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The Impact of Macroeconomic Policies on Investment

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This paper looks at investment in developing countries, its relationship to growth and development, and the macroeconomic conditions and policies through which investment and growth can flourish. It draws heavily on recent empirical studies by the International Monetary Fund in this area and brings out some of the issues surrounding the efforts by the Fund to support policies conducive to higher savings, investment, and growth in the context of adjustment programs.

Investment and Growth

While experience has varied from one region to another, and even more markedly between different countries, real output growth in the developing world has slowed from an annual average rate of 5½ percent in the 1970s to about 3 percent in the 1980s. With relatively high rates of population growth and much weaker terms of trade, this slowdown translated into a marked decline in per capita income in many countries.

Though there are many factors responsible for the deceleration of growth, the one that stands out is the contemporaneous decline in capital formation—a vital ingredient and precondition for growth. Again, for the entire group of developing countries, domestic investment declined from 27½ percent of national income during the period 1976–81, to 23½ percent in the five years following the outbreak of the debt crisis (1983–87).[1] Underlying the decline

[1]Data weaknesses require that these estimates (and those for savings cited below) be treated with some caution. Both investment and savings are "gross" (they include depreciation) and include reinvestment by individual entities (and

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in investment was a sharp reduction in financial resources not only in the form of foreign capital but also—and more importantly, as I will show—from national savings (which fell from 27 percent of national income to 22½ percent over the same period).

The restoration of a satisfactory rate of growth in the developing world is a matter of urgent concern and one of high priority in the Fund's work. Referring specifically to those countries with debt-servicing difficulties, the recent communiqué of the Interim Committee notes: "These countries should intensify efforts to raise national saving and investment, promote efficiency through structural reforms, curb inflationary pressures, encourage the return of flight capital, and promote foreign direct investment. . . ."[2]

Much of what I have to say involves an elaboration of these policy prescriptions. The consensus is that the achievement of satisfactory growth requires steady increases both in the domestic capital stock and in the efficiency with which it is utilized. To be sustainable, however, higher investment must be achieved in consonance with a viable external payments position (including a manageable external debt situation)—a constraint that underlines the need for greater emphasis on mobilization of domestic savings. I shall consider these issues in turn.

The Level of Investment

An ample body of evidence is available inside and outside the Fund that supports the relationship between investment and growth in developing countries. Indeed, the contribution of investment to growth is generally found to be larger in developing countries than in the industrial world, although there are large differences between different subgroups of developing countries.

This relationship between investment and growth was examined in a recent Fund study covering 125 capital importing developing

thereby exceed savings and investment as intermediated by the financial system). Gross domestic investment includes investment in plant and equipment, residential construction, and changes in stocks. National saving is derived by adding (subtracting) the external current account deficit (surplus) to (from) gross domestic investment. Savings and investment ratios are based on national income, defined as gross national product plus net foreign transfers.

[2] *IMF Survey* (Washington: International Monetary Fund, October 16, 1989), p. 310.

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countries.[3] The study found the relationship to hold for all country groups, with a 10 percentage point increase in the ratio of investment to gross domestic product (GDP) raising the growth rate of output by 1½ percentage points on average. (This result is broadly confirmed by other studies.)

Efficiency of Investment

Studies such as these, though they point to a positive and relatively strong relationship between the absolute level of investment and the rate of growth, ignore such elements as the efficiency of resource use, as reflected, for example, in the allocation of resources and the quality of capital. Partly for this reason we find a large residual in such analyses, implying that only part of the growth process can be explained in terms of the absolute capital stock. However, we can be confident, a priori, that a shift in the allocation of resources toward more productive projects (for example, in favor of viable export-oriented ventures rather than protected import-substituting ones) and investment in human capital (health, education, and training) will bring about gains in output through increased efficiency.

Clearly, data weaknesses and problems in devising appropriate techniques for measuring the quality of investment limit empirical work in this area. Nevertheless, some studies have attempted to allow for quality variation in inputs, and they do indeed reveal larger relative contributions by capital and labor to output compared with the results obtained when productivity or the quality of factors of production are not taken into account. Of interest in this context are the results of another Fund study,[4] which attempted to evaluate the relative contributions of factor inputs (capital and labor) and total factor productivity in the growth of output of groups of developing countries classified by region. (The contribution of a factor input is defined as the average share of that factor in output times its growth rate, while total factor productivity measures all other influences on growth.)

This study reveals a wide variation between the various regional groupings not only in the relative contribution of factor inputs to

[3]*World Economic Outlook: A Survey by the Staff of the International Monetary Fund* (Washington: International Monetary Fund, April 1988).

[4]Also published in *World Economic Outlook* (cited in fn. 3).

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growth but also in the contribution of factor productivity (the proxy for efficiency). For example, over the period 1974–81, total factor inputs accounted for about 70 percent of the growth of output in the non-oil Middle Eastern countries, leaving the remainder (accounting for about 1¼ percentage points of GDP growth annually) to be explained by improvements in factor productivity (or efficiency). Improvements in efficiency also contributed to growth in developing countries in Asia and Europe. In Africa and the Western Hemisphere, on the other hand, declining factor productivity (suggesting resource misallocation) offset the contribution to growth of total factor inputs by about one half of a percentage point annually.

During 1982–87, indications are that factor productivity declined for all regional groupings of developing countries—with the exception of Asia. The Middle Eastern countries, for their part, succeeded in maintaining positive productivity gains (contributing about three fourths of a percentage point to GDP growth annually) as against zero or negative contributions in the remaining regional groupings (Africa, Europe, and the Western Hemisphere).

In sum, this study confirms that while capital accumulation per se has made a significant contribution to growth in developing countries, improvements in the quality of resources and the efficiency with which they are used are also very important.

The External Constraint

The gap between domestic investment and national saving is reflected in a country's external current account position. Thus, when investment exceeds the financing available through national savings, recourse to foreign financing is required. The existence of a current external deficit is not necessarily a cause for concern, but a number of caveats deserve emphasis.

First, external financing can only be a supplement to, not a substitute for, national savings. This is evident from the relative magnitudes involved. Thus, national savings have financed by far the greater share of investment in developing countries—about 90 percent on average. With the focus of attention being on the supply (or lack) of foreign financing in the wake of the debt crisis, this fact is sometimes overlooked: what it means, of course, is that higher investment ultimately hinges on greater mobilization of

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domestic resources through policies aimed at strengthening financial savings and keeping them within the country.

Second, while foreign financing can be an important supplement to national savings, its *form* is also important. In light of recent experience, commercial borrowing is likely to continue to play a much less important role in balance of payments financing in the developing world in the years ahead compared with the pre-debt crisis period. Meanwhile, the relative importance of official financing and direct investment has increased, and both sources of finance are more closely linked to domestic policies. Increasingly, bilateral donors are paying attention to domestic macro- and structural policies, while foreign direct investment, by its very nature, is aimed at a commercially acceptable rate of return. The latter, in turn, depends not only on the economic environment but on the political atmosphere as well—notably confidence on the part of potential investors that their assets and earnings are not subject to arbitrary action on the part of the host country.

Improved domestic policies and a greater receptiveness to foreign investment—which is often accompanied by technology and managerial expertise—should help improve the productivity of domestic as well as foreign-financed investment. Strengthened domestic policies are also a key to addressing the problems of capital flight—an irony in borrowing countries—which is essentially the consequence of perverse incentives and a general lack of confidence in economic management.

Finally, reliance on external borrowing must be kept within manageable bounds. This point has been amply demonstrated by the experience in recent years of many developing countries that relied too heavily on external borrowing—frequently on commercial terms—as a source of capital. As debt service obligations rose, these countries became vulnerable to exogenous shocks—arising from the global recession, higher interest rates, terms of trade losses, and so on—that characterized the early 1980s and culminated in the debt crisis.

The general principle is that orderly repayments will be ensured if debt is incurred up to (but not beyond) the point where the marginal productivity of capital is equal to the real interest cost of the borrowed funds. In such a framework, debt-servicing difficulties can be viewed as having arisen either because the marginal productivity of capital was overstated, or because exogenous shocks

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lowered the return on capital relative to the cost of borrowing. Our empirical work in the Fund in recent years has brought out the overwhelming importance of the former explanation. Although external shocks have had adverse implications for the economics in many countries, the pre-eminence of domestic economic policies is clearly established as the governing influence on economic performance.

Lessons from Recent Experience

This point can, I believe, best be illustrated by examining in more detail the recent experience of two distinct groups of developing countries: those that experienced debt crises and those that did not. This is a useful dichotomy for analytical purposes because a great deal of data on the respective economic policies and performance of the two groups has been assembled by the Fund in connection with our continuing studies for the *World Economic Outlook*. In addition, the contrasting experience of the two groups provides a graphic illustration of the consequences of two markedly different economic strategies on saving and investment, on the one hand, and growth on the other, and hence offers valuable lessons for policy.

At the most general level—real GDP growth—we find that the two groups of countries had identical growth rates during the 1970s (5.2 percent annually). Investment ratios (relative to national income) were also comparable for the two groups (in the range of 27–28 percent). What differed, however, were the financing sources for investment, with the countries that were to avoid debt problems relying much more heavily on national savings. National savings in these countries accounted for 26 percent of national income during the late 1970s, compared with only 23 percent in the countries that were later to experience debt problems. This discrepancy was reflected in the differing external positions of the two groups, with the countries with future debt problems relying much more heavily on foreign savings, as indicated by their much larger external current account deficits (which represented 4 percent of national income annually during the late 1970s, compared with less than 2 percent for the other group).

The onset of the debt crisis in the early 1980s had severe consequences for the countries that had been relying heavily on foreign

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savings during the previous decade. The virtual cessation of external commercial financing (which was in part cause, in part effect, of the debt crisis), combined with the continuing large outward transfers from these countries needed to service their massive external debt, resulted in a very large contraction of the net external financial resources available to them. This forced on these countries a rapid external adjustment. Their current account deficit fell from over 4 percent of national income in the years leading up to the debt crisis to about 1 percent in the following five years. Moreover, national saving in these countries fell to about 18 percent of national income after 1982 from about 23 percent in 1976–81.

How was this sharp fall in both domestic and foreign resources reflected in domestic absorption (that is, consumption plus investment)? The answer explains why many of these countries have failed to restore growth: Not only did investment bear the full brunt of the reduction in resources, but domestic consumption was allowed to *rise*, thereby further constricting investment. In the event, investment ratios fell sharply, from 27 percent of national income in 1976–81 to about 19 percent after 1983. As a consequence, real GDP actually declined by 3 percent during 1981–83. And while adjustment efforts in many of these countries helped to restore the average growth rate for the group in the second half of the decade, it remained relatively low (3 percent) and uneven.

The countries that avoided debt-servicing problems and, thereby, did not lose access to foreign financing, also maintained their national savings rates at about 26 percent of national income (6 or 7 percentage points higher than in the countries experiencing a debt crisis). Thus, they were able to *maintain* domestic investment during the 1980s—at about 27 percent of national income—and succeeded in *increasing* their real GDP growth in the 1980s compared with the late 1970s (6 percent versus 5.2 percent).

Behind these contrasting performances were a number of policy differences between the two groups that are worth recounting. Compared with the countries that avoided debt problems and achieved sound investment and growth performance, the crisis-prone countries

- had large budget deficits
- had loose monetary policies (artificially low interest rates, high rates of monetary creation)

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- recorded relatively high rates of inflation
- did not make active use of the exchange rate
- failed to achieve strong export growth
- cut investment rather than consumption in their approach to adjustment.

Macroeconomic Policies and Investment

The final topic of my remarks is the crucial role for macroeconomic policies in establishing a climate conducive to saving and investment, in ensuring that capital is efficiently utilized, and in keeping reliance on external resources within manageable bounds.

Fiscal Policy

High and rising fiscal deficits have been a central cause of excess demand pressures—as indicated by inflation and large external payments deficits—in many countries. These conditions, which were symptomatic of the countries that experienced debt crises, hurt domestic investment in a variety of ways. For example, large public sector financing requirements pre-empt resources that might otherwise be used in the private sector, frequently more efficiently.[5] Also, public sector borrowing often takes the form of loans from the central bank, which is highly inflationary.

Because of rigidities in some prices, inflation has distorting effects that produce misleading signals and interfere with the efficient allocation of resources. Rigidities of exchange rates and interest rates are a particularly common problem, leading to a weakening external position as incentives are shifted away from exports in favor of imports, and in favor of spending and capital flight rather than financial saving. It is not surprising to find, therefore, that countries with high inflation have saved and invested significantly less in recent years than countries with low inflation rates.[6] In

[5]Mohsin Khan and Carmen M. Reinhart, "Private Investment and Economic Growth in Developing Countries," IMF Working Paper, No. 89/60 (Washington: International Monetary Fund, July 1989).

[6]During 1982–88, developing countries with high inflation rates recorded savings rates equivalent to about 18 percent of national income and investment rates of about 20 percent. Low-inflation countries saved and invested on average 28 percent of national income.

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addition, as I pointed out in a paper some twenty-five years ago,[7] inflation tends to alter the composition of investment, toward less efficient ventures (for example, inventories) offering short-term gains, and away from productive projects involving larger gestation.

Because of the prevalence of large fiscal deficits, and their role in contributing to excess demand, fiscal restraint is typically a key component of adjustment programs supported by the Fund. While the impact of fiscal restraint on domestic saving and investment will vary according to the structure of the economy and the particular circumstances, a few generalizations are possible. A reduction in *public consumption* (current expenditures), for example, is unlikely to have a significant effect on private consumption in developing countries and would normally lead to an increase in national savings. The rise in national savings, in turn, could stimulate private investment if it were to lead to lower domestic real interest rates, or if it were to result in the expectation of a lower burden of taxation in the future.

If, on the other hand, the fiscal adjustment takes the form of *increased revenues*, private saving is likely to fall, particularly if the tax increase reduces the after-tax rate of return on saving (which would tilt the pattern of expenditure toward consumption). Similarly, if the incidence of the tax falls on profits, private investment may suffer. If increased investment is not forthcoming, the rise in national saving will simply replace foreign saving; that is, it will result in an improvement in the external current account position.

Cuts in *public investment* could affect private investment in a number of ways. If, for example, the public investment projects that are curtailed compete directly with the private sector, private investment may receive a net stimulus. On the other hand, a reduction in public investment projects that are complementary to the private capital stock could lead to an improvement in the current account position but to a lower rate of economic growth.

Credit Policy

The restraint of aggregate demand through limits on the expansion of domestic credit—another central element of adjustment

[7] A.S. Shaalan, "The Impact of Inflation on the Composition of Private Domestic Investment," *Staff Papers*, International Monetary Fund (Washington), Vol. 9 (July 1962).

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programs—also influences saving and investment. Much depends upon whether interest rates are relatively free to respond to market forces or are administered (fixed). If interest rates have some flexibility, a more restrictive credit policy would tend to raise interest rates and stimulate private financial saving. With credit restricted, higher saving will serve to strengthen the external position. Meanwhile, however, if the credit restraint is an element of a broader program of adjustment, confidence may rise to the extent that individuals seeking to increase investment seek alternative (noninflationary) financing—through reduced consumption, for example.

With rigid interest rates, a tightening of credit will be less effective in strengthening the balance of payments (since there is likely to be little effect on domestic financial savings), while the necessary tightening of credit rationing may further undermine allocative efficiency. In these circumstances, the direct effects of credit restraint on private investment will be unfavorable. However, stabilization programs usually attempt to mitigate such adverse effects on private investment by applying subceilings on credit to the public sector, which seek to shift the composition of credit toward the private sector within the overall ceiling. Further negative effects on investment could prove to be short term if the restrictive credit policy succeeds in bringing inflation under control. As the domestic macroeconomic situation improves, the medium-term outlook for investment would become more favorable.

Interest Rate Policy

While there is disagreement over the influence of interest rates on the volume of *total* savings, interest rates have been shown to be important in determining the *form* in which savings are held. Thus, while an increase in interest rates may stimulate total savings by making future consumption less expensive relative to current consumption (substitution effect), it may also tend to reduce saving by lowering the amount of present saving necessary to buy a given amount of future consumption (income effect). Empirical evidence on the relative importance of these two effects is mixed, but there is evidence that the interest rate has a significant effect on the volume of *financial* savings.

In countries experiencing prolonged bouts of financial repression (for example, negative real interest rates), a large proportion of

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savings are held as inflation hedges such as real estate, consumer durables, precious metals and gems, and foreign currency. Where such countries have significantly increased interest rates, a large positive effect on financial savings has been observed. In addition, where the interest rate increase has been accompanied by appropriate macropolicies leading to greater confidence in the exchange rate, capital flight has been curbed or even reversed, thus augmenting the supply of resources for domestic investment.

Developing countries often keep interest rates artificially low in an effort both to keep down the cost of government borrowing and to stimulate private investment. In practice, however, such a strategy has many disadvantages. Insofar as low real interest rates depress financial savings and encourage capital outflow, the supply of resources for investment will be reduced. At the same time, artificial suppression of real interest rates tends to lower the productivity of investment as scarce financial resources have to be rationed by administrative means (rather than through the market). The success of allocation of credit by administrative means depends on the ability of policymakers to identify correctly the most productive sectors and to control the end use of funds allocated to them. Neither of these tasks is easy. Moreover, the low cost of funds reduces the necessity for careful evaluation of projects by enterprises. Finally, low interest rates together with downward rigidity of real wages distort relative factor prices in a manner that encourages a bias in investment toward capital-intensive techniques with detrimental effects on employment.

In a recent study covering 33 developing countries over the period 1965–85, the relationship between real interest rates and growth was examined. The study showed that increases in interest rates, toward modestly positive levels, are associated with increased saving and investment and with increased financial depth (monetization). And financial depth, in turn, is strongly associated with more productive investment, thus improving prospects for growth.

Financial Sector Development

There is abundant evidence that policies aimed at assisting the development of the financial sector can improve the climate for private sector investment. (Indeed, this subject forms the basis for the 1989 *World Development Report* of the World Bank.) Informal

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finance, as it exists in many developing countries, involves unequal opportunities for potential lenders and borrowers and, since it is by definition unregulated, is exposed to greater risk of fraud and instability. As economies grow, informal financing arrangements need to be replaced by the more sophisticated and comprehensive services that organized institutions like commercial banks, investment houses, and organized capital markets can supply. These institutions are capable of mobilizing financial savings on a large scale and of transforming their maturity structure by intermediating between the many small depositors, usually with a preference for liquid assets, and fewer large borrowers who typically need long-term finance for investment. Government policy can help foster and develop financial systems in a context of broad macroeconomic stability by building better legal, accounting, and regulatory frameworks.

Exchange Rate Policy

Exchange rates are a key administered price in almost all developing countries, and one which is frequently subject to considerable rigidity. Because of the pervasive influence of the exchange rate on domestic prices (via its direct effect on the domestic currency price of imported goods and exportables), governments are often reluctant to depreciate their currencies lest such action should aggravate domestic inflationary pressures. Failure to depreciate in conditions of inflation (when domestic prices are rising faster than in trading partners) has been a widespread problem. The resulting price distortions divert investment into importing and import-dependent industries at the expense of exportables, and, as the balance of payments weakens, confidence in the currency declines, leading to a drain on domestic savings in the form of capital flight.

Overvalued exchange rates often give rise to other price distortions as well. Governments often respond to capital flight, for example, not by allowing interest rates to find a market level, but by seeking to control capital flight directly—an endeavor that has rarely been fully successful. The deterioration in the balance of payments is often addressed not by fundamental measures of adjustment but by the intensification of trade and payments restrictions or by recourse to foreign borrowing. Restrictions directly undermine efficiency by compounding price distortions and hence the allocation of investment, and by breeding corruption—a du-

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bious prescription for growth. I have already discussed the perils of undue recourse to foreign borrowing as a means of augmenting domestic savings.

While depreciation is best not postponed in the circumstances I have been describing, it is not a panacea. Adjustment to a realistic exchange rate needs to be backed by a comprehensive macroeconomic program aimed at reining in aggregate demand and restoring a viable external position. Without such a program, the changes in relative prices induced by the depreciation would be quickly eroded by domestic inflation, and the earlier distortions would quickly reappear, again undermining savings, investment, and growth.

Uncertainty and Policy Credibility

A final consideration relates to the credibility of policies. A number of recent studies have emphasized the irreversible nature of investment expenditures because capital, once installed, is company- or industry-specific and cannot be put to use elsewhere without considerable cost. In view of the irreversible nature of investment, uncertainty plays an important role in investment decision making. In this context, the perceived stability and predictability of the incentive structure and the macroeconomic policy environment are probably as important as the policies and incentives themselves. Various studies have analyzed the different forms of uncertainty relevant for investment decisions. For example, uncertainty regarding future demand or future real exchange rates or interest rates may cause companies to refrain from investment even if existing conditions made entry profitable. Equally, uncertainty deters potential foreign investors, thus depriving the country of access both to foreign equity capital and to the management and technology that frequently accompany it.

A corollary of this issue is the credibility of policy *reform*. This could be related to investors' perceptions about both the internal consistency of a reform package as well as the government's willingness and ability to carry out the reform in the face of short-run social costs. Credibility in this sense could become an important factor in investor response. This factor would be especially significant in economies that have attempted, but failed, to carry reforms to their successful conclusion in the past. It is difficult to suggest how credibility could be improved by government actions in the short run, but the adoption of sound macroeconomic policies

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that support domestic and external balance is a start in the right direction. The issue is also related to the choice between gradual and abrupt reforms, which in the end would largely depend on the specific conditions prevailing in a particular country.

Concluding Remarks

I would like to conclude with some additional comments regarding savings, investment, and growth in the Middle East—a region which has been the subject of rather limited empirical work. I shall speak first of the oil exporting countries and then of the non-oil developing countries of the region.[8]

Oil Exporting Countries

Trends in the capital-surplus major oil exporters have moved in line with the changing fortunes of the world oil market. National savings (to which fiscal surpluses contributed importantly in past years) declined from as much as 43 percent of national income in the second half of the 1970s (when budget surpluses were typically very large) to about 30 percent in the first half of the 1980s. The debacle in the world oil market in 1986 led to a further contraction in national savings, which fell to about 17 percent of national income in 1988.

Domestic investment in these countries showed greater resilience. Indeed, in the first half of the 1980s, investment (at about 29 percent of national income) was somewhat higher than in the second half of the 1970s (27 percent of national income), though it fell sharply after 1986 to about 20 percent on average. The eventual decline in investment reflected a desire in most countries to conserve foreign assets and was facilitated by the completion by most countries of much of their infrastructure development programs.

These diverging trends in saving and investment were accompanied by a substantial increase in the share of consumption in national income—a process that has continued without interruption during the 1980s. This, in turn, has contributed to the emer-

[8]The country coverage corresponds to that of the Fund's Middle Eastern Department (with the exception of a few countries that have been excluded on account of data limitations). The oil exporting countries comprise the Islamic Republic of Iran, Kuwait, Libya, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. The non-oil economies are Bahrain, Egypt, Jordan, Pakistan, the Syrian Arab Republic, and the Yemen Arab Republic.

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gence of a current external deficit for the group as a whole in the range of 2–3 percent of national income. Although the external reserve position of the majority remains comfortable, affording considerable scope for policymakers, the more constrained external position combined with the continuing uncertainty surrounding the prospects for the world oil market calls for caution and prudence in domestic policies. More compelling reasons exist now, for example, for these countries to subject domestic investment to more rigorous scrutiny to ensure that new ventures are remunerative and productive. In more restrictive budgetary circumstances, most countries also are seeking to improve the efficiency of government expenditures by curbing subsidies and raising charges and fees for government services. These policies promise to strengthen budgetary positions (augmenting national savings) and to minimize the distortions in domestic price structures that can give misleading signals for investment.

As budgets have shifted from surplus into deficit in recent years, new financing mechanisms are being introduced, including bonds and other government securities. Such investments offer new vehicles for domestic savings and are leading to more flexible interest rate policies in some countries. Such a step can be helpful not only in raising government finance but also in integrating domestic capital and money markets and in enabling governments to influence external capital flows more effectively—an important consideration in countries with unrestricted exchange and payments systems.

Non-Oil Developing Countries of the Middle East

The direction of change in savings and investment in the non-oil countries of the Middle East is similar to that of the oil exporters, though the magnitudes differ significantly. In brief, national savings fell from 18½ percent of national income during 1976–81 to about 14 percent in the early 1980s and have since declined to about 12 percent. Investment ratios now stand at about 16 percent of national income—six points lower than in the late 1970s. Meanwhile, in these countries too, consumption ratios have been on the rise.

These trends are a reflection in part of adverse external (exogenous) factors and in part of weaknesses in domestic policy. The contraction of the export earnings of the oil exporting countries in the 1980s, coupled with the weakening of domestic demand

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and activity in their non-oil sectors, had profound implications for the non-oil countries of the region that depend upon the oil exporters—to a greater or lesser degree—for financial support, for outlets for their surplus labor (and associated remittances), and for export markets. More generally, the external economic environment during the 1980s for the Middle Eastern non-oil group has been mixed, with relatively high interest rates and weak commodity prices over most of the decade being partly offset by moderately strong (if uneven) world trade growth.

On the whole, these economies have been susceptible to adverse external influences on account of shortcomings in domestic policies and delays in adjustment (compounded in some cases by hostilities and civil strife) that are reflected in large external imbalances and external financing difficulties (current account deficits are in the range of 4–5 percent of national income on average).

At the root of these imbalances are large, and, in some cases still rising, public sector deficits as expenditures have risen in the face of poor revenue performance. The liquidity expansion associated with the financing of these deficits, together with rigidities in domestic prices and interest rates, has been fueling excess demand pressures as reflected in high or rising rates of inflation and deteriorating external positions. Despite these pressures, some countries continue to maintain overvalued exchange rates and complex exchange and trade systems in an effort to moderate price increases. However, this has put downward pressure on exchange rates in parallel markets and, together with negative real interest rates, has contributed to capital flight in some countries.

The policy requirements are clear for many countries in this group, and determined action is necessary. It is encouraging to note that two countries in this group have recently embarked on comprehensive adjustment programs in collaboration with the Fund, and discussions are under way in one or two others.

Thus, the issues I have discussed in broader terms in the earlier sections of this paper have a clear relevance for the Middle Eastern countries, particularly in current circumstances. I would hope that this seminar will be able to address in more specific, policy-related terms the challenges countries of this region are facing today in mobilizing savings and ensuring both that capital is profitably utilized and that the recovery that has been emerging can be sustained through sound policy choices.

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Comment

Mohamed El-Diri

Without going into every detail of Mr. A. Shakour Shaalan's important paper on the relationship between investment and growth in the context of the macroeconomic policies adopted by developing countries and supported by the International Monetary Fund, it seems to me that three fundamental points warrant emphasis here. The first revolves around a general retrospective analysis of the relationship between investment, external financing, and growth; the second relates to macroeconomic policies aimed at improving investment ratios; while the third emphasizes the present chronic problem of foreign debt and its impact on investment—and therefore growth—within developing countries.

Investment, External Resources, and Growth

Most developing countries have been relying on foreign resources to raise their level of income. The nature, importance, and institutional framework of those resources have changed radically over the years. Nevertheless, external resources have almost become an autonomous factor of production, whose consequences are considered two of the main factors that subsequently contributed to the debt problem.

The underlying concept behind the promotion of foreign resources in the developing economies was based on the assumption that, since those resources were not associated with direct performance, they helped somewhat to reduce the need for certain factors, such as savings or foreign exchange, so as to achieve fast growth and correct imbalances. However, the achievement of those objectives depends on the fulfillment of certain prerequisites for sustainable growth and for the gradual elimination of dependence on foreign resources.

One of the prerequisites for achieving the objectives is the ability of developing countries to adjust their productive structures to cope with the changes taking place in domestic and foreign demand. This condition may have particular importance in a fast-

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growing economy, thus requiring a significant increase in the supply of inputs for production, raw materials, and manufactured goods. Since developing countries in general import those materials, any limitation on their import would reflect negatively on the level of growth. Consequently, controls would be tightened, thus impeding investment. Moreover, the increasing shortage of imported materials caused by a lack of foreign resources results in the use of potential savings to finance domestic consumption demand at the expense of productive investment, which leads to weak aggregate demand. It has been proved, however, that while foreign capital has a positive impact it poses certain dangers:

- This capital might lead governments to postpone the implementation of necessary reforms;
- Foreign capital could lead the government to borrow excessively.

With this in mind, let us review the developing countries' experience from the early seventies to the early eighties.

Although the practical experience of the developing countries varies from region to region, and from country to country, as Mr. Shaalan has pointed out, growth in the developing countries in general witnessed a considerable slowdown throughout the eighties compared with the seventies. It is also evident that this slowdown was due to several factors, such as population growth, weakening terms of trade, instabilities in currency exchange markets, and the resurgence of protectionism. But the most important cause of decelerating growth during the eighties was without doubt the decline in capital formation that immediately followed the outbreak of the debt crisis, which was attributed in turn to scarce financial resources, both domestic and foreign.

During the seventies and up to the eighties, external capital flows, especially private flows, to developing countries increased in momentum, as manifested in greater borrowing from commercial banks, whose share in recent total capital flows to developing countries rose from 15 percent in 1970 to 36 percent in 1983. As a result, these countries became more vulnerable to external debt-servicing difficulties, for three reasons:

- The volume of loans greatly exceeded the volume of direct investments, leading to an imbalance between capital and debt. New investments in developing countries thus fell from an

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annual average of $14 billion in 1975–79 to $7.8 billion in 1983.

- Floating interest on loans increased markedly, placing the burden of debt squarely on the borrower whenever the interest rate grew.
- Repayment time was significantly reduced, especially following the decline in the share of public capital and public debt in total external contributions. It should be recalled that foreign investments declined before bank loans became scarce, which also explains the reduction in the ratio of direct investments to total external contributions in favor of developing countries from 48 percent to 12.5 percent in 1983.

Thus, most developing countries, especially from 1978 to 1983, began to encounter serious difficulties that became so chronic that many of these countries turned to commercial borrowing payable on terms different from and at odds with the phased planning of investment financing or the time spans in which these investments become remunerative. Abetting this action was the abundant liquidity at the disposal of commercial banks during that time, which made it easier for developing countries to obtain these loans, made without sufficient concern for the areas and terms of assignment.

On the other hand, one must acknowledge that many of these countries did not undertake sufficient restructuring of their economies when these external debts began to mount, while external funds were frequently improperly assigned. Indeed, the presence of foreign capital does not necessarily preclude raising the level of domestic saving, whether private or public, since such capital can only supplement and does not replace domestic saving. The principle applied in this regard requires taking into consideration the same measures for determining domestic saving and investment levels as are applied in estimating acceptable levels of external borrowing. One can infer from this principle that managing and adjusting external capital flows is an essential bridgehead to managing the macroeconomy.

Macroeconomic Policies and Investment

The diverse situations in which developing countries found themselves enable certain lessons to be derived about the impact

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of government intervention in the various economic sectors. First, most developing countries failed to display sufficient flexibility before the uncertainties surrounding international economic conditions arose. Second, foreign capital, as well as domestic resources, was not utilized or channeled effectively, because, as a rule, investment yields should exceed official resource costs if sufficient surpluses are to be generated to cover interest, award shareholders, and secure profits.

Without repeating the figures quantifying the experience of developing countries in this regard, which Mr. Shaalan has already provided, I should like to summarize some of the salient features of this experience for economic policy. Three areas of activity may be delineated, each involving certain distortions and constraints that developing countries have been unable to resolve adequately:

- The greatest value corresponds to the opportunity cost, for through it productive structures can achieve sufficient flexibility and the activities in which the country has a comparative advantage can be encouraged. If price subsidies are introduced, it should be done with care. On the other hand, because the price structure, including interest rates, influences investment decisions, this area of activity should not be ignored.
- The rate of exchange and commercial policy also play an important role. During the seventies and until the early eighties, many developing countries sometimes allowed their currencies to become overvalued and their commercial policies to suffer distortions, thereby encouraging imports and discouraging exports. As a result, macroeconomic equilibria in many developing countries were upset.
- Domestic demand must be limited to a level compatible with domestic production and external realities. The absence of such compatibility will lead to problems in performance and the depletion of exchange reserves.

These three areas of activity actually suggest a macroeconomic policy for restoring growth and ensuring its progress through improved savings and ways in which these savings may be employed in productive investments. Long-term growth is effectively linked to a combination of structural economic variables, such as domestic savings ratios, human capital formation, growth in exportables, real interest rates on external debt, and population growth.

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For the first three variables, one anticipates that they would have a positive impact on development; the other two are more likely to hamper development.

One recent study that endorsed this line of thought attempted to incorporate it in an evaluation of the experience of 55 selected countries, starting from 1970.[1] Among the results obtained was that exports were the principal determinant of growth for over 95 percent of these countries for 1970–85, with growth increasing by 2.6 percentage points on average. It was also shown that domestic savings ratios have a positive effect on economic growth, possibly to the same extent as exports. The study contends that a unit increase in domestic savings yields a tenfold percentage increase, raising per capita GNP by 1–2 percentage points a year. Investments in human capital during this period increased by 4 percent a year; this type of investment, according to the study, had a tangibly positive impact. As for population growth and real interest on external debt, both had a negative effect on per capita GNP (with the former effecting a slight decline of about 2 percentage points), which was to be expected.

However, upon interpolating these results, one notes that the variables that were regarded as the greatest determinants of growth (exports and savings) had themselves been subject to external limitations since the early seventies. Consequently, the results of the adjustment programs endorsed by the developing countries during this period fell short of expectations. The programs revolved around the revival of exports in particular, strengthening market mechanisms, deregulating prices, reducing expenditures, and so on.

The adverse consequences of an unstable global environment characterized by the prevalence of protectionist policies in the industrial countries cannot benefit exports from developing countries. On the other hand, if one contends that prices should be determined exclusively by the market, one may point to the example of the farming sector in the industrial countries, which benefits greatly from financial aid to countries, and which therefore confirms the asymmetrical nature of adjustment efforts.

By the same token, the contraction of expenditures required for

[1]See Ichiro Otani and Delano Villanueva, "Theoretical Aspects of Growth in Developing Countries: External Debt Dynamics and the Role of Human Capital," IMF Working Paper, No. 88/54 (Washington: International Monetary Fund, 1988).

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adjustment programs was most glaring in productive investments and in the education and health sectors, where a clear drop occurred in both physical and human capital formation.

Similarly, the growing external debt, on the one hand, and the dramatic drop in external flows, on the other, have led to a reverse transfer of resources. These transfers will most likely diminish the amount of savings earmarked for investment.

All these pressures, in addition to the negative social consequences entailed, led to the failure of the various adjustment programs pursued by the developing countries. One can conclude therefore that the success of any adjustment program must involve an adequate amount of external financing. Without it the programs will have contrary results at intolerable economic and social costs.

External Debt, Investment, and Growth

We cannot in all honesty decry the credit policies pursued by developing countries still in the early stages of growth. The procurement of intermediate goods and equipment through loans is a necessary gamble in the first stages of growth—a process that, the economists agree, is a long time maturing. But when debt becomes a cumulative phenomenon, the question of the externalities of that debt, as well as domestic utilization, automatically arises.

With regard to utilization, we can assume that the country facing accumulating debt has not been able to direct the loans obtained productively, enabling a normal repayment of the debt and an expansion of the base for economic growth.

What needs to be emphasized here are the many forms that this debt takes in developing countries, reflecting at the same time the diversity in domestic use of credit, the structural development of the economies concerned, and the state of the international economy. But it is evident that the kinds of loans extended to developing countries were not their choice but were imposed on them. The fall in the share of public loans in total external flows to developing countries, their replacement by commercial bank loans, the setting of multivalued interest rates, and the instability of exchange markets—all combined to leave developing countries no room for choice. At the same time, interest rates grew at a be-

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wildering rate during the seventies, and maturities grew shorter and shorter.[2]

This situation of a burgeoning foreign debt that exceeds the capacity of developing countries to cope is what impelled these countries to prod for a rescheduling of their debts, the initiation of adjustment programs, and the restructuring of their economies.

One of the consequences of this state of affairs is that new loans are being used to cover interest on old loans and to renew the principal. In 1979, the amount of interest owed by non-oil developing countries exceeded the level of new loans, with only a year's duration separating them. As the balance of trade of these countries is registering a very large deficit in the wake of the second oil shock, to achieve equilibrium in their balance of payments they are resorting to short-term loans at a time when these loans are tied to extremely high costs.

Although these countries have scored some success in this effort during the past few years, the record shows that they remain unable to achieve the goals to which they aspire.

As a result, the debt question continues to be the subject of heated debate, as the rescheduling of conventional debts is a very costly endeavor. Meanwhile, no tangible progress is apparent on additional flows to developing countries while fluctuations in international economic conditions continue.

The recovery of investment and growth to a sound footing under prevailing conditions is therefore inextricably tied to the resolution of the debt crisis. The question of private and public debt and their costs and the achievement of thoughtful solutions that accord with the conditions and aspirations of developing countries must therefore be addressed.

Resolving the debt crisis, curtailing protectionism, stabilizing exchange markets, and reviving domestic investment—so that the developing countries may become genuine contributors to international production and trade—are the problems that, if solved, would provide a sound and viable basis for restoring investment and for progress in development in developing countries.

[2]According to the Organization for Economic Cooperation and Development, the interest rate ranged from a fixed rate of 4.5 percent in 1972 to a variable rate reaching 17.4 percent in 1981.

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Fareed Atabani

I read with great interest Mr. Shaalan's refreshingly clear exposition both of the theoretical relationships between investment and growth and of the growing empirical evidence resulting from work inside and outside the Fund to buttress this relationship. Let me say at the outset that I have no quarrel with Mr. Shaalan's contribution and find myself in complete agreement with the eminently sensible things he had to say. In my comments I will therefore attempt to clarify and elaborate some of the major policy issues that seem to me to be behind much of Mr. Shaalan's paper.

To do this one should pose a number of questions: Why, given the theoretical framework and the evidence on investment and growth, are the economics of most developing countries experiencing low rates of growth and substantial dislocations? What if anything is the role of macroeconomic policy in the context of growth and what is the role of government in the process of economic development? Answers to these and similar questions would, I believe, clarify the necessary conditions—already implicit in the paper—for maintaining high and sustained levels of investment and economic growth.

The source of present-day trouble in most developing countries, I think, lies in the rejection by many economists (and the acceptance of this rejection by policymakers) of some of the basic tenets of economic theory based on the assumption that economic theory is irrelevant for present-day developing countries. In its simplest and most prevalent form, it is argued that microeconomic relationships, particularly relative prices, cannot be applicable to developing countries in which markets, among other things, are neither perfect nor competitive in the textbook sense. Separated from its microeconomic foundations, concern with macroeconomics then shifted to identifying and then manipulating major (undifferentiated) aggregates like investment, consumption, and savings in an attempt to obtain more output from the economy. The emphasis of macroeconomic policy is therefore shifted to demand management based on the view that higher levels of investment are beneficial, with little or no concern for how these

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are to be achieved or what type of investment it is. By contrast, microeconomics, concerned with relative prices as the signal for resource allocation, focuses on the supply side, that is, on efficiency and the proper allocation of resources and not merely on the *increase* of the *rate* at which they are used.

The macroeconomic concern with aggregates implies that all supply relationships are fixed. This gives rise to all sorts of concepts that are surprisingly still fashionable in current thinking about economic development—concepts that have ossified into dogma. Perhaps the most prevalent is the denial of the possibility that workers will respond positively to changes in incentives, or the possibility of substituting one good for another in response to changes in prices, or the idea that export earnings or import requirements of most developing countries are fixed for any given scale of production. The most important implication of fixed supply relationships is that prices can, without harm, be stripped of their proper function of allocating scarce resources to their most efficient uses. Prices then are viewed merely as a passive instrument for government manipulation, for example, to curb inflation through price controls or perhaps to be tampered with to increase government revenues.

This view of economic relationships leads direct to the concept that to bring about economic development in most underdeveloped economies their governments will need only to *control* and *direct* the major economic activities with no reference to relative prices. I believe that therein lies the major problem in formulating economic policy in most developing countries in the postwar era. Government policy then attempts to achieve what relative prices are meant to, that is, allocate resources. But bureaucracies in most countries are not able to cope with the stringent requirements needed to stay on top of the system, thereby causing irreparable damage to the efficiency of the economy.

Mr. Shaalan in his paper refers to the markedly different effects of the debt crisis on two sets of countries: those that relied "heavily on foreign savings during the previous decade"—certainly the majority—and those "countries that avoided debt problems and achieved sound investment and growth performance"—a minority. He then goes on to enumerate a number of policy differences between the two groups, such as large budget deficits, loose monetary policies, high rates of inflation, and overvalued exchange

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rates. To my mind these are the symptoms of a much deeper malaise. The first group consists of those countries that have tampered with the price system and refused to allow relative prices to do their job, while the second group consists of those countries that left their domestic price systems largely intact and, by and large, allowed relative prices to perform their function.

In the first group, what started off as attempts to foster economic growth through government intervention (since prices cannot be relied on because markets are not perfect) ended up by causing macroeconomic mismanagement resulting in monumental distortions that eventually hampered economic growth. The trouble with this approach is that advocates of intervention, in their haste to reject the market mechanism, have failed to pose the really important question. Since it is generally admitted that markets in most developing countries are imperfect, the proper question to pose is whether to rely on imperfect markets or imperfect governments. The history of economic development over the past forty years indicates quite clearly that, in most developing countries, imperfect markets work better than imperfect governments. Experience shows that governments use their powers not only arbitrarily but also incompetently. In most developing countries the administrative capacity to intervene intelligently and in a nondistorting manner is lacking.

If this is true, the question remains, what is the appropriate role of economic policy in fostering investment and hence economic development? First, it is necessary that the price system be allowed to function with minimum interference by the government so that relative prices can allocate scarce resources to their most beneficial uses. Only then can the quality of investment be improved and investment reflect resource endowments and comparative advantage. At the macro-level, it is obvious that economic stability is a prerequisite for economic growth. Policies that ensure such stability are a noninflationary monetary policy and a tight control of public finances. The aim of macroeconomic policy is to ensure that the rate of inflation in the economy is both low and stable. With low and stable inflation, investors can, at the very least, be confident that major shocks, such as sudden currency depreciations or emergency measures that could choke businesses, will not be needed. Experience shows that when this deceptively modest goal is achieved, development will proceed in a more or less satisfactory

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fashion. It also shows that when macroeconomic policy attempts to achieve something bolder, the results are usually disappointing.

What, then, beyond the delivery of a stable macroeconomic environment that fosters both the level and the efficiency of investment, is the role of government in the process of economic development? Obviously, governments have an important supporting role where their own scarce resources can be of maximum benefit. Perhaps the most crucial role is the creation of an effective and impartial legal system. By this I do not mean only the adoption of clear rules that define property rights, contracts, limited liability, etc. but also, and perhaps more important, the means of enforcing these rules impartially. In addition, spending on improved infrastructure, the provision of education and training, and the delivery of adequate health services are prime areas for government activity, since investment in these areas tends to foster and improve the quality of private investment in the creation of goods and services. In addition, in most developing countries, if the government does not provide these public welfare services, the need is likely to remain unmet and to grow, with detrimental effects on the quality of investment and economic growth.

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