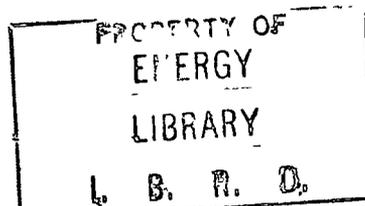


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# Capital-Importing Oil Exporters: Adjustment Issues and Policy Choices

World Bank Staff Working Paper No. 475



August 1981

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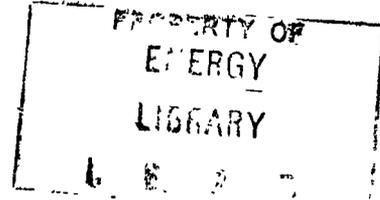
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WORLD BANK

Staff Working Paper No. 475

August 1981



CAPITAL-IMPORTING OIL EXPORTERS:  
ADJUSTMENT ISSUES AND POLICY CHOICES

A Background Study for World Development Report 1981

The main unifying feature of the capital-importing oil exporters is the need to utilize petroleum export revenues--available over the next 10 to 20 years to representative members--to effect transitions to sustainable growth trajectories with acceptable distributional characteristics. A second common feature is the nature of the short- to medium-run difficulties of economic management occasioned by oil windfalls. These themes viewed in the aftermath of the first oil shock, and with an eye towards the second, form the subject of this paper. Using a simple two-sector model involving traded and nontraded goods as a conceptual framework, the paper compares the evolution of critical macro and sectoral variables for a number of oil economies after 1974. Similarities and differences in observed government behavior are discussed, as are their consequences for the respective nonoil economies.

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## I. Introduction

The capital-importing oil exporters might somewhat cynically be classified as those with oil sufficient to create problems, but not enough to solve them. Indeed, in many other respects--size, income per head, and level of development--the group is quite heterogeneous. Its main unifying feature is a common central issue of development policy--the need to utilize petroleum export revenues to effect transitions to sustainable growth trajectories with acceptable distributional characteristics. Such revenues are available over the next 10 to 20 years to representative members of the group, assuming present projections of supply and domestic demand. The examples of Japan, Korea, and Taiwan notwithstanding, this is not a lengthy period from the viewpoint of achieving fundamental structural change. A second common characteristic is the nature of the short- to medium-run difficulties of economic management occasioned by windfalls accruing to exporters after the fourfold petroleum price increase of 1973-74 and the doubling of oil prices in 1979-80. These problems, and the policies chosen to address them, bear critically on the prospects for the transition. The above two themes, viewed in the aftermath of the first oil shock and with an eye toward their implications for the period after the second, form the subject of this paper.

Before proceeding to a unifying theoretical analysis, an overview of group experience, and a survey of possible policy alternatives, the selected group of exporters is decomposed into two subgroups. "Core" members include Algeria, Ecuador, Gabon, Indonesia, Nigeria, Trinidad and Tobago, and Venezuela. The present focus is on these countries, which were appreciable net exporters of petroleum products by 1972. Because it is somewhat premature to assess responses to the second shock and their medium-run implications, the experiences of the core members over the past decade yield indications of

possible future trends. "Other" members include Mexico, Egypt, and Malaysia; the first two are exporters of recent standing while Malaysia's highly diversified primary export base renders it a somewhat special case. For a brief spell in the mid-1970s, Bolivia experienced an "oil boom," but it is not included in the group. Neither is Tunisia, which received "only" 40% of its export revenues from petroleum after the first oil price increase.

## II. The "Oil Economy Syndrome"

The stylized representation in this section may be considered as providing a unifying framework for analyzing the performance and policies of oil exporters. Figure 1 depicts essentials of the adjustment problem. Commodities are divided into tradeables (typically agriculture, industry, oil, and other primary products) and nontradeables (construction, infrastructure, certain services).<sup>1/</sup> (Here and throughout the paper, notes are grouped at the end of sections.) AB represents the production frontier for tradeables and nontradeables, given presently available factor supplies but excluding production of an exportable oil surplus. DC is an absorption frontier, taking into account the possibility of obtaining extra supplies of traded goods (AC) through exporting petroleum. OZ depicts a consumption locus, at constant distribution of income, for relative prices of tradeables to nontradeables given by the slope of the tangent  $M_0N_0$ .<sup>2/</sup> Absorption is at  $G_0$ , production at  $P_0$ .

A jump in oil prices shifts the absorption locus to EF, but in the short run the supply of nontraded goods is limited. Demand shifts to  $G_1$  but, since nontraded goods are normal, this is possible only with a rise in their relative price. This appreciation of the real exchange rate<sup>3/</sup> may be accomplished either by domestic inflation holding the nominal exchange rate



fixed or by appreciation of the nominal exchange rate against the currencies of trading partners. The effect will be to raise profitability (and perhaps wages) in the nontraded sectors, which will tend to grow at the expense of the activities producing nonoil tradeables. With zero growth the economy adjusts to increase consumption and output of nontradeables. It is not, however, possible for adjustment to proceed as far as the consumption production pair  $G_2$  and  $P_2$  because at the relative price ratio needed to sustain  $G_2$  there is still an incentive to move production into tradeables out of nontraded goods. The final consumption-production point  $G_3$   $P_3$  is therefore in between, and it represents an increase in the relative price of nontraded goods. The more rapid is the increase in aggregate absorption, the greater is the equilibrium degree of real appreciation. When the exportable surplus declines, the consumption locus contracts back to AB, posing a difficult structural adjustment problem in the face of declining oil exports and real incomes.

Since the adjustment issues are primarily related to absorption levels, conventional tools of commercial policy--tariffs, import quotas, or differential exchange rates--can have only a limited impact, except insofar as they influence domestic savings and investment decisions. The main effect of commercial policy is to distribute the adverse impact of real appreciation resulting from attempts to absorb oil windfalls differentially across the various traded sectors. Devaluation, too, can have only a temporary impact. It is well known that for devaluation to be effective in restoring external balance for deficit countries it must be accompanied by expenditure-reducing policies. A similar stricture applies to attempts to use it for internal balance in chronic surplus countries, but this conflicts with the objective of absorbing increases in export earnings, either as real consumption or investment.

The dynamic issues facing the oil economy reflect policy options at a number of levels. Considering an individual country as an international price taker, and abstracting from institutional constraints on the level of production, the prime decision relates to the petroleum extraction profile over time. Next comes the split of income into consumption and accumulation, and the division of investment into real domestic capital formation and the accumulation of claims on foreign countries. All the above choices may be summarized as fundamental saving and portfolio decisions. Next come the policy issues relating to the appropriate sectoral distribution of domestic current and capital spending out of oil revenues. The subsequent level of choice concerns policy and institutional development to shape appropriate distributional, consumption, saving, investment, and production patterns in the nonoil economy. The nonoil sectors will be subject to two sources of stress: changes in the intensity of demand and its sectoral pattern, and shifts in relative prices. The more rapidly it is desired to boost domestic absorption and the less flexible is the nonoil economy, the more violent will such stresses become.

Medium-term adjustment is heavily influenced by institutional characteristics of oil exporters. Limited linkages to the domestic economy and taxation of petroleum rents by producer governments cause the primary impact of oil windfalls to be felt in public sector revenues. A theory of adjustment for such countries is therefore primarily an abstraction of observed government behavior following massive windfall gains. Since oil revenues accrue in foreign currency while the bulk of government spending typically goes on, nontraded goods--construction, infrastructure, and services--even a budget surplus may prove inflationary, an increase in the foreign component of the monetary base being only partially offset by

decreased claims of the banking system on central government. A secondary rise in government revenues is also likely from taxes levied on a greatly expanded volume of imports, arising from domestic capacity constraints in the face of multiplier effects out of government spending. This shift in the distribution of national income in favor of the public sector will increase demands for urban sectors producing nontradeables, especially construction and service activities intensive in white-collar occupations. A jump in public spending may also strain administrative capacity, particularly in the least developed oil exporters.

The resulting inflationary forces erode, in the first instance, the real purchasing position of the public sector itself, because of its status as a net exporter.<sup>4/</sup> This, together with a probable trend toward relaxing domestic revenue-raising efforts, results in a tendency for "real" revenues to fall short of those reasonably anticipated on the basis of pre-shock relative prices and exchange rates. Public sector savings performance is consequently apt to deteriorate steadily, following a dramatic initial jump immediately after the price rise. Adherence to expanded real investment targets can therefore lead to government deficits greater than before the shock, despite a massive increase in nominal and real government revenues. Unless private savings rise relative to private investment, this is mirrored in larger deficits on trade and current balance accounts. The unexpected magnitude of these deficits and difficulties created for the manufacturing and nonoil primary sectors by real appreciation may result in a turn to contractionary policy after some years. Adjustment tends to involve a period of "overshooting" rather than to proceed smoothly.

Contractionary policies and price controls intended to slow inflation and return to external balance may then inhibit private investment,

which is effectively "crowded out" by the public sector. The increase in domestic demand from multiplier effects out of government spending may not greatly increase capacity in the productive trade sectors without specifically focussed policies. Even without overshooting, private investment outside the construction and service sectors is likely to be inhibited under laissez-faire economic policy by reduced profitability arising out of real appreciation. This effect may operate through several mechanisms--in fact or markets due to higher wages or reduced factor supplies, increased costs of intermediates and of the nontraded component of investment relative to product prices, or decreased efficiency due to bottlenecks in the surrounding economy. These stresses may be most severe for large economies, where the share of domestic goods in consumption and intermediate flows is largest.<sup>5/</sup> Further, reduced dependence upon previously dominant tradeables, such as agriculture for export and government revenue, may result in reduced attention to their difficulties and a lower priority in the allocation of public sector spending.

A desire to raise absorption rapidly, in line with rising revenues, is likely to bias further the composition of public spending. For institutional reasons, it may be difficult to double or treble certain categories of expenditure in a few years. Primary expenditure decisions made by a relatively limited number of individuals tend naturally to emphasize large, capital-intensive projects that require relatively little in the way of domestic human resources or institutional changes for their implementation. Public investment will therefore tend to be biased heavily in favor of infrastructure, which becomes the leading growth sector, rather than to be responsive to demands established by the private commodity-producing sectors.

Wage goods and domestic consumption of petroleum products may also be subsidized as an anti-inflationary measure, thus weakening fiscal

performance. Combined with the shift in demand and production patterns towards urban goods and services, this leads domestic petroleum consumption to be highly elastic with respect to aggregate gross domestic product (GDP). The period of adjustment to a sustained "nonoil" growth trajectory is therefore shortened, sometimes quite considerably, as growth in domestic demand chokes off oil exports. To anticipate this problem, investment in less tradeable energy sources, such as natural gas, may be necessary long before oil is exhausted.

Foreign exchange reserves will probably be accumulated following an oil price shock, at least temporarily. However, the absorption-sterilizing impact of reserve accumulation may be offset by a further relaxation of the foreign exchange constraint induced by an inflow of capital attracted by the enhanced creditworthiness of oil exporters. Monetary policy is likely to prove particularly ineffectual for oil exporters assuming freely mobile capital. The onus is then particularly on fiscal policy, but, given the decision to absorb windfalls rapidly, the range of choice may be more constrained than is generally realized.

Footnotes to Section II

1. This rather bald distinction may be blurred in reality, since certain services are tradeable, and many agricultural or manufactured products face natural or policy-induced barriers to international trade. Mineral exporters are, in fact, particularly large importers of nonfactor services.

2. The shape of OZ represents high income elasticity of demand for non-tradeables and below-unity elasticity for food.

3. The real exchange rate is here defined as the price of nontradeables relative to tradeables.

4. The description here assumes, following the experience of most oil producers, a fixed nominal exchange rate policy, although the essentials carry through with flexible rates.

5. The larger is the share of domestic nontradeables in consumption, the more will pressure to maintain real wages raise labor costs in the traded sectors. The larger capital-importing oil exporters typically produce a greater proportion of wage goods than the smaller capital surplus oil exporters.

### III. The First Oil Shock: An Overview of Group Experience

The diversity of capital-importing oil exporters is shown in Table 1. (Tables are grouped at the end of the paper.) The selected countries range in population from tiny Trinidad and Tobago to Indonesia, the world's fifth most populous nation. Indonesia also is one of the group's poorest members, with GDP per head barely one-tenth that of Trinidad or Venezuela. Relative to the experience of the 1960s, the early 1970s suggest an acceleration of growth except for the two richest of the selected countries, but this trend is reversed following the first oil shock. For Ecuador, Indonesia, and Nigeria growth rates of GDP fall. The tendency for the poorer oil exporters to grow less rapidly than the richer, relative to their previous trends, continues through 1976-79.

Shifts in the sectoral composition of output between 1970 and 1977 are indicated in Table 2. Except for Venezuela, whose petroleum sector had "boomed" in the mid-1950s, Ecuador, where output accelerated after 1970, and Trinidad, gradual development of the mineral sector over the 1960s proceeded together with a gradual decline in the contribution of other primary sectors, notably agriculture, to GDP. The 1970s marked an acceleration of this trend particularly for the largely agriculturally oriented countries: Nigeria, Indonesia, and Ecuador. These were also characterized by a slight rise in the share of manufacturing in nonoil GDP. This stands in contrast to the three richer countries where the manufacturing sector contracted in relative terms, negligibly so for Venezuela.

The distinctive trade pattern of a set of capital-importing petroleum exporters is shown in Table 3. In contrast with a sample of oil-importing developing countries, the oil exporters ran considerable commodity trade surpluses, on aggregate, since the early 1960s. These partly covered

large nonfactor service deficits and factor payments abroad. The oil importers remained net exporters of nonfuel primary goods over 1963-75, although the share of this category in total exports fell. Their net manufactured exports rose from -60% of total exports in 1963 to -56% in 1971 and -48% in 1975, a development consistent with income-related patterns from cross-country analysis.<sup>1/</sup> Their capital goods exports, though small, rose steadily relative to imports of capital goods. The oil exporters, however, saw their net nonfuel primary exports fall rapidly in relation to total imports. Their food account, in particular, swung into substantial net deficit after 1975. Net imports of manufactures other than capital goods remained almost unchanged as a proportion of imports, as did net imports of capital goods after 1971. Capital goods exports, and those of manufactures in general, remained small. This suggests the evolution, even over the 1960s, of a more diversified spectrum of comparative advantage in the oil-importing developing countries. The impression is confirmed by the tendency, even before the oil price rise of 1974, for the share of oil in export revenues to increase--from 68% in 1963 to 70% in 1971--for the set of oil exporters. In 1975 oil exports accounted for 84% of their total export revenue. For selected countries, Table 4 provides further data on the contribution of oil to total exports.

The quadrupling of crude oil prices over 1973/74 led to a 120% improvement in the net barter terms of trade for a representative member of the present group for 1974-77 (with 1970-73 as the base period: see Table 5). This represented a windfall gain equivalent to one-third of GDP, in an ex ante sense,<sup>2/</sup> and resulted in real import growth rates averaging 16% annually over 1972-76. The steady decline in deflated petroleum prices after 1974 led the terms of trade to deteriorate for a number of countries, but this effect

was slight relative to the gigantic improvement in 1973-74. Over this period real exports stagnated, dropping especially for Venezuela, which reduced the volume of petroleum exports in response to their enhanced value. Some countries, such as Indonesia, managed to maintain nonoil export growth because of previous investments in tree crops, but on the whole traditional exports contracted or responded sluggishly after 1974.

Table 6 indicates the balance-of-payments impact of the first oil shock for selected members of the group. The mean resource balance for a sample of countries was 1.5% of GDP in 1972, rose to 15% in 1974, and plunged to -3% by 1977, in which year only Indonesia and Trinidad and Tobago still maintained a surplus. Trinidad's relatively cautious absorption policy contrasts with that of the other exporters. Deterioration in foreign balances over 1975-77 led a number of oil exporters to adopt contractionary policies in the second part of the decade, but resource balances on average were not again improved significantly until the second oil price shock of 1979-80. During the period of adjustment to the first oil shock, long-term borrowing continued for all countries, even increasing in some cases, while short-term capital accounts tended to be in deficit. The "rest of the world" acted as "bank" to the group, lending willingly at long term and accepting short-term deposits. Reserve growth slowed or turned around for Algeria, Nigeria, and Venezuela after 1976, but continued for the other three countries.

Increased domestic absorption was effected primarily through massive increases in public investment. Over 1970-73 real gross investment had increased, on average, by 9.2% for the countries selected (see Table 7). This period was one of recovery from internal shocks for Indonesia and Nigeria; their investment growth rates were therefore unusually high. Over 1973-77, however, the average real investment growth rate shot up to 14.3% annually,

mainly as a result of sharp jumps in 1974 and 1975. The dominant savings and portfolio decisions of the petroleum exporters were clearly intended to accumulate capital rapidly and to do so domestically rather than abroad.

This placed a severe strain on limited administrative resources, particularly in the least developed countries. The increase in public sector investment further committed the respective governments to substantial current expenditures for maintenance in the following years. Only in Indonesia did the rate of investment growth fall. As indicated by the pattern of resource gaps, savings initially registered a sharp increase: for a representative country, from 22% of GDP over the early 1970s to 41% in 1974. Savings rates thereafter eroded to 34% by 1977. "Real" savings, defined as nominal savings divided by the investment deflator, actually fell for three members of the group (Algeria, Nigeria, and Venezuela over 1974-77); remained almost constant for Ecuador; and rose at 2.1% and 64% annually for Indonesia and Trinidad, respectively.<sup>3/</sup>

An important feature of the first oil shock was to greatly increase the size and role of the public sector in the economies of oil producers (see Table 8). The political implications should not be overlooked: oil was instrumental in consolidating the power of the Nigerian federal government over the states, to cite one outstanding case. Public sector and central government revenues increased dramatically relative to GDP for oil exporters, as did the dependence of the public sectors (or central governments) on petroleum revenues. The ratio of public to private consumption rose on average by 30% over 1972-77.<sup>4/</sup> Only in Ecuador did the ratio decline (by 11%), apparently because of draconian control of public sector salaries. Increases were especially spectacular for Nigeria (64%), Gabon (63%), and Indonesia (31%). Public sector savings rates tended to follow those of overall savings,

registering a sharp increase immediately following the rise in revenues and then dropping over a period of some years. Contributing to this trend in some cases was the weak performance of nonpetroleum tax revenues. Ecuadorian nonoil revenue, for example, fell from 19% of nonoil GDP to only 16%. At the same time, public sector capital spending tended to be maintained at high levels in accordance with plans formulated immediately after the oil bonanza. Over the period 1976-79, public sector deficits thus generally rose to historically high levels despite their massive revenue increases.

In the time available it has not proved possible to obtain a comprehensive picture of the behavior of private investment. Yet its response to increased domestic demand appears to have been sluggish. Increases in the capital budget (direct investment and transfers) of the Algerian Treasury more than account for the observed rise in the share of investment to GDP.<sup>5/</sup> Ecuadorian private investment over the period 1971-77 increased at only 8% annually relative to the 13% growth rate of public investment. Private Nigerian investment fell between 1973/74 and 1975/76 and rose at only 4.7% annually through 1973/74-1978/79. A slackening in Indonesian private investment after 1975 is suggested by a decline in projects submitted to governments for investment approval and the slow execution of projects approved. Private investment suffered further from contractionary policies initiated in 1978.

Substantial increases in Nigerian private savings between the first and second oil shocks were largely transferred to fund the federal government's investment program. An appreciable part of this transfer was effected through inflation and hence was involuntary. Private savings were similarly used in Ecuador to fund public sector spending. In the absence of a developed capital market to intermediate between savers and private investors,

the state may well be the only outlet for financial savings of the private sector. Relatively slow increases in private investment are quite consistent with a tendency for the composition of private production to shift in favor of nontradeables: construction and services, for instance, which are generally labor intensive relative to manufacturing.

In four instances the increase in demands for nontradeables affected the real exchange rate considerably. Relative to the U.S. dollar (with base period 1970-73), effective exchange rates by 1977 had risen by 50%, 70%, 40%, and 25% in Nigeria, Indonesia, Gabon, and Ecuador, respectively. Algeria, Trinidad, and Venezuela appeared to be able to accommodate the increases in absorption without significant shifts in their real exchange rates. Perhaps coincidentally, these are the countries previously identified as having experienced accelerated growth after 1974.<sup>6/</sup>

Under appropriate assumptions it is possible to estimate very roughly the consequences of real appreciation for public sector budgets. The direct import content of Ecuadorian government purchases appears to be small: much hydrocarbon investment, for example, was private and funded from abroad. For Nigeria an import content of 40% has been suggested; for Indonesia assume that 30% of development expenditures involved imported goods and services. Real appreciation up to 1977 then reduces the purchasing power of public revenues by 7% for Ecuador, 15% for Indonesia, and 17% for Nigeria--reductions equivalent to resource deficiencies of 1.5%, 2.7%, and 3.6% of GDP, respectively. Given the difficulty of adjusting the real volume of public spending downward, this effect may partly explain the overshooting pattern of adjustment after 1974. Unexpectedly large deficits spurred contractionary policies in Algeria, Ecuador, Indonesia, and Nigeria in 1978. In the case of Indonesia these included a 34% devaluation of the rupiah in November 1978. By

mid-1980 over half of the resulting gains in competitiveness in manufactured exports and import substitutes had been eroded by domestic inflation as the real exchange rate reverted to its previous position.

In partial explanation of the different behavior of the real exchange rate between these groups, note that Venezuela had adapted to the structure of an oil monoexporter long before 1974 and responded to the price increase with a considerable fall in petroleum export volumes and reserve accumulation. At Venezuelan costs and exchange rates, few manufacturing activities would have survived even before 1974 without extensive protective barriers of long standing. The Venezuelan nontraded and traded sectors are distinguished by commercial policy rather than any intrinsic "tradeability." Besides being the archetypal small open economy, Trinidad responded fairly cautiously to the increase in oil revenues after 1973. The Algerian example merits closer attention. Because of a strong emphasis on hydrocarbons and heavy industry, nonindustrial investment accounted for only around 40% of total investment until 1979. This policy appears to have involved extremely high incremental capital-output ratios (ICORs) over the period. The nonhydrocarbon industrial ICOR decreased from 8.4 during 1974-77 as capacity utilization rose but only fell to 6.5 in 1978-79. However, relatively low investment in infrastructure possibly implied a high direct import content for public sector capital spending. Since almost half of government revenue accrued from nonpetroleum sources, the imbalance between domestic revenue collection and domestic expenditures was perhaps less for Algeria than for Ecuador or Indonesia, and certainly far smaller than for Nigeria. Oil revenues were translated into imports directly rather than indirectly through real appreciation.

Sectoral growth patterns confirm the shift in demand toward the construction sector, a result primarily of increased public investment. In all cases construction emerged as a leading growth sector, and real construction prices generally increased, relative to their levels of 1972, by 10% to 20% over 1972-77. Price responses for other nontradeables were less regular, possibly because of their largely administered prices and the difficulty of measuring the output of the service sectors. Indonesian relative prices conform especially well to the expected pattern. Prices of manufacturing rose less rapidly than agricultural prices which benefited from greatly improved external terms of trade compared with manufactures. These prices in turn rose less than those of services and construction. Relative prices moved particularly in favor of Nigerian agriculture despite massive food imports; the pulling away of resources from Nigerian agriculture appears to have acted directly through the labor market as opposed to relative product prices.<sup>7/</sup> Except for temporary increases in 1975, real Nigerian wage levels remained constant as, apparently, did real Indonesian wages. In both countries manufacturing therefore tended to be squeezed between rising costs and import competition.

Domestic prices of petroleum products have been heavily subsidized as an anti-inflation measure by Ecuador and Indonesia. This policy also characterizes two new oil exporters, Egypt and Mexico. In addition to weakening the domestic resource mobilization effort of the public sector in these countries, growing oil consumption demand promises to be a main factor in limiting the growth, not to mention the existence, of net petroleum exports (as is further discussed below).

The growth of tradeable relative to nontradeable sectors may be gauged for selected countries from Table 9. The table shows the percentage

change over 1970-77 of the respective current price GDP shares of "nonmineral tradeables" and "nontradeables" and the percentage increase in the share of the mining sector. A balanced response would be evidenced by an equal percentage decline in the shares of tradeables and nontradeables; this would only be possible if demand patterns were to shift towards tradeables. The response pattern is far from balanced, especially for Algeria, Ecuador, Indonesia, and Nigeria. These cases indicate substantial resource pulls toward the nontraded sectors, although this must be interpreted with care. Temporary underutilization of large addition to capacity (characteristic, for example, of Algeria over the period) could result in the decline of the relative contribution of industry as capital stock expanded through "forced," rather than demand-induced, investment. Shifts in employment toward the nontradeables have generally been enhanced by relatively capital-intensive manufacturing expansion. The only force working against this has been growth of labor-intensive informal manufacturing sectors. The more cautious development policy of Trinidad and the previous adjustment of Venezuela to the role of petroleum monoexporter are shown in the form of relatively balanced responses, whereas the diversified development pattern of Malaysia is clearly evident in its unusual expansion of nonmineral tradeables.

Patterns of public capital expenditures differ considerably across countries, not the least because of the different social bases and entrepreneurial roles of the state. Nigeria displays the most pronounced case of "urban bias"; agriculture was allocated only 6.5% of total capital spending and received even less--3.0%. Indonesian development expenditures were far more evenly distributed across rural and urban infrastructure, industry, and educational social services. As noted previously, Algerian capital spending displayed a strong industrial bias until 1979, when the emphasis shifted

toward agriculture and infrastructure. Not too surprisingly, public industrial investment undertaken by oil producer governments has tended to favor large capital-intensive projects--frequently in hydrocarbons, but also in steel, fertilizer, and cement. This, combined with the long gestation lags and delayed contribution to productivity of much infrastructural spending (for example, school construction), has tended to raise ICORs over the 1970s despite the pronounced shift of the nonoil economy toward construction and services. The high Algerian ICOR was noted above. The Indonesian ICOR doubled after 1974, and that of Nigeria rose by 60%. However, even in the early 1970s ICORs were already high for certain producers because of gestating investment in the petroleum sector.

It is difficult to generalize about the impact of the oil shock on dualism and the distribution of income in exporting countries. At least two cases provide evidence that the development paths of the 1970s have tended to accentuate duality. Nigerian rural income per head changed little, while, following the 1974 oil shock, rural-urban migration rose from about 0.5% annually to 1.0% of rural population annually. Sluggish agricultural output barely maintained food availability per head in rural areas and proved quite inadequate to meet urban needs. The urban-rural income differential rose from about 2.6 in 1974 to 4.6 in 1977 (excluding petroleum revenues). Ecuadorian rural-urban migration was also rapid. The urban informal sector expanded, with employment growth largely concentrated in services and commerce, whereas manufacturing investment--biased by cheapened imported capital goods--proved capital intensive. The real urban official minimum wage rose by 3.6% each year over 1970-77, but that for the rural areas fell by 2.2% annually in the same period. Indonesian wage rates appear to have moved largely in line with the cost of living, but after the 1978 devaluation there is evidence that

employees in large firms were more easily able to withstand erosion in their living standards. A fairly general but tentative conclusion is that the large revenues accruing to the public sector and reduced dependence upon exportable agricultural surpluses have strengthened the position of formal sector urban groups whose formation has been further encouraged by concentration upon large-scale capital-intensive industrial projects. How far such effects can be attributed to oil is not clear, since similar trends are observable in many nonmineral exporting economies. Previous studies have, however, indicated a general tendency for income inequality in mineral-exporting developing countries to be greater than usual.

Footnotes to Section III

1. See Chenery, H. B., and M. Syrquin (1975), Patterns of Development: 1950-70 (New York: Oxford University Press).
2. The estimate of windfall gain here is taken as base-year exports/GDP times change in net barter terms of trade. Such a gain might not be realizable on account of limits to domestic supply responses in activities complementary to imported products.
3. The apparent decline in the Venezuelan savings rate is perhaps misleading, since the decision to cut exports of oil and conserve supplies represents an act of savings unrecorded in the National Accounts.
4. Unweighted average: Algeria, Ecuador, Gabon, Indonesia, Nigeria, Trinidad, and Venezuela.
5. A substantial part of capital spending by the Treasury represents subsidies rather than direct capital formation.
6. The direction of causality, if any, between real appreciation and growth is not clear. On the one hand, excessive demands on domestic resources could frustrate real growth through congestion effects and the collapse of traditional activities resulting from real appreciation. On the other, real appreciation may be symptomatic of the inability of domestic activity to respond rapidly to shifts in the pattern of demand.
7. Together with a lack of investment, migration, increased school attendance, and a shift of attitudes against "productive" work have been suggested as significant features in Nigeria's poor agricultural performance.

#### IV. The Second Oil Shock: Prospects and Policies

The second oil shock represents a smaller percentage increase in petroleum prices than the first, but its potential effect on oil producers may be rather similar. Although nonoil GDP of typical oil producers rose by about 40% between 1973 and 1978, exports increased relative to GDP, and shares of oil in total exports were higher. For some producers, the ex ante windfall, relative to GDP, might therefore be comparable. Some infrastructural gains may have raised the absorptive capacity of the least developed oil exporters relative to their position in 1974, and there is greater awareness of problems attending too strong an oil boom, but patterns shaped over the past seven years may be hard to change.

The second shock was also marked by an upward shift in the long-run expected trend of real oil prices. This could lead to a policy of conservation on the part of oil producers or to profligacy, depending on the strength of wealth versus intertemporal substitution effects and on the subjective rate of time preference. It could also induce them to borrow against their reserves rather than extract them, depending on the expected level of real interest rates.

Domestic demand for oil promises to increase sufficiently soon to wipe out the exportable surplus for several producers. By present trends, Ecuador could be a net importer by 1990, Indonesia by 2000, and Nigeria by 2010. The "new exporters," Mexico and Egypt, could lose their status after a decade. Production increases and the rise in oil prices have already affected these economies greatly. Gains from the terms of trade over 1978-80 were equivalent to about 6.3% of Mexican GDP; by 1980 petroleum represented 45% of merchandise exports and 30% of federal revenue. Petroleum accounted for 20% of Egyptian GDP in 1978 and 75% of merchandise exports. But for these

producers, and for Trinidad with a reserve-production ratio of 8 to 12 years, the 1978-80 oil shock appears as a temporary respite in the long span of development.

For both new and old exporters, extraction, accumulation, and portfolio and developmental policies require urgent formulation. Already Mexico, after two booming years marked by import expansion at 31% annually, has seen its real exchange rate appreciate as inflation rose to 30% annually in 1980. Capital inflows, responding to enhanced creditworthiness, undermined attempts at contractionary credit policy and permitted increased absorption. Appreciation promises to reduce incentives for private investment in manufacturing and to substitute cheap imported capital goods for domestic labor. Despite attempts to control costs through subsidies and price controls, similar problems have begun to beset Egypt.

What adjustment paths are open to the oil exporters, and which seem most promising? The remainder of this paper presents some thoughts on this topic without, however, inquiring into their political feasibility in individual cases. The desire to increase absorption and the long-term growth rate of the nonoil economy rather than to cut oil output or accumulate reserves is taken as a fundamental policy objective, essentially of political origin.

The first priority is to recognize real appreciation as the consequence of attempts to raise absorption of domestic goods and to take its consequences for agriculture and private manufacturing into account. The discussion above not only suggests that beyond some point an oil boom might prove to be self-defeating because of stagnation in these sectors, but that it may create powerful interest groups dependent on the maintenance of high levels, and specific patterns, of public spending. Once the real exchange

rate deviates markedly from its "nonoil equilibrium" level, reversing the process is likely to be painful if not politically infeasible, while relative price structures will make it difficult to develop mature, efficient tradeable sectors. The above analysis, together with the example of Indonesia, suggests that devaluation can be at best a temporary palliative with socially and economically destabilizing side effects. These may also hamper the development of financial markets--vital for private savings to be transformed into private capital without being channeled through one state. Except for producers with very long-run hydrocarbon export prospects, it therefore seems necessary to ensure that shifts away from pre-oil purchasing parties are not too great.

The imbalance between domestic resources supplied and demanded stems primarily from the public sector. Limits, or pseudo-market forces, must therefore be introduced via a centralized planning framework to ensure that the independent decisions of public sector agencies do not cumulate to excessive demands. The construction component of capital expenditures could, as a first approximation, be used to estimate domestic resource requirements of capital expenditure plans, and economy-wide supply-demand balances monitored for the construction industry as a predictor of potential imbalance. Current expenditures, too, should be monitored, especially as they strain markets for skilled labor. A detailed domestic-foreign breakdown of public expenditures and revenues would be a valuable planning tool. It would also provide an indicator sensitive to the slackening of domestic revenue-raising efforts. Some flexibility is vital in plan formulation. It may also be necessary to curb the demands of public agencies for foreign loans despite hordes of eager lenders.

It may be more feasible to raise the efficiency of much existing infrastructure rather than to embark on grandiose (though apparently affordable) projects that absorb domestic resources. Old ports could run more efficiently (perhaps with new imported equipment and expertise), old roads could be upgraded. The payoff to improved public sector efficiency is exceptionally large for oil exporters, since foreign resources complementary to domestic ones are not lacking.

A considerable effort needs to be made to channel resources to private sector agriculture and manufacturing, assuming that the road ahead is not to be that of a state-owned economy. This is no easy task, especially given the institutional structure of some oil exporters. The "miracle" economies--Japan, Korea, Taiwan, etc.--are conspicuously poor in mineral resources. The tradeoffs involved in helping one or the other sector should be recognized. Limiting cheap food imports may protect agriculture, but it makes it harder for domestic industry to compete with imports through increasing wage pressures.

For the more agriculturally oriented oil producer, at least, it would seem that potential migration from a combination of rural neglect and accelerated urban spending is undesirably large. This, plus equity considerations, argues for substantial oil revenues to be spent in the rural sector and for the maintenance of adequate producer prices. Rural spending should include infrastructure, technical assistance, and, perhaps, promotion of nonfarm industry. Inadequate organization may limit the expansion rate of rural spending; the unused rural allocation should then be saved in oil or foreign exchange rather than be diverted to uses that will harm the rural sector through inducing real appreciation.

Appropriate industrial policy for developing oil exporters--a hotly debated topic also in the U.K., Norway, Holland, and Canada--should be formulated with the horizon of prospective oil exports in mind. For some producers these horizons might be extended by exploiting less tradeable energy sources--natural gas reserves, coal, hydro, or even nuclear power--and by holding domestic petroleum prices at realistic levels. This paper argues against indiscriminate protection of domestic industry, but also against a noninterventionist free-trade policy. The prime need seems to be to foster the acquisition of industrial management, technical, and organizational skills. Even the remarkable Far Eastern examples suggest that this is a slow process. It does not seem plausible--and the experience of primary producers does not suggest--that infrastructural spending alone will sufficiently stimulate private manufacturing investment.

A suitable strategy might be to pick a range of strategic industries and provide incentives--production subsidies, training grants, tariff protection, and export subsidies--to these fairly uniformly. Incentives should not discriminate strongly in favor of capital or of domestic sales, although limited bias toward import substitution may initially prove necessary. The Korean experience argues, rather, for export-focussed incentives because of the technical benefits accruing from international competition. Brazil, too, has "forced" exports from the private sector in exchange for government concessions. Incentives should also be conditional on steady improvement in total factor productivity toward internationally competitive levels, and possibly on limited increases in the average wage bill per employee in assisted industrial units. Indonesian experience suggests that, without such conditionality, even nonstatutory labor market segmentation might lead to highly dualistic industrial labor markets.

At the beginning of the process, the selected industries might be fairly import intensive to reduce strain on domestic resources. The construction component of manufacturing investment is, fortunately, less than that of infrastructure. There may be little point in trying immediately to develop a capital goods industry by restricting imports: natural barriers to building up domestic resources are surely challenging enough. Early "indigenization" attempts might similarly prove to be counterproductive in the longer run.

During this phase of industrial policy, oil export revenues would be absorbed by a wide range of manufactured and service imports. There is no reason why these should not include consumer goods: oil revenues have to leak out of the economy somehow. As oil exports fell, the technical and organizational skills developed in the first phase would enable a speedy broadening of the industrial base. Efficient typewriter production, for example, is probably not too hard to achieve in an industrial environment geared toward producing internationally competitive air conditioning units or electric motors. Such a policy would enable the oil producers to avoid "Venezuelization," achieve economies of scale, and broaden their basis of comparative advantage, but it requires stable, rather than continually shifting, incentive patterns.

Complementary to these policies are, of course, appropriate provisions for the development of human resources and provision of social services in general. In their own right, and from the viewpoint of improving productivity in the long run, these are clearly most desirable objectives. From the viewpoint of oil exporters, the only possible caution against too heavy initial emphasis in these directions concerns their probably high component of scarce nontradeable domestic services, relative to abundant foreign exchange.

Table 1  
Capital-Importing Oil Exporters: General Characteristics

Economy	Population 1977 (millions)	Growth Rate 1970-77 (% annually)	GDP/head (1979 US\$)	Real Growth Rates (% annually)			
				1960-73	1970-73	1973-77	1976-79
Algeria	17.2	3.2	1,733	3.3	4.4	5.3	8.4
Ecuador	7.3	3.0	1,124	5.7 <sup>a/</sup>	9.1	7.8	5.3
Indonesia	133.5	1.8	354	5.3	8.7	6.6	6.6
Nigeria	80.0	2.6	733 <sup>b/</sup>	5.3	6.6	6.5	4.7
Trinidad	1.1	1.2	3,534	3.7	3.3	4.4	5.5
Venezuela	13.5	3.4	3,147	5.4	4.2	6.3	5.1

<sup>a/</sup> 1965-73.

<sup>b/</sup> 1978.

Table 2  
 Capital-Importing Oil Exporters: Sectoral Characteristics  
 (percent; current prices)

Economy	Share of Mineral Sector in GDP				Share of Agriculture in GDP		Share of Agriculture in Nonmineral GDP		Share of Manufacturi in Nonmineral GDP	
	1960	1970	1977	1979	1970	1977	1970	1977	1970	1977
Algeria	3.3	16.5	30.0	29.8	12.7	7.5	15.2	12.5	18.0	15.5
Ecuador	1.7	1.1	11.6	n.a.	27.6	20.3	27.8	22.9	16.6	18.7
Indonesia	3.7	5.1	19.4	16.9	47.2	31.3	49.6	38.8	9.8	11.8
Nigeria	1.1	10.1	27.9	22.5	48.8	33.6	54.2	46.6	7.9	12.0
Trinidad	13.0	9.3	40.4	n.a.	4.9	2.9	5.4	4.8	25.0	23.5
Venezuela	21.5	18.5	21.5	n.a.	7.0	6.2	8.6	8.0	19.5	19.4

n.a. Not available.

Table 3  
Trade Patterns of Oil Exporters and Importers:  
A Comparison (1963-75)  
(percent)

Percentage in Product Category	<u>Capital-Importing Oil Exporters</u>			<u>Oil Importers</u>		
	1963	1971	1975	1963	1971	1975
<u>Import Patterns</u>						
Nonfuel Primary	23.2	17.1	19.2	30.0	25.3	22.2
Food and Beverage	16.3	11.7	14.4	18.2	14.0	13.2
Nonfood Agriculture	3.3	2.8	2.4	9.0	6.6	4.8
Metals and Minerals	3.1	2.7	2.4	3.1	4.7	4.1
Fuels	5.0	3.5	3.1	9.0	9.6	19.8
Manufactures	71.0	78.6	77.4	59.2	64.5	57.5
Capital: Broad	32.5	40.9	42.0	28.2	30.1	26.5
Capital: Narrow	<u>24.2</u>	<u>32.1</u>	<u>33.5</u>	<u>24.1</u>	<u>25.1</u>	<u>22.3</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (US\$ million)	4,750	10,391	38,656	17,931	38,314	103,679
<u>Export Patterns</u>						
Nonfuel Primary	37.6	23.1	11.6	71.6	52.7	45.1
Food and Beverage	14.1	9.7	5.1	50.0	36.5	33.1
Nonfood Agriculture	14.0	7.6	3.5	16.9	10.1	6.2
Metals and Minerals	9.5	5.8	3.0	4.9	6.1	5.9
Fuels	57.3	70.2	84.0	3.4	3.2	5.2
Manufactures	4.8	6.4	4.2	24.4	43.0	48.6
Capital: Broad	0.6	1.4	1.4	3.4	8.1	12.0
Capital: Narrow	<u>0.6</u>	<u>1.1</u>	<u>1.1</u>	<u>2.9</u>	<u>5.9</u>	<u>8.8</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (US\$ million)	6,533	13,482	50,854	12,510	24,910	61,480

Note: For this table, oil exporters are: Congo, Nigeria, Tunisia, Libya, Iran, Malaysia, Mexico, and Venezuela. For the set of oil importers, see Havrylyshyn, O., and M. Wolf, Trade among Developing Countries: Theory, Policy Issues, and Principal Trends, World Bank Staff Working Paper no. 479 (Washington, D.C., August 1981).

Table 4  
Capital-Importing Mineral Exporters: Dependence on Petroleum

Economy	Petroleum Exports/Total Exports				Growth Rate of Real Petroleum Exports 1973-79 (% annually)
	1973	1974	1976	1979	
Algeria	.81	.91	.91	.92	1.0
Ecuador	.52	.61	.44	.47	-9.3
Indonesia	.50	.70	.70	.57	2.1
Nigeria	.83	.93	.93	.94	2.0
Trinidad	.82	.83	.90	.91 <sup>a/</sup>	-3.5
Venezuela	.88	.95	.94	.95	-6.3

Growth Rates of Other Primary Exports  
1973-79

<u>Economy</u>	<u>% annually</u>	<u>Export</u>
Nigeria	-3.3	Bananas
	-4.6	Coffee
	3.2	Cacao
Ecuador	-0.6	Rubber
Indonesia	-3.0	Wood
Nigeria	-1.0 <sup>b/</sup>	Cacao
Trinidad	-7.6 <sup>c/</sup>	Sugar
Venezuela	-5.6	Iron ore

<sup>a/</sup> 1978.

<sup>b/</sup> 1973-78.

<sup>c/</sup> 1973-76.

Table 5  
Capital-Importing Mineral Exporters: The First Oil Shock

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Economy	Terms-of-Trade: 1974-77 (base 1970-73)	Terms-of-Trade Effect/GDP	Real Import Growth Rates 1972-76	Real Export Growth Rates 1972-76
Algeria	2.7	.35	.20	-.03
Ecuador	1.6	.15	.17	.08
Gabon	2.4	.70	.22	.03
Indonesia	2.4	.23	.24	.03
Malaysia	1.2	.12	.08	.08
Nigeria	3.1	.45	.29	-.04
Trinidad	1.7	.23	.00	+.02
Venezuela	3.0	.56	.16	-.13
Unweighted mean	2.2	.33	.16	.00

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Table 6  
Capital-Importing Oil Exporters: Balance of Payments

Economy	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Cumulated		
												1974-76	1976-79	
[Row titles:														
(a)	Resource balance/GDP (%)													
(b)	Current balance/GDP (%)													
(c)	Long-term capital (US\$ million)													
(d)	Other capital, errors and omissions (US\$ million)													
(e)	Change in reserves (US\$ million)]													
Algeria														
(a)	-5.4	-7.2	-3.7	-6.3	1.0	-11.9	-6.9	-12.6	-13.8	-2.9				
(b)	-2.4	0.8	-1.8	-5.1	1.3	-11.6	-5.4	-11.9	-14.4	-5.4				
(c)	63.0	4.0	200.0	1,014.0	529.0	1,395.0	1,743.0	1,897.0	3,652.0	2,717.0		3,667.0	10,009.0	
(d)	-20.0	-46.0	1.0	16.0	-140.0	-69.0	-233.0	80.0	-20.0	-504.0		-442.0	-677.0	
(e)	70.0	-14.0	-90.1	-628.0	-542.0	326.0	-637.0	80.0	-296.0	-679.0		-853.0	-1,532.0	
Ecuador														
(a)	-4.5	-8.4	-.7	5.2	6.0	-3.7	2.1	-0.7	-1.1	-0.6				
(b)	-6.9	-9.7	-4.1	0.3	1.0	-5.1	-0.1	-5.3	-9.4	-6.4				
(c)	110.4	180.6	159.4	77.1	105.2	199.7	157.0	591.0	782.4	859.1		461.9	2,389.5	
(d)	8.6	-35.7	-13.0	8.8	-33.2	-43.6	22.8	-128.4	-90.7	-250.8		-54.0	-447.1	
(e)	-7.7	10.7	-74.3	-99.6	-108.2	65.2	-224.0	-146.3	-12.9	-86.3		-267.0	-469.5	

(Table continues on following page.)

Table 6 (continued)

Economy	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Cumulated		
												1974-76	1976-79	
<b>Indonesia</b>														
(a)	-3.0	-2.2	-2.4	0.6	7.6	0.6	1.3	3.5	1.0	6.4				
(b)	-3.4	-4.0	-3.0	-2.9	2.3	-3.7	-2.4	-0.1	-2.8	2.0				
(c)	290.0	377.0	500.0	520.0	492.0	1,043.0	1,982.0	1,491.0	1,596.0	1,320.0		3,517.0	6,389.0	
(d)	-3.0	-33.0	211.0	295	-399	-1,986.0	-451	-445	-12	-85.6		-2,836.0	-993.6	
(e)	-12	-32	-407	-326	-707	905	-913	-1017	-117	-1436		-715.0	-3,483.0	
<b>Nigeria</b>														
(a)	0.3	1.5	3.3	6.1	17.9	1.6	0.4	-0.6	-5.5					
(b)	-4.6	-4.0	-3.0	-0.05	16.4	0.1	-0.8	-2.0	-6.4					
(c)	205.0	310.0	367.0	306.0	169.0	209.0	-28.0	423.0	1,536.0	1,234.0		350.0	3,165.0	
(d)	134	205	121	-177	47	-64	9	-234	77	739		-8.0	591.0	
(e)	-90.0	-174.5	45.6	-206.0	-5,050.0	16.0	405.0	948.0	2,342.0	-3,662.0		-4,629.0	33.0	

(Table continues on following page.)

Table 6 (continued)

Economy	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Cumulated		
												1974-76	1976-79	
Trinidad and Tobago														
(a)	-5.0	-10.5	-4.6	4.1	26.6	20.9	17.4	17.0	11.6	16.0				
(b)	-12.5	-17.4	-10.8	-2.5	12.8	10.4	6.7	4.2	2.5	6.4				
(c)	84.8	140.6	105.4	70.0	78.9	164.8	-24.9	275.8	246.1	318.9		218.8	815.9	
(d)	4.8	41.0	-1.9	-41.9	-57.2	20.2	38.4	22.2	-23.5	-233.0		1.4	-195.9	
(e)	120	-20.1	8.8	9.8	-342.8	-364.8	-265.3	-461.8	-325.0	-333.0		-972.9	-1,385.1	
Venezuela														
(a)	5.3	7.9	7.6	14.3	34.9	8.7	3.2	-5.6	-9.7	-0.5				
(b)	-0.9	-0.1	-0.7	4.9	19.5	8.0	0.8	-9.0	-14.7	-0.6				
(c)	90.0	376.0	-377.0	-57.0	-665.0	395.0	1,371.0	2,130.0	3,719.0	1,714		1,101.0	8,934.0	
(d)	59.0	57.0	539.0	-195.0	-678.0	123.0	-1,643.0	839.0	111.0	-451.0		-2,198.0	-1,144.0	
(e)	-88.0	-467.0	-210.0	-633.0	-4,484.0	-2,670.0	-71.0	110.0	1,737.0	-1,109.0		-7,225.0	667.0	

Table 7  
Capital-Importing Mineral Exporters:  
Investment Growth and Savings Rate

Economy	Real Investment Growth Rates (% annually)		Average Savings Rates (% annually)			
	1970-73	1973-77	1970	1972	1974	1977
Algeria	.07	.12	.37	.36	.45	.37
Ecuador	.06	.14	.17	.17	.26	.24
Gabon	.15	n.a.	.33	.32	.63	.63
Indonesia	.18	.11	.09	.13	.21	.19
Nigeria	.14	.28	.10	.17	.39	.27
Trinidad	.02	.12	.14	.12	.35	.32
Venezuela	.08	.15	.30	.34	.55	.35
Unweighted average	.09 <sup>a/</sup>	.14	.21	.23	.41	.34

n.a. Not available.

<sup>a/</sup> Excluding Gabon.

Table 8  
Capital-Importing Oil Exporters: Oil and Government

Economy

[Row titles:

- (a) Central government, public sector or Treasury revenues/GDP
- (b) Share of oil in revenues
- (c) Current expenditures/GDP
- (d) Current savings/GDP
- (e) Capital spending and transfers on capital account/GDP
- (f) Balance/GDP
- (g) Average savings rate]

	1972	1973	1974	1975	1976	1977	1978	1979
Algeria: Treasury								
(a)		.32	.42	.45	.39	.43	.38	.39
(b)		.41	.62	.58	.55	.54	.47	.58
(c)		.18	.16	.23	.21	.19	.17	.17
(d)		.14	.26	.22	.18	.24	.21	.21
(e)		.11	.24	.29	.23	.32	.31	.25
(f)		.03	.02	-.07	-.05	-.08	-.10	-.04
(g)		-.43	.62	.48	.55	.56	.55	.53
Ecuador: Public sector								
(a)	.21	.21	.23	.22	.22	.19		
(b)	.10	.20	.37	.37	.35	.24		
(c)	.14	.14	.14	.11	.11	.14		
(d)	.07	.07	.09	.11	.11	.05		
(e)	.06	.08	.10	.12	.13	.09		
(f)	.01	-.01	-.01	-.01	-.02	-.04		
(g)	.33	.33	-.39	.50	.50	.26		
Indonesia: Central govt.								
(a)	.13	.14	.16	.17	.18	.18	.19	.22
(b)	.39	.39	.54	.55	.56	.55	.54	.64
(c)	.10	.10	.09	.10	.10	.11	.12	.13
(d)	.03	.04	.07	.07	.08	.07	.07	.09
(e)	.06	.07	.09	.13	.13	.11	.11	.13
(f)	-.03	-.03	-.02	-.04	-.05	-.04	-.04	-.04
(g)	.23	.28	.43	.41	.44	.39	.37	.41

(Table continues on following page.)

Table 8 (continued)

<u>Economy</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u>
Nigeria: Federal govt. <sup>a/</sup>						
(a)	.16	.23	.23	.21	.19	.12
(b)	.79	.96	.94	.97	.86	n.a.
(c)	.07	.09	.11	.10	.12	.09
(d)	.07	.14	.12	.11	.07	.03
(e)	.02	.06	.17	.19	.20	.19
(f)	.05	.08	-.05	-.08	-.13	-.16
(g)	.44	.63	.49	.51	.39	.27

n.a. Not available.

a/ 1973/74 figures to GDP 1973, etc.

Table 9  
Capital-Importing Oil Exporters:  
Resource Shifts between Tradeables and Nontradeables

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Percentage Change in Sectoral Share  
in GDP at Current Prices: 1970-77 (%)

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Economy	Agriculture and Manufacturing	Mining	Other Sectors
Algeria	-30	+62	-7
Ecuador	-12	+274	0
Indonesia	-19	+52	0
Malaysia	+8	+44	-12
Nigeria	-18	+65	-7
Trinidad	-37	+317	-34
Venezuela	-3	+11	-3

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