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Policy and Strategy on Industrial Development in Jordan

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Executive Summary

The present report is part of a larger project, which is intended to strengthen the technical and institutional capability of the Ministry of Industry and Trade, Jordan, for policy formulation and monitoring at sectoral and sub-sectoral levels.

The objective of the report is to examine the effects of existing industrial strategy, policy and policy instruments on the structure, pattern and quality of industrial development in the country, and to suggest how industrial policy might be modified to facilitate more rapid industrial growth.

The report consists of six chapters. The first chapter provides a background overview of recent economic trends and developments in the Jordan economy, and describes the government's policy stance towards industrial development. The contents of the 1988 adjustment programme are discussed, and the current policy objectives are identified.

The second chapter examines in detail recent trends in the industrial and manufacturing sectors. During the 1970s and early 1980s, Jordan followed a policy of import-substituting industrialisation. In August 1988, the government announced a series of policy reform measures which marked a significant shift in the government's approach to industrial policy towards a less interventionist strategy. The aim of the reform measures was to provide an 'enabling environment' for business, which would allow the private manufacturing sector to assume a key role in the future industrial growth process. The measures introduced, which covered tariff policy, the exchange rate, and industrial licensing, are described in detail in the second chapter.

The third chapter provides an assessment of the effectiveness of the industrial and trade policy reform programme. Three criteria are used in assessing the reform programme: transparency; consistency; and co-ordination. Detailed estimates of the changes in the tariff structure and of the resultant changes in the levels of nominal and effective protection are provided. The chapter finds that the

reform process has had a positive impact in terms of the three criteria used, but that further improvement is needed.

The objective of chapter 4 is to provide a quantitative assessment of the policy reform measures on the performance of the manufacturing sector. The methodological and data problems are first discussed, drawing attention particularly to the limited period available for observing the impact of the reforms, as a result of the onset of the Gulf crisis in mid-1990. The export and output performance of the manufacturing sector is examined, using the before-after methodology, whereby performance in the pre and post-reform period is compared. Evidence of an improvement in growth performance is provided. Additional evidence of the positive impact of the reform measures is found in the data on manufacturing sector investment behaviour.

Jordan has traditionally relied heavily on import duties as a major source of tax revenue. Consequently, any reduction in tariff levels has a potentially damaging impact on the budgetary balance. Chapter 5 examines the effect of the tariff reforms introduced in 1988-89 on government tax revenues. The estimates suggest that the trade reform measures did have a significant revenue-depleting effect. As a consequence, further tariff liberalisation will be conditional on the introduction of alternative sources of tax revenue, such as a generalised sales or value-added tax.

The sixth chapter considers certain aspects of policy towards export diversification and promotion. The role of temporary entry and drawback arrangements in providing exporters with access to duty-free imported inputs is discussed. Institutional arrangements for the promotion of manufactured exports are also considered. The chapter concludes that the establishment of a policy and incentives framework which is conducive to exporting activity is the most important means of assisting Jordan's export growth.

The information and data used in preparing the report have been collected and analysed by Mr. Khalil E. Abdelrahim, National Expert to the project. The final report has been written by Mr. Colin Kirkpatrick, Consultant to the project.

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1. ECONOMIC BACKGROUND

1.1 Introduction

Jordan has a small, predominantly services-oriented economy, with a relatively narrow productive base. Jordan's only natural resources are phosphate, potash and limestone. Less than 5 per cent of its agricultural land is arable, and virtually all of its oil has to be imported. The Jordanian economy is heavily dependent on regional economic developments. Prior to the Gulf crisis, about 75 per cent of Jordan's exports of agricultural and manufactured products were marketed in neighbouring countries. Neighbouring Arab countries have traditionally provided employment for Jordanian labour, and in addition, official grant aid from the Arab oil producing countries accounted for 90 per cent of all foreign grants received by Jordan.

During the 1970s and early part of the 1980s, Jordan recorded rapid economic growth, based largely on the regional oil boom which increased the demand for Jordan's exports and created employment opportunities for skilled labour, with which Jordan is relatively well endowed. Jordan's productive base expanded and became increasingly diversified, employment opportunities increased, and the standard of living improved. Encouraged by a relatively open and liberal exchange and trade system, and by the rapid increase in remittance inflows, private sector investment increased significantly. In addition, substantial grants and loans from neighbouring countries financed a major programme of government investment in social services and economic infrastructure while providing support for the budget and balance of payments.

1.2 Economic Trends, 1982-90

The rapid fall in the price of oil in 1982 and the subsequent slowdown in the regional economies resulted in reduced inflows of official aid and workers' remittances. Between 1982 and 1989, there was a 30 per cent reduction in grant aid which had traditionally financed about 30 per cent of Jordan's imports and

amounted to about 80 per cent of domestic tax and non-tax revenues. There was a reduction in the demand for Jordanian goods and services in the neighbouring countries which led to a decline in exports of agricultural and manufactured goods.

The immediate consequence of these developments was a major slowdown in economic activity, while at the same time putting a severe strain on the government's budgetary operations and balance of payments. Between 1983-89, real output growth slowed to 1.7 per cent per annum and investment fell by about 6.6 per cent per annum (Table 1). With the continuing high population growth, Jordan experienced a sharp fall in per capita income and a decline in its standard of living.

The real import growth rate fell dramatically, from an average of 9.5 per cent in 1978-82, to 1.4 per cent during 1983-89. Export growth fell slightly. As a result, the current account deficit fell from 36 per cent of GDP in 1982 to about 15 per cent in 1987-88. However, the decline in the current account deficit was more than offset by the decline in foreign grants from 9 per cent of GDP in 1982 to 4.5 per cent of GDP in 1988. There was also a significant increase in debt service payments and unpaid trade credits owed to Jordan by some of her neighbours. As a result, the overall balance of payments position deteriorated during the 1980s.

Table 1 Macroeconomic Trends (1978-89)

	1978-82	1983-89
National Accounts Real Growth Rates		
Gross Domestic Product	8.0	1.70
Agriculture	6.0	6.9
Industry	11.3	0.4
Manufacturing	12.8	0.6
Construction	22.6	-6.5
Services	7.3	2.4
Consumption	7.7	2.5
Investment	19.8	-6.6
Balance of Payments		
Current Account before Grants	-	-17.2
Current Account after Grants	-2.5	-4.5
Exports of Goods. real growth rate	16.5	12.3
Imports of Goods, real growth rate	9.5	1.4

Source: Ministries of Finance, Planning and Central Bank of Jordan.

1.3 The Government's Policy Response, Post-1982

The government's response to the economic slowdown was designed to maintain the momentum of economic activity through a combination of expansionary macro policies and support measures given to the agricultural and industrial sectors. In the area of public finance, expenditures increased more rapidly than revenues, and the budget deficit widened substantially. The growing budget deficits were financed largely by external borrowing contracted on non-concessional terms, which led to increased external indebtedness. The government also borrowed heavily from the domestic banking system which led to a rapid growth in liquidity and put pressure on prices. The nominal exchange rate was maintained initially through external borrowing and a drawdown on reserves, but the rise in prices led to an appreciation of the real exchange rate.

In the agricultural sector, a system of production licensing was introduced to reduce the output of crops which faced marketing difficulties abroad, and in addition production was supported by highly subsidised inputs, with self-sufficiency

in cereals being encouraged by offering high purchasing prices to producers. In the industrial sector, import tariffs were increased and bans on competitive imports were introduced to protect domestic producers from declining demand. Tax concessions and other incentives were offered to private investors, and efforts were made to form bilateral trade agreements with neighbouring countries, as a means of expanding trade.

The policy stance adopted by the government in response to the post-1982 recession led to growing macroeconomic difficulties. While the nominal exchange rate was maintained through external borrowing and a drawdown on reserves, the real exchange rate appreciated, eroding the international competitiveness of Jordan's exports of goods and services. By 1988, each of the major macro indicators was under stress: real GDP contracted, inflationary pressure increased, the budget deficit excluding grants rose to almost 25 per cent of GDP, the balance of payments showed a large deficit, and the official exchange rate was under considerable pressure.

1.4 The Adjustment Programme

By the end of 1987, it was evident that a more radical programme of economic adjustment was needed, and in 1988 the government embarked on a comprehensive adjustment effort with the aim of correcting the external and internal imbalances within the economy. This programme of policy reform was supported by an IMF Stand-By Agreement and a World Bank Industry and Trade Policy Adjustment Loan. The reform programme has been implemented in the following areas:

exchange rate devaluation: beginning in October 1988, the Jordan dinar was floated, which led to an immediate depreciation, from 0.33/US$ to 0.67US$ in March 1990.

deregulation of the financial sector: in September 1988, the Central Bank of Jordan began decontrolling interest rates, and interest rates

were completely freed in early 1990.

monetary and fiscal policy: in late 1988, credit policy was tightened considerably. Discretionary fiscal measures aimed at raising revenue were introduced in early 1989, including increases in domestic petroleum product prices, increases in taxes on cigarettes and drinks, increases in water charges, and vehicle registration and licence fees. There was a reduction in extrabudgetary expenditures and a reduction in transfers to loss making public enterprises. As a result of these measures, the overall budget deficit was reduced from almost 24 per cent of GDP in 1988 to about 18 per cent in 1989. Further fiscal measures were introduced in the 1990 budget, including increases in corporation taxes, in mining fees for potash and in fuel oil prices for large industrial users.

measures to stimulate industry and trade: in August 1988, the government announced a number of measures aimed at improving the performance of the industrial sector, which subsequently became part of the comprehensive policy reform programme under the World Bank's Industry and Trade Adjustment Loan, approved by the Bank in December, 1989. Details of these various reforms are given below, in the section on Industry and Trade Policy Reforms.

The structural reform measures adopted in 1988 and 1989 resulted in some progress being made in reducing the budget deficit and in improving the balance of payments situation. The growth in real GDP declined, however, due mainly to a sharp fall in agricultural output caused by adverse weather conditions.

The prospects for further recovery and economic progress in 1990 were disrupted by the outbreak of the Gulf crisis in August 1990. Given Jordan's strong economic linkages with the region, the economy was severely affected by the crisis, both in terms of immediate and substantial trade and external financial flow losses, but also in terms of medium term growth and employment prospects.

1.5 Current Policy Objectives

Following the agreement with the international financial institutions on the general policy guidelines for the adjustment programme, the government has embarked on a comprehensive restructuring plan which 'guarantees a constant and health growth which will provide increased employment opportunities, tackles internal and external imbalances, reduces the burden of foreign debts and leads to increased confidence in the national economy'.[1]

The programme involves:

- an increase of 3 per cent per annum in GDP;
- increased employment opportunities through increased government and private sector investment;
- higher export volumes coupled with increased import substitution output;
- reduction in the rate of inflation;
- reduction in budget deficit, from 18 per cent in 1991 to 5 per cent in 1997;
- reduction in the balance of payments deficit from 27.7 per cent of GDP in 1992 to 11.7 per cent in 1997;
- reduction in current account deficit from 24 per cent of GDP in 1991 to 2 per cent in 1997;
- controlling government borrowing to avoid inflationary pressure, and reduction in government borrowing from the banking sector to facilitate private sector borrowing;
- improvement in the living standards of low income groups and reduction in poverty.

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[1] Speech by Finance Minister, Basel Jardaneh, when presenting the programme to the Lower House of Parliament, reported in Jordan Times, 12-13 December, 1991.

2. INDUSTRIAL AND MANUFACTURING SECTORS

2.1 Structure and Growth Trends

The industrial sector, covering mining and manufacturing, accounted for about 25 per cent of GDP during the 1986-89 period (Table 2). The mining sector, which consists principally of phosphate and potash products, contributed 3-4 per cent of GDP, and manufacturing about 13 per cent, in 1986. Manufacturing and mining together generate about 10 per cent of total employment, with approximately 85 per cent in the relatively more labour intensive manufacturing sector.

Industry as a whole grew rapidly during the 1978-82 period, by almost 13 per cent per annum, but fell to 0.4 per cent in the 1983-89 period (Table 1). Manufacturing output shows a similar growth pattern: 12.8 per cent in the earlier period, falling to 0.6 per cent during 1983-89. These average growth figures disguise the sizeable year on year variation in the industrial sector's output performance (Table 3). Output grew by almost 10 per cent in 1987, mainly due to higher output of potash, phosphate, fertiliser and cement. But in 1988, production fell by 8 per cent due to a decline in the production of phosphate and cement. A similar switchback pattern of output growth was recorded in 1989 to 1991, with a 7.7 per cent decline in 1991, due to the repercussions of the Gulf crisis.

The Jordanian manufacturing sector is characterised by dualism in which the large scale, capital intensive industries coexist with small and medium scale industries. The former category includes fertiliser, cement, pharmaceuticals and petroleum products. Most of the firms in these industries are joint venture projects between the government and private sector. Other important manufactured outputs -processed foods, chemicals, textiles, garments, footwear, furniture and various engineering and building materials - are produced in a large number of small and medium sized establishments. These establishments tend to be relatively labour intensive, using simple production technology.

Table 2 National Accounts summary at current prices (in millions of Jordanian dinars)

Origin and Use of Resources	1983	1984	1985	1986	1987	1988	1989	1990
A1. GDP at market prices	1728.1	1818.7	1880.0	2024.6	2073.2	2189.5	2556.6	2567.4
A2. Net indirect taxes	243.8	255.5	255.4	247.5	252.5	277.4	284.3	317.0
A3. GDP at factor cost	1484.3	1563.2	1624.6	1777.1	1820.7	1912.1	2272.23	2250.4
A4. Agriculture	97.2	79.6	87.4	100.1	125.0	123.2	134.2	168.4
A5. Industry	427.1	462.5	418.4	509.5	509.7	548.7	635.6	713.3
a. Manufacturing	176.4	192.1	171.2	270.8	274.3	280.6	303.5	336.3
b. Mining and quarrying	40.6	60.8	62.7	63.1	62.6	89.6	158.3	179.2
c. Other	210.1	209.6	184.5	175.6	172.8	178.5	173.8	197.8
A6. Services etc.	960.0	1021.1	1118.8	1167.5	1186.0	1240.2	1502.6	1384.3
B1. Resource balance	-783.8	-738.0	-690.8	-533.5	-501.4	-500.9	-472.4	-819.8
B2. Exports of GNFS	637.2	743.2	778.1	630.3	753.4	912.7	1350.5	1562.3
B3. Imports of GNFS	1421.0	1481.2	1468.9	1163.6	1254.8	1413.6	1822.9	2382.1
C1. Domestic absorption	2206.5	2556.7	2570.8	2558.1	2574.6	2690.4	3029.0	3387.2
D1. Total consumption etc.	1910.0	1995.3	2076.1	2104.9	2101.1	2275.4	2564.0	2874.9
D2. Private etc.	1448.7	1472.5	1560.9	1558.4	1531.7	1699.9	2014.1	2319.3
a. Statistical discrepancy	0.0	0.0	-0.0	0.0	3.1	-0.2	-0.0	-0.0
D3. General Government	461.3	522.8	515.2	546.5	566.3	575.7	549.9	-556.6
E1. Gross domestic investment	601.9	561.4	494.7	453.2	473.5	415.0	465.0	512.3
E2. Fixed investment	548.5	530.4	455.6	423.4	411.8	415.0	465.0	512.3
E3. Increase in stocks	53.4	31.0	39.1	29.8	61.7	0.0	0.0	0.0

Source: Central Bank of Jordan, *Monthly Bulletin*, various issues.

Table 3 Growth of Industrial Production 1986-91 (percentage change, 1979 = 100)

1986	1987	1988	1989	1990	1991
1.4	9.3	(8.1)	4.9	0.4	(7.7)

Source: Central Bank of Jordan, *Monthly Statistical Bulletin.*

There appear to be few linkages between the large natural resource based industries and local manufacturers of spare parts and other parts needed for periodic maintenance. Although a significant part of the manufacturing sector consists of small enterprises employing less than five people, their contribution to output is small. Table 4 shows the principal products of the industrial sector.

Industrial goods account for a high proportion of domestic exports (Table 5). The main exports are minerals and mineral-related products (phosphates, fertilisers and potash) and a range of manufactured goods. During the period 1985-1989, the mining sector accounted for about 45 per cent of exports and manufacturing for 30 per cent. Domestic exports (total exports net of re-exports) increased at an average annual growth rate of about 12 per cent between 1983 and 1989, primarily reflecting the expanding mineral exports and the significant increase in exports of chemicals. With improved external competitiveness after 1988, resulting from the depreciation of the dinar, non-mineral manufactured exports increased significantly in 1989, with pharmaceuticals, textiles, food processing, furniture and ceramics all recording increased exports.

Table 4 Jordan: Production of Principal Industries, 1985-1989

	Units	1985	1986	1987	1988	1989	1990
Phosphate	1,000 ton	6067.1	6249.2	6845.4	5628.2	6635.6	5748.1
Potash	1,000 ton	902.2	1102.0	1203.2	1298.9	1350.7	1451.1
Fertilizers	1,000 ton	510.5	551.1	604.0	615.8	602.7	595.8
Cement	1,000 ton	2022.9	1794.7	2371.6	1777.6	1930.0	1738.1
Petroleum products	1,000 ton	2423.9	2257.1	2404.5	2316.0	2335.1	2593.8
Sole leather & wool	Ton	29.3	18.1	34.4	58.1	76.9	87.9
Upper leather	1,000 sq. ft.	1937.8	2393.1	2140.6	2133.8	1824.1	1878.3
Detergents	1,000 ton	15.0	28.1	25.9	16.8	25.4	32.5
Liquid batteries	1,000 batteries	49.6	55.7	54.4	63.2	68.4	59.5
Cigarettes	Million cigarettes	3538.1	3327.7	4000.4	3704.2	2791.8	3184.8
Spirits & alcoholic beverages	1,000 litre	5547.2	5457.2	5320.0	5490.3	5432.3	6814.4
Paper & cardboard	1,000 ton	21.1	15.1	20.5	17.2	22.3	22.6
Electricity	Million kwh	2154.4	2646.8	3123.2	2887.1	3061.5	3284.8
Iron	1,000 ton	198.4	209.6	217.0	194.3	176.5	179.1
Textiles	1,000 yard	2249.0	2249.2	1957.9	2136.4	1617 7	1436.7
Fodder	1,000 ton	45.9	44.6	43.7	48.9	50.8	47.0
Index of industrial production (1979 = 100)		185.2	187.8	205.2	188.5	197.9	198.7
Percentage change		(2.2)	(1.4)	(9.3)	(-8.1)	(5.0)	(0.4)

Source: Central Bank of Jordan

Table 5 Jordan: Exports, 1985-90

	1985	1986	1987	1988	1989	1990[1]
	(in millions of US dollars)					
Domestic exports	647.7	645.1	734.4	865.1	929.5	806.5
Phosphates	167.5	185.3	180.1	204.2	254.6	209.1
Fertilizers	77.6	83.2	88.8	130.3	120.0	122.8
Potash	78.5	89.9	82.6	179.3	123.9	134.7
Other	324.1	286.7	382.9	351.3	431.0	339.9
Fruit & Vegetables	61.2	62.6	59.0	52.2	56.6	49.4
Misc. manufactures	152.8	80.9	146.7	140.9	172.8	140.6
Chemicals	51.5	72.6	117.5	113.7	151.3	115.8
Other	58.6	70.6	59.6	44.5	50.3	34.2
Re-exports	**140.9**	**86.9**	**197.5**	**151.0**	**180.1**	**92.8**
Total	788.6	732.0	931.9	1016.1	1109.6	899.3
	(percent change over previous year)					
Domestic exports	-4.7	-0.4	-13.8	17.8	7.4	-13.2
Phosphates	-7.4	10.6	-2.8	13.4	19.8	-17.9
Fertilizers	-32.?	7.1	6.8	46.7	-7.9	2.3
Potash	102.1	14.5	-8.1	117.1	-30.9	8.7
Other	-6.1	-11.5	33.5	-8.2	22.7	-21.1
Fruit & Vegetables	-12.7	2.3	-5.7	-11.6	8.4	-12.8
Misc. manufactures	-0.9	-47.1	81.4	-4.0	22.6	-18.6
Chemicals	-16.2	41.0	61.8	-3.2	33.1	-23.5
Other	-1.2	20.5	-15.6	-25.3	13.0	-32.1
Re-exports	**82.8**	**-38.8**	**127.3**	**-23.5**	**19.3**	**-48.5**
Total	4.3	-7.2	27.3	9.0	9.2	-19.0

Source: Central Bank of Jordan.

(1) Preliminary.

2.2 Industrial Strategy and Policy

During the 1970s and early part of the 1980s, Jordan followed a policy of import-substituting industrialisation, using protection from import competition, regulation of market entry through investment licensing, and various fiscal and credit incentives to promote the growth of the manufacturing sector.[2] The protection of manufacturing was mainly through a low level of tariffs on inputs with a high level of tariffs on competing imports, and a small number of quantitative restrictions.

The manufacturing sector was severely affected by the downturn in the regional economy in 1982. Manufacturing value added grew by only 1.7 per cent per annum during 1982-84, compared to 12.8 per cent during 1978-82. The government responded by introducing several new measures that were intended to shield the manufacturing sector from the full impact of the recession. These measures resulted in a move towards increased protection and greater selectivity in allowing new investment. Beginning in 1984, the number of quantitative restrictions and tariffs on competing imports was increased. At the same time, attempts were made to encourage exports by providing income tax exemptions, customs duty drawbacks, and subsidised finance for export development. Efforts were made also to form bilateral trade agreements with neighbouring countries, as a means of expanding trade.

The August 1988 reform programme marked a significant shift in the government's approach to industrial policy. The attachment to the interventionist, import-substitution planning strategy was weakened by the announcement of a series of policy reforms which were intended to provide an 'enabling environment' for industry, and to allow the private manufacturing sector to assume a key role in the future industrial growth process.

An 'enabling environment' can be described as one that permits business to

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[2] Industrial policy and performance in the 1970s and early 1980s is reviewed in World Bank, Jordan: Policies and Prospects for Small and Medium Scale Manufacturing Industries, January 1988 (Report 6848-JO) (restricted circulation).

operate in a supportive macroeconomic and incentive framework. More precisely, it can be defined by:

- the nature of the price system - the exchange rate, interest rate, wage rate, and input and output price determination;
- the trade policy regime - import and export tariffs, subsidies, trade-related goods taxes, quantitative restrictions, including licensing regulations;
- the corporate tax system and the system of fiscal incentives;
- the financial system - its lending regulations, supervision, capacity to provide industrial finance, and system of monetary incentives;
- corporate and labour law and its enforcement, particularly as regards entry and exit regulations for industry;
- the institutional and economic infrastructure (promotion and technical services, power, transport etc.).

The ultimate objective of shifting policy towards a more market-based 'enabling environment' for industrial development is to accelerate the rate of economic growth by improving the competitiveness and efficiency of the industrial sector. The policy reforms which began in 1988 are intended to allow this to happen, by improving the incentive structure for exports and efficient import substitution, and by strengthening institutions in support of industry and trade.

2.3 Recent Policy Reforms

Most of the main elements in the policy reform framework described above have been discussed in one form or another in recent reports concerned with economic adjustment and industrial development in Jordan. A process of industrial policy realignment was initiated in August 1988, when the government announced a number of measures to improve the operating environment for industry. This process of policy reform was continued by the adoption of a comprehensive

programme under the 1989 Industrial and Trade Policy Adjustment Loan with the World Bank. Since mid 1988, the following measures of policy reform have been announced:

2.3.1 Tariff Reform

- Import bans on 30 products competing with domestically produced commodities were replaced by tariffs. These included consumer goods (beverages, parts, washing machines) as well as intermediate goods (cement, reinforced steel, asbestos pipes and plates). The value of imports remaining subject to quantitative restrictions amounted to less than 2 per cent of manufacturing sector's output value (August 1988).
- Tariff adjustments were effected, involving increases in existing tariffs on some imports, as well as reductions or exemptions for most other imports (August 1988).
- Imports of certain luxury commodities were prohibited, and tariffs on some more essential imports were raised, as a temporary measure to offset rapidly depleting foreign exchange reserves (November 1988).
- First phase of a tariff reform process designed to create a more uniform and non-discriminatory structure of protection across different economic sectors, was implemented. The number of tariffs was reduced significantly, the minimum tariff was raised to 5 per cent, and the maximum reduced to 60 per cent. However, for commodities where the maximum duty was reduced to 60 per cent, the excess was transferred to the consumption tax, which was limited to imported items and not extended to locally produced goods. Also, exemptions from import duties remained high, affecting more than half of all imports (November 1989). In 1991, the maximum import tariff was reduced to 50 per cent, but at the same time a consumption tax of 10 per cent was extended to a wide range of imported goods.

2.3.2 Exchange Rate

The dinar was effectively allowed to float (October 1988) and the real effective exchange rate depreciated by 21 per cent in 1988. A pegged exchange rate was subsequently adopted (May 1989) with the dinar fixed against a basket of five currencies. The real effective exchange rate continued to depreciate, and fell by 7 per cent in 1990 (Figure 1).

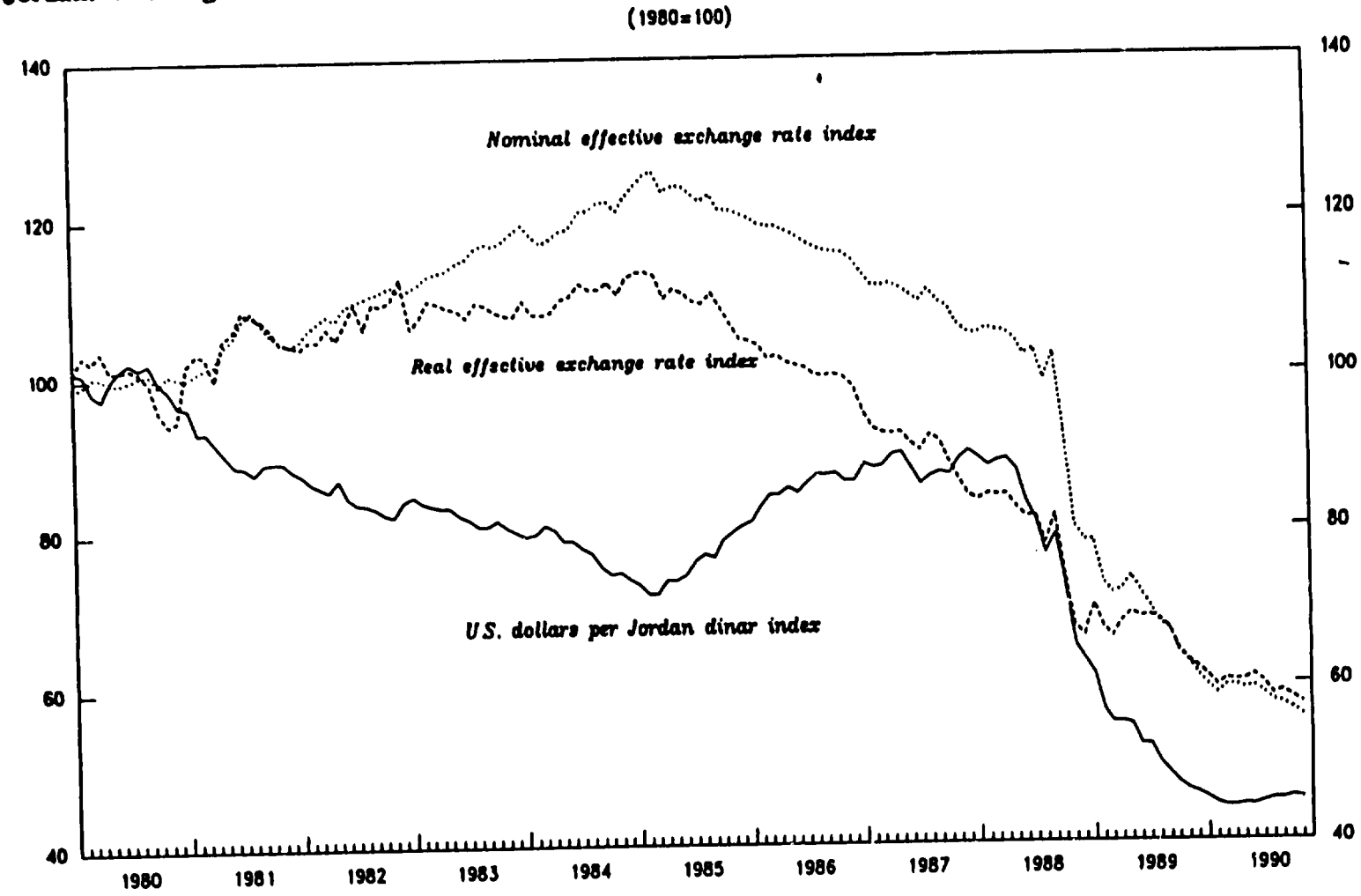
2.3.3 Industrial Licensing

The investment licensing system was abolished (August 1988). Previously, investment licensing was carried out by the Department of Industry. This required prospective investors to submit a project feasibility study to the Department, and at the same time the investor had to apply for registration with the Department of Companies, the Municipality, and apply for benefits under the Encouragement of Investment Law (see below).

2.3.4 Other Reforms

Under the World Bank ITPAL, programmes were initiated to strengthen institutions supporting industrial development and export promotion, for example, the decision to merge the Free Zones Corporation and the Industrial Estates Corporation. Efforts were made also to rationalise incentives for investment and export finance by allowing trading companies the same incentives and duty exemptions granted to manufacturers.

Figure 1 Jordan: Exchange Rate Indices, 1980-90



Sources: IMF

1/ A decline in the index indicates depreciation.

2.4 Summary

Historically, the main focus of industrial development in Jordan has been on import substitution. Consequently, Jordan's trade regime has been characterised by high protection against imports. Quantitative restrictions protected a significant proportion of manufacturing industry, and a multiplicity of exemptions created a highly complex pattern of protection.

In 1988-89, the Government instituted a programme of trade and industrial policy reforms, whereby

(i) many exemptions to specific institutions from paying tariffs were eliminated

(ii) most quantitative restrictions were replaced by tariffs

(iii) the level and variation of tariffs were reduced

(iv) the exchange rate was depreciated

(v) the system of industrial licensing was abolished.

The main objective of this report is to assess the effect of these reform measures on the performance of the industrial sector. This is undertaken in the following two chapters. Chapter 3 assesses the extent to which the 1988-89 measures actually represented a major shift in policy orientation, towards a more 'enabling' trade and industrial policy environment. Chapter 4 provides a quantitative evaluation of the impact of the reform measures on the economic performance of the industrial sector.

3. ASSESSMENT OF THE INDUSTRIAL AND TRADE POLICY REFORMS

3.1 Introduction

A programme of industrial and trade policy reform, such as that adopted by the government in 1988, is intended to improve the industrial sector's economic performance in two main ways. The first is by improving the allocation and use of resources between different productive activities. To achieve this involves moving towards a more 'neutral' structure of economic prices and incentives, where prices more closely reflect the opportunity costs of the resources being used in production. The creation of a more neutral incentive structure will lower the costs to the economy arising from the misallocation of resources. A key policy instrument for shifting towards a more neutral incentive structure is the reform of the tariff structure. The second means by which performance may improve is through greater cost-efficiency of existing productive enterprises. To achieve this involves increasing the degree of competition, which forces the domestic enterprises to compete and become more price competitive by lowering their production costs. A key instrument for increasing competition in the domestic market is the 'liberalisation' of the import schedule, by lowering the level of import tariffs, and removing quotas and quantitative restrictions. The relaxation of licensing and regulatory procedures is a further means of easing market entry and increasing competition.

It should be recognised that there is no single 'model' or 'optimum' trade and industrial policy package which can be used as a yardstick against which to measure the existing policy framework. The textbook model of perfect competition and free trade can be disregarded on both theoretical and empirical grounds, and it is generally accepted that the limited use of interventionist trade policy measures, including tariff protection, may be justified, in certain circumstances, on sound economic principles. The optimum degree of policy intervention is specific to a particular economy, and will be determined by the structural characteristics and stage of industrial development of the economy in question.

In assessing a reform programme is it necessary, therefore, to rely upon various qualitative indicators, which can be regarded as yardsticks of 'good practice'. The 'good practice' indicators are in turn derived from an assessment of multi-country experiences with trade liberalisation and industrial sector policy reform, from which certain lessons can be drawn.[3] A movement in the direction of these qualitative indicators is judged to be an improvement, but it is seldom possible to quantify the precise magnitude of such improvements.

Three criteria have been used to assess the Jordanian policy reform programme:

transparency;

consistency;

co-ordination.

We discuss each in turn, and attempt to assess the extent to which the recent reform measures have complied with these criteria.

3.2 Transparency

When government intervention takes place, it ought, as far as possible, to be simple rather than complex. Potential and actual investors should be able to 'see through' the implications of commercial policies. This objective is best served by relying on as few instruments of intervention as possible and by operating within a well established and understood set of rules, rather than discretionary intervention. This means, for example, relying to a greater extent on tariffs rather than quantitative restrictions, avoidance of a proliferation of tariff rates, and the minimal use of discretionary exemptions.

Have the recent reform measures improved the transparency of the trade and industrial policy framework? The transparency effects in relation to (a) import

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[3] See, for example, D. Papageorgiou et al (1990) Liberalizing Foreign Trade in Developing Countries: The Lessons of Experience, World Bank, Washington DC; D. Rodrick (1992) 'The Limits of Trade Policy Reform in Developing Countries', Journal of Economic Perspectives, Vol. 6, No.1.

duties, (b) quantitative restrictions and (c) licensing, are considered in turn.

3.2.1 Import Duties

Although the post-1988 reforms have achieved some improvement in the tariff structure, import taxation in Jordan is still characterised by: (i) a multiplicity of duties; (ii) excessive number of rates; (iii) extensive exemptions; (iv) import deposits.

(i) multiplicity of duties:

- the import rate is the principal customs duty;
- the unified tax is levied at 12 per cent of the c.i.f. value, and is earmarked between municipalities, universities, and the central government budget: there are many exemptions;
- the additional tax, introduced in 1969, is levied at 1 per cent of taxed goods and 2 per cent of goods exempt from principal customs duty;
- the import licence fee is currently set at 5 per cent of c.i.f. value;
- imports from countries other than the country of origin are subject to a penalty of 5 per cent of value;
- the consumption tax, introduced in November 1988, is levied as a specific rate which is differentiated according to the nature of the good being imported. Rates range from 3 per cent to 60 per cent.[4]

(ii) extensive number of rates:

- in addition to the multiplicity of duties and taxes, Jordan has traditionally applied a large number of rates. Prior to the November 1989 tariff reforms, the schedule had 120 different rates, ranging from zero to 318 per cent. The number of rates was reduced in the November 1989 reform, which raised the minimum rate to 5 per cent and reduced the maximum tariff to 60 per cent, and also restricted tariff rates to multiples of 5 per cent.

[4] IMF, Jordan: The Consumption Tax and its Reform, February, 1991, Table 2

(iii) sizeable exemptions

- a significant proportion of imports are exempt from tariffs and other duties. Items granted exemption cover goods used by government, imports from countries with which Jordan has bilateral trade agreements, and goods belonging to returnees which are intended for personal use. The Encouragement of Investment Law grants exemptions to the fixed asset and spare parts imports for approved projects. In 1988, almost 30 institutions, accounting for more than 50 per cent of total imports, were exempted from paying import duties. The reforms of 1988 reduced the number of institutions with exemption status, but the proportion of imports exempted from tariffs remains high at between 35-40 per cent in 1989.

(iv) import deposits

Imports are subject to an advance deposit requirement. In October 1989, the minimum deposit requirement on imports of basic foodstuffs, medicines with no domestic substitutes, and raw materials used in local industry, was raised from 10 to 30 per cent, and that on all other imports from 40 per cent to 70 per cent. These increases in the minimum advance deposit rates were regarded as a temporary measure to restrain imports and save foreign exchange without resorting to import restrictions. The minimum deposit requirements were reduced in April 1990 for some commodities.

3.2.2 Quantitative Restrictions

The August 1988 reforms replaced the majority of quantitative restrictions with tariffs. In November 1988, concern over the decline in foreign exchange reserves led to the temporary reintroduction of a prohibition on the importation of certain luxury commodities. The banned items had an estimated value of about 7 per cent of 1988 total import value, and included motor vehicles, television sets and air conditioners. Most of these restrictions were subsequently removed.

3.2.3 Licensing

Prior to 1988, investment licensing was carried out by the Ministry of Industry and Trade. A prospective investor was required to submit a feasibility study for the proposed project, and at the same time had to apply for registration with the Department of Companies and the Municipality. The system of investment licensing was terminated in 1988. However, non-prohibited imports still require licences (unless they are covered by a trade agreement between Jordan and the exporting country) which are granted by the Ministry of Industry and Trade, on payment of the licence fee.

In summary, it would seem that the policy reform measures introduced in 1988 and 1989 did not significantly increase the transparency of the trade and industry policy environment. A qualitative assessment of the impact of the various measures on transparency is given in Table 6.

3.3 Consistency

Consistency in the impact of policy across sectors is important in minimising resource misallocation inefficiencies.[5] Any single commodity should be subject to the same duties irrespective of the importer or end-user. Similarly, competing activities should be subject to the same level of subsidy or taxation.

It has already been noted that a significant proportion of imports into Jordan are exempted from tariffs, depending upon the importing party. The effect is to create different retail prices for the same good for different consumers, and to lower the degree of protection given to domestic producers of import substitutes.

3.3.1 Nominal Protection Levels

The cross-activity consistency of the protective regime can be assessed in terms of the level of dispersion of the level of protection. One measure of the pattern of incentives to domestic producers to engage in different forms of import-substituting activities is given by the structure of nominal protection. Table 7

[5] The consistency criterion is similar to the neutrality criterion for trade reform.

provides estimates of the nominal rates of protection given to various manufacturing activities in 1979, 1986 and 1989. The nominal rate of protection measures the percentage by which the price of the output of a particular industry could potentially be increased due to the presence of tariffs on competing imports. For the consistency criterion to be met, the objective is to narrow the range within which the nominal rates fall, and to reduce the variation in rates within this range. The estimates indicate that the average (unweighted) level of tariff protection fell by four percentage points between 1986 and 1989. However, the range between maximum and minimum rates appears to have increased. The figures are potentially misleading, however, for the following reasons. First, a significant proportion of imports into Jordan continue to be exempted from tariffs. This creates distortions in the retail prices of the same goods for different consumers. Second, the tariff on certain luxury items, which do not have domestically produced broad equivalents, remained unaltered by the tariff reforms.

Table 6 Impact of Reform Measures on Transparency of Policy Environment

w = weak; m = moderate; s = strong

1. Import Duties		w
multiplicity of duties	w	
extensive number of duties	m	
exemptions	w	
import deposits	w	
2. Quantitative Restrictions		m
3. Licensing		s

Table 7 Nominal Rates of Protection for Manufacturing Industries 1979, 1986, 1989 (%)

Sector(1)	1979	1986	1989
Bakery products		59.5	11.5
Confectionery		59.1	70.0
Other food products		10.5	27.0
Prepared animal foods		7.2	7.5
Beverages	70.0	87.5	130.0
Tobacco	100.0	78.1	80.0
Textile manufacturing	34.0	41.3	25.0
Wearing apparel	40.0	49.5	40.0
Leather and footwear	30.0	30.7	35.0
Wood, cork and furniture	25.0	38.9	36.5
Paper and paper products	45.0	24.8	28.0
Printing and publishing	13.0	11.6	8.7
Industrial and other chemicals	13.0	16.3	20.6
Rubber and plastic	29.0	33.8	21.5
Ceramic and glass		37.7	25.0
Basic metal industries	15.0	17.5	14.9
Fabricated metal products		34.0	25.0
Machinery (non-electric)	7.0	14.5	13.3
Electrical and transport equipment	29.0	30.8	30.6
Miscellaneous manufacturing		40.7	25.4
Average	34.6	37.6	33.8
Maximum rate	100.0	87.5	130.0
Minimum rate	7.0	7.2	11.5

(1) the sectors correspond to the classification of economic activities used in the 1985 input-output table for Jordan.

Note: The estimates are unweighted averages of the *ad valorem* tariff rates. The exclusion of non-tariff charges on imports means that the estimates will underestimate the level of nominal protection.

Sources: 1979 - Balour, S.M. 'Economic Policy, Growth and Industrialisation, the Case of Jordan 1967-86' Ph.D Thesis, University of Keele, 1990; 1986 - World Bank, Jordan: Policies and Prospects for Small and Medium Scale Manufacturing Industries, January 1988; 1989 - Consultant estimates, based on Government of Jordan, Schedule of Tariffs, 1989, Gazette No. 3666, 25 November, 1989.

3.3.2 Effective Protection Levels

A more meaningful indicator of the pattern of incentives provided by the tariff structure is provided by the effective rate of protection (ERP). The ERP measures the strength of the 'resource-pull' effects of tariffs by estimating the degree of protection given to value added. Hence it is necessary to allow for the effect of tariffs on both output and inputs: a tariff on a competing import acts as a 'subsidy' to the domestic producer, whereas a tariff on imported inputs acts as a 'tax' by raising costs of production. The effective rate of protection afforded domestic producers of good j in terms of value added is defined as:

$$ERP_j = \frac{t_j - \sum t_i a_{ij}}{1 - \sum a_{ij}}$$

where t_j is the nominal *ad valorem* import tariff, t_i is the input tariff and a_{ij} is the input coefficient for the input of i per unit of j.[6]

Estimates of the ERP for manufacturing activities in Jordan, 1979, 1986 and 1989, are given in Table 8. There are several sources of potential bias in the estimates in Table 8, which should be treated therefore, as indicating orders of magnitude. Subject to this caveat, a number of comments can be made. First, the average effective protection rates exceed the average nominal tariff level in each of the three years. This implied that manufacturing activity in Jordan has been more heavily protected than nominal tariffs would of themselves suggest. Second, although the effective protection rate has fallen between 1986 and 1989, by 8 percentage points, the dispersion of effective rates remains significant.

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[6] For further discussion of the ERP concept, see J. Cody, R. Kitchen and J. Weiss (1990) Policy Design and Price Reform in Developing Countries: Guidelines with Special Reference to Industry, Harvester Wheatsheaf.

Table 8 Effective Rates of Protection for Manufacturing Industries, 1979, 1986 and 1989 (%)

Sector	1979	1986	1989
Bakery products		-319.5	7.8
Confectionery		315.5	86.7
Other food products		7.1	26.4
Prepared animal foods		-9.6	17.7
Beverages	81.0	164.6	175.0
Tobacco	176.0	121.7	85.7
Textile manufacture	41.0	53.9	25.8
Wearing apparel	72.0	61.5	143.7
Leather and footwear	77.0	32.9	37.6
Wood, cork and furniture	30.0	40.9	67.8
Paper and paper products	57.0	22.3	34.1
Printing and publishing	18.0	3.2	21.4
Industrial and other chemicals	16.0	15.8	18.3
Rubber and plastic	40.0	43.7	24.4
Ceramics and glass		37.9	36.2
Basic metal industries	18.0		20.0
Fabricated metal products		0.48	20.0
Machinery (non-electrical)	7.0	46.7	35.4
Electrical and transport equipment	31.0	12.8	119.9
Miscellaneous manufacturing		44.3	26.4
		44.3	
Average	51.1		51.5
Maximum rate	176.0		175.0
Minimum rate	7.0	59.4(1)	17.7
		315.5	
		-319.5	

(1) excluding the negative effective protection figures.

Sources: As for Table 7.

To summarise, both nominal and effective protection levels continued to be very uneven in the post-1988 reform period, indicating that the tariff structure is non-neutral in its impact across sectors. The tariff reform, therefore, had an insignificant impact in improving the consistency of the trade tariff framework.

3.4 Co-ordination

There is now a sizeable body of evidence on developing countries' experience with trade policy reform.[7] An important lesson to be learnt from this experience is the need to co-ordinate trade policy reform and macroeconomic policy. A trade reform can complicate the task of macro stabilisation, and a failure to anticipate inter-sectoral effects may place the trade policy reform process in jeopardy.

Sound macro stability depends crucially on sound fiscal policy and sound exchange rate management. Trade reform can interfere with both objectives.[8] Trade policy reform normally involves a devaluation of the currency. However, from a macro stabilisation point of view, a large depreciation of the currency may add to domestic inflationary pressures, with the increase in local currency cost of imports being translated into a general domestic price rise. Secondly, trade reform will have immediate implications for the fiscal balance. Trade taxes constitute around 15-20 per cent of government revenue in developing countries on average. Tariff reductions may lead to a reduction in import duties, and a widening of the fiscal deficit. Failure to plan for the co-ordination of both trade and macro policy may threaten, therefore, the policy reform process.

There is evidence to suggest that these trade-offs existed in the Jordanian context. The exchange rate depreciated significantly in the late 1980s (see Figure

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[7] See, for example, V. Thomas and J. Nash (1992) 'Trade Policy Reform: Recent Evidence from Theory and Practice' in Adhikari, R., Kirkpatrick, C. and Weiss, J. (eds) Industrial and Trade Policy Reform in Developing Countries, Manchester University Press.

[8] Here we draw on the discussion in Rodrik, D. (1992) 'The Limits of Trade Policy Reform in Developing Countries', Journal of Economic Literature, Winter.

1), and at the same time the cost of living index rose from 99.8 in 1987 to 155.4 in 1990 (Central Bank, Major Economic Indicators, 1991). The government's concern for potential revenue losses following tariff reductions led to the introduction of the consumption tax in late 1988, and acted as a constraint on further moves towards trade liberalisation.[9]

Attention to the issue of policy co-ordination has a direct bearing on the credibility of the reform programme. A stable macro environment is a key determinant of the private sector's investment decisions: macro instability will weaken the credibility of the reform process, encouraging expectations of policy reversals, and thereby undermine the supply response to the reformed price incentive structure.

3.5 Summary

The purpose of this chapter has been to assess the effectiveness of the post-1988 policy reform programme. Effectiveness has been assessed in terms of the move towards a more enabling policy environment for the industrial sector. Three specific criteria were used: transparency, consistency, and co-ordination. The extent of the reform measures was assessed in terms of modification of the tariff structure, and changes in the levels of nominal and effective protection. The overall conclusion is that the extent of reform achieved has been positive, but modest.

[9] the Consumption Tax proposed by the IMF is intended to offset any revenue losses from tariff reductions.

4. THE IMPACT OF THE REFORM MEASURES ON INDUSTRIAL SECTOR PERFORMANCE

4.1 Introduction

The objective of this chapter is to quantify the impact of the recent policy reform measures on the performance of the manufacturing sector. The methodological and data problems are first discussed, and the empirical evidence is then presented.

4.2 Methodology and Data Issues

The most commonly used method for analysing the effects of trade policy reform on performance is the 'before-after' approach. With this approach, average performance in a period before the reforms were introduced is compared with average performance in the period subsequent to the reforms.

While this procedure is easy to apply, a problem with it is that all observed changes are attributed to the programme. If non-programme determinants of the programme have changed during the observation period, the before-after estimates of programme effects will typically be biased.

The choice of time period to be covered is also problematic. The speed of response to policy changes will vary between sectors and activities, and the 'after' period should be extended to capture these lagged responses. Extending the time period, however, increases the bias resulting from non-programme determinants of performance. Most studies have used a 2-3 year period.

A third issue relates to the choice of performance indicator. Advocates of trade reform policies suggest that the effects should be observable at the macro and micro level. At the macro level, the effects would include: an increase in the rate of growth of exports, an increase in output growth, and an increase in productivity growth. At the micro level, improvements in firm level productivity performance should occur. In this study, an attempt will be made to measure the impact of

performance at both levels.[10]

4.3 Impact on Export Performance

The lowering of tariffs on imports, and the depreciation of the exchange rate, can be expected to have shifted the incentive structure in favour of export production *vis-a-vis* import substitution.[11] Table 9 shows that domestic exports increased significantly in the post 1988 period. In 1990, the disturbance to trade caused by the Gulf War resulted in zero export growth: however, if the growth rate for the first half of 1990 is extrapolated to the whole year, exports would have increased during 1990 by 8 per cent.

More detailed examination of export performance by traded items shows a significant increase in the growth rate of most non-mineral exports in 1989 (tables 10 and 11).

Table 9 Jordan: Domestic Exports, 1986-90

Year	Domestic Exports	
	US$ million	% change over previous year
1986	645.1	-0.4
1987	734.4	-13.8
1988	865.1	17.8
1989	989.5	7.4
1990	924.4	0.0
(1990)(1)	(1003.8)	(8.0)

(1) estimated, by extrapolating January-July growth rate.
Source: Central Bank, *Monthly Bulletin*, various issues.

[10] The micro level estimates of domestic resource cost performance will be based on firm level data. A questionnaire was distributed to a sample of manufacturing firms, but at the time of writing (May 1992) insufficient returns had been received to allow this part of the study to proceed. A copy of the questionnaire is included as Annex 1.

[11] We concentrate on domestic export performance. Re-exports are determined largely by economic conditions in the final destination markets.

Table 10 Jordan: Industrial Exports, 1986-90 (US $ million)

	Industrial Exports			
Year	All	Miscellaneous Manufactures	Chemicals	Other
1986	224.1	80.9	72.6	70.6
1987	323.8	146.7	117.5	59.6
1988	299.1	140.9	113.7	44.5
1989	344.4	172.8	151.3	50.3
1990	290.6	140.6	115.8	34.2

Source: Central Bank of Jordan

Table 11 Manufactured Exports, by Item, 1988-1991 (JDs, million)

Industrial Sector	1988	1989	1990	1991(1)
Leather products	3.7	7.9	8 8	5.8
Medical Products	22.2	33.6	48.5	49.2
Plastic and Rubber Products	3.6	4.7	6.5	5.3
Chemical Industries	17.8	38.8	51.6	45.6
Comestics and Perfumes	0.3	1.1	3.4	3.7
Engineering Industries (electric and metal)	13.8	39.3	48.6	30.6
Furniture, Kitchen Cabinets and Doors	7.3	12.4	11.8	8.2
Construction Industries	8.2	15.0	22.0	11.6
Printing, Paper and Stationery	1.2	2.0	3.0	1.60
Supply Industry	6.5	11.5	21.3	29.6
Woven Industry	20.4	21.4	38.4	28.1
Packing and Packaging	13.4	14.0	16.4	22.4
Agricultural Industries	11.0	13.5	10.0	11.8
Fertilizers, Phosphate and Potash	82.0	117.0	148.5	121.9

(1) January - November
Source: Amman Chamber of Industry's Report 1991

The 'before-after' approach was applied to the detailed export data by comparing export growth rates during the period 1986 to 1988, with the 1988 to 1990 rate of growth. The disaggregated foreign trade statistics covering 99 items

were used. The data were deflated by the wholesale price index to eliminate the effect of inflation on the local currency values. The test was applied to both domestic and total exports. In both cases, the difference in means was positive, confirming a higher growth rate, on average, in the post-reform period. However, the t-statistic value fell below the critical value for statistical significance (table 12).

The evidence on export performance in the period immediately following the 1988 tariff reforms and exchange rate depreciation is suggestive of a positive supply response to the changes in incentive structure. However, the intervention of the Gulf crisis clearly interrupted the apparent improvement in exports, and as a consequence, the period of observation is too short to support more robust conclusions as to the impact of the reforms of export performance.

Table 12 'Before-After 'Test for Exports and Manufacturing Value Added, 1986-88 and 1988-90

Variable	Difference in Means: t-statistic value
Total Exports	1.0
Domestic Exports	1.1
Manufacturing Value-Added	2.3

4.4 Impact on Industrial Output

The output growth of industrial activities is shown in tables 13 and 14. In current prices, output grew year on year throughout the second half of the decade, but when measured at constant prices, total industrial output fell in 1990. The decline in output in 1990 was concentrated in the mineral-based activities, with the volume output of phosphate declining by 13 per cent, and cement by 10 per cent.

The before-after output performance of the manufacturing (non-mineral) activities has been compared using the periods 1986-88 and 1988-90. As with the export data, the manufacturing output figures were converted to constant prices. For ISIC Division 3 activities, the difference in mean growth rates was found to be

significant (t statistic = 2.3), confirming that the growth rate in manufacturing activities was higher on average in the post-1988 period.

The improvement in manufacturing output performance will be in part due to the increased export production noted in section 4.3. However, there is indirect evidence to suggest that a significant part of the improvement was due to the manufacturing sector's response to the liberalisation of domestic market operating conditions, and in particular, the removal of the industrial licensing system in August 1988. The number of industrial projects registered in the Ministry of Industry and Trade increased from 158 in 1987 to 623 in 1989 and to 719 in 1991. The level of proposed investment rose from JD 26.3 million in 1987, to JD 105 million in 1991 (table 14). The increase in registrations of new projects (registration is still required to benefit from tariff exemption on imported machinery and equipment) reflects the removal of the complex and bureaucratic licensing procedures which deterred investment proposals and the improvement in business confidence in the post-1988 reform period.

Figures on loans approved by the Industrial Development Bank show a similar, but less dramatic increase in the post-reform period; with a doubling of the number of loans and volume of lending between 1987 and 1991 (table 15).

Table 13 Industrial Output, 1986-1990 (million JD)

	Current Prices	Constant Prices
1986	332.4	332.4
1987	440.1	440.9
1988	478.1	449.8
1989	617.9	461.8
1990	638.9	411.1

Source: Industrial Surveys (annual)
Central Bank, Major Economic Indicators.

Table 14 Changes in value added of Industrial Subsectors (1987-1991)

ISIC Code	Industrial Subsectors	Value Added in Million Dinars of Current Prices			
		1987	1988	1989	1990
290	Mining & Quarrying	64.720	76.587	191.417	193.416
311 & 312	Food Manufacturing	16.678	24.467	36.744	38.610
313	Beverage Industries	14.258	12.864	14.039	18.854
314	Tobacco Manufacturing	39.869	41.929	40.952	50.080
321	Manufacturing Textiles	4.268	5.967	9.495	12.959
322	Manufacturing of wearing (clothing)	4.481	4.961	6.189	8.371
323	Leather Products	0.834	1.364	1.067	0.746
324	Footwear industry	2.073	2.317	2.924	2.200
331 & 332	Furniture & Wood Products	8.290	9.317	12.717	11.750
341	Paper & Paper Products	6.360	6.277	10.448	13.404
342	Printing & Publishing	5.025	6.271	7.814	7.909
351 & 352	Chemicals & Chemical Products	23.836	39.681	75.593	57.291
353	Petroleum Refining	104.562	89.240	34.076	36.213
355	Rubber Products	0.321	0.433	0.738	0.724
356	Plastic Products	6.435	7.575	8.102	11.244
361	Non-metallic Products	54.036	58.572	55.040	60.615
371	Basic Metal Products	14.705	14.563	16.576	21.999
381	Metal Product except Machinery	13.610	10.545	14.593	15.417
382	Non-Electric Machinery	2.833	3.967	3.934	6.259
383	Electric Machinery	1.447	2.495	7.288	7.624
384	Transport Equipment	0.404	0.652	0.660	0.463
385	Scientific Equipment	-	0.552	1.844	1.281
390	Miscellaneous	-	0.267	0.588	1.009
410	Generated Electricity	39.743	42.098	42.492	43.563
951	Industrial Services	10.724	13.728	19.744	16.472
	Total	440.112	478.652	617.938	638.733

Source: Annual Industrial Surveys of Department of Statistics

Table 15 Number of Industrial Projects Registered at Ministry of Industry & Trade in Million Dinar

Industry	1987		1989		1990		1991	
	No. Project	Capital	No. Project	Capital	No. Project	Capital	No. Project	Capital
Food Processing	42	10.7	145	24.4	127	5.8	196	15.8
Engineering	38	4.7	140	10.4	107	13.8	116	17.6
Chemical & Plastic	32	3.1	160	11.2	79	6.5	133	21.0
Construction	11	1.5	23	3.7	18	1.4	22	1.3
Textiles	12	1.2	24	1.1	72	3.4	50	14.2
Wood & Furniture	6	3.5	84	9.6	19	5.0	5	0.17
Leather	6	0.3	9.0	0.3	5	0.3	10	0.2
Paper	11	1.3	38	2.4	24	1.5	20	0.3
Miscellaneous							167	34.3
Total	158	26.3	623	63.1	451	37.7	719	104.8

4.5 Summary

The objective of this chapter has been to quantify the impact of the 1988-89 policy reforms on the economic performance of the industrial sector. The onset of the Gulf crisis in mid-1990 represented a major economic disruption to the Jordanian economy, and as a result, any post-reform improvement in performance was curtailed. Consequently, it is difficult to identify firm evidence as to the impact of the reforms on the basis of less than two years' data.

Nevertheless, the evidence on exports and manufacturing output growth is consistent with *a priori* expectations as to the effect of the reform measures on performance. The application of the before-after approach shows that average growth performance was higher in the post-1988 period than in the preceding period. Evidence on the investment intentions of the manufacturing sector is also consistent with increased business confidence and activity in the period following the reform measures.

Table 16 Approved Loans Classified by Type of Industry (1987-1991) in Million Dinar

Industry	1987		1988		1989		1990		1991	
	No. Loans	Amount	No. Loans	Amount	No. Loans	Amount	No. Loans	Amount	No. Loans	Amount
Food & Beverage	13	0.98	18	2.13	21	2.28	25	4.13	14	2.92
Engineering & Metal	5	0.51	22	1.88	15	1.74	20	1.57	26	2.66
Chemical & Plastic	15	0.82	20	2.95	36	6.4	9	2.16	22	5.15
Construction	5	3.35	2	0.28	3	0.10	5	0.79	10	1.55
Textiles & Leather	1	0.02	15	2.05	8	1.07	10	0.37	9	0.96
Wooden Industry	7	0.40	5	0.08	10	0.08	4	0.37	4	0.38
Paper Products	4	0.97	11	1.79	8	0.99	8	2.80	11	0.93
Miscellaneous	1	0.63	1	0.14	7	0.16	5	1.14	4	0.38
Total	51	7.68	95	11.3	108	12.82	86	13.33	100	14.71

Source: Industrial Development Bank (IDB) Annual Reports

5. THE GOVERNMENT REVENUE IMPLICATIONS OF TARIFF REFORM

5.1 Introduction

The interdependence between trade policy and fiscal balance is such that trade policy reforms cannot be considered in isolation. Revenue-depleting trade policy reforms in the absence of other fiscal reforms are likely, *ceteris paribus*, to result in fiscal problems and therefore undermine the sustainability of trade policy reform. The magnitude of this threat to sustainability in a particular country depends upon the country's current fiscal dependence on trade taxes and the extent to which tariff reform is revenue-depleting, rather than revenue-neutral or revenue-enhancing.

5.2 Revenue Effects of Tariff Reform

Potential revenue loss causes great anxiety on the part of governments, and is probably the single most important factor causing resistance to trade liberalisation.[12] However, it does not automatically follow that tariff reduction leads to revenue depletion, and it is possible to speculate, on a *ceteris paribus* basis, as to whether particular types of trade reform will be revenue-depleting or revenue-enhancing.

A reduction in the spread of tariff rates (without altering the average tariff level significantly) may enhance revenue. First, the greater the pre-reform differentials, the greater the scope and incentive for duty evasion. Second, since greater dispersion of duty rates is often the outcome of ad hoc decisions in response to lobbying by interest groups, the rates are likely to be non-optimal in revenue terms. Third, the greater spread of nominal tariff rates is likely to be associated with pervasive use of tariff exemptions. If a reduction in tariff differentials is associated with the removal of exemptions, revenue yield will be enhanced.

The revenue effect of a reduction of the overall average rate of import

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[12] This section draws on Greenaway, D. and C. Milner (1991) 'Fiscal Dependence on Trade Taxes and Tax Policy Reform', Journal of Development Studies, Vol.27, No.3.

taxation is also indeterminate, unless one knows how the tariff reductions affect individual categories of imports. In the case of a marginal reduction, the precise effect depends on the initial tariff and the elasticity of import demand over the relevant range. If the initial tariff is above the revenue maximising rate, the tariff reduction will necessarily increase tariff collections. Tariff reductions may reduce incentives to smuggling and unrecorded trade, thereby improving compliance and broadening the tax base.

Economic theory ranks quota restrictions as an inferior protective instrument to the tariff. For this reason, trade reform frequently involves the replacement of import quotas by equivalent tariffs. Such switching of instruments will be revenue enhancing, with the rents that previously accrued to the importers of quota goods being transferred to the fiscal authorities.

5.3 The Revenue Implications of the 1988 Reforms

Jordan's tax revenue yield is heavily dependent on trade taxes, with import duties accounting for an average 45 per cent of total tax revenue in the period 1985-1989. Although the share of import duties has declined steadily over the second half of the decade, the share in 1989 was 38 per cent (Table 17). This dependence on import duties is significantly greater than the average developing country ratio (Table 18). The ratio fell dramatically in 1990, due to an exceptionally large increase in total tax revenue resulting from income tax charges on returnees' remittances from the Gulf area.

Jordan does not publish information on import revenue on a commodity by commodity basis, and an analysis of the revenue implications of the trade policy reforms must be based, therefore, on aggregate data. Table 19 combines the published data on imports and import duties for the period from 1986 to 1990. Imports increased in local currency terms each year; between 1986 to 1988 imports rose by 20 per cent, whereas between 1988 and 1990 the increase was 69 per cent. At the same time, total revenue yield from import duties declined, resulting in a

significant fall in the average collection rate (import duties divided by total imports). Our estimates of the change in the average nominal tariff rate for the pre- and post-reform periods (Table 7) suggest that the average rate fell by about 4 percentage points. Comparing the estimated average tariff levels and the estimated average collection rates for 1986 and 1989 indicates that the implicit exemption rate increased to 75 per cent in 1989.

Table 17 Jordan: Central Government Tax Revenues

Year	Import Duties (JD million)	Total Tax Revenues (JD million)	Share of Import Duties in Total Tax Revenue (%)
1985	117.9	246.6	47.4
1986	112.0	238.0	47.0
1987	108.5	242.4	44.8
1988	117.4	255.9	45.9
1989	103.9	273.9	37.9
1990	116.7	383.9	30.1

Source: Central Bank, Monthly Statistical Bulletin.

Table 18 Dependence on Trade Taxes in Developing Countries

	Share of Trade Taxes in Total Tax Revenue
Low income economies	33.8
Lower middle income economies	22.6
Upper middle income economies	9.9
Asia	17.7
Africa	35.8
Americas	22.3

Source: D. Greenaway and C. Milner (1991) 'Fiscal dependence on trade taxes and trade policy reform' Journal of Development Studies, Vol. 27, No. 3.

Table 19 Import Duties and Government Revenue, 1986-1990 (JD million)

	1986	1987	1988	1989	1990
Imports	850.2	915.6	1021.6	1230.1	1725.8
Import duties	112.0	108.5	117.4	103.9	116.7
Average Collection Rate (%) (import duties divided by total imports)	13.2	11.8	11.5	8.4	6.8
Import Duties as share of Tax Revenue (%)	47.0	44.8	45.9	37.9	30.1
Mean Average Tariff Rate (%)	37.6			33.8	
Estimated Exemption Rate (%)(1)	64.8			75.1	

(1) exemption rate = $\frac{\text{average tariff rate - average collection rate}}{\text{average tariff rate}}$

Source: Trade Statistics (annual) and Central Bank, Monthly Statistical Bulletin.

The figures in Table 19 should be interpreted as orders of magnitude rather than precise estimates. Nevertheless, they do suggest that the trade reform measures of 1988 had a significant revenue-depleting effect. This suggests that the pre-reform average nominal tariffs, which were relatively low at less than 40 per cent, were already below the maximum revenue tariff level. Although the degree of tariff liberalisation was limited, that which occurred was probably revenue depleting. The revenue depletion impact of tariff reduction was not compensated for by a significant lowering in the proportion of imports exempted from duties. The share of imports exempted from tariffs remained high at between 35-40 per cent in 1989. Consequently, the potential revenue-enhancing effect of reducing exemptions was not realised.

5.4 Summary

The objective of this chapter was to consider the effect of the tariff reductions introduced in 1988-89, on government tax revenues. More detailed study would be required to obtain precise estimates of the revenue elasticity of tariff reductions. However, the above findings have clear implications for reinstating and sustaining the policy reform process in Jordan. In particular, they suggest that further trade reform will be conditional on the introduction of an alternative source of tax revenue, such as a value added tax. There are inevitably problems in the design and implementation of such a domestic tax. These constraints reinforce the urgency of planning for the introduction of a new revenue source as a substitute to trade taxes, if the trade liberalisation process is to proceed.[13]

The government intends to develop a generalised sales tax by January 1, 1993, and to put the procedural, institutional and administrative arrangements by June 1992. The sales tax would be applied equally to imports and domestically produced goods. The proposed sales tax may be a step towards the adoption of a

[13] Proposals for a general sales tax are discussed in detail in IMF, Jordan: The Consumption Tax and its Reform, 1991.

value-added tax (VAT). VAT systems are generally considered to be the most efficient and equitable form of sales taxation and have been adopted by a significant number of developing countries. A carefully designed VAT system can also reinforce the process of revenue administration. The adoption of a sales tax would reduce the dependence on trade taxes for revenue, and allow tariff levels to be determined by efficiency criteria, rather than revenue needs.

6. EXPORT DIVERSIFICATION AND PROMOTION

6.1 Introduction

There is general agreement on the need to diversify Jordan's exports, by widening the range of exported commodities and by developing new external markets. Previous UNDP-funded studies have addressed this issue, and have identified alternative institutional arrangements for the promotion of industrial exports through the restructuring of the Jordan Commercial Centres Corporation into the lead institution for identifying and developing new export activities and markets. A series of technical marketing studies have been prepared on various products.

Rather less attention has been given to the creation of an appropriate economic policy framework which is conducive to private sector export activity. The objective of this chapter is to reiterate the points already made in earlier chapters, namely that, an export success is likely to require a shift in policy away from a ministry-led, export-promotion approach, towards a more incentive-based system.

6.2 Temporary Entry and Drawback Arrangements

Establishing an appropriate customs regime for exports is important, but complex. As we have seen in Chapter 5, tariffs and taxes on imports are a major source of government revenue and are therefore of central importance for Jordan's fiscal and budgetary needs. However, most Jordanian exporters rely on imported inputs. If exports are to compete in international markets, domestic producers need to obtain their imported inputs without a significant import duty cost element. Hence the urgency of introducing an alternative form of sales tax which would compensate for any revenue loss resulting from further import duty reductions.

The percentage of imported material inputs varies from industry to industry, but is estimated to average 53 per cent of all input costs (table 20). The percentage of customs and tariff duties levied on imported inputs to the total cost of production

is shown for a sample of local industries, in table 21.

Many countries offer free-trade status through a combination of the following policies: (1) duty exemption (also called temporary admission), (2) drawback, where duties are collected but then paid back, (3) manufacturing in bond, based on bonded plants or bonded manufacturing warehouses.

In Jordan, two schemes have been used to give exporters access to inputs at border prices. Temporary entry allows producers to import inputs duty free where the inputs are used solely in export production. This scheme involves bankers' guarantees being used as security to cover the average amount of duties the exporter owes to the government.

The duty drawback scheme is granted to inputs used in producing export commodities. The system allows for the refunding of tariff duties paid or imported inputs by industrialists after presenting relevant documentation determining the material content of exports.

Discussion with exporters revealed a number of limitations in the temporary entry scheme. These are that the scheme may not be used by persons who are not registered for the purpose; and that the bank guarantee required can be costly to exporters.

Additional concern expressed about the drawback scheme was that delays were experienced where customs officials lacked the technical capability to identify the input-output relations in individual manufacturing processes.

In general, it would appear that the drawback and temporary importation schemes have worked effectively. To deal with the specific operational difficulties, it would be advisable to adopt the norms laid down for individual customs procedures by the Kyoto Convention which has been drawn up specifically to deal with such matters.

Table 20 Share of Imported Inputs by Industrial Sub-Sector

Industrial subsector	Percentage of Imported Materials in Total Material Inputs
Food processing	50
Brewing	50
Cigarettes	50
Clerical industries	70
Basic metal industries	91
Non-electric industries	54
Electric industry	55
All industries average	53

Source: ESCWA 'Report on repercussions of latest policy measures on investment in Jordan's industry', Amman, May, 1990.

Table 21 Customs Duties on Imported Raw Materials, 1989

	Manufacturing Subsector	Custom Duties		Percentage of custom duties to total cost (%)
		tariff rate %	additional fees %	
1	Textiles & Clothes	13.7	20	27.75
2	Equipment & Electric machinery	19.3	20	21.0
3	Wood industry	17.8	20	10.65
4	Basic Metal Industry (including machinery)	13.6	20	11.4
5	Insecticides	9.5	20	9.7
6	Leather & Footwear	18.3	20	6.0
7	Food processing	13.7	20	5.0
8	Paper products	9.5	20	4.0
9	Chemical Industry	14.4	20	2.0

Source: Ministry of Industry and Trade, Amman, 1990

6.3 Institutional Structure for Export Promotion

Responsibility for export promotion is fragmented across a number of institutions. Recent measures have been announced to establish a Higher Export Council. Jordan Commercial Centres Corperation, and the merging of the Free Zones Corporation to help investment and export promotion.

Commercial Banks and the Industrial Development Bank (IDB) are empowered to provide loans to exporters during the pre-export phase to finance raw materials and intermediate goods costs. Pre-export loans are made on the basis of export orders and the relevant letters of credit (covering up to 60 per cent or value of letter of credit). Post-export loans are also made, in the form of an overdraft facility for a maximum of 18 months (covering up to 80 per cent of the amount of the letter of acceptance of exported merchandise).

The move towards closer co-operation between the main institutions with responsibility for export promotion may minimise the problems of duplication of effort and fragmentation of responsibility. The objective of these institutions should be to provide exporters with open access to supportive services, such as market information, quality testing, and support in entering new external markets. Their role should be supportive to the private sector, rather than directive or regulatory.

The export credit scheme faces certain problems such as a reluctance on the part of the banks to finance export at low interest rates, and the absence of an export insurance scheme to cover country risk.

6.4 Summary

The evidence on export performance in the post-1988 reform period is consistent with the view that the creation of an appropriate policy environment, is the crucial determinant of export diversification and growth. Exchange rate policy and the tariff structure are key factors. In addition, easing exporters' access to imported inputs at world prices, has contributed to export growth. Institutional

arrangements can contribute, by providing market information, encouraging quality improvement, and providing access to export financing.

ANNEX I

MINISTRY OF INDUSTRY AND TRADE

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION

AMMAN CHAMBER OF INDUSTRY

STUDY OF MANUFACTURING SECTOR IN THE

HASHEMITE KINGDOM OF JORDAN

QUESTIONNAIRE

PLEASE RETURN THIS QUESTIONNAIRE BY 20 MARCH 1992 TO:

Mr. Khalil Elian
Ministry of Industry and Trade
PO Box 2019
Amman

Tel: 663191 X 282

Fax: 603721

THIS QUESTIONNAIRE IS BEING CONDUCTED WITH THE COOPERATION OF THE AMMAN CHAMBER OF INDUSTRY. THE OBJECTIVE IS TO ASSESS THE EFFECTS OF RECENT TRADE POLICY CHANGES ON THE MANUFACTURING SECTOR. INFORMATION PROVIDED WILL BE TREATED AS CONFIDENTIAL AND THE IDENTITY OF INDIVIDUAL FIRMS WILL NOT BE REVEALED.

THANK YOU FOR YOUR COOPERATION.

Section A

This Section is concerned with production and output information for the year 1989.

Please complete Table A.

Table A

Information on Production and Sales 1989
(please identify the three (A.B.C.) major products, in terms of total sales)

SITC (if known)	Products	Unit	Total Production Quantity	Domestic Sales			Exports		Price (Unit c.i.f. for import substitutes; or f.o.b. for export (in foreign currency or JD)
				Quantity	Value (JD '000s)	ex factory unit price	Quantity	Value in JD '000s)	
	A								
	B								
	C								

Section B

This section is concerned with input information for the year 1989.

Please complete Table B.

Instructions on completing Table B:

(i) column 1 : list the three major products (A, B, C)

(ii) column 2 : for each major product list the various material inputs used in production (do not include labour as an input)

(iii) column 3 : list physical unit of measure used for each input

(iv) column 4 : denote whether input is imported (I) or locally purchased (L)

(v) column 5 : list amount of inputs used in production (opening stock plus purchases minus closing stock)

(vi) column 6 : give value of inputs consumed in production (JD '000s)

(vii) column 7 : price of input (for imported inputs, give c.i.f. price plus import duties and taxes paid; for locally produced inputs, give purchase price)

Table B

Information on Inputs 1989

Product (1)	Inputs (2)	Unit (3)	Imported/Locally Produced (4)	Quantity Consumed (5)	Total Value of Input Consumed (6)	Price of Input (7)
A.	(a)					
	(b)					
	(c)					
	(d)					
	(e)					
B	(a)					
	(b)					
	(c)					
	(d)					
	(e)					
C	(a)					
	(b)					
	(c)					
	(d)					
	(e)					

Section C

This section is concerned with capital and labour costs in 1989.

Please complete Tables C1 and Table C2.

Table C.1

Information on Fixed Assets 1989

Category	Expected Economic Life	Replacement Cost in 1989 (JD '000s)	
		local cost (%)	foreign cost (%)
1. Plant and machinery			
2. Land and buildings			
3. Vehicles			
4. Fixtures and fittings			
5. Other (specify)			

Table C.2

Information on Employment 1989

Type of Employee	Number of Employees	Total Wages and Salaries Cost (JD '000s)	Foreign Workers (% of Total)
1. Management and Professional			
2. Skilled Workers			
product A			
product B			
product C			
3. Unskilled Workers			
product A			
product B			
product C			

Section D

This section is concerned with capacity utilisation in 1989.

Plant capacity refers to the potential level of output that could be achieved from the present machinery installed, assuming no machinery breakdown, a complete range of spare parts, available machine operations, access to raw materials and the ability to sell all that is manufactured.

Please complete Table D.

Table D

Information and Capacity Utilisation 1989

D1	At what level of plant capacity were you operating in 1989? (please circle)				
	product A	more than 75% or	50-75% or	25-50% or	less than 25%
	product B	more than 75% or	50-75% or	25-50% or	less than 25%
	product C	more than 75% or	50-75% or	25-50% or	less than 25%
D2	What was the peak level of capacity achieved in previous years?				
	product A				
	product B				
	product C				

D3	Indicate in the following table the seriousness of each obstacle to increased capacity utilisation on a score of 0 - 10 (0 indicating there is no obstacle, 10 indicating a fundamental constant)				
Type of constraint		Score from 1 to 10 indicates importance of constraint		Has this constant become more (M) or less (L) severe since 1985?	
Shortage of local raw materials					
Shortage of imported raw materials					
Lack of domestic market demand					
Lack of export market demand					
Machinery breakdown					
Lack of machine spare parts					
Shortage of machine operators					
Labour stoppages					
Cash flow difficulties					
Central or local decision making (be specific)					
Other (specify)					

ANNEX II CONSULTANT'S TERMS OF REFERENCE

Purpose of project

The purpose of the main project, of which the above post is a part, is to strengthen the technical and institutional capability of the Ministry of Industry and Trade for policy formulation and monitoring at sectoral and sub-sectoral levels.

Duties

The consultant will be attached to the Directorate of Planning, Ministry of Industry and Trade, and work under the overall direction of the National project co-ordinator and co-operate with the national expert. He is expected to assist in examining the effects of existing industrial strategy, policies and policy instruments on the structure, pace, pattern and quality of industrial development in the country and suggest new, or changes in existing industrial strategy, policies and policy instruments to facilitate industrial development and promotion in keeping with the changing needs, priority and trends within the country and outside, particularly in the export market.

During the second phase of his mission, the adviser is expected to guide the national expert in collecting, analysing and compiling information and data required for effectively completing the above study and analysis.

(i) More specifically, the consultant is expected to: undertake a comprehensive review of the effects of the existing policy matrix on the structure, performance and growth of industrial sector;

(ii) identify suitable modification and refinements of existing tariff structure, giving due consideration both to the revenue implications on tariff reform, and on their impact on the performance of major industrial sub-sectors;

(iii) identify suitable modifications and refinements to the existing policies and initiatives for export diversification and promotion;

(iv) identify any additional non-trade areas where policy reform is needed in order to achieve the basic objective of rapid industrialization.

ANNEX III

PROJECT DP/JOR/87/009/11-89/12413

THE DEVELOPMENT OF INDUSTRIAL POLICY IN JORDAN

REPORT ON INITIAL MISSION VISIT,

5-13 DECEMBER, 1991.

C. KIRKPATRICK

UNIDO CONSULTANT

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CONTENTS

I. BACKGROUND, SUMMARY AND RECOMMENDATIONS

1. Background

This report was conceived as a preparatory input to a comprehensive study of industrial policy and strategy in HK of Jordan. The objective of the present report is to propose a framework and work plan for the main study, and in consultation with the National Coordinator and UNIDO National Expert, to identify the latter's tasks of collecting, analysing and compiling information and data required for effectively undertaking the main project study. (The consultant's TOR are given in Annex I).

The objective of the main project study will be to assist the Ministry of Industry and Trade in planning a policy strategy for industrial development, in the context of the significant changes in the economic environment brought about by the adjustment programme which began in mid - 1988 and the disruption caused by the 1990 Gulf crisis. The purpose of the main report will be to identify the most important options in a range of specific industrial and trade policy areas, and to set out recommendations and proposals for the initiation of a series of more detailed studies in prioritized areas.

The remaining sections of this report are as follows. Section II provides a general review of recent economic development experience in Jordan, and Section III describes the structure and growth of the industrial sector. Section IV contains two parts. The first describes the desirable components of industrial policy, which are defined as a set of policies which provide an enabling environment. An enabling environment is defined as one that permits business to operate within a stable and comprehensive institutional and regulatory system, and with a supportive

macroeconomic and incentive framework. The second part of Section IV describes the major features of the current business environment in Jordan, and identifies the main policy reforms adopted since mid 1988. Section V begins by identifying various criteria for assessing the effectiveness of economic policy reform. The criteria are then used to assess the recent policy reform measures introduced in Jordan, particularly in the area of trade policy. The perceived weaknesses of the trade reform process adopted so far are identified.

Section VI contains the recommended strategy for the development of an industry sector policy framework in Jordan. As a prerequisite to the formulation of such a strategic policy programme it is recommended that:

- a comprehensive review be undertaken of the effects of the existing policy matrix on the structure, performance and growth of the industrial sector. In particular, it is proposed that the review should examine the impact on the industrial sector of the post-1988 policy changes in the area of tariff and trade-related measures.
- a study should be undertaken to identify suitable modifications and refinements to the existing tariff structure, giving due consideration both to the revenue implications of tariff reforms, and to their impact on the performance of the industrial sector.
- a study should be undertaken to identify possible refinements to the existing policies and initiatives directed at achieving export diversification and promotion.
- a study should be undertaken to identify any additional non-trade related areas where policy reform is needed in order to achieve the basic objective of rapid industrialisation.

These main recommendations are elaborated upon in the second part of Section VI, where a detailed set of activities and related outputs is proposed. Part 3 of Section VI sets out a work schedule, and part 4 details the proposed report completion and submission schedule.

II. ECONOMIC BACKGROUND AND OVERVIEW

Jordan has a small, predominantly service-oriented economy, with a relatively narrow productive base. During 1985-89 the services sector accounted for about 67 per cent of GDP at factor cost, the manufacturing and mining sector for 15 per cent, the construction sector for 8 per cent and the agriculture sector for 6 per cent. Jordan's only natural resources are phosphate, potash and limestone. Less than 5 per cent of its agricultural land is arable, and virtually all of its oil has to be imported. The Jordanian economy is heavily dependent on regional economic developments. Prior to the Gulf crisis, about 75 per cent of Jordan's exports of agricultural and manufactured products were marketed in neighbouring countries. Neighbouring Arab countries have traditionally provided employment for Jordanian labour, absorbing about 85 per cent of emigration from Jordan. In addition, official grant aid from the Arab oil producing countries accounted for 90 per cent of all foreign grants received by Jordan.

Rapid economic growth was recorded during the 1970s and the early part of the 1980s, as the regional oil boom increased the demand for Jordan's exports and created employment opportunities for skilled labour, with which Jordan is relatively well endowed. Encouraged by a relatively open and liberal exchange and trade system, and by the rapid increase in remittance inflows, private sector investment increased significantly. In addition, substantial grants and loans from neighbouring countries financed a major programme of government investment in social services and economic infrastructure while providing support for the budget and balance of payments.

The rapid fall in the price of oil in 1982 and the subsequent slow down in regional economies resulted in reduced inflows of official aid and workers' remittances and lower demand for Jordan's exports. Between 1982 and 1989, there

was a 30 per cent reduction in grant aid, which had traditionally financed about 30 per cent of Jordan's imports and amounted to about 80 per cent of domestic tax and non-tax government revenues. These developments contributed to a slow down in domestic economic activity and raised unemployment, while at the same time putting a severe strain on the government's budgetary operations and the balance of payments.

The government's response during the 1980s to the deteriorating economic environment was designed to maintain the momentum of economic activity through a combination of expansionary financial policies and support measures given to the agricultural and industrial sectors. In the area of public finances, expenditures increased more rapidly than revenue; and the budget deficit widened substantially. The growing budget deficits were financed largely by external borrowing contracted on non-concessional terms, which quickly led to external indebtedness. The government also borrowed heavily from the domestic banking system which led to a rapid growth in liquidity and put pressure on the exchange rate and prices.

In the agricultural sector, a system of production licensing was introduced to reduce the output of crops which faced marketing difficulties abroad, and in addition production was supported by highly subsidised inputs, with self-sufficiency in cereals being encouraged by offering high purchasing prices to producers. In the industrial sector, import tariffs were increased and bans on competitive imports were introduced to protect domestic producers from declining demand. Tax concessions and other incentives were offered to private investors, and efforts were made to form bilateral trade agreements with neighbouring countries, as a means of expanding trade.

The policy stance adopted by the government in response to the post-1982 recession led to growing macroeconomic difficulties. While the nominal exchange rate was maintained through external borrowing and a drawdown on reserves, the

real exchange rate appreciated, eroding the international competitiveness of Jordan's exports of goods and services. By 1988, each of the major macro indicators was under stress: real GDP contracted, inflationary pressure increased, the budget deficit excluding grants rose to almost 25 per cent of GDP, the balance of payments showed a large deficit, and the official exchange rate was under considerable pressure.

In 1988 the government embarked on a comprehensive adjustment effort supported by a IMF standby and World Bank adjustment program, with the aim of correcting the external and internal imbalances within the economy. Discretionary fiscal measures aimed at raising revenue and limiting expenditure resulted in a decline in the budget deficit, excluding grants, to 19 per cent in 1989. The increase in prices associated with the government's programme led to social disturbance in April 1989 and to the fall of the government in May 1989. The new government, nevertheless, indicated its commitment to the reform programme and maintained the pace of the reforms. Monetary policy was tightened and interest rate ceilings were gradually removed. The Jordan dinar was floated and depreciated in real effective terms by 21 per cent in 1988 and by 7 per cent in 1989. The improvement in external competitiveness contributed to an improved export performance. Additional broad-based structural changes were introduced in the area of tariff reform, investment licencing and export promotion policies.

Adjustment policies were continued in 1990 with measures being implemented to reduce the budget deficit, contain credit expansion, and enhance external competitiveness. The structural reform measures adopted in late 1989, coupled with renewed confidence, were expected to facilitate an increase in private sector investment. However, the prospects for economic recovery and full progress in 1990 were disrupted by the outbreak of the Gulf crisis in August 1990.

The Gulf crisis put the Jordanian economy under severe strain. IMF estimates suggest that in 1990 the financial cost of the crisis to Jordan was of the order of US$ 1.2 billion, equivalent to about 30 per cent of GDP. The economy declined by about 8 per cent during 1990, and this decline was accompanied by a deterioration in the budget and the balance of payments. Export markets in neighbouring countries was lost, remittances from Jordanian workers and income from tourism fell dramatically. The pressure for government expenditure increased as returnees required increased outlays on education and health. In addition to the direct budget and balance of payments impacts, the crisis also had a substantial adverse impact on savings, investment and output. Private consumption expenditures rose as a result of the return of some 250,000 persons, representing an additional 8 per cent of the population. Private investment fell sharply due to uncertainties. Manufacturing production declined as exports to neighbouring Arab markets were blocked. Transit transportation activity, which relies heavily on the trucking of goods to neighbouring countries, was severely affected. Unemployment rose to about 25 per cent of the labour force.

At the same time, several factors mitigated the effect of the crisis. There was a high level of aid inflows in 1990. Disbursements of grants and loans from the Gulf Crisis Financial Coordination Group amounted to about US$ 345 million in 1990, of which about a third was in grants. London and Paris Club rescheduling agreements allowed for part of Jordan's bilateral debt to be rescheduled during 1990. There was an unusually high inflow of remittances as a result of financial savings brought back by returning workers. The high level of foreign receipts enabled the country to finance a high level of imports caused by large stockpiling by government and the private sector as well as allowing the Central Bank to increase its foreign exchange reserves.

To a large extent the immediate prospects for the Jordanian economy depend on the normalisation of economic relations within the region. While the resolution of the Gulf crisis has removed some of the obstacles of the external trade and financial relations of Jordan, much will depend on whether and when Jordan is able to regain access to regional markets for its exports of goods and labour. Favourable developments in the region could present Jordan with potential opportunities for recovery and growth, for example, a resumption of growth in Lebanon or Syria could result in demand for Jordanian manufactures. When the reconstruction of the Iraqi economy begins, Jordan is well placed to become a major supplier of construction and maintenance services. But, in the longer-term, the prospects for sustained growth require a diversification of the country's export markets and a reduction in the current heavy dependence on the regional economy.

The recovery and expansion of the economy will involve the implementation by Jordan of a comprehensive, growth oriented adjustment program. Given the financial constraints facing the government, this growth will depend heavily on the private sector. The principal aim of the adjustment programme, therefore, should be to create an 'enabling environment' for business which permits enterprises to operate within a manageable and comprehensive institutional and regulatory system, and with a supportive macroeconomic and incentive framework.

III. THE DEVELOPMENT AND STRUCTURE OF THE INDUSTRIAL SECTOR

The industrial sector, covering mining and manufacturing, accounted for about 15 per cent of GDP during to the 1985-89 period. The mining sector which consists principally of phosphate and potash products, contributed 4 per cent of GDP, and manufacturing accounted for 11 per cent. The manufacturing and mining sectors together generate about 10 per cent of total employment, with approximately 85 per cent being in the relatively more labour intensive manufacturing sector.

Industry as a whole grew by 1.1 per cent per annum over the period 1983-86, although the manufacturing sector recorded a negative annual growth rate of -1.5 per cent. The Central Bank index of industrial production shows an increase of 9 per cent in 1987, mainly due to higher output of potash, phosphate, fertiliser and cement. But in 1988 industrial production declined by 8 per cent, due to setbacks in production of phosphate and cement. Industrial production recovered in 1989, with a 5 per cent increase.

The Jordanian manufacturing sector is characterised by dualism in which the large scale, relatively capital intensive industries coexist with the relatively simple small and medium scale industries. The former category includes fertiliser, cement, pharmaceuticals and petroleum products. Most of the firms in these industries are joint venture projects between the government and private sector. Other important manufacturing outputs - processed foods, chemicals, textiles, garments, footwear, furniture and various engineering and building materials - are produced in a large number of small and medium sized establishments. These establishments tend to be relatively labour intensive, using simple production technology. For example, rubber products are mainly tyre - retreading and water hoses; basic metal products refers to goldsmiths and small metal workshops, and food manufacturing consists of

small bakeries and fruit processing plants. There appear to be few linkages between the large natural resource based industries and local manufactures of spare parts and other parts needed for periodic maintenance. The engineering subsector, for example, is largely geared to supplying the needs of the construction sector. Although a significant part of the manufacturing sector consists of small enterprises employing less than five people, their contribution to output and employment is small.

Jordan's main merchandise exports are minerals and mineral - related products (phosphates, fertilisers and potash), agricultural commodities and a wide range of manufactured goods. Over the 1985-89 period, the mining sector accounted for about 45 per cent of exports and manufacturing for 30 per cent. Domestic exports (total exports net of re-exports) increased at an average annual growth rate of about 10 per cent between 1985 and 1989, primarily reflecting the expanding mineral exports and the significant increase in exports of chemicals. Until 1989, exports of foodstuffs and manufactures were largely unchanged due to increased competition from other suppliers and the downturn of economic activity in the region. However, with the improved external competitiveness after late 1988, non-mineral manufactured exports increased substantially in 1989. Pharmaceuticals, textiles, food processing, furniture and ceramics all recorded increased exports in the period following the devaluation of the Jordan dinar.

The manufacturing sector continued to expand in the first half of 1990, but with 75 per cent of manufactured exports going to the regional market, the Gulf crisis had an immediate and severe effect on the sector. As a result, the real value added in the manufacturing sector is estimated to have declined by 9 per cent in 1990.

Increasing the share of the industrial sector has been a consistent objective of the government's successive Five Year Plans. In the 1970s import substituting

industrialisation was encouraged by offering the manufacturing sector protection by means of a combination of low tariffs on inputs and high tariff on outputs. With the economic turn down in the mid-1980s further import restrictions and high tariff rates were imposed on some consumer goods while tariff rates were lowered on raw materials and intermediate inputs. In August 1988 many of the quantitative restrictions were removed and replaced by tariffs. The Encouragement of Investment Law of 1987 provided incentives for selected investment projects through exemptions from profits tax and import duties and liberal provisions for the repatriation of profits. Subsequent amendments to the Law in 1988 unified the exemption period from taxes for all projects at five years and included provisions for the carry over of losses after the exemption period. In June 1990, the government waived export licencing requirements for a number of industrial products which together account for about 80 per cent of manufacturing exports.

IV. THE DEVELOPMENT OF INDUSTRIAL POLICY

The Objectives of Industrial Policy

Recent government announcements have reiterated the commitment to a strategy of economic restructuring in which the manufacturing sector will play a key role. Prospects for expanding the production of Jordan's natural resources-based industries such as potash and phosphate are more limited than in the past. Thus, the small and medium scale industries will have to become the engine of growth for the industrial sector.

The proposed work programme for the project will have two related aims. The first will be to identify and elaborate the key aspects of an enabling environment which will allow the industrial sector and in particular private manufacturing, to assume the role of the key growth sector in Jordan's future economic development. The second aim will be to isolate the areas in which reform of the existing policy framework is needed if the enabling environment criteria are to be met.

An enabling environment can be defined as one that permits business to operate within a manageable and comprehensible institutional and regulatory system, and with a supportive macroeconomic and incentive framework. More precisely, the business environment can be defined *inter alia* by: (i) the nature of the price system - the exchange rate, interest rate, wage rates, and input and output price determination; (ii) the trade policy regime - import and export tariffs, subsidies, trade-related goods taxes, and quantitative restrictions including licencing regulations etc; (iii) the corporate tax system and the system of fiscal incentives; (iv) the financial system - its lending regulations, supervision, capacity to provide industrial finance, and system of monetary incentives; the role of the state's ownership policy for industrial assets; (vi) corporate and labour law and its

enforcement, particularly as regards entry and exit regulations for industry; (vii) the institutional and economic infrastructure (promotion and technical services, power, transport etc.)

The notion that the central issue of industrial strategy should be the creation of an enabling environment is very different to the concept of state-led industrial development which was widely adopted in developing countries during the 1960s and 1970s. To support the state-sponsored industrialization strategy it was necessary to develop an investment and production planning system, often on a five-year basis, and a trade protection and internal regulatory system which would allow import-substitution industrial activities to grow. The formulation of an incentive system for private business was of secondary importance and the international competitiveness of local industry was subordinated to the principal concern of selecting priority industries and setting up production plants. The experience of the past two decades has shown that the state planning import-substitution industrialisation strategy has typically resulted in economically inefficient enterprises, which are often unprofitable without sustained protection, and make little net foreign exchange savings.

The ultimate objective behind the creation of an enabling environment is the improvement in the welfare of the citizens of Jordan. Thus, in the medium term, one expects the reformed policy framework to contribute significantly to improved economic performance. This will be achieved by improving the competitiveness and efficiency of industry and trade. The shift towards an enabling environment for business allows this to happen, by improving the incentive structure for exports and efficient import substitution and by strengthening institutions in support of industry and trade.

Recent Policy Reforms

Most of the main elements in the policy reform framework described above have been discussed in one form or another in various reports concerned with economic adjustment and industrial and trade development in Jordan. The government has indicated its general acceptance of the desirability of implementing the various policy reforms needed to establish an enabling environment. Indeed, a process of policy reform in industry and trade was initiated in August 1988, when the Government announced a number of measures to improve the operating environment for industry. In summary, since then it has:

- abolished the investment licencing system;
- established a special unit in the Ministry of Industry and Trade to help Jordanian and foreign investors set up enterprises with Jordan;
- announced a policy that all requests for investment incentives would be processed in less than one month;
- allowed trading companies all the incentives and duty exemption granted to manufacturers (exporters);
- replaced import bans on most competitive imports with tariffs, and simultaneously abolished all price controls on domestically produced items that were protected by import bans (import bans on selected luxury items not produced in Jordan were subsequently reintroduced);
- introduced a large number of tariff adjustments, involving increases in prevailing tariff for some imports as well as tariff reductions or exemptions for most other imports (August 1988).
- implemented the first phase of a tariff reform system, designed to create a more uniform and non-discriminatory structure of protection across different economic sectors. A number of tariffs were reduced, the minimum tariff

rate was raised to 5 per cent, and the maximum rate reduced to 60 per cent (November 1989).

- introduced a consumption tax and reduced import tariffs on selected basic imports (November 1991).

These industrial and trade sector reforms were supported by a change in exchange rate policy. The Jordan dinar was floated in October 1988, and the real effective exchange rate depreciated significantly (by 21 per cent in 1988 and 7 per cent in 1989), thereby improving the external competitiveness of exporters.

Jordan's adjustment programme was disrupted by the onset of the Gulf crisis in 1990, and the subsequent deterioration in the economic situation. The suspension of the policy reform process does present the government, however, with an opportunity to review the impact of the reform process that has so far been implemented and, where necessary, of altering the detailed content of the programme still to be implemented. The objective of the proposed work programme will be to assess the impact and effects of the measures implemented so far, and to identify the areas where the policy process requires further refinement.

V. A PROGRAMME FOR INDUSTRIAL POLICY DESIGN AND IMPLEMENTATION

Given the need to design an effective policy and regulatory framework, we must consider: (i) the nature of the changes in the structure of industrial and trade policies that have been implemented so far, and (ii) the areas in which further policy reform is needed.

Criteria for an Optimal Policy and Regulatory Environment

We can identify five key criteria for assessing the efficiency of the recent policy reforms: greater simplicity; greater consistency; greater transparency; greater certainty; and greater coordination and sequencing.

Greater simplicity:

As and when government intervention takes place, it ought, as far as possible, to be simple rather than complex. The purpose of intervention should be to facilitate rather than frustrate decision making in the business sector. Simplicity is conducive to this end. This objective is best served by relying on as few instruments of intervention as possible and by relying on well established rules rather than discretionary intervention. For example, in practical terms this means relying on tariffs to a greater extent than quantitative restrictions and avoiding the proliferation of a large number of tariff rates.

Greater consistency :

Consistency in the impact of intervention across sectors, for example in the levels of protection, is vitally important in minimizing resource misallocation inefficiencies. Competing activities should be subject to the same import duties, taxes or subsidies.

Greater transparency :

Transparency is related to simplicity and refers to the ease with which actual and potential investors can "see through" the implications of commercial policies. For example, the potential effects of a change in an import tariff are, other things being equal, relatively easy to identify, but the same cannot be said of import licencing restrictions. This creates uncertainty which is a strong disincentive to investment. Greater transparency is likely to be achieved by relying to a greater extent on policy instruments which operate through price rather than quantity.

Greater Certainty :

Industrial and trade policies should minimise rather than create uncertainty. The creation of greater certainty in the business environment requires the establishment of open, well defined administrative procedures for addressing the needs and concerns of the business sector. Where such procedures are absent or poorly developed, individuals and interest groups inevitably attempt to influence policy though informal channels. This results in an environment conducive to corruption, in appearance if not in actual fact, thereby undermining efforts directed at achieving meaningful reform.

Greater coordination and sequencing :

There is now a sizeable body of evidence on the most effective ways in which to introduce policy reforms, based on the experience of developing countries that have been undergoing similar reform programmes during the past decade. Two related lessons can be learnt from the experience. First, it is important to consider the impact that a particular policy reform may have on the rest of the economic process. A failure to anticipate inter-sectoral effects and possible trade-offs in objectives, may place the whole policy reform process in jeopardy. The implication of tariff reform for the government's budget is one well-documented example. A

major programme of tariff reduction may result in a significant fall, in the short term at least, in government revenue, thereby worsening the budget deficit and macro balance. Consideration needs to be given therefore, to alternative sources of government revenue which will compensate for the loss of import tariff receipts. Second, the timing or sequencing, of the reform measures requires careful examination. Business enterprises cannot adjust instantaneously to a sudden policy change: if the policy change is a large one, the enterprise may be unable to adjust sufficiently rapidly, and may be forced out of business. For example, firms may need time to adjust to increased competition from imports by adopting more efficient production practices; if the domestic market is fully opened to foreign imports, the domestic manufacturing sector may suffer a major contraction in production and employment.

The Current Business Environment

An effort was made during the course of the present mission to form a preliminary view of the current state of opinion on the post-1988 reform period. Interviews with the private business sector, government sector and international agencies, were conducted with the objective of eliciting the opinion of those interviewed on the impact and repercussions of the policy changes so far introduced, and the areas in which they believed further reform was needed, (details of the interviews conducted are given in Annex II).

Those interviewed were generally supportive of the government's commitment to a programme of industrial policy reform. as part of an overall strategy aimed at increasing output and the economic efficiency of industry in Jordan. There was general agreement that the private manufacturing sector should play a central part in the industrial growth process, and that the creation of an

enabling business environment was essential if manufacturing was to act as a lead sector in Jordan's medium term economic recovery.

A number of concerns were expressed, however, about the effects of the policy changes introduced since 1988, and various factors were identified as important constraints which continue to inhibit the manufacturing sector's recovery and growth. There was a high degree of unanimity among interviewees on two key problem areas. We discuss each of these in turn.

Tariff Reform

The changes in tariff and trade policy introduced since 1988 were summarised above. Our preliminary investigations indicate that the effects of these changes have not complied fully with the criteria for efficient policy reform discussed in detail in the preceding section.

Simplicity: the structure of trade restraints continues to rely on a range of different measures, involving tariffs, licences, import deposit scheme, complex customs clearance procedures. For example, private sector sources estimate that zero-tariff imports incur additional charges amounting to 21 per cent of the c.i.f. value.

Consistency: consistency in the impact of intervention is important for minimising the allocative inefficiency of the protection structure. This requires a low level of dispersion in the levels of effective protection. Other things being equal, the wider the range in nominal tariffs, the wider will be the range in effective rates of protection. This would argue for a narrowing of the range of tariff rates on both intermediate and final goods. The present tariff reforms do not appear to have achieved this objective. There is still wide variation in the nominal tariff rates, and thus in the level of effective protection given to different activities. There appears to be a degree of de-escalation of tariff levels, by stage of production, with lower rates on semi-manufactured inputs than on unprocessed raw inputs. The range of

effective protection levels will create unanticipated distortions in production decisions. To give one unconfirmed example cited by an interviewee, inputs for manufacture of refrigeration equipment are subject to import duty, while imports of refrigeration equipment are free of import duty.

Transparency: there are elements of the trade regulatory framework which make it difficult for investors to 'see through' the implication of commercial policies. A significant proportion of imports coming into Jordan are exempted from tariffs. The effect is to create different retail prices for the same good for different consumers, without any economic rationale, and this places domestic producers of goods imported tariff free at a disadvantage vis-a-vis imports.

Certainty: there is a need to establish open and well defined channels for addressing the needs and concerns of investors that inevitably occur during a period of transition. The recently introduced consumption tax (November 1991) has created considerable uncertainty among the business community, who perceive the measure to be poorly designed, without economic rationale, and costly to enforce.

Coordination and Sequencing: a major consideration in the field of tariff reform is the repercussions of a lowering of tariffs on the public finances. Careful consideration needs to be given to the trade-off between improvements in industrial efficiency and performance, and the economic costs incurred through a widening of the fiscal deficit. Our impression is that this aspect of the tariff reform policy in Jordan has not been fully considered. If our judgement is correct, a continued failure to address the issue is likely to jeopardise the credibility of the policy reform process.

The perceived weaknesses in the trade policy reform process have been discussed at some length because we believe that this is the single most important dimension of the existing business environment where further policy changes are needed.

Export Diversification and Promotion

There is general agreement on the need to diversify Jordan's exports, by widening the range of exported commodities and by developing new external markets. UNDP-funded studies have identified alternative institutional arrangements for the promotion of industrial exports through the restructuring of the Jordan Commercial Centres Corporation into the lead institution for identifying and developing new export activities and markets. A series of technical marketing studies have been prepared on various products. Much less attention appears to have been given however to the use of fiscal and financial policies to create a structure of price incentives that encourages export expansion and diversification.

The current approach to export diversification and promotion in Jordan can be characterised as a continuation of the state-led, planning approach to trade promotion, which perpetuates the separation between public and private sectors. The experience of the export success story countries of East and South East Asia reveals two key factors in their success. First, the close symbiotic relationship between the private and government sectors, with a high degree of cooperation and mutual understanding in the common objective of developing new export markets. Second, the reliance placed on the use of government policy to establish a particular set of prices, which acted as a signal to the business community, rather than the use of discretionary regulatory measures.

Further consideration needs to be given, therefore, to shifting the forms of export promotion from a state-led, ministry-based approach to a more incentive based system, based on a closer working relation between government and the private sector.

VI. PROPOSED WORK PLAN AND SCHEDULE

1. Proposed Approach

The preceding sections of this report have sought to establish the need to formulate an industry policy framework, which will create an enabling business environment consistent with the developmental potential and aspirations in Jordan.

As a pre-requisite to the formulation of such a strategic policy framework, it is necessary to:

- Undertake a comprehensive review of the effects of the existing policy matrix on the structure, performance and growth of the industrial sector. In particular, an examination of the impact on the industrial sector of recent post-1988, changes including those the area of trade policy, is required.
- Identify suitable modification and refinements of the existing tariff structure, giving due consideration both to the revenue implications of tariff reform, and to their impact on the performance of major industrial sub-sectors.
- Identify suitable modifications and refinements to the existing policies and initiatives for export diversification and promotion.
- Identify any additional non-trade areas where policy reform is needed in order to achieve the basic objective of rapid industrialisation.

The output from these activities would provide the informational basis for the formulation of the industrial policy programme.

2. Proposed Activities and Outputs

2.1 Study of the impact of the existing policy matrix on the structure, performance and growth of the industrial sector.

Output

2.1.1 review of existing structure of trade regime; to include sectoral level estimates of nominal and effective protection, and other non tariff measures.

2.1.2 assessment of the impact of tariff reforms on industrial sector based on sample survey of manufacturing firms. An attempt will be made to include the firms surveyed in 1986 by the World Bank's Small and Medium Industries Report, to allow comparison to be made of the change in domestic resource cost (DRC) ratios between the pre-and post 1988 reform periods.

2.2 Study on the refinement of the tariff structure, including methodology for determination of the appropriate level of tariffs, considering the implications of any proposed changes for the economic performance of the manufacturing sector and the government's tax revenue needs.

Output

2.2.1 review of the implementation of tariff reform programmes in other developing countries with particular attention to be given to tax revenue implications.

2.2.2 design of an appropriate tariff structure for Jordan and identification of the necessary modifications and refinements to the existing structure.

2.3 Study on export diversification and promotion.

Output

2.3.1 comparative study of successful export diversification and promotion policies adopted in a sample of export-oriented newly

industrialising countries, with the objective of identifying the key institutional structures and policy instruments used in the promotion of manufactured exports. The study to include an assessment of the feasibility of implementing these keys policy measures and institutional structures in Jordan.

2.4 Study of other, non-trade constraints on the growth of the industrial sector in Jordan.

Output

2.4.1 study to identify existing constraints on industrial sector development, to include, licencing system, incentives for domestic and foreign investment, barriers to industrial entry and exit, raticnalisation of institutional and administrative responsibilities for industrial sector support.

3. Work Schedule

The proposed work plan will be carried out by the UNIDO National Expert (Industrial Planner) (NE) and the UNIDO Consultant Adviser (Industrial Policy and Strategy) (CA). It will be the responsibility of the Adviser to guide the National Expert in the latter's tasks of collecting, analysing and compiling the information and data required for effectively completing the above listed studies.

	Study/Output	Timing	Staff Input (WW)	
			NE	CA[1]
2.1.1	Review of trade policy and levels of protection	mid-December to end January 1992	6	1
2.1.2	Assessment of impact of trade policy reforms on manufacturing sector based on sample survey of manufacturing firms and estimates of DRCs	February - mid April 1992	10	5
2.2.1	Comparative study of experience with trade policy reform and of implications for tax receipts and alternative forms of taxation	May-June 1992		4
2.2.2	Design of appropriate tariff structure for Jordan	July-September 1992	8	4
2.3.1	Comparative study of export promotion and diversification policies in newly industrialising countries and proposals for export promotion strategy for Jordan	September 1992		4
2.4.1	Study of non trade constraints on industrial sector in Jordan and recommendations for reform	mid-April end June	10	2

(1) 8 working weeks in Jordan, and 12 working weeks in UK. Three visits to Jordan: mid-March (2ww), July-August (4ww) and September - October (2ww).

4. Report Completion and Submission Schedule

Report No.	Submission Date
2.1.1	1 April 1992
2.1.2	15 May 1992
2.2.1	15 July 1992
2.2.2	1 October 1992
2.3.1	15 October 1992
2.4.1	15 October 1992

The proposed work and report completion schedules involve a collaborative working arrangement between the National Expert and Consultant Adviser, as detailed in the latter's Terms of Reference. To maintain close working relations during the duration of the project it will be necessary to make use of secretarial, telephone, fax and express delivery services. It is recommended that in budgeting for the Consultant Advisor's input to the project, provision of $1,000 should be made to meet communication expenses (evidence of expenditure to be provided by the consultant). It is also envisaged that studies 2.1.1. and 2.2.2 will involve the use of the World Bank's tariff analysis computer programme SINTIA. The cost (estimated approximately $300) should be included in project budget.

ANNEX I

DP/JOR/87/009/11-89/12413

JOB DESCRIPTION

Post Title	Advisor on Industrial Policy and Strategy
Duration	10 days (Initial mission, as part of two split mission).
Date required	2 December 1991
Duty station	Amman, Jordan
Purpose of project	The purpose of the main project of which the above post is a part is to strengthen the technical and institutional capability of the Ministry of Industry and Trade for carrying out the tasks of industrial planning, policy formulation implementation and monitoring at sectoral and sub-sectoral levels within the framework of the country's current and forthcoming Five Year Plans.
Duties	The adviser will be attached to the Directorate of Planning of the Ministry of Industry and Trade and work under the overall direction of the Director of the Directorate and in consultation with the national Coordinator of the project and the UNIDO Industrial Planner. The adviser is expected to advise and assist in examining the effects of existing industrial strategy, policies and policy instruments on the structure, pace and pattern and quality of industrial development in the country and suggest new, or changes in existing industrial strategy, policies and policy instruments to facilitate industrial development and promotion in keeping with the changing needs, priority and trends within the country and outside, particularly in the export market. During the present phase of his mission, he is expected to prepare a detailed work plan, framework and modality of completing the above tasks, and guide the national expert in the latter's tasks of collecting, analysing and compiling information and data required for effectively completing the above study and analysis. The adviser is also required to produce a comprehensive report setting out the findings of his mission together with his recommendations.
Qualification	Advance university degree in economics with extensive practical professional experience in formulating and implementing industrial plan, strategy and policies.
Language	English

ANNEX II: SCHEDULE OF INTERVIEWS

SATURDAY 7 DECEMBER 1991

9.00	Mr. Khalil Elaian Abdelrahim
9.30	Mrs. Tamam El-Ghul

SUNDAY 8 DECEMBER 1991

8.30	Dr. Montaser J. Oklah Programming Dept. UNDP
9.15	Dr. Sha'lan Alayan Special Assistant UN Economic and Social Commission for Western Asia
10.15	Dr. Rima Khalaf Hunaidi General Manager Jordan Commercial Centres Corporation
12.00	Dr. Moh'd S. Halaiqah Director General Amman Chamber of Industry

MONDAY 9 DECEMBER

9.30	H.E. Dr. Abdullah Nsour Minister for Industry and Trade
12.00	Dr. Tayseer Abdel Jaber Under-Secretary General United Nations Economic and Social Commission for West Asia (ESCWA)
12.30	Dr. Najim Kassab Regional Adviser UNIDO - ESCWA
	Mr. Akram Karmoul Head, Industrial Sector, UN - ESCWA

13.00 Mr. Nabil Al-Khatib
Regional Trade Adviser
UN Economic and Social Committee for West Asia

TUESDAY 10 DECEMBER

9.00 Dr. Abdulhadi Alawin
Director General of Statistics
Department of Statistics

10.00 Dr. Nathim Al-Abdullah
Tariff Department
Ministry of Finance

12.00 Dr. Mohamad S. Amerah
Division Chief - Economic and Social Studies Division
Royal Scientific Society

WEDNESDAY 11 DECEMBER

9.00 Mr. Ayad Qudat
Economic Adviser
Prime Minister's Office

11.00 H. E. Dr. Safwan Togan
Secretary General
Minister of Planning

Mr. Mustafa Zahran
Director, Projects Department
Ministry of Planning

Dr. Nabil Amari
Director of Research Department
Ministry of Planning

Mr. Yousef Butshoon
Director of International Cooperation Dept.
Ministry of Planning

14.00 H. E. Mr. Mohammad Al-Gamal
Director,
Customs Department

THURSDAY 12 DECEMBER

13.00 Dr. Jamal M. Salah Adib Hadad
Head, Research Department
Central Bank of Jordan

14.00 Mr. Ali Al-Madadha
Office of the Minister
Ministry of Finance

15.00 Mr. Rafik Shukor
Resident Representative
UNDP

Name and Address of Company:

Name and Telephone Number of Person Responsible for completion of this Questionnaire:

Company Details:

1. Year production began:

2. Main activities:

3. Type of ownership:

private (%) public (%)

4. Ownership by nationality

local (%) foreign (%)