18	0.49	0.67
Belgium	1965	0.62	1.37	1.99
Canada	1965	0.37	0.94	1.31
Czechoslovakia	1967	0.29	2.49	2.78
Denmark	1966	0.02	0.49	0.51
Finland	1965	0.04	0.42	0.46
France	1965	0.23	1.12	1.35
Federal Republic of Germany	1965	0.25	1.28	1.53
Hungary	1965	0.66	2.60	3.26
Ireland	1964	0.21	0.86	1.07
Italy	1965	0.02	1.12	1.14
Japan	1965	0.04	0.94	0.98
Netherlands	1965	0.36	1.63	1.99
Norway	1965	0.01	0.35	0.36
Poland	1967	0.85	1.84	2.69
Portugal	1964	0.00	0.60	0.60
Spain	1966	0.14	1.05	1.19
Sweden	1964	0.02	0.22	0.24
Turkey	1968	0.23	0.92	1.15
United Kingdom	1968	0.20	1.36	1.56
United States	1963	0.06	1.21	1.27
Yugoslavia	1966	0.29	1.27	1.56

Source: U.N., The United Nations Statistical Commission and the Economic Commission for Europe, Conference of European Statisticians, Statistical Standards and Studies № 30, Standardized Input-Output Tables of the ECE Countries for Year Around 1965, 1977, U.N., Publication Sales № E.77.II.E.18.