

# Country Development Strategy Statement

**FY 1984**

**JORDAN ENTERING 82  
AN ECONOMIC ASSIGNMENT**

**ANNEX 1**



## Jordan

January 1982

Agency for International Development  
Washington, D.C. 20523

BEST AVAILABLE

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ANNEX I

AGENCY FOR INTERNATIONAL DEVELOPMENT

JORDAN

JORDAN ENTERING 1982 :  
AN ECONOMIC ASSESSMENT

FEBRUARY 1982

## ANNEX I

### JORDAN ENTERING 1982:

#### AN ECONOMIC ASSESSMENT

##### I. Introduction: Summary of Recent Economic Performance

Since the mid 1970's, Jordan has enjoyed vigorous economic growth. Production has advanced at annual rates consistently in the ten percent range. Employment opportunities, both at home and abroad, have kept employment at close to full employment. According to official statistics, which probably understate real rate of inflation, price inflation has been held to the relatively modest (by international standards) range of about 10 to 12 percent. This is particularly impressive under the conditions of rapidly increasing aggregate demand that have characterized the recent economic boom. In spite of heavy reliance on imported goods, Jordan has managed to accumulate large reserves of foreign exchange, and has succeeded in establishing the Jordanian Dinar as a stable regional currency.

Government economic policy is undergirded by a strong commitment to developing along private market lines. Yet the Government has also been quick to control those segments of the economy in which private markets generate results that are perceived not to conform to over-all socio-economic goals. The result is an interesting mixture of market and extra-market influences. While some of the long-term implications of this mix give cause for concern on economic grounds, they seem in the short-term to have been effective means of achieving a number of the Government's equity goals.

When a nation gains access to large infusions of resources in a short period of time, difficulties often arise in absorbing them efficiently. Jordan has not escaped these difficulties. Nevertheless, the government's economic team appears to be fully cognizant of this potential problem. Accordingly, the Government has assigned high priority to the development of an institutional framework that is needed to accommodate efficiently the absorption and allocation of resources, and the distribution of the benefits of economic growth. Specific steps include: the establishment and support of an active stock exchange; easing the administrative and bureaucratic requirements of establishing industrial enterprises, with the Chamber of Industry as the vehicle; and the provision for the development of specialized lending institutions as well as a strong banking system.

The future outlook for the economy is generally bright in the medium term. Indisputably, however, continued progress is also contingent upon the resolution of a number of remaining problems. Foremost among these outstanding problems is the severe imbalance between domestic consumption and domestic production. Thus far, cash transfers from friendly Arab governments have covered the greatest part of Jordan's very substantial trade deficits. However, in periods when these transfers have slowed (1976 and 1978 in particular) imports have not declined correspondingly. This confirms the belief that Jordan's economy has become geared to the high levels of imports associated with the resource transfers. If such transfers were reduced significantly for more than a few months, it could seriously impair the economy's ability to support the government's ambitious plans for capital formation. The Government seems very much

aware of this, and of the attendant necessity to develop a greater internal capacity to generate foreign exchange through exports, and gradually to supplant some categories of imports with domestic production.

Among the economic obstacles to development that remain are the heavy reliance on foreign exchange to finance consumption, some degree (perhaps modest) of unexploited agricultural production potential, inadequate water supplies and transmission systems, imperfect capital markets, shortages of skilled labor, and distortion in the system of relative prices. Each of these however, is related to the broader goal of developing an independent, self-sustaining, indigenous productive capacity. Until this goal is achieved, any level of consumption that is attained may be attended by the risk that it is transitory. This is particularly true since resource transfers depend not only on the willingness of donors to continue them, but on their ability to do so as well.

The international markets for petroleum are experiencing a significant softening of demand as alternative sources of energy are developed, energy conservation measures are implemented, and the international economy generally remains sluggish. Under the circumstances, the tenuousness of dependence on nations whose sole source of economic strength is petroleum sales must be evident.

One other source of foreign exchange has contributed importantly to financing Jordan's trade deficit. Jordanians working abroad have remitted well over one-half billion dollars (net) in each of the last three years,

and net transfers are likely to surpass one billion dollars in 1981. These flows undoubtedly are linked in some degree to current imports, Nevertheless, at least part of these remittances seem sure to represent savings, so that their foreign exchange medium is available for financing deficits. The ability of workers to continue earning and remitting foreign exchange is dependent to a considerable extent on political and economic conditions beyond Jordan's control. Consequently this source of financing for Jordanian imports is also somewhat tenuous.

Jordan's economy, as the foregoing introduction reports, has performed exceptionally well in recent years, particularly when performance is measured by the growth of income rather than its level. Nevertheless, three considerations serve to remind that much remains to be done before the Kingdom will have achieved a level of development consistent with its own goals and with general understandings of the concept of development.

1. While growth of GNP has been high by international standards, the level of per capita GNP is still in the neighborhood of \$1,500 at the official exchange rate. Moreover, the distribution of income appears to be such that, for up to half the families in Jordan, the mean per capita income may be less than two-thirds of the over-all average.
2. While current income distribution data are essentially unavailable, particularly for rural areas, it is visibly evident that in many areas Jordanians continue to live in conditions far more harsh than per capita aggregates may imply. Many villages lack access to electricity or running potable water. Few have access to :

sewerage systems. Disease and mortality rates are high. While this may reflect primarily a problem of income distribution, it is nevertheless a problem that calls for a remedy.

3. Under conditions that have prevailed in the past five years, maintenance of the consumption levels that have been attained is largely at the pleasure of Arab benefactor nations. To increase its degree of self-reliance, Jordan must develop a greater internal production capacity.

The five-year development plan for 1981-1985 can be interpreted as a statement of commitment to increasing economic self-reliance, and to addressing concretely the first two concerns. Under this interpretation of the Plan, the Government of Jordan presumably would consider foreign initiatives to constitute genuine "assistance" if they facilitated the more rapid achievement of goals in these areas. It is in this context, therefore, that any U.S. economic assistance can best complement the self-help efforts of the Jordanians.

## II. Foreign Economic Assistance

The three concerns identified in the previous section relate to: (1) production and productivity, (2) equity, and (3) greater economic self-reliance. Clearly, production and productivity on the one hand, and self-reliance on the other, are closely related. Thus while the concept of foreign assistance to achieve independence may seem paradoxical, it is less so when production is seen as both the direct target of the assistance and a necessary pre-condition to economic independence.

In Jordan as elsewhere, production's upper limit depends upon:

(1) the quantity of resources available; (2) the quality of resources; (3) the dictates of technology as to the form in which resources are molded to production needs, (4) the ways in which resources are organized into productive entities, and (5) legal, institutional, social, and cultural influences, particularly as they affect the quality and availability of information, tastes and preferences and the ability to act on them, expectations, and the ability to implement decisions. If economic assistance is to yield production gains therefore, it must be by relieving one or more of these five constraints.

Assistance in the form of foreign exchange is a straight-forward means of providing additional resources. In Jordan's case, however, there is little or no immediate need for additional foreign exchange. The most recent data available from the Central Bank show that as of November 1981 the Jordanian monetary system's net foreign assets were in excess of \$1.5 billion. This represents about one-half of the kingdom's total imports of goods and services in 1980 and is almost equal to the entire merchandise deficit for that year.<sup>1/</sup>

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<sup>1/</sup> From the Jordanian point of view however, one can easily imagine the the argument that any offer of foreign exchange assistance on concessional terms is welcome. Although it may not be possible to absorb at the moment, it might very well not be offered later. Therefore, let it be accepted now and put to work earning interest which can be applied against the current trade deficit.

Each of the other four constraints on production does seem effectively to restrict the level of production the Jordanian economy is able to reach. Investment in human resources proved to be among the highest yielding uses of resources in American experience. There is no reason to doubt that this means of upgrading human resources has yielded and can continue to yield positive returns in Jordan, as well. Appropriate foreign assistance in this area is likely to take the form of technical assistance in training the staff for additional instructional facilities, delivery and training in the delivery of health care, nutritional upgrading, and family planning. The quality of land resources is also likely to be susceptible of upgrading through foreign technical assistance. Many of the findings of extensive and costly research into crop rotation systems, soil quality enhancement and maintenance, and related determinants of agricultural production apparently lend themselves easily to applications in other environments.

In Jordan, where the government places a high priority on the development of industrial capacity, it seems certain that the development process will involve substantial acquisitions of foreign technology. This is a production boosting process, and one that Jordan cannot accomplish independently. On economic grounds alone there is no need for such transfers to be subsidized by the supplying country since Jordan has on hand abundant foreign exchange.

The precise kinds of entrepreneurial skills required to organize production in a developing country may differ substantially from those required in an industrial or otherwise advanced economy. This is particularly likely to be the case if development is proceeding along a path

leading to international markets and the sophisticated forms of competition involved in gaining access to them. Foreign assistance in the development and upgrading of entrepreneurial skills, through management institutes and seminars for example, can appreciably lower costs, relative to the trial and error method, of acquiring the skills.

The final category of constraint contains many sub-categories that appear to be particularly significant in Jordan. Here, as mentioned earlier, the King and the entire government express, and in many ways enact, a strong commitment to private enterprise and to private markets as providing principles according to which they wish the economy to develop. However, there does not appear to be a correspondingly intense commitment to allow the price mechanism to direct the markets. In a free market private enterprise system, prices in one market influence the behavior of participants in other markets as well. In a very important sense therefore, a system in which Government either sets directly or exerts the major influence on prices in a broad range of markets, cannot function as a market economy. A market-directed economy without a system of market determined prices is roughly analogous to a thermostat with no independent temperature reading device. Thus, whatever is gained by price regulation is gained at some cost. Government officials are aware that the depth of their capacity to conduct research and analysis into questions of this sort, and to develop alternative approaches, is limited.

### III. Economic Growth and Public Economic Policy

Public policy can cause changes in the economic environment that for short and medium periods of time reinforce, or mitigate, the effects of

other changes in the economic environment. If domestic economic policy, on balance, seems to cause conditions that are antithetical to economic growth, it is possible that foreign assistance will enable the recipient government to delay taking the needed action. In such a case the foreign assistance will have been wasted. Thus it is important for donors to be familiar with the economic policy environment in order to assess the probability of an assistance initiative achieving the desired result.

It is in this context that we turn now to a review of Jordan's economic growth and public economic policy. In reviewing economic policy our emphasis will be on the influence of policy on:

- (a) saving and domestic capital formation;
- (b) the balance of international payments;
- (c) the allocative efficiency of economic markets; and
- (d) the attainment of the equity goals that have been put forth by the Government in support of request for assistance.

#### A. Production and Growth

Jordan's Gross Domestic Product reached almost U.S. \$3 billion, or \$1,265 per capita in 1980. This represented real growth in the 8 to 10 percent range on an aggregate basis. In spite of a very high 3.8 percent population growth, therefore, per capita output undoubtedly increased significantly as well. Final data for 1981 are not yet available, but preliminary indications suggest that the economy expanded as briskly in 1981 as in 1980, and that the surge of economic growth will continue through 1982. Thus, the impressive growth of the domestic economy that marked the

1976-1980 development plan period continues in the early stages of the 1981-1985 plan period.

Over most of the 1976-1980 period, the growth rate of Gross Domestic Product exceeded that of Gross National Product, resulting in an increase in the share of of domestic product in GNP from 74 percent in 1976 to 81 percent in 1980. The growth rates, however, may be misleading. In absolute terms (i.e. the Jordanian Dinar value of increases) the contribution of increases in domestic production to GNP growth fell from 94 percent of the total in 1977 to 80 percent in 1980. In the meantime, economic conditions in Jordan continue to be highly sensitive to external conditions that are largely outside its control. In 1980, for example, only 30 percent of the goods and services purchased in Jordan were produced in Jordan. Table 1 below summarizes the performance of Gross National Product and its foreign and domestic components over the 1976-1980 plan period.

Table 1  
Gross National Product and  
Gross Domestic Product

	<u>GDP</u>	<u>GNP</u>	<u>Goods Purchased in Jordan</u>	<u>Goods Purchased &amp; Produced in Jordan</u>	<u>Exports</u>	<u>Imports</u>
1976	401.7	542.5	631.6	209.6	192.1	422.0
1977	477.6	623.5	775.9	235.6	242.0	540.3
1978	576.7	725.5	918.0	312.4	264.3	605.6
1979	712.0	880.3	1,197.0	372.5	339.5	829.5
1980	869.0	1,073.8	1,369.2	406.6	462.4	922.6

Sources: IMF, International Financial Statistics; 1981 Yearbook.

As these data reveal, domestic production (JD 869 million) in 1980 accounted for only 81 percent of gross income (JD 1,073.8 million). The difference is mainly accounted for by remitted earnings of Jordanians working abroad. Moreover, over half of Jordan's domestic production is exported. Consequently, external influences dominate four crucial dimensions of the Jordanian economy - export earnings, cost of imports, worker remittances, and foreign transfer payments.

The structure of Jordan's production is another important target of development planning. In particular, the Government's development plans for 1976-1980 and 1981-1985 were designed to reduce the large share of the service sector (66 percent of GDP in 1975 and 61 percent in 1980),

and increase the shares of mining, manufacturing, and electricity and water. While the share of agriculture was not targeted for increase, increasing the level of agricultural production was an important goal of that sector as well as of the water projects.

The service sector consisted of trade, transport and communication, public administration and defense, and "other services". Of these, trade is the largest, constituting 20 percent of GDP in 1980. Following closely, however, is public administration and defense (17 percent). This is the only component slated for a major reduction in its share of GDP (to 12 percent by 1980). This reduction, if it can be attained, can contribute to the development effort.

A major element in the public administration component is typically wages and salaries. Visible evidence of the employee "stand-about" phenomenon at Government ministries suggests that wages and salaries of Government employees may over-state the social value of production in this "sector". Reducing the size of the sector may supply some of the resources that will be required to expand the more directly productive sectors.

In Table 2 below, the sectoral shares of domestic production are displayed for the period 1976-1980, along with the target levels for each in the two five-year development plans.

Table 2  
Sectoral Shares in Gross  
Domestic Product  
(Percent)

<u>Sector</u>	<u>Actual Shares</u>					<u>Plan Targets 1/</u>	
	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1985</u>
Agriculture	10	10	12	8	9	8	7
Industry and Mining	20	21	17	18	22	28	29
Construction	7	7	7	8	7	5	8
Electricity and Water	1	1	1	1	1	2	2
Services	62	61	63	65	61	56	54

Source: Actual shares from IMF, Jordan-Recent Economic Development, July 1981. Plan targets from The Hashemite Kingdom of Jordan, National Planning Council, Summary of the Five Year Plan for Economic and Social Development 1981-1985.

1/ Components do not sum to 100 due to rounding.

1. Agricultural Production

Jordan's perennial trade deficit includes a large agricultural products component. Food and live animal exports account for just under one-fifth of both exports and imports of merchandise. Since imports far exceed exports in the aggregate, these goods also account for about the same proportion of the trade deficit. In 1979, the food deficit was approximately US \$290 million. Opinions are mixed as to the nation's potential for increasing agricultural production. There is, however, broad agreement that Jordan is unlikely ever to produce as much food as is consumed. There is further widespread agreement that any significant increases that do occur will be in irrigated agriculture in the Jordan Valley, where fruits and vegetables are produced. The magnitude of potential production gains, however, is uncertain.

The agricultural sector is clearly an important part of the Jordanian economy. In spite of the small share it contributes to total domestic production (10 percent), it is estimated by the IMF to provide one-fourth of domestic employment and one-fifth of exports. It is clearly worthy of attention in development planning, and in fact receives priority attention in the new Development Plan, albeit ranking fourth behind industry and mining, water and irrigation and educational investments. It should not be expected to prove the key to Jordanian development, however, barring some major technological breakthrough.

This is illustrated by the relatively modest impact that even a doubling of fruit and vegetable exports would have. That change, coupled with an equal reduction in the pecuniary value of fruit and vegetable

imports would, in 1979, still have left food imports at a level well over twice the level of food exports.

## 2. Industrial Production

Behind the service sector, manufacturing is the largest contributor to domestic production, constituting 13 percent of Gross Domestic Product. The 1981-1985 Development Plan anticipates further expansion of this activity along with mining as the leading sector in the development thrust.

In its efforts to alter the structure of the economy in favor of industrial production, the Government has emphasized private enterprise. Nevertheless, Government itself has played, and continues to play, an important direct role. This role has included direct participation in the formation of productive enterprises, development of private and quasi-private supporting institutions, provision of direct and indirect subsidies, preferential tax and tariff structures, and protection against foreign competition. These measures must be viewed ambivalently from an economic point of view.

On the positive side, the package of incentive measures appears to send an indisputable signal to domestic and foreign entrepreneurs that Jordan welcomes and encourages private investment, and is eager to assure them that the environment is hospitable and stable. By its participation and encouragement, Government performs the legitimate functions of the public sector in a predominantly market economy, of generating and disseminating a flow of high quality information, and of sharing the risks

inherent in Jordan's geopolitical circumstances.

Qualitatively, these functions are clearly consistent with the goal of developing a higher level of internal productive capacity. There is room to question, however, whether: (a) the means employed are the most effective for performing these functions, and (b) the benefits, in terms of increased production, are sufficient to cover the costs, in terms of the pervasive distortion of relative price signals that results from interventions by way of taxes, tariffs, price controls, interest ceilings, wage regulation, subsidies, and supply manipulations.

It is still too early to judge these issues empirically. The a priori supposition, however, is that structural rigidities may be formed that will make it difficult for the private market economy that is developing to achieve the allocative efficiency of which it would otherwise be capable.

The incentive package, it must be remembered, has been developed for a specific purpose - to induce entrepreneurs to make the decision to invest in building productive capacity in Jordan. It would likely be a futile exercise, therefore, for an outside observer merely to point critically at the consequences of the package in terms of some goal (as efficiency) other than attracting investment. If such criticism of the existing incentives is to elicit a corrective response, therefore, it must be accompanied by a proposal of an alternative means of achieving the investment goal. Such a proposal might well emerge from a careful study of the entire system of input and output price determination.

In this regard, some form of direct subsidy would be preferable on economic grounds. Among the advantages of this approach is the fact that it would enable the government to measure directly the cost of inducing the investment. Having such a measure would facilitate comparison of the cost with the anticipated benefit to the development process. More importantly, perhaps, it would free the price system to play its critical role in signaling the private sector when changes in conditions of cost, resource availability, technology, consumer tastes, or public policy require changes in the rate or structure of resource use. Without such a mechanism, shortages and surpluses are sure to appear, and the market system will not receive the signals it needs to respond appropriately.

Finally, as one knowledgeable Jordanian development official observed, once an implicit or explicit subsidy has been granted to an industry, it is unlikely to be removed. For this reason, it is to be hoped that if the existing incentive package does imply serious efficiency losses, this will be discovered and corrected before its components become so deeply imbedded that they cannot be removed.

A review of the performance of industrial production over the 1976-1980 period makes clear the rationale behind the emphasis placed on this sector. The industrial production index (in which mining is weighted heavily to reflect the importance of phosphates) increased at an average annual rate of 19 percent. The influence of phosphates, production of which more than doubled, is evident. Nevertheless, similarly imposing gains were registered in the production of cement (+ 57%), petroleum products (+ 54%), detergents (+ 206%), cigarettes (+ 91%), electricity (+ 143%), and liquid pharmaceutical

products (+ 176%). Data are not available to permit valid calculations of rates of return or marginal capital - output ratios. However, a rank-ordering of investment by sector and GDP growth by sector for this period shows the industrial sector to have led in both categories. Moreover, since almost three-fourths of the investment in the sector was private investment (compared to 59% of total investment in all sectors combined) one might suppose that these projects were subjected to more rigorous profitability tests than those involving more Government participation. Table 3 below shows the performance of industrial production over the 1976-1980 plan period for the aggregate index and the five most heavily weighted components of the index.

#### B. Monetary Policy

There are two broad theoretical conceptions of the channels through which monetary policy influences economic performance. In one view, monetary policy is primarily a major determinant of the level of domestic aggregate demand. Depending upon the way it is implemented, it may also influence the distribution of demand among sectors and industries. This model is generally thought to be appropriate for the analysis of an essentially closed economy, and possibly for very large economies that heavily influence world economic conditions.

The alternative conception holds that the primary influence of monetary policy is on financial markets, and through them, on the distribution of demand between consumption goods and capital goods, and among alternative forms of financial assets. In this model, the level of prices and the rate

Table 3

Industrial Production  
Levels and Growth:  
1976 - 1980

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Industrial Production					
Index: 1975 = 100	125.0	129.7	159.2	188.0	232.1
Annual Percent Changes	25	4	23	18	24
Phosphates (1,000 Tons)	1,702	1,769	2,320	2,828	3,911
Percent Changes		4	31	60	38
Petroleum Products (1,100 Tons)	1,145	1,146	1,397	1,612	1,760
Percent Changes			22	15	9
Cigarettes (1,000 Tons)	2.2	2.5	2.6	3.4	4.2
Percent Changes		14	4	31	24
Iron (1,000 Tons)	62.4	63.8	65.3	81.0	86.2
Percent Changes		2	2	24	6
Electricity (Million KWH)	386	473	572	774	939
Percent Changes		23	21	35	21

Source: IMF, Jordan - Recent Economic Developments, July 1981.

of price inflation, as well as the levels and growth rates of domestic production are largely independent of domestic monetary policy. The rationale for these conclusions is that any effort by the monetary authorities to stimulate demand by creating more money than people are willing to hold, will result in the unwanted excess being sent abroad in exchange for foreign assets and/or foreign goods. Conversely, attempts to restrict domestic money holdings below desired levels will be defeated by inflows from abroad. In the end, therefore, the only enduring changes will be in the mix of foreign and domestic assets in domestic portfolios, and hence, in the level of international reserves.

It is not the intention of this paper to resolve the question of which of these theoretical models best fits the Jordanian case.<sup>1/</sup> These models address a very narrow definition of monetary policy, in which expansion and contraction of monetary aggregates is its only instrument. In Jordan, as in most developing countries, policy instruments also include exchange rate management, foreign exchange controls, non-price credit allocation inducements, regulated interest rates, and differential tariff schemes to control the structure of imports. Moreover, even if monetary policy was capable of causing Jordanian price inflation to diverge sharply from world and regional market rates, it does not appear on the basis of official statistics to have done so. Similarly, GNP growth appears to have been more affected by "real" factors such as the droughts of 1976 and 1978, and

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<sup>1/</sup> This question is the subject of an excellent recent paper by James A. Hanson, "Jordanian Inflation: Causes and Remedies" (January 1980). Hanson tentatively concludes that Jordan data are consistent with the implications of the latter, Monetarist, approach.

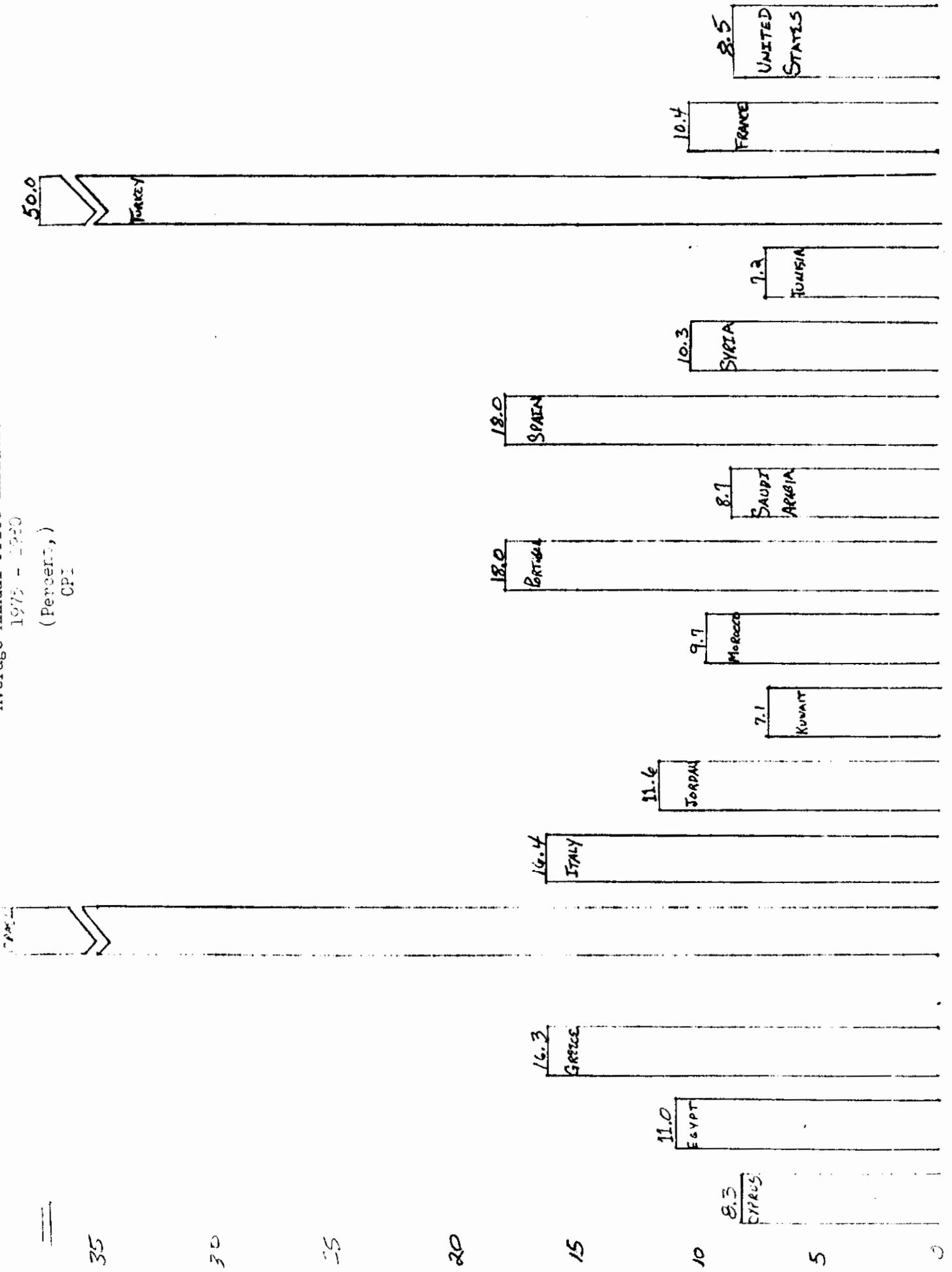
the world market price of phosphates, than by changes in the rate of monetary expansion.

Figure 1 shows average annual rates of price inflation for 1975-1980, for Near East countries, France and the United States. The price measure in each case is the official consumer price index. Since the coverage and the quality of the data vary from country to country, the measures should not be taken as reflecting the purchasing power of money with precision. Thus, for example, it would be difficult to argue that Morocco's 9.7 percent annual inflation is significantly different from Jordan's 11.6 percent or Syria's 10.3 percent. At the very least, however, it does seem safe to conclude that Jordan's price increases have not differed so dramatically from those of its neighbors or of the western economic powers, that it implies a need for major corrections in public policy.

Over the same period, nominal GNP in Jordan increased at an average rate of 25.5 percent. If GNP is deflated by the Amman consumer price index (a crude, but perhaps adequate technique for the purpose at hand) the average increase in the resulting measure of real income is 12.5%. Thus the combination of price inflation and increased real income is extremely close to the Government's estimate of increases in nominal income.

The money stock in this period grew at an average rate of 21 percent. Allowing for some excess in our measure of real output growth (it exceeds Government estimates by 3.5 percentage points), this monetary expansion is

Figure 1  
Average Annual Price Inflation  
1975 - 1980  
(Percentage)  
CPI



very nearly the amount that would be required to purchase the new output at prices reasonably reflecting world market prices. From November 1980 to November 1981 the money stock again increased 21 percent. We conclude, therefore, that in terms of recent rates of expansion of the domestic monetary aggregates, there is no evidence of its having exerted undue restrictive or inflationary pressure.

The structural effects of monetary policy are much less straightforward than the aggregate effects. Given the steady increase in foreign exchange reserves, it would be difficult to argue that policy had induced capital flights. On the other hand, the accumulation of reserves is importantly influenced by transfer payments which would be likely to occur regardless of economic considerations. Thus, it is possible that elements of monetary policy have resulted in exports being smaller or imports greater than they would otherwise have been. The relevant policy measures in this connection are the exchange rate and tariff policy.

Judging by the relative rates of price inflation in the United States and in Jordan, there may be a case that the Jordanian dinar became increasingly over-valued vis-a-vis the dollar in the 1975 to 1980 period. Using the official consumer price indexes for this period, the average rate of price inflation in Jordan was 1.4 times the rate in the United States. Strict purchasing power parity would require (if the indexes were accurate) a corresponding increase in the Jordanian dinar price of dollars. Instead, the dinar price of dollars declined by about 1 percent in this period. Of course, the consumer price index probably is not the appropriate index to

use for such comparisons, purchasing power parity ratios are not necessarily the equilibrium ratios, and the dollar may not be the appropriate currency against which to measure the value of the dinar. Consequently, it is far from clear that the dinar is over-valued. It is, nevertheless, a possible source of structural obstruction to the development process. Over-valuation is likely effectively to tax exporters, producers of import substitutes, and inward remittances, while subsidizing imports.

At this point, any over-valuation that may exist is probably relatively small. Moreover, in 1981, the dinar was modestly devalued against the dollar. Consequently, it seems sufficient to caution that the exchange rate is one relative price that merits close scrutiny by the monetary authorities.

Tariff policy must be judged a priori. It is designed to encourage productive investment by extending preferential treatment to capital goods. As noted in an earlier section of this paper, such a policy distorts relative price signals. It may, therefore, ultimately result in production of goods at a real resource cost that exceeds the cost of producing goods or services in which Jordan has a comparative advantage, and trading them for the subsidized goods. However, in an economy in which many prices are distorted by public sector interventions, it is difficult to evaluate the consequences of one more distortion.

Monetary policy may also influence the structure of domestic economic activity. Interest rate ceilings that are below the rate of price inflation discourage saving. All local currency interest rates in Jordan have ceilings

below the rate of price inflation. In spite of this, however, there are savings instruments in Jordan that offer unregulated yields - notably equity shares. Moreover, tax treatment of interest income effectively raises the rate of return. Again, therefore, the consequences of interest rate ceilings are unclear. If they have any effect at all, however, it is difficult to see how they would benefit economic development.

In the context of economic development, one broad test to which monetary and credit policy must be put is whether it has resulted in relatively more productive projects having to be foregone for want of credit, while relatively less productive projects have succeeded in securing credit. It is impossible to derive a quantitative answer to this question. There is no evidence that this has been the case. In discussions with private sector financial and industrial sources, as well as with government officials concerned with development planning, industry, and financial markets, the general impression seems to be that credit availability has supported the exceptional pace of economic growth.

### C. Fiscal Policy

Two aspects of Jordan's recent fiscal policy stand out. First is the size and financing of the budget deficit. Table 4 below summarizes this aspect. It is clear that the absolute size of the annual deficit has grown (at a compound annual rate of 20 percent); however, neither expenditures nor the deficit have grown more rapidly than GNP. Furthermore, the level of domestic revenues has increased relative to both current account expenditures and total expenditures. In general, therefore, it seems clear

Table 4  
Government Expenditures, Revenues,  
and Deficit Financing <sup>1/</sup>  
1976 - 1981

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980<sup>2/</sup></u>	Annual Rate For 3 QTRS 1981 <sup>2,3/</sup>
	(Millions of JD)					
1. Expenditures	<u>262.5</u>	<u>337.8</u>	<u>361.5</u>	<u>515.7</u>	<u>517.6</u>	<u>664.7</u>
a. (Current)	(185.9)	(195.6)	(212.9)	(321.3)	(325.8)	(399.9)
b. (Capital)	( 76.6)	(142.2)	(148.6)	(194.3)	(191.8)	(273.7)
2. Domestic Revenue	<u>107.6</u>	<u>142.2</u>	<u>158.5</u>	<u>187.9</u>	<u>224.5</u>	<u>281.9</u>
3. Domestic Deficit ( 1 - 3 )	<u>154.9</u>	<u>195.6</u>	<u>203.0</u>	<u>327.8</u>	<u>293.1</u>	<u>382.8</u>
( % of Expenditure )	( <u>59.0</u> )	( <u>57.2</u> )	( <u>56.2</u> )	( <u>63.6</u> )	( <u>56.6</u> )	( <u>57.6</u> )
4. Financing						
a. Foreign Grants	66.2	122.2	81.7	210.3	208.8	133.9
b. Foreign Borrowing	19.9	58.5	90.7	37.6	42.6	95.4
c. Domestic Borrowing	17.0	15.0	30.0	20.0	27.0	18.7
5. Discrepancy	51.8	(-1)	6.0	59.9	1.5	134.8

(IMF attributes discrepancy to uneven use of cash and accrual accounting methods.).

Source: Central Bank of Jordan. Monthly Statistical Bulletin, 17, No. 12, December 1981.

<sup>1/</sup> Elements may not sum to 100% of totals due to rounding.

<sup>2/</sup> Preliminary estimates.

<sup>3/</sup> Quarterly data converted to annual rate on the assumption that fourth quarter 1981 data will exceed fourth quarter 1980 data by the same percentage as the third quarter 1981 exceeded third quarter 1980.

that the government's deficit financing has increased less rapidly than its debt service capacity.

The second aspect of government finance that stands out is the structure of domestic revenues collections. Customs and excise taxes generate over one-half of domestic revenue. These taxes are often favored for their relative administrative simplicity and hence relatively low collection costs. Nevertheless, they are regressive (on income) and probably have undesired income distribution effects. Since 1976, the government has succeeded in raising the share of tax revenue generated by the more progressive income tax. Projects are underway to facilitate further gains in this direction.

Aside from the structural effects of government policy with respect to subsidies, tariffs, and supply manipulation, the government's management of its fiscal affairs appears to have been a contributing factor to the relative stability with which the economic boom has been accommodated.