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INDUSTRIAL DEVELOPMENT REVIEW SERIES

PAKISTAN

Prepared by the
Regional and Country Studies Branch
Division for Industrial Studies

Preface

Within the framework of UNIDO country surveys and studies, a series of industrial development reviews on developing countries is prepared by the Regional and Country Studies Branch of the Division for Industrial Studies.

The reviews provide a general survey and brief analysis of each country's industrial development, both as a service to those within UNIDO and other international agencies concerned with industrial policy, planning, project development and implementation, and as a ready source of information for Governments. It is hoped that the reviews will prove useful as well to financial and industrial enterprises, both public and private, to research institutes and to aid agencies in developed countries. The reviews also aim at providing a basis for undertaking in-depth studies of specific aspects of industrial policies, strategies and programmes in the developing countries and at providing a basis for informed discussion and analyses of industrial development trends and policies.

The reviews draw on information provided by the UNIDO data base, material available from national and international statistical publications, and other sources. While up-to-date national statistics are not always available on every aspect of industrial development, the reviews will be updated periodically and efforts are being made to improve the UNIDO data base and to monitor industrial progress and changes in industrial policy on a regular basis.

The present review was prepared in early 1985 on the basis of information available at UNIDO headquarters. It is divided into two rather distinct parts. Chapters 1 and 2 are analytical in character, giving first a brief overview of the country's economy and its manufacturing sector and then a more detailed review of the structure and development of its manufacturing industries. Chapters 3 and 4 contain various kinds of reference material - which it is hoped will be useful to readers - on national plans and policy statements relevant to industrial development, on the country's natural,

human and financial resources for industrial development and on the more important governmental and other institutions involved in industrial development. It also contains relevant basic indicators, graphical presentation of manufacturing trends as well as statistical Annex.

It should be noted that the reviews are not official statements of intention or policy by Governments or by UNIDO, nor do they represent an official assessment by UNIDO of industrial development in the countries concerned. Readers are invited to comment on the findings and analyses of the reviews, and thereby assist UNIDO in improving and updating the reviews.

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EXPLANATORY NOTES

Regional classifications, industrial classifications, trade classifications and symbols used in the statistical tables of this report, unless otherwise indicated, follow those adopted in the United Nations Statistical Yearbook.

Dates divided by a slash (1970/71) indicate a crop year or a financial year. Dates divided by a hyphen (1970-71) indicate the full period, including the beginning and end years. References to dollars ($) are to United States dollars, unless otherwise stated.

In tables:

Three dots (...) indicate that data are not available or are not separately reported;
A dash (-) indicates that the amount is nil or negligible;
A blank indicates that the item is not applicable;
One dot (.) indicates that there is insufficient data from which to calculate the figure.

THIS REPORT IS BASED UPON INFORMATION AVAILABLE AS AT APRIL 1985.

The following abbreviations are used in this document:

ADBP	Agricultural Development Bank of Pakistan
ATDO	Appropriate Technology Development Organization
BIM	Board of Industrial Management
CDWP	Central Development Working Party
CIPC	Central Investment Promotion Committee
CTL	Central Testing Laboratories
DFI	Direct Foreign Investment
DRC	Domestic Resource Cost
EEC	European Economic Community
ECNEC	Executive Committee of the National Economic Council
EIU	Economist Intelligence Unit
EPZA	Export Processing Zone Authority
FBC	Federal Bank for Cooperatives
GDP	gross domestic product
GNP	gross national product
IACP	Investment Advisory Centre of Pakistan
IDBP	Industrial Development Bank of Pakistan
IEPR	Implicit Effective Protection Rate
ISIC	International Standard Industrial Classification
LIBOR	London Inter-Bank Offer Rate
LIDO	Leather Industry Development Organization
MVA	manufacturing value added
NDFC	National Development Finance Corporation
NWFP	North West Frontier Province
PCSIR	Pakistan Council of Science and Industrial Research
PICIC	Pakistan Industrial Credit and Investment Corporation
PITAC	Pakistan Industrial and Technical Assistance Centre
PPCB	Punjab Provincial Cooperative Bank
PR	Pakistani Rupees
PSI	Pakistan Standards Institution
PSIC	Punjab Small Industries Corporation
RCD	Regional Cooperation for Development
SARC	South Asian Regional Cooperation
SBP	State Bank of Pakistan
SIC	Provincial Small Industries Corporations
SITC	Standard International Trade Classification
TIRDC	Textile Industry Research & Development Centre
UAE	United Arab Emirates
UNIDO	United Nations Industrial Development Organization
UNDP	United Nations Development Programme

BASIC INDICATORS 1
The economy

GDP (1981):	$24,660 million
Population Number:	90.5 million (mid-1983)[a/]
Growth rate:	3.0 per cent (annual average 1970-82)
Labour force:	22.6 million (1981)
GNP per capita :	$380 (1982)

Average annual growth rate of GDP (per cent):

1960-70	1970-81	1982/83	1983/84
6.7	5.0	6.4	4.5

Structure of production[b/]

	1960	1982
	Percentage	
Agriculture	46	31
Industry	16	25
Manufacturing	12	17
Services	38	44

Average annual rate of inflation (per cent):

1960-70	1970-81	May 1984
3.3	12.7	6.8

Currency: (Pakistani Rupee equivalents to $1):

Prior to May 1972	Feb. 1973	Feb. 1981	Feb. 1982	Feb. 1983	Feb. 1985
4.76	9.90	9.90	10.55	12.75	15.80

a/ Estimate based on 1981 census figures.
b/ Sectoral shares weighted by GDP in current prices 1981.

BASIC INDICATORS 2
Resources and transport infrastructure

Resources	
Cash crops (leading products by volume):	Sugarcane, cotton, rapeseed and mustard, tobacco
Livestock (total numbers in million, 1983/84)[a]:	buffaloes (12.8), cattle (16.3), goats (28.7), sheep (24.2), poultry (79.0), donkeys (2.7)
Fisheries (total catch)[b]:	337,200 metric tons (1982)
Forests:	2.8 million hectares; 3.5 per cent of total area
Mining (leading products by volume):	dolomite, lime stone, magnesite, coal, sulphur
Energy production	
major source:	natural gas
share of total production:	62 per cent (1982)
share of total consumption:	39 per cent (1982)
Transport	
Roads :	97,519 km[c] (1983/84) (thereof 39,372 km high type)
Railways :	8,823 route km (1983/84)
Ports :	Karachi, Port Qasim (under construction)
Main Airports :	Karachi, Lahore, Hyderabad, Islamabad/Rawalpindi

a/ Estimates.
b/ Including subsistence catch.
c/ Including low type roads of District Council.

BASIC INDICATORS 3
Foreign trade and balance of payments

Exports:	total value:	$2,403 million (1982)
	main goods:	rice, cotton cloth, cotton yarn, readymade garments & hosiery, raw cotton, carpets and rugs, leather
	main destinations:	Iran, Japan, UAE, USA, Saudi Arabia, FRG, UK
Imports:	total value:	$5,396 million (1982)
	main goods:	petroleum and petroleum products, non-electrical machinery, edible oils, transport equipment, chemicals
	main origins:	Japan, Saudi Arabia, USA, Kuwait, UAE, UK, FRG
Balance of payments :		Current account deficit $811 million (1982)
Gross international reserves:		US $734 million (Dec.1984) or 6 weeks of import coverage
External public debt:	total:	$9,178 million (1982)
	percentage of GNP:	31.5 per cent (1982)
Debt service:		
	percentage of GNP:	1.8 per cent (1982)
	percentage of total exports:	9.2 per cent (1982)

BASIC INDICATORS 4
The manufacturing sector

Manufacturing value added:	$2,496 million (1981)[a/]	
MVA per capita:	$29.6 (1981)[a/]	
Employment in manufacturing:	3.730 million [b/] (1981/82)	
as percentage of total labour force:	17 per cent	
MVA per employee:	$669.2	
Structure of MVA: (Percentage share)	1973	1980/81
Mainly consumer goods	65.3	57.1
Mainly intermediate goods	25.8	34.1
Mainly capital goods	8.8	9.1
Trade in manufactures[c/]		
Total value - exports:	$1,359 million (1982)	
- imports:	$2,562 million (1982)	
Share of manufactures[c/]		
- in total exports:	57.9 per cent (1982)	
- in total imports:	49.0 per cent (1982)	

a/ In constant 1975 US $.
b/ Calculated by applying the ratios of the 1978/79 labour force survey to the estimated population (projected from the 1981 population census).
c/ SITC 5 to 8 less 68.

BASIC INDICATORS 5
Trade in manufactured goods

In 1982

MANUFACTURED EXPORTS[a] total value: $1,359 million

Principal manufactured exports (per cent of total)		Destination (in per cent)					
		Developing Countries	Developed Market Countries				Centrally Planned Developed Countries
			Total	USA	EEC	Japan	
Textile yarn, fabrics, made-up articles	(68.2)	48.00	45.51	7.80	20.14	10.44	6.05
Clothing	(10.6)	23.16	60.69	18.99	33.50	0.69	16.09
Leather manufactured n.e.s. and dressed fur skins	(7.7)	11.27	81.13	1.42	44.10	14.30	7.56
Professional, scientific and controll. instruments	(1.7)	16.32	78.75	33.22	36.25	1.15	4.55
Transport equipment	(1.7)	95.64	4.36	4.25	0.11	0.00	0.00

MANUFACTURED IMPORTS[a] total value: $2,562 million

Principal manufactured imports (per cent of total)		Origin (in per cent)					
		Developing Countries	Developed Market Countries				Centrally Planned Developed Countries
			Total	USA	EEC	Japan	
Machinery, other than electrical	(24.2)	7.70	87.41	10.77	54.63	14.65	4.20
Transport equipment	(13.3)	6.44	91.09	6.37	19.06	60.10	2.09
Electrical machinery, apparatus and appliances	(9.8)	10.23	84.93	13.44	37.20	26.57	3.64
Iron and steel	(9.1)	11.53	84.31	7.38	29.15	27.17	4.10
Textile yarn, fabrics made-up articles	(6.9)	32.79	51.48	1.30	14.82	33.01	1.17

a/ SITC 5 to 8 less 68.

BASIC INDICATORS 6

Inter-country comparison of selected indicators

	Unit	Bangladesh	India	Nepal	Pakistan	Sri Lanka
I. Demographic indicators						
Population (1982)	millions	92.9	717.0	15.4	87.1	15.2
Population growth (1970-82)	per cent per annum	2.6	2.3	2.6	3.0	1.7
Infant mortality (1982)	per 1000	133	94	145	121	32
Area	'000 Km^2	144	3,288	141	804	66
Density (1982)	persons per km^2	645	218	109	108	230
II. Economic indicators						
GDP (1981)	$ billion	10.9	150.8	1.0	24.7	4.4
GDP (1981) per capita	$	122	160	114	217	350
GDP growth (1970-81)	per cent per annum	4.1	3.6	2.7	5.0	4.5
Agriculture (1982)	per cent of GDP	47c/	33c/	...	31	27c/
Industry (1982)	per cent of GDP	14c/	26c/	...	25	27c/
Manufacturing (1982)	per cent of GDP	7c/	16c/	...	17	15c/
Services (1982)	per cent of GDP	39c/	41c/	...	44	46c/
Exports (goods) (1982)	per cent of GDP	8	6	11	10	27
Gross domestic investment (1982)	per cent of GDP	14	25	15	17	31
External public debt (1982)	per cent of GNP	38.6	11.4	11.6	31.5	41.8
III. Industrial indicators						
MVA (1981)	million $ at constant 1975 prices	1,290	16,190	...	2,496	714
Share of MVA in GDP (1981)	per cent	7	16	...	17	15
Growth of MVA (1970-81)	Average annual per cent	10.4	4.5	2.9	5.0	2.4
MVA share in world manufacturing value added (1981)	per cent	0.04	0.91	...	0.17	0.05
Share of manufactured exports in total exports (1982) a/	per cent	...	56.1b/	30.5b/	57.9	21.5c/

a/ SITC 5-8 less (67 + 68). b/ 1980. c/ 1981.

EXECUTIVE SUMMARY

With a GNP per capita of about US $380 (1982), Pakistan is among the countries at the top end of the World Bank category of low-income developing countries. Over the last five years the country has maintained an annual GDP growth rate of over 5 per cent. Agriculture provides a third of GDP while Pakistan's manufacturing sector accounts for roughly 17-18 per cent of GDP and provides employment for some 14-15 per cent of the labour force. The real growth rate of manufacturing stood at 7.7 per cent in 1983/84 (as compared to a GDP growth rate of 4.5 per cent) after having reached an exceptionally high rate of above 10 per cent in the early eighties. The dominant branches, both in terms of value-added and of employment shares, are textiles and food products; among the fastest growing branches have in the recent past been petroleum refineries as well as iron and steel.

During the seventies manufacturing production has become more capital intensive in overall terms. Although many industry groups must still be regarded as inefficient according to the domestic resource cost criterion, effective protection has decreased considerably to an average of 60 per cent in 1980/81. The private sector's share in total manufacturing capital formation has gone up sharply in 1983/84 and has, for the first time since 1974/75, again surpassed the public sector's investment share. Among the major policy issues to be addressed in the future are the extremely strong regional imbalances in the dispersal of industry, with 95 per cent of all manufacturing units being located in Punjab and Sind (mainly Karachi).

The Government pursues a policy approach aimed at deregulating industrial activities and of assigning a leading role in development to the private industrial sector. To this end, measures have been taken to streamline the investment sanctioning process, to facilitate the transfer of technology from abroad and to increasingly liberalize imports. A further policy change affecting the framework and terms of industrial financing is the islamization process of Pakistan's banking system which is to be completed in July 1985.

In 1983/84 the economy of Pakistan has encountered a number of particularly difficult developments such as a poor crop resulting in a reduction of agricultural output, unexpectedly low export growth, reduced home remittances of emigrant workers and accelerated inflation. Thus, the Government in November 1984 had to announce a downscaling of the current Five-year Plan and the introduction of a revised three-year rolling Plan to take effect from July 1985.

The current Sixth Five-year Plan (1983-88) accords highest priority within the industrial sector to the steel-based engineering goods industries. Industrial investment is further planned to concentrate on agro-based processing industries (oriented in particular towards export markets), on the production of agricultural inputs and on mineral-based projects on the basis of already discovered natural resources.

In regard to the resource base major constraints can be identified above all in the field of energy. Pakistan is an energy-deficit country with a degree of self-sufficiency of roughly three quarters. In order to remove the negative effects of persistent energy shortages on industrial production, the current Five-year Plan has given the top-most priority to the energy sector.

1. THE ECONOMY OF PAKISTAN

1.1 Recent economic trends

In 1983/84, the real growth of Pakistan's GDP was considerably lower than in previous years.[1/] Whereas in the period of the Fifth Five-year Plan (1978/79-1982/83) real GDP grew at an annual average rate of 6.4 per cent, it decreased to 4.5 per cent in 1983/84 falling well behind the targeted 6.5 per cent growth for the first fiscal year of the current Plan period.

1983/84 was the first year of the Sixth Five-year Plan (1983/84-1987/88) in which ambitious development objectives have been formulated. With the energy sector receiving the top-most priority in sectoral allocation, total Plan outlay is expected to reach PRs 403 bn (in constant 1982/83 prices) implying a 49 per cent increase over the Fifth Plan's outlay.

In November 1984, the Government was forced to announce a downscaling of the Sixth Five-year Plan due to financial constraints which had resulted from the combining effects of the unexpectedly low export growth, the reduced remittances of emigrant workers and the accelerated inflation rate. A three-year rolling Plan was launched to take effect from July 1, 1985, which reduces Government spending from a planned level of PRs 210 billion to PRs 180 billion, i.e. by 14 per cent. The four provinces of the country have been asked by the Planning Commission to identify suitable projects which could be dropped in order to accommodate the new financial framework.

The recent shortfall in the economy's overall growth was mainly due to the disastrous crop in 1983/84 accounting for a 4.6 per cent reduction in agricultural output as compared to the sector's target growth rate of 4.9 per cent. Most crops were adversely affected both by bad weather conditions (autumn storms followed by winter drought) and insect infestation applying

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1/ Information based on data provided by the Government of Pakistan, Ministry of Industries.

in particular to cotton, the production of which declined by 39 per cent on the 1982/83 output reaching only 58 per cent of its target. A slight output reduction was also reported in the case of wheat, whereas rice and sugarcane could by and large maintain their output levels.

The annual real growth rate of MVA slowed down from 8.9 per cent in 1982/83 to 7.7 per cent in 1983/84[1/]. This was mainly due to a reduction in the growth rate of value added in large-scale industries (7 per cent in 1983/84) whereas value added in small-scale industries is estimated to have grown by 10 per cent. Output data indicate production gains above all in such items as vegetable ghee, refined sugar, cement, fertilizers, chemicals, paper board and chip board, safety matches, jute goods, cycle rubber tyres and tubes, cigarettes and mild steel products. Despite continuing energy shortages as well as rising prices for imported inputs the manufacturing sector was thus basically able to sustain its momentum in 1983/84 thereby partly offsetting the drastic shortfall in agricultural growth.

The same pattern can be observed as far as foreign trade is concerned. Taking the first 10 months of 1983/84, it emerges that although cotton exports registered a decline of 37 per cent, total exports increased by 16.7 per cent in dollar terms (23.1 per cent in rupee term) largely due to rapid growth of non-traditional manufactured exports, particularly chemical fertilizers and engineering products. Total exports in 1983/84 have eventually recorded an increase of 7.6 per cent in rupee terms (totalling around PRs 37 bn) which was, however, by far exceeded by import growth (which reached 12.6 per cent) resulting in a widening merchandise trade deficit of PRs 39.7 bn. As emigrant worker remittances declined in 1983/84 from their peak level of almost $3 bn (1982/83), the current account deficit has also risen quite substantially.

The inflation rate (as measured by the consumer price index) has recently experienced wide fluctuations. After the sharp reduction in 1982/83 (to only slightly above 3 per cent at the end of 1982) it again assumed an accelerating tendency, went up to 10.7 per cent in November 1983, only to decrease subsequently to 6.8 per cent in May 1984.

1/ Cf. State Bank of Pakistan, Bulletin, January 1985, p. ii.

Though the dependence of Pakistan's economy on external financial resources has continued to be high (due to the country's very low rate of domestic savings) the country is in the favourable position to rely almost exclusively on public or publicly guaranteed foreign debt. For 1984/85, the World Bank led Aid-to-Pakistan Consortium has made a commitment of $1,822 mn as compared with Pakistan's original request of $1,620 mn; this is the second time (after 1983/84) that a greater amount than requested (plus 12.5 per cent) has been committed to the country. On this basis, it does not seem unlikely that the Government's objective will materialize to have 80 per cent of its $10 bn foreign financing requirements under the Sixth Five-year Plan provided by the Consortium. Moreover, the 1984/85 assistance has been granted on favourable terms carrying an average interest rate of 4 per cent with a repayment period of 30 years including a grace period of 8 years.

Foreign aid inflows need to be supplemented by increased domestic efforts to sustain economic growth. The problems experienced during 1983/84 - decelerating growth rates and the re-emergence of double-digit inflation rates by the end of 1983 - reflect the need for redressing some important structural imbalances in the Pakistani economy. These are briefly discussed in the following section.

1.2 Economic structure

This section attempts to explain some selected macroeconomic aspects of economic structure, including the sectoral structure, the regional structure, domestic vs foreign market orientation and public or private sector involvement in the Pakistani economy. A more detailed analysis of the structure of the manufacturing sector will subsequently be presented in chapter 2.

With a GNP per capita of $380 (1982), Pakistan finds itself in the upper range of low-income developing countries. According to UNIDO data for 1981, the agricultural sector contributed 28.4 per cent to GDP. The industrial sector accounted for 27.2 per cent (manufacturing industries alone 18.4 per cent, construction 5.9 per cent, utilities 1.9 per cent, mining and quarrying 1.0 per cent) and services for 44.4 per cent. Sectoral real growth rates during the period 1970-81 reveal that the

agricultural sector had the lowest growth performance with 3.0 per cent (annual average) whereas construction experienced the highest annual increases of 8.9 per cent. The manufacturing sector's growth rate stood at 5.3 per cent resulting in an almost constant share of manufacturing in GDP during that period.

Both population and economic activity are very unevenly distributed in regional terms.[1/] Only scattered subsistence farming and cattle grazing as well as limited small-scale industrial activities are found in the North to North-Western mountain belt and in the arid Western part of the country whereas the main urban agglomeracions and industrial centres are concentrated in the fertile plain of the Indus River Basin spreading from the Northeast into the Arabian Sea. At the province level, this implies that the vast majority of manufacturing enterprises are located within Punjab and Sind which taken together account for some four fifths of Pakistan's population whereas manufacturing activities in Baluchistan are clearly negligible.

As it is the Sind province which produces almost half of all rice and more than one third of cotton (closely followed by Punjab) the regional disparities in economic activity are further increased by agricultural production.

The high and increasing regional disparities in economic development have led to massive internal migration from the countryside to the fast growing urban agglomerations as well as to workers' emigration to other countries (which will be dealt with separately below in section 4.1.). In view of the clearly limited absorptive capacity of the major cities it seems essential to concentrate on the provision of employment opportunities within the migration areas themselves in the future .

As compared with many other developing countries, the dependence of Pakistan's economy on foreign trade is rather low (Table 1). In the

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1/ For a detailed analysis, see Zingel, W.P., Some Economic and Social Problems of Pakistan in the 1980s, in: Orient, Vol. 23 (1982), pp. 270 ff. and the analysis presented in section 2.5 of this Review.

Table 1. Share of exports and imports in GNP (current prices), 1969/70-1982/83 (percentages)

Year	Exports	Imports	Exports and Imports
1969/70	7.2	11.5	18.7
1974/75	9.1	19.8	28.9
1979/80	10.0	20.8	30.8
1980/81	10.7	19.6	30.3
1981/82	8.3	18.7	27.0
1982/83	9.4	18.5	27.9

Source: Calculated from Government of Pakistan, Economic Adviser's Wing, Finance Division, Pakistan Economic Survey 1983-84.

early seventies, the share of imports in GNP rose sharply to almost 20 per cent mainly as a result of the dramatic oil price increase. Since then imports stabilized at that level whereas the share of exports in GNP has in recent years been oscillating around a level of 8-10 per cent. Only in two subsequent years (1979/80 and 1980/81) did the combined GNP share of foreign trade therefore exceed a benchmark of 30 per cent. Major changes have taken place, however, within the broad categories of export goods. Manufactured goods have assumed the most dynamic role and have led export growth during the seventies with an annual increase of 26.6 per cent (current prices).[1/] In 1982/83, they held a share of 57 per cent in total exports as compared to 44 per cent in 1970/71. It has to be noted, however, that due to a substantial dependence on the export of some major agricultural products and their world market prices, the shares of primary, semi-manufactured and manufactured products in total exports are subject to wide fluctuations even on an annual basis.

As far as private and public sector involvement in Pakistan's economy is concerned, it is the latter which is of predominant importance contributing

1/ Cf. Naqvi, S.N.H. and Sarmad, K., Pakistan's Economy through the Seventies, Islamabad 1984, p. 111.

62 per cent to gross fixed capital formation (Table 2). This share which used to be well below 50 per cent during the sixties, increased to over 70 per cent in 1975/76 and has in recent years been slowly declining again, a trend which can almost exclusively be explained by changing policy approaches towards the industrial sector. Whereas until 1972/73, the private sector's share in large-scale manufacturing had been floating around 90 per cent it decreased to only 20 per cent in 1977/78 as a consequence of the nationalization of industry (1972). The Government has lately embarked on a denationalization and deregulation programme, whereby private investment in large-scale manufacturing has again taken the lead and contributed 53 per cent (provisional figure for 1983/84) to gross fixed capital formation.

Table 2. Contribution of private and public sector to gross fixed capital formation (current prices), 1969/70-1983/84
(percentage shares)

Sector	1969/70	1974/75	1980/81	1981/82	1982/83a/	1983/84b/
Private Sector	51.1	32.1	36.4	34.1	36.1	37.8
Public Sector	48.9	67.9	63.6	65.8	63.9	62.2
of which:						
- Government enterprises	(9.4)	(8.3)	(6.0)	(7.6)	(7.3)	(8.1)
- Autonomous and semi-autonomous organizations	(58.7)	(57.3)	(59.6)	(53.0)	(55.7)	(53.1)
- General Government	(31.8)	(34.4)	(34.4)	(39.4)	(37.0)	(38.8)

Source: Calculated from Government of Pakistan, Economic Adviser's Wing, Finance Division, Pakistan Economic Survey, 1983-84.

a/ Revised.
b/ Provisional.

1.3 Overview of the manufacturing sector

The manufacturing sector as a whole was among the fastest growing segments of the economy during the fifties and sixties resulting in a doubling of its GDP share from 8 to 16 per cent within these two decades. In the fifties, the predominant source of growth was the import-substitution segment of industry, whereas in the sixties it was domestic demand which took the lead. In the early seventies, a number of factors were responsible for a considerable slowing down of industrial growth. Among the most influential determinants are to be mentioned[1/]: exhaustion of the import-substitution potential in consumer industries (which held a share of about 80 per cent in the large-scale industries' value added by the end of the sixties); their excessive protection resulting in inefficient production; overcapitalization and overcapacities due to capital-cheapening policy measures as well as major infrastructural and energy bottlenecks.

As a combined effect of all these detrimental factors, some traditional industries like textiles stagnated or even declined. This decline, however, was partly compensated for by the emergence of new non-traditional industries, above all phosphatic and nitrogenous fertilizers, and by the momentum which in particular small-scale industries gained in the seventies. The latter's annual growth rate over the whole decade has been projected at 7.3 per cent[2/] as compared to only 3.3 per cent of large-scale manufacturing units. As a result, small-scale manufacturing accounted for more than three quarters of total manufacturing employment at the end of the seventies.

1/ Cf. Sarmad, K., A Review of Pakistan's Development Experience (1949-50 to 1979-80), Pakistan Institute of Development Economics, Islamabad 1984, pp. 20 ff.; Naqvi/Sarmad, op.cit., pp. 35 ff.

2/ Estimated figure based on the Statistics Division's Survey of Small and Household Manufacturing (1969/70) and the Punjab Small and Household Manufacturing Industries Survey (1975/76). Concerning the paucity of extact data on the small-scale sector, see also Amjad, R., Small-scale Industries and Rural Development: Implications for Rural Industrialization in Pakistan in: Chuta, E./Sethuraman, S.V. (eds.), Rural Small-scale Industries and Employment in Africa and Asia, Geneva 1984, pp.93 f.

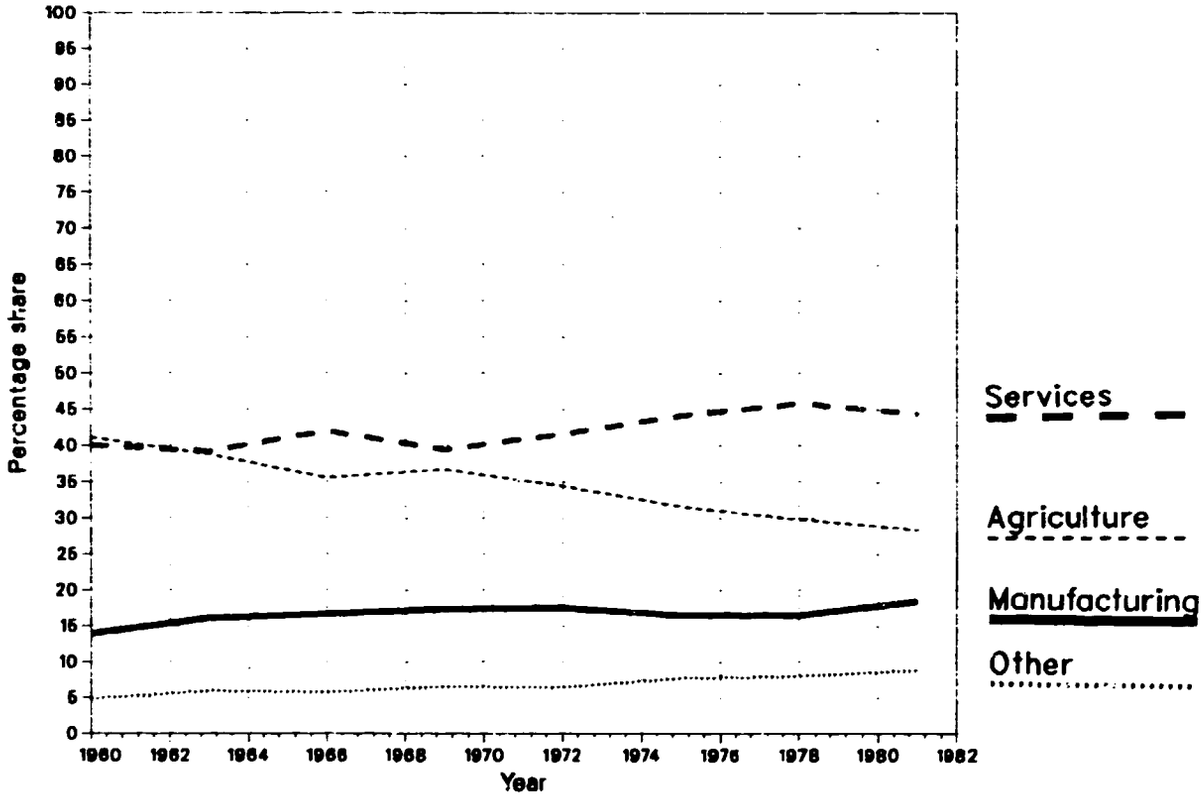
Although some progress in diversification has been achieved in recent years, the manufacturing sector is still dominated by a small number of key branches: food products, tobacco and textiles together generate more than half of total MVA, and the textile sector alone provides half of all manufacturing employment. In order to further diversify the country's industrial structure highest priority has been accorded to the steel-based engineering goods industries which are facing rapidly increasing domestic demand. This industrial branch has to be seen in connection with the recent completion of Pakistan's first integrated steel mill (at Bin Qasim near Karachi) which has started commercial production of hot rolled sheet and galvanised sheet by the end of 1984.[1/] The promotion of steel-using downstream activities, e.g., in transport equipment, electrical equipment and machinery for domestic industrialization is thus particularly emphasized in the current Five-year Plan. Further priority sectors are the processing of agricultural goods (cotton textiles, sugar) with a view to strengthening their competitiveness in export markets as well as those industries producing agricultural machinery (e.g. assembly of tractors) both contributing to effectively linking agriculture and industry.

The present Government has pursued a policy of strengthening the private industrial sector. Emphasis has been placed on deregulation of administrative controls and on encouragement of private investment - both domestic and foreign - within the manufacturing sector. Emphasis will have to be placed in the future on public investment to improve the physical infrastructure for industry - in the form of expanded energy supplies and transport facilities in particular - as well as on the upgrading of the general and technical education level of the industrial labour force. The nex chapter reviews the growth and performance of the manufacturing sector in Pakistan.

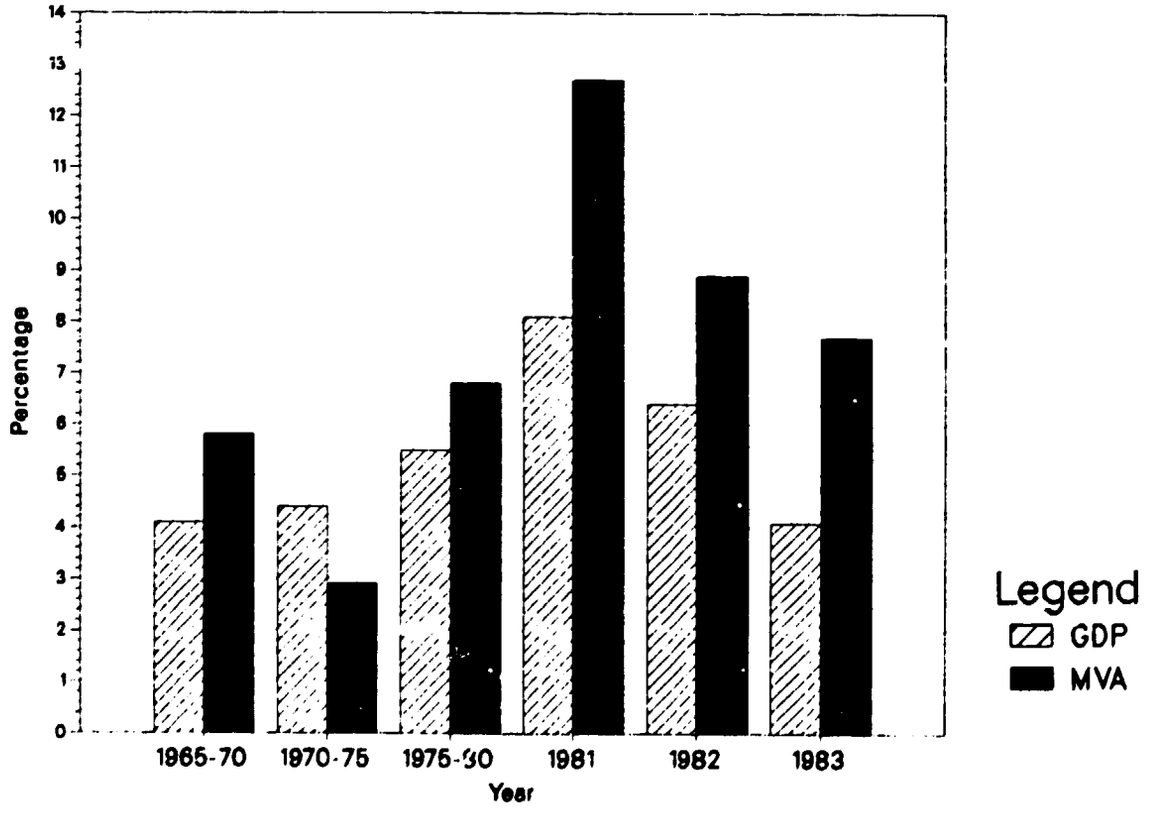
1/ Cf. The Economist Intelligence Unit, Quarterly Review of Pakistan, Bangladesh, Afghanistan, Annual Supplement 1984, p. 18.

MANUFACTURING TRENDS

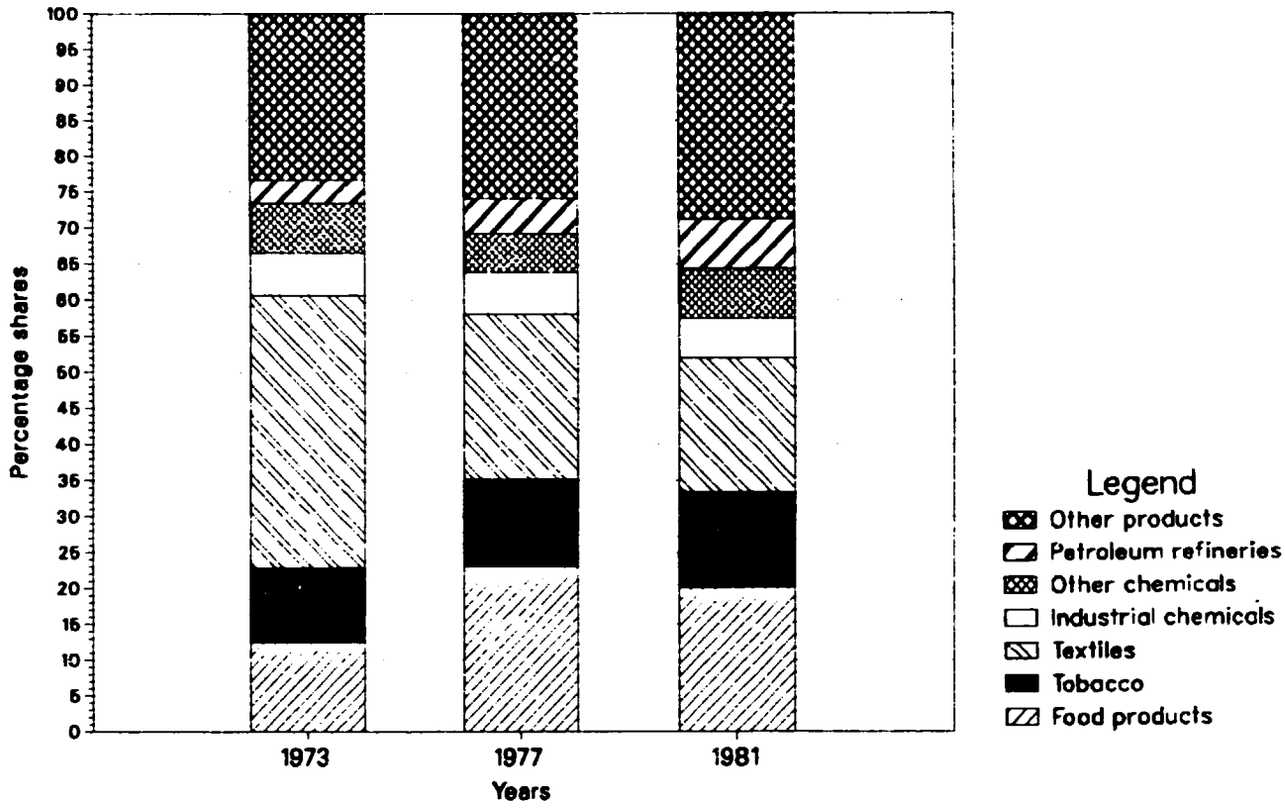
GDP BY ECONOMIC SECTOR, 1960-1981
PAKISTAN



ANNUAL RATES OF GROWTH OF GDP AND MVA, 1965-1983
PAKISTAN

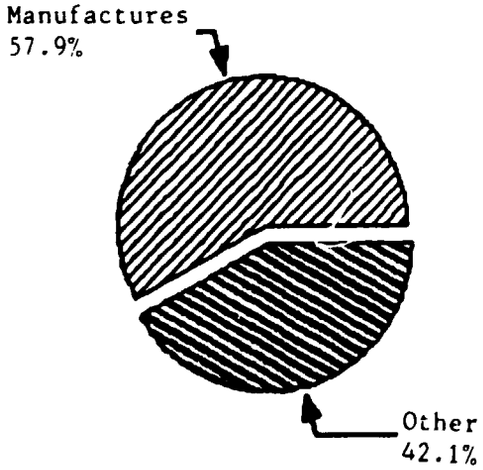


COMPOSITION OF MVA BY MAIN BRANCHES, 1973,1977,1981
PAKISTAN (current prices)

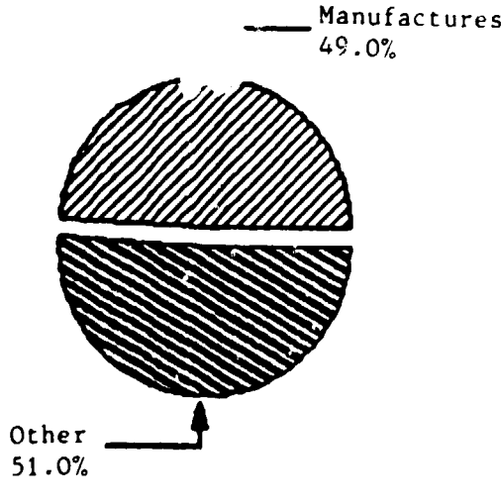


MANUFACTURED EXPORTS AND IMPORTS IN 1982
PAKISTAN

SHARE OF MANUFACTURES 1/ IN TOTAL EXPORTS

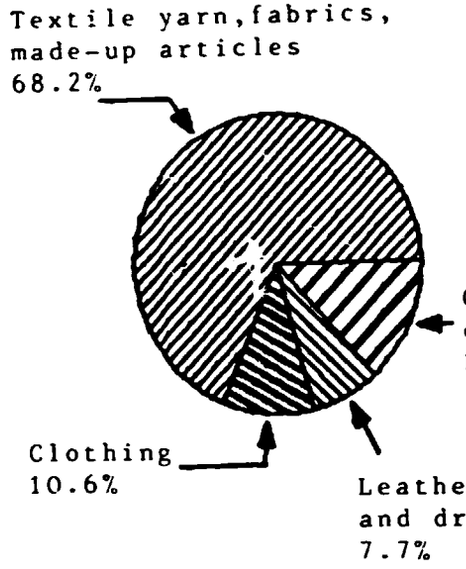


SHARE OF MANUFACTURES 1/ IN TOTAL IMPORTS

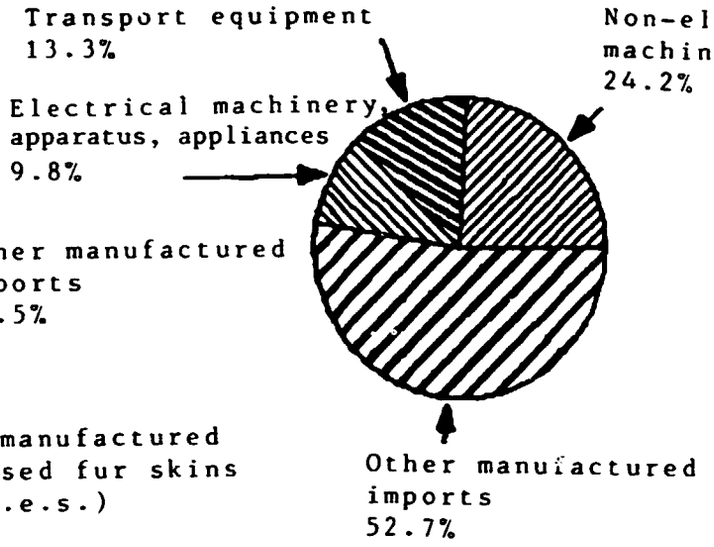


1/ SITC 5-8 less 68.

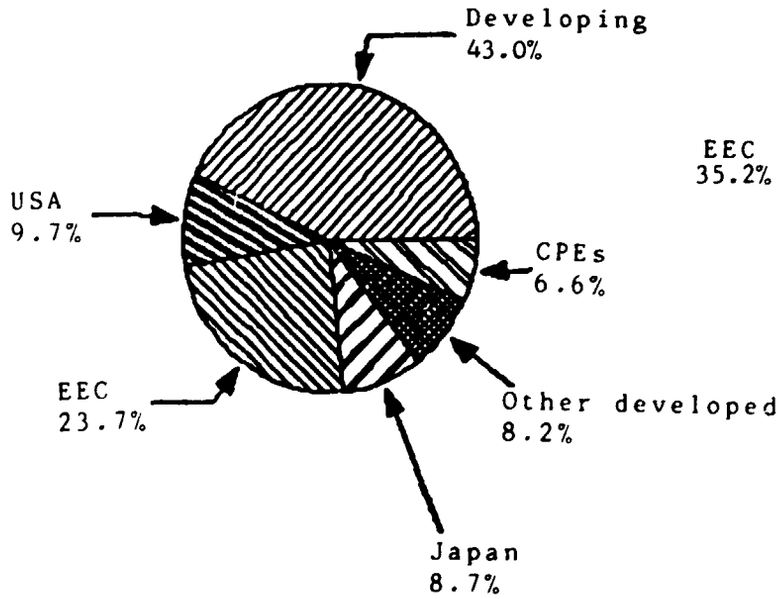
COMPOSITION OF MANUFACTURED EXPORTS



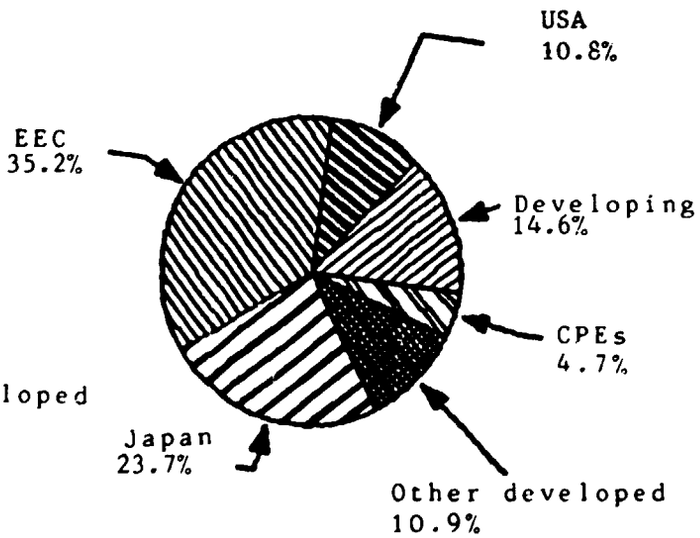
COMPOSITION OF MANUFACTURED IMPORTS



DESTINATION OF MANUFACTURED EXPORTS



ORIGIN OF MANUFACTURED IMPORTS



2. STRUCTURE AND PERFORMANCE OF THE MANUFACTURING SECTOR

2.1 Growth and structural changes of value added in manufacturing

In the recent past, Pakistan's manufacturing sector has emerged as the economy's most dynamic segment and has shown high growth rates considerably above those of total GDP. According to data published by the Ministry of Industries the real growth rate of MVA surged up from 1.9 per cent in 1976/77 to 9.9 per cent in 1977/78. After having peaked at 13.2 per cent in 1981/82, it declined again to 8.9 per cent in 1982/83 and finally to 7.7 per cent in 1983/84 which is still high by international standards. The target growth rate for 1983/84 was set at 8.2 per cent.

Pakistan's industrialization process was initiated by an early import-substitution phase oriented towards simple consumer goods which took place as early as in the first half of the fifties.[1/] This period was then followed by a temporary sharp decline in industrial investment which was mainly due to a foreign exchange constraint emerging from decreasing terms of trade. The years from the late fifties to the mid-sixties subsequently witnessed large amounts of foreign aid inflows which together with liberal Government policies created favourable conditions for rapid expansion of industrial production at two-digit growth rates. Looking at the three broad categories of end use, considerable structural changes within this short period are noteworthy; The share of consumer goods in value added generated by large-scale industries fell from 60 per cent (1959/60) to 55 per cent (1963/64) while the share of capital goods increased from 17 per cent to an impressive 24 per cent in the same period.

The following years up to 1970 showed, however, that this fairly advanced industrial structure stood on the fragile basis of continuing high foreign aid inflows. The slowing down of foreign aid after the Indo-Pakistan War of 1965 immediately resulted in the Government's rescheduling of the Third Plan and the downscaling of the capital goods sector with its high dependence on foreign exchange availability.

1/ Cf. for the following section Khan, O.A., "Critical Perspectives on Industrial Growth in Pakistan", Pakistan Economic and Social Review, Spring-Summer 1980, pp.1 ff.

Table 3. Structural changes in MVA according to categories of end use, 1973, 1977 and 1980/81 (based on current prices)

Category of end use	Share in total MVA (in per cent of total)		
	1973	1977	1980/81
Mainly consumer goods[a/]	65.3	62.8	57.1
Mainly intermediate goods[b/]	25.8	27.1	34.1
Mainly capital goods[c/]	8.8	10.1	9.1

Source: Calculated from the UNIDO data base, information supplied by the UN Statistical Office with estimates by the UNIDO Secretariat; Government of Pakistan, Federal Bureau of Statistics, Census of Manufacturing Industries 1980-81.

a/ ISIC 311, 313, 314, 321, 322, 324, 332, 342, 361, 390.
b/ ISIC 323, 331, 341, 351, 352, 353, 354, 355, 356, 362, 369, 371, 372.
c/ ISIC 381, 382, 383, 384, 385; includes also some consumer durables.

Consequently, a structural retrogression took place leading to a value added share of 80 per cent (1969/70) for consumer goods and of 13 per cent for capital goods.

In Table 3, corresponding figures have been calculated for the recent past.[1/] The latest available figures show that the share of consumer industries in total MVA has been constantly declining, the share of intermediate goods has risen substantially to more than a third, while capital goods have only been able to keep a share of about 10 per cent with a decreasing tendency again in the late seventies.[2/] It is to be expected, however, that the process of building-up domestic capital goods industries

1/ It should be noted, however, that the figures presented in Table 3 are not strictly comparable to those mentioned for the fifties and sixties, due to variations in the definitions used. This partly explains the drastic changes in comparing the 1969/70 and 1973 figures. The considerable reduction in the MVA share of consumer goods was, however, to a large extent also the consequence of the country's break up in 1971. The former East Pakistan was characterized by an above-average share of consumer goods production.

2/ For a more disaggregated graphical presentation of structural changes that have taken place in the period 1965-80, see Table A-5 on p. 75.

will be accelerated once the Karachi steel mill starts commercial production on a large scale and downstream activities are actively encouraged.

An analysis of MVA distribution at the branch level (Table 4) reveals that by and large major structural changes in the period 1973-1980/81 have been confined to a limited number of branches. What can be mainly observed is a striking reduction in the share of textiles which has been halved within less than a decade.[1/] On the other hand, those industries relying heavily on agricultural inputs accounted for more than one third of total MVA in 1980/81, whereas in 1973 their share was somewhat less than one quarter. Taken together this implies that substantially more than half of all MVA is concentrated in the agro-based and textile sectors of the economy.

A particularly high share increment was achieved by petroleum refineries which, together with industrial and other chemicals accounted for almost 20 per cent of MVA in 1980/81. Other sectors showing above average increases in their relative position were non-metallic mineral products as well as iron and steel.

Excluding food products (ISIC 311), tobacco (314) and textiles (321) it can be seen that the remaining MVA is spread over a wide range of industrial branches with a high rank correlation between 1973 and 1980/81. It thus seems that changes in industrial policy which have occured during that period have more affected industrial growth than structural changes within industry.

1/ The analysis presented here is, however, based on current prices so that the picture is to some extent influenced by shifts in relative prices.

Table 4. Distribution of value-added in manufacturing by branch, 1973, 1977 and 1980/81
(at current prices in PRs)

Description (ISIC)	Value added					
	in thousand PR			in per cent of total		
	1973	1977	1980/81	1973	1977	1980/81
Total Manufacturing (300)	7,495,000	14,001,603	28,692,120	100.0	100.0	100.0
Food products (311)	936,000	3,234,399	5,771,927	12.5	23.1	20.1
Beverages (313)	67,000	216,988	523,203	0.9	1.5	1.8
Tobacco (314)	781,000	1,688,436	3,804,984	10.4	12.1	13.3
Textiles (321)	2,835,000	3,207,616	5,335,322	37.8	22.9	18.6
Wearing apparel, except footwear (322)	27,000	52,983	254,530	0.4	0.4	0.9
Leather products (323)	128,000	159,946	305,080	1.7	1.1	1.1
Footwear, except rubber or plastic (324)	35,000	20,306	227,702	0.5	0.1	0.8
Wood products, except furniture (331)	5,000	23,860	78,662	0.1	0.2	0.3
Furniture, except metal (332)	12,000	9,577	44,432	0.2	0.1	0.2
Paper and products (341)	177,000	197,013	424,925	2.4	1.4	1.5
Printing and publishing (342)	83,000	148,747	215,739	1.1	1.1	0.8
Industrial chemicals (351)	435,000	798,398	1,589,437	5.8	5.7	5.5
Other chemicals (352)	519,000	761,724	1,942,581	6.9	5.4	6.8
Petroleum refineries	242,000	668,537	1,972,112	3.2	4.8	6.9
Misc. petroleum and coal products (354)	2,000	4,984	146,142	0.0	0.0	0.5
Rubber products (355)	69,000	250,469	277,317	0.9	1.8	1.0
Plastic products (356)	16,000	43,498	85,790	0.2	0.3	0.3
Pottery, china, earthenware (361)	13,000	33,310	55,285	0.2	0.2	0.2
Glass and products (362)	17,000	41,856	95,707	0.2	0.3	0.3
Other non-metallic mineral products (369)	223,000	312,664	1,696,963	3.0	2.2	5.9
Iron and steel (371)	106,000	542,461	1,143,101	1.4	3.9	4.0
Non-ferrous metals (372)	3,000	6,512	13,656	0.0	0.0	0.0
Fabricated metal products (381)	115,000	281,655	303,089	1.5	2.0	1.1
Machinery, except electrical (382)	85,000	309,272	491,348	1.1	2.2	1.7
Machinery electric (383)	211,000	445,417	994,980	2.8	3.2	3.5
Transport equipment (384)	216,000	331,295	708,142	2.9	2.4	2.5
Professional and scientific equipment (385)	41,000	42,104	84,387	0.5	0.3	0.3
Other manufactured products (390)	96,000	167,576	105,577	1.3	1.2	0.4

Sources: UNIDO data base, information supplied by the UN Statistical Office with estimates by the UNIDO secretariat; Government of Pakistan, Federal Bureau of Statistics, Census of Manufacturing Industries, 1980-81.

2.2. Performance and efficiency of the manufacturing sector

The share of the manufacturing sector in total GDP has basically remained constant since 1970 at a level of around 17-18 per cent. Manufacturing employment which stood at 3.8 million in 1982/83 has throughout the seventies (no exact figures after 1978/79 are available) maintained a share of around 14 per cent of total employment (14.5 per cent in 1978/79). This implies that during the seventies there have been no major deviations between the development of labour productivity in the manufacturing sector on the one hand and overall changes in labour productivity on the other.

According to the latest Census of Manufacturing Industries, it is still the textiles sector which holds a predominant position supplying 44 per cent of all manufacturing employment as against 50 per cent in 1973 (Table 5). The only other sector with a two-digit share is food products which has increased its relative share from 10 per cent in 1973 to 11.6 per cent in 1980/81. These two sectors are followed in descending order of magnitude, by transport equipment (5 per cent), non-industrial chemicals (4.5 per cent), iron and steel (4 per cent), electric machinery (3.7 per cent) and non-electrical machinery (3 per cent), all other sectors ranging below a share of 3 per cent each.

A comparison of the branch shares in total manufacturing employment with those in wages and salaries suggests that in the case of textiles the wage level is far below the manufacturing average whereas in particular in the chemical branches as well as in transport equipment an above-average wage level can be assumed.

Taking the share of wages and salaries in value added as a proxy for labour-intensity of production[1/], it follows that between 1973 and 1980/81 overall production in the manufacturing sector has become more capital

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1/ This methodical approach has to be based on the assumption of constant real wages; its correctness is thus essentially dependent on the degree to which real wages may have changed during the seventies. No data are, however, available on this aspect.

Table 5. Selected industrial indicators, distribution by branch of manufacturing, 1973 and 1980/81 (at current prices in PRs)

Description (ISIC)	Employment Share in total (percentage)		Wages and salaries Share in total (percentage)		Share of value added in gross output (percentage)		Share of wages and salaries in value added (percentage)	
	1973	1980/81	1973	1980/81	1973	1980/81	1973	1980/81
Total Manufacturing (300)	100.0	100.0	100.0	100.0	41.4	34.0	22.6	19.6
Food products (311)	10.0	11.6	10.1	12.9	26.1	32.9	18.4	12.6
Beverages (313)	0.6	0.9	0.5	1.0	54.5	52.7	13.4	10.6
Tobacco (314)	2.2	2.9	2.9	2.4	79.0	78.5	6.3	3.6
Textiles (321)	50.0	44.3	40.8	33.0	40.1	26.3	24.4	34.8
Wearing apparel, except footwear (322)	0.3	0.9	0.5	1.1	37.5	41.9	33.3	23.7
Leather products (323)	0.7	1.0	0.6	0.7	26.1	25.5	8.6	13.4
Footwear, except rubber or plastic (324)	0.6	1.1	0.6	1.2	34.0	40.8	28.6	29.2
Wood products, except furniture (331)	0.2	0.4	0.1	0.3	33.3	39.4	40.0	23.7
Furniture, except metal (332)	0.3	0.2	0.4	0.2	44.4	52.0	50.0	28.0
Paper and products (341)	1.5	1.8	1.8	2.3	59.0	38.3	16.9	30.4
Printing and publishing (342)	1.3	1.9	1.5	1.5	66.9	38.9	30.1	39.5
Industrial chemicals (351)	2.0	2.8	3.6	5.4	65.7	48.3	14.0	19.2
Other chemicals (352)	5.5	4.5	5.3	6.6	52.8	41.8	17.3	19.1
Petroleum refineries (353)	0.5	0.6	1.2	1.1	61.0	15.8	8.7	3.3
Misc.petroleum and coal products (354)	0.0	0.2	0.1	0.2	20.0	30.4	50.0	8.6
Rubber products (355)	1.4	1.2	1.2	1.2	32.4	35.2	30.4	24.5
Plastic products (356)	0.2	0.4	0.6	0.5	26.7	38.1	68.8	33.9
Pottery, china, earthenware (361)	0.4	0.4	0.3	0.4	68.4	54.3	38.5	38.5
Glass and products (362)	0.8	0.7	0.6	0.6	42.5	48.8	58.8	35.0
Other non-metallic mineral prod.(369)	3.4	2.6	3.0	3.7	49.6	62.0	22.9	12.1
Iron and steel (371)	2.9	4.0	2.7	4.6	24.7	34.5	43.4	22.5
Non-ferrous metals (372)	0.1	0.1	0.1	0.1	27.3	24.6	66.7	50.8
Fabricated metal products (381)	3.2	2.3	3.3	2.3	38.7	32.8	48.7	42.3
Machinery, except electrical (382)	2.2	3.0	2.4	3.6	39.0	34.5	47.1	41.0
Machinery electric (383)	3.7	3.7	6.1	4.5	47.8	37.5	48.8	25.6
Transport equipment (384)	3.7	5.0	5.8	7.3	37.3	29.3	45.8	58.3
Professional & scientific equipm.(385)	1.3	0.6	1.7	0.5	40.6	38.3	68.3	35.9
Other manufactured products (390)	1.1	0.6	2.1	0.6	32.3	35.0	36.5	31.2

Source: UNIDO data base, information supplied by the UN Statistical Office with estimates by the UNIDO Secretariat; Government of Pakistan, Federal Bureau of Statistics, Census on Manufacturing Industries 1980/81.

intensive. The share of wages and salaries went down from 22.6 to 19.6 per cent of value added. The highest capital-intensity applies to petroleum refineries, tobacco and miscellaneous petroleum and coal products whereas transport equipment, non-ferrous metals and fabricated metal products turn out to be particularly labour-intensive sectors.

Between 1973 and 1980/81, the share of value added in gross output fell from 41.4 to 34 per cent being highest in the production of tobacco (78.5 per cent), followed by other non-metallic mineral products (62.0 per cent) and pottery, china and earthenware (54.3 per cent).

Reliable and precise judgements on the economic efficiency of a country's whole manufacturing sector as well as on the efficiency of individual branches are generally rather difficult to obtain. A useful indicator of the relative efficiency achieved in production can be presented, however, by using the domestic resource cost (DRC) criterion. By evaluating both inputs and outputs of production at world market prices, the DRC measures the efficiency of domestic production in terms of the excess domestic cost of saving foreign exchange.[1/]

Applying this approach a recent study for 1980/81 has shown[2/] that out of a total of 90 industry groups only 13 industries can be classified as being efficient users of domestic resources (DRC$<$1). In descending order of efficiency the ten most efficient industries are (DRC values in brackets): hydrogenated and vegetable oils (0.28), other non-electrical machinery (0.35), surgical instruments (0.37), optical goods (0.41), petroleum products (0.46), soaps and detergents (0.64), animal feeds (0.69), fish and sea food (0.77), electric fans (0.79) and bakery products (0.82).

1/ DRC is defined as the sum of return on capital, employment cost at shadow wages and cost of primary inputs into the production of non-traded inputs divided by net value added at world market prices. Thus, DRC$>$1 indicates that an industry is inefficient (at the current exchange rate).

2/ Cf. for the following Naqvi, S.N.H.,/Kemal, A.R., The Structure of Protection in Pakistan: 1980-81, Pakistan Institute of Development Economics, Islamabad 1984.

The following ten industry groups have, on the other hand, been calculated as being the most inefficient-ones yielding negative value added at world market prices: spinning of cotton, leather tanning, tobacco stemming, made-up textile goods, weaving of cotton, matches, processing and canning of fruits and vegetables, wood furniture, sewing machines and wearing apparel.

It is noteworthy that precisely the same ranking of industries emerges when calculating the branch-wise Implicit Effective Protection Rates (IEPR)[1/]: The most ineffective industries turn out to be those enjoying the highest effective protection from international competition.

The average IEPR for the manufacturing sector as a whole was 60 per cent in 1980/81 and average DRC stood at 2.65. This means that - when compared with other developing countries - the average effective protection of manufacturing activities in Pakistan is rather moderate; it has gone down sharply from 271 per cent in 1963/64 and still 125 per cent in 1968/69. The DRC figure of 2.65, on the other hand, indicates that in aggregate terms the manufacturing sector is inefficient in the use of domestic resources. Excluding, however, only two extreme cases, the average DRC decreases to 1.35 which points to a considerably lower degree of inefficiency.

Two interesting results of a more disaggregated analysis should finally be mentioned (Tables 6 and 7): First, the study quoted above has shown the unconventional result that export-oriented industries are far more heavily protected and producing less efficiently than import-competing as well as import non-competing industries. This means that obviously many industry groups have in the past been 'subsidized' into export markets. Secondly, analysing industries by size[2/] reveals that medium-sized industries contain the smallest percentage of inefficient units whereas the corresponding percentage is highest in the case of large-scale industries.

1/ The IEPR expresses the percentage differential between the value added at domestic prices and at world market prices thus indicating the combined effects of various protective policy measures (tariffs, quotas, subsidies, etc.)

2/ The following definitions have been used: small-scale employing 10-50 persons; medium-scale employing 51-100 persons and large-scale employing more than 100 persons.

Table 6. Effective protection rate and domestic resource costs ratio by market orientation, 1980/81

Market Orientation of Industries	Effective Protection Rate	Domestic Resource Cost
Export-oriented	551	8.54a/
Export-oriented and import-competing	76	2.93
Import-competing	42	6.79b/
Import non-competing	-7	3.10

Source: Naqvi, S.N.H. and Kemal, A.R., The Structure of Potection in Pakistan: 1980-81, Islamabad 1984, p.9 (Vol. II).

a/ If three extreme cases are excluded, the DRC equals 1.69.

b/ If three extreme cases are excluded, the DRC equals 3.29.

Table 7. Distribution of inefficient industries (DRC$>$1) by size, 1980/81

Size of Industry	Total Number of Industries	Inefficient Industries as a Percentage of Total Industries
Small	77	78
Medium	59	73
Large	67	85

Source: Naqvi, S.N.H. and Kemal, A.R., The Structure of Protection in Pakistan: 1980-81, Islamabad 1984, p. 7 (Vol. II).

2.3 Exports and imports of manufactured goods

As mentioned earlier, Pakistan does not belong to those developing countries with a particular high dependence on foreign trade. The share of exports in GNP has been flowing around roughly 10 per cent, and that of imports around 20 per cent, both with a declining tendency recently. The regional and sectoral structure of total trade are presented in Annex Tables A-1 and A-2. The following analysis will concentrate mainly on trade involving manufactured goods.

To start with the geographical structure of Pakistan's trade in manufactured goods, it can be seen from Table 8 that 56 per cent of total manufactured exports and 43 per cent of their more narrowly defined segment (SITC 5-8 less 68) are directed towards other developing countries which in terms of international comparison is a remarkably high share of 'South-South-trade'. Manufactured imports, on the other hand, are much more concentrated on developed country sources with an overwhelming dominance of developed market economies which provide, e.g., 87 per cent of non-electrical machinery imports and 91 per cent of transport equipment imports of Pakistan (for these figures, see Basic Indicators 5).

The main driving force behind Pakistan's geographical export diversification starting in the early seventies has been the increasing role of the Gulf countries[1/] in general and of Saudi Arabia and the United Arab Emirates (UAE) in particular as rapidly growing markets for Pakistan's exported goods. In 1982/83 the Gulf countries' share in Pakistan's total exports (imports) increased to 22 per cent (29 per cent) with Saudi Arabia alone accounting for 9 per cent of all exports. Although rice has been the most important single item in value terms, also 40 per cent of readymade garments, 39 per cent of footwear and 21 per cent of machinery exports have been directed to this region (Table 9).

1/ Comprising Abu Dhabi, Bahrain, Dubai, Kuwait, Oman, Qatar and Saudi Arabia.

Table 8 . Geographical distribution of manufactured exports and imports, 1982
(percentage shares)

	Developing Countries	Developed Market Economies				Centrally Planned Developed Countries
		Total	USA	EEC	Japan	
Total Manufactured Exports[a/]	55.5	38.3	6.4	18.3	7.8	4.6
SITC 5-8 less 68[b/]	42.9	50.1	9.7	23.6	8.7	6.6
Total Manufactured Imports	32.1	63.1	12.6	25.5	17.7	3.3
SITC 5-8 less 68	14.6	78.9	10.8	35.2	23.7	4.7

Source: UNIDO data base; information supplied by the United Nations Statistical Office.

Note: Percentages may not add to 100.0 due to the fact that countries report trade to/from "unspecified areas".

a/ Based on a definition of trade in manufactures covering a list of 148 specifically identfied SITC 3-digit or 4-digit codes comprising a wide range of processing stages of manufactured goods.

b/ Covers only items recognized as exclusively manufactured goods, i.e. with a high level of manufacturing content.

Table 9. Pakistan's exports to the Gulf countries, 1981/82, 1982/83

Item	1982/83		1981/82	
	Value (in million PRs)	Share[a/] (in per cent)	Value (in million PRs)	Share[a/] (in per cent)
Rice	1,529.6	41.5	1,557.7	37.7
Art silk fabrics	1,421.3	65.6	227.0	59.7
Tents and canvas	891.4	74.7	514.4	75.8
Readymade garments	775.2	40.4	165.2	13.7
Fruits and vegetables	392.7	67.1	196.1	56.7
Made up textiles	350.2	31.6	69.1	14.4
Cotton fabrics	345.0	9.6	215.7	7.3
Petroleum products	143.5	14.5	871.4	42.5
Carpets and rugs	100.3	8.2	84.2	5.0
Machinery	90.4	21.0	45.1	16.7
Sports goods	83.2	18.5	54.3	16.6
Cotton bags	81.2	35.7	65.2	19.6
Spices	70.2	41.7	56.3	38.3
Towels	62.4	12.5	31.9	7.0
Fish and fish preparations	60.7	6.7	49.1	6.2
Footwear	58.1	39.2	20.5	20.4
Cotton yarn	21.1	0.6	3.2	0.1
Cutlery	19.8	15.8	5.7	6.4
Leather garments	18.8	6.8	9.9	5.5
Hosiery	18.2	14.3	6.9	7.4
Tobacco manufactures	14.1	11.5	18.8	18.0
Surgical instruments	5.5	2.0	5.0	2.0
Cotton thread	3.5	2.1	3.1	3.8

Source: Pakistan and Gulf Economist, Feb.25-March 2, 1984.

a/ Share of exports to the Gulf countries as compared to total exports of individual items.

Whereas, on the one hand, Pakistan has obviously been partly successful in opening up non-traditional export markets, this regional diversification contrasts with the high commodity concentration of manufactured exports: textiles, clothing and leather goods taken together still account for more than four fifths of all manufactured exports (narrowly defined), leaving only small shares for some rapidly growing non-traditional exports like chemical fertilizers and some engineering products.

Based on a broad economic classification of exports into primary, semi-manufactured and manufactured goods, Pakistan's export structure has witnessed major changes within the last 10 years. Both primary and semi-manufactured exports have lost ground while the share of manufactured exports in total exports went up to 57 per cent (Table 10). This increasing

Table 10. Summary economic classification of exports, 1973/74-1983/84

(per cent)

Year	Primary Commodities	Semi-Manufactured Goods	Manufactured Goods	Total Exports
1973/74	39.4	22.6	38.0	100.0
1974/75	48.0	12.7	39.3	100.0
1975/76	43.7	18.4	37.9	100.0
1976/77	40.0	16.7	42.4	100.0
1977/78	35.7	14.7	49.6	100.0
1978/79	32.3	20.6	47.1	100.0
1979/80	42.0	15.0	43.0	100.0
1980/81	43.8	11.3	44.9	100.0
1981/82	34.7	13.3	52.0	100.0
1982/83	30.0	13.4	56.6	100.0
1983/84	29.1	14.0	56.9	100.0

Source: Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984; Information supplied by the Ministry of Industries (for 1983/84).

degree of domestic processing is confirmed by Table 11 revealing a doubling of the export share of processed goods for final use between 1970 and 1982.

The respective structural changes on the import side have been less pronounced with the share of processed goods for final use having declined from 67 to 55 per cent. The doubling of the import share of non-processed goods for further processing is hardly surprising bearing in mind that the period covered by these figures includes the structural upheavals of two drastic oil price increases. Mineral fuels, being the most important import

Table 11. Shares of exports and imports classified according to level of processing 1970, and 1982, and trend growth rates, 1970-1975 and 1975-1982

CLASSES	EXPORTS				IMPORTS			
	CLASS SHARE OF TOTAL (PERCENTAGE)		CLASS GROWTH RATE (PERCENTAGE)		CLASS SHARE OF TOTAL (PERCENTAGE)		CLASS GROWTH RATE (PERCENTAGE)	
	1970	1982	1970-1975	1975-1982	1970	1982	1970-1975	1975-1982
A : Non-processed goods for further processing	32.44	15.00	-4.52	20.08	13.60	26.07	24.45	16.16
B : Processed goods for further processing	39.69	31.57	4.43	15.04	17.14	13.74	15.51	16.44
C : Non-processed goods for final use	3.50	4.96	3.32	18.58	2.07	4.97	29.50	15.83
D : Processed goods for final use	24.36	48.47	31.63	17.32	67.20	55.22	10.40	17.25
	1970	1982			1970	1982		
Sum of classes: A+B+C+D in 1000 current US$	675316	2346176			1119839	5095393		
Total trade SITC 0-9 in 1000 current US$	695343	2347754			1170895	5232787		

SOURCE: UNIDO data base; Information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

Note: Calculations are based on current us dollar prices.
Sum of classes and Total trade figures should be identical. Discrepancies or zero values are due to lack of countrys" trade reporting in general, but especially at the 3-, 4- and 5-digit SITC level.

item, accounted for almost one third of all imports in 1982/83, followed by machinery and transport equipment (25 per cent).

Pakistan's terms of trade, which had reached a peak level of 126 in 1978/79 (1975 = 100), have since then been constantly declining to a level of 89 in 1982/83 but increased again to a level of 94 in 1983/84.

The Sixth Five-year Plan assumes an annual export value growth rate of 15 per cent implying that in 1987/88 exports would slightly exceed $5 billion. Considering, however, that during the first year of the current Plan exports have fallen short of target by some 5 percentage points and the target for the second year is set at an ambitious 21 per cent, a questionmark may be put behind this assumption. Of course, the future export performance will not only be determined by the aspirations of Pakistan's policy-makers to increase production efficiency in order to capture new markets but to a large extent also by recessional or expansive conditions in the world market as well as by protective policy measures taken in the developed countries. The crucial role of textiles and clothing in Pakistan's manufactured exports has been mentioned. In this context, it should be noted that both the EEC countries and the USA have erected comprehensive barriers against textile imports from Pakistan whereas Canada and Sweden maintain restrictions on certain clothing items imported from Pakistan. Chemical exports are likely to come under severe pressure as several petrochemical plants in the Gulf area come on stream. Expanding engineering exports is also not likely to be easy because of the high cost of most engineering products manufactured in Pakistan, reflecting in part the high cost of domestically manufactured steel. The need for increasing manufacturing exports is likely to gain additional importance because of dwindling worker remittances from the Middle East. It is essential that export incentives be carefully built into Pakistan's industrial policy and that a policy framework be developed for achieving market penetration in key product areas.

2.4 Ownership and investment patterns in manufacturing

The distribution of manufacturing investment in terms of private vs. public sources of capital formation has in the recent past undergone substantial structural changes. Although it should not be disregarded that both private and public fixed capital formation started to decline in absolute terms in the very beginning of the seventies, the year 1972 has to be taken as major turning point for the change in ownership patterns. In that year a policy shift involving nationalization of major industries became effective and the trend occurring in subsequent years showed a consistent decline in the private sector's share in manufacturing fixed capital formation from around 90 per cent to only 26 per cent in 1977/78 (Table 12). In the following years this trend was, however, reversed; on the one hand, major public sector industrial projects had been completed leaving new room for agricultural, energy and infrastructural investments, and, on the other hand, the Government policy came to be based on a renewed emphasis and encouragement of a leading role of private industrial investors.

Nevertheless, it was not before 1980/81 that private investment in manufacturing for the first time surpassed the level it had reached already in 1972/73 (measured at constant 1970 prices). With a real growth rate of 5.6 per cent in 1982/83 private investment for the first time in 5 years overcompensated the real decline of public investment resulting in a slight real increase (0.5 per cent) of total manufacturing investment during that year. The substantial public expenditure decline relating to the Karachi Steel Mill, which in previous years had accounted for some 50 to 60 per cent of public manufacturing investment, was primarily responsible for the decrease occurring again in total investment in 1983/84 even at current prices as well as for a major upswing of the private sector's share from 49 to 59 per cent.

Should the Government in future actively pursue its stated policy of deregulation and encouragement towards the private sector the latter may again take over the leading and dynamic role it had assumed before in the country's industrialization process (policy measures so far taken in this regard are described in chapter 3).

Table 12. Private and public fixed capital formation in manufacturing, 1969/70-1983/84

Year	Total At Current Prices (in million PRs)	Private Sector		Public Sector	
		At Current Prices (in million PRs)	Share in Total (percentage)	At Current Prices (in million PRs)	Share in Total (percentage)
1969/70	1,575	1,396	88.6	179	11.4
1970/71	1,494	1,426	95.4	68	4.6
1971/72	1,334	1,235	92.6	99	7.4
1972/73	1,130	1,019	90.2	111	9.8
1973/74	1,405	1,023	72.8	382	27.2
1974/75	2,502	1,437	57.4	1,065	42.6
1975/76	5,001	1,819	36.4	3,182	63.6
1976/77	6,625	2,111	31.9	4,514	68.1
1977/78	8,263	2,120	25.7	6,143	74.3
1978/79	9,147	2,487	27.2	6,660	72.8
1979/80	10,104	3,511	34.8	6,593	65.2
1980/81	9,195	4,360	47.4	4,835	52.6
1981/82	9,157	4,473	48.8	4,684	51.2
1982/83 a/	10,041	4,910	48.9	5,131	51.1
1983/84 b/	9,248	5,442	58.8	3,806	41.2

Sources: Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984; Ahrens, H. and Zingel, W.-P., Towards Reducing the Dependence on Capital Imports. A Planning Model for Pakistan's Policy of Self-Reliance, Wiesbaden 1982, p. 97.

a/ Revised.

b/ Provisional.

Looking at the sectoral distribution of private large- and medium-scale investment in manufacturing, the period between 1972/73 and 1982/83 was characterized by a significant decline in the share of textiles, a roughly constant share of the food sector and considerable increases in the share of footwear and wearing apparel, tobacco, paper and paper products, rubber products as well as chemical products, basic metal industries and electrical machinery and appliances (for detailed figures, see Annex Table A-3).

Data on sector-wise investment in private small-scale industries[1/] are being published regularly by the Statistical Division, but as they are calculated on the assumption of constant shares of various industry groups, they essentially ignore any structural changes that may have occurred. At the aggregate level it may be quite safely stated that slightly less than 30 per cent of manufacturing capital formation is attributable to the small-scale sector.

A further important aspect of ownership patterns concerns the role played by foreign investors. Tables 13 to 15 give an overview on the scope and structure of foreign investment during the period 1973-1982. From these data the following major conclusions can be drawn:

- Pakistan does not belong to those countries which have been attracting foreign investment on a large scale. The cumulative inflows within the 10 years under consideration amount to roughly PRs 2.8 bn of which almost two thirds were accounted for by the period 1978-82. Annual inflows in these more recent years have, however, also been subject to large fluctuations without a clear growth trend.

- The lion's share of foreign investment was attracted by the manufacturing sector to which 60 per cent of cumulative net inflows and even 75 per cent of the 1982 net inflow were directed. The whole industrial sector (manufacturing plus mining & quarrying plus

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1/ Being officially defined now as including all enterprises having fixed assets, excluding the cost of land, up to PRs 10 million.

construction) accounted for as much as 91 per cent of cumulative net inflows. Despite this strong concentration on industry, the contribution of foreign investment to total industrial investment remained fairly low at approximately 6-7 per cent in 1982.

- According to the cumulative figures, the United Kingdom ranked first as investing country with 25 per cent, followed by the UAE with 19 per cent and the USA with 14 per cent. It is noteworthy that since 1978 no further investments were undertaken by the UAE and that the share of Saudi Arabia sharply increased to 40 per cent of the total in 1982. Furthermore, the negligible role played by Japanese investors is in sharp contrast with the dominant position Japan is enjoying as Pakistan's first ranking trade partner.1/

Table 13. Net inflow of foreign investment, 1973-1982

Year	Net Inflow (in million PRs)	Cumulative Net Inflow (in million PRs)
1973	23.6	23.6
1974	112.0	135.6
1975	103.1	238.7
1976	366.4	605.1
1977	446.8	1,051.9
1978	133.3	1,185.2
1979	432.6	1,617.8
1980	293.3	1,911.1
1981	432.8	2,343.9
1982	458.3	2,802.2

Source: State Bank of Pakistan, Statistics Department, Foreign Liabilities and Assets and Foreign Investment in Pakistan 1982.

1/ A recent Pakistan-Japan businessmen's meeting in Karachi has identified the following industrial sectors as suitable for joint ventures: electrical components, electric generating sets, irrigation pumps, agro-based industries, deep-sea fishing and sea-food processing.

Table 14. Net inflow of foreign investment by economic sectors, 1973-1982

Economic Sector	Cumulative Net Inflow (in per cent of total)	Net Inflow 1981 (in per cent of total)	Net Inflow 1982 (in per cent of total)
Manufacturing	60.3	60.3	74.6
Mining and quarrying	23.6	18.9	24.5
Transportation, storage and communication	0.8	1.3	0.3
Construction	6.9	0.5	0.4
Commerce	1.4	-3.8	-1.1
Other	7.0	22.9	1.3
Total	100.0	100.0	100.0

Source: See Table 13.

Table 15. Net inflow of foreign investment by country, 1973-1982

Country	Cumulative New Inflow (in per cent of total)	Net Inflow 1981 (in per cent of total)	Net Inflow 1982 (in per cent of total)
United Kingdom	25.1	28.0	19.4
United Arab Emirates	18.8	-	-
USA	13.9	14.9	15.9
Saudi Arabia	8.3	1.2	39.5
Kuwait	5.7	22.1	-
Belgium	5.4	0.8	2.1
Netherlands	5.4	9.7	7.2
Denmark	3.9	3.5	0.3
Fed.Rep. of Germany	2.7	1.4	1.9
Switzerland	2.7	2.7	6.2
Qatar	1.1	5.1	1.7
Japan	0.5	-	0.1
Other	6.5	10.6	5.7
Total	100.0	100.0	100.0

Source: See Table 13.

2.5 Size and geographical distribution of manufacturing enterprises

The analysis presented in this section relies on the figures given in the most recent Census of Manufacturing Industries 1980/81. It is thus based on a total of only 3,815 reporting units which, although including many small-scale units, reveal basically the size and regional structure of large- and medium-scale manufacturing. It should therefore be borne in mind that the small-scale sector as a whole contributes some three quarters to total manufacturing employment, around 30 per cent to manufacturing value added and almost 20 per cent to total exports.

A breakdown of manufacturing industries by Provinces (Table 16) reveals that as much as 95 per cent of all enterprises included in the latest Census, which generated 91 per cent of value added, are located within Punjab and Sind which taken together account for almost four fifths of Pakistan's population. At the other end Baluchistan with an area share of 44 per cent shows an almost total lack of manufacturing activities (share below 1 per cent). These regional disparities become even more pronounced at the district level: In North West Frontier Province (NWFP) 57 per cent of MVA (45 per cent of manufacturing establishments) originate from Peshawar alone; in Sind Karachi is the source of two thirds of the Province's MVA as well as of 80 per cent of its manufacturing establishments. Moreover, it may be calculated that 71 per cent of all manufacturing industries in 1980/81 were concentrated in just 8 districts of Pakistan. As the respective figure for 1975/76 already stood at 70 per cent it can be concluded that attempts to reduce these strong regional imbalances and to distribute economic activity more equally have not yet been successful. A rapid expansion of productive employment in the relatively backward regions, the development potential of which is furthermore being reduced by internal and external migration, could thus be seen as a priority issue on the policy agenda.

Table 16. Distribution of population, area and manufacturing industries by provinces, 1980/81 (percentage shares)

Province	Population (1981)	Area	Manufacturing Establishments (1980/81)	Manufacturing Value Added (1980/81)
Punjab	56.5	25.9	54.3	42.8
Sind	22.6	17.7	40.8	48.1
(of which Karachi)	(26.8)	...	(80.0)	(67.2)
Sub-total	79.1	43.6	95.1	90.9
N.W.F.P.	15.7	12.8	4.3	8.5
(of which Peshawar)	(5.0)	...	(44.5)	(56.6)
Baluchistan	5.1	43.6	0.6	0.6
Total	100	100	100	100

Sources: Calculated from Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984; Government of Pakistan, Federal Bureau of Statistics, Census of Manufacturing Industries 1980-81.

Turning now from regional to size distribution of manufacturing industries a highly dualistic structural pattern emerges (Table 17):

- Almost half of all establishments employ less than 20 persons, for nearly three quarters the employment size is below 50 persons and for as much as 90 per cent of establishments it is below 250 persons. This overwhelming majority of manufacturing units holds a share of only 27 per cent in total manufacturing employment and an equally high share in value added.

- The remaining 10 per cent of establishments employing more than 250 persons consequently generate slightly less than three quarters (73 per cent) of all manufacturing value added and employment.

- It is the textile sector in which about two thirds of all establishments employing more than 2,000 persons are concentrated. Industrial chemicals, iron and steel, basic industries and transport equipment can be identified as further sectors comprising very large enterprises (more than 1,000 employees).

Table 17. Size distribution of manufacturing establishments, 1980/81

Employment Size	Share in Total Number (Percentages)	Share in Total Employment (percentages)	Share In Total Value Added (percentages)
Up to 9	18.7	1.0	0.6
From 9 to 19	29.7	3.6	1.9
From 20 to 49	24.7	6.6	5.9
From 50 to 99	10.1	5.9	6.7
From 100 to 249	7.3	10.1	11.8
From 250 to 499	4.0	12.2	16.3
From 500 to 999	3.1	19.0	23.9
From 1000 to 1999	1.5	17.9	24.2
From 2000 to 4999	0.7	19.0	7.3
5000 and above	0.1	4.7	1.2

Source: Calculated from Government of Pakistan, Federal Bureau of Statistics, Census of Manufacturing Industries 1980-81.

2.6 Summary

The manufacturing sector in Pakistan's economy has exhibited high growth rates in recent years. A small number of key branches continue, however, to dominate the sector - reflecting a limited degree of structural changes in the past. Industrial efficiency has remained low by international standards and many industrial branches are sheltered behind relatively high protection walls. The export performance of the manufacturing sector has recently been impressive but once again a small number of branches account for the bulk of manufactured exports. Moreover, it seems unlikely that the export success of the early 1980s will be easily sustained.

The Government has, since the late 1970s, significantly changed the industrial investment policy and has emphasized the leading role of the private sector by developing a set of policies geared towards deregulation of industrial controls. These policy measures as well as the overall industrial policy objectives are reviewed in the next chapter.

3. INDUSTRIAL DEVELOPMENT STRATEGIES, POLICIES, PLANS AND INSTITUTIONS

3.1 Goals of industrial policy[1/]

The final aim of industrial policy is to achieve rapid growth with social justice. It favours a more equitable distribution to promote the welfare of the majority of the population essentially by providing productive employment opportunities and higher incomes. In order to make progress towards attaining this overall aim, industrial policy during the Sixth Plan period (1983-88) is committed to the goals of:

- increasing the share of manufacturing activities in the national product,
- deepening the industrial structure through an increase in the weight of high value-added, more sophisticated engineering, chemicals and other basic industries;
- strengthening the linkages of the industrial sector with other sectors of the economy, among others by further developing agro-based and mineral-based industries;
- achieving a more equitable regional dispersal of industry throughout the country;
- facing competition and seeking a higher share of the world market by means of a stronger orientation towards export-led industrialization requiring, among others, progress in tariff rationalization, modernization of production, quality control and standardization efforts.

These broad goals of industrial policy are subsequently translated into specific medium-term targets as well as sectoral priorities. Among the most important quantitative targets of the Sixth Plan are to be mentioned:

1/ This section is mainly descriptive in nature and is based upon official Government publications. Cf. Government of Pakistan, Planning Commission, The Sixth Five Year Plan 1983-88; Government of Pakistan, Ministry of Industries, Industrial Policy Statement, June 1984.

- to increase industrial investment from 3.2 per cent of GNP at the beginning of the Plan to 4.4 per cent by its end;
- to increase the share of private investment in total industrial investment from initially 40 per cent to 62 per cent by the end of the plan period;
- to increase private industrial investment as a proportion of GNP from 1.3 per cent to 3.0 per cent over the Plan period.

As industrial sectors receiving priority attention the Sixth Plan presents the following list:

- Highest priority is accorded to the steel-based engineering goods industries. Domestic demand is expected to expand rapidly after the Karachi Steel Mill has started commercial production. Specific downstream industries which have been identified as investment targets include transport equipment, railway wagons, rails, large diameter pipes, electrical equipment, telecommunication instruments and machinery for domestic industrialization.
- Based on high agricultural growth expectations, industrial investment will further concentrate on agro-based processing industries with a particular orientation towards export markets. This applies above all to the cotton textiles sector which is to be strengthened as a modern export-oriented industry and to the sugar industry which is foreseen to switch from its previous import-substitution emphasis to the initial phase of export promotion. A reduction in the difference between domestic and world market sugar prices is planned in order to encourage the development of further food processing industries like canned fruit and vegetables, confectionary and fruit juices.
- The third priority area is the production of agricultural inputs. After having attained self-sufficiency in the case of nitrogenous fertilizer, this refers in particular to phosphatic fertilizer factories as well as to efforts aimed at the mechanization of agriculture (e.g. small and medium tractors) which is regarded as the crucial link between agriculture and industry.

- Finally, further industrial development is to proceed along mineral-based production lines exploiting already discovered resources of minerals like copper (at Saindak), phosphate rock (at Hazara) and gypsum, the latter for meeting agricultural demand. In addition, the neglected coal potential shall be utilized for power generation and coal-based industries.

The priorities outlined above are reflected in the investment pattern as envisaged for the Sixth Plan period, shown in Table 18. This Table also points to the overriding importance which is being attached to the private sector as the dominant agent of industrial development. More than three quarters of total investment are to emerge from private sources. The realization of the private sector investment programme of PRs 62 billion

Table 18. Investment pattern during Sixth Plan period, 1983-88

Sector	Investment (in million PRs)			
	Public	Private	Total	Sector as percentage of total
Basic metals and other engineering industries	9,060	10,870	19,930	24
Agro, small and rural industries	2,481	13,400	15,881	19
Textiles	5	12,790	12,795	16
Petrochemicals	60	5,260	5,320	6
Non-metallic mineral products	2,108	4,290	6,398	8
Fertilizers	1,440	4,100	5,540	7
Chemicals & pharmaceuticals	1,399	5,285	6,684	8
Rubber products and other misc. industries	3,947	6,005	9,952	12
Total	20,500	62,000	82,500	100

Source: Government of Pakistan, Planning Commission, The Sixth Five Year Plan 1983-88, p. 172.

would, however, require a real growth rate of 22 per cent per annum. This may be an overambitious goal although, with a real growth rate of 14 per cent, private industrial investment indeed increased impressively in 1983/84.[1/]

Public sector industrial investment will be mainly concentrated on the completion of ongoing projects. Out of the total sum of PRs 20.5 billion the lion's share is again earmarked for the Karachi Steel Mill the completion of which will require budget resources of PRs 8.5 billion. Further activities to be completed include public sector cement projects carried forward from the Fifth Plan. It is foreseen that after completion of these projects the public sector would in the future primarily concentrate on the rationalization of its ongoing operations.

As far as manufactured exports are concerned, particular emphasis is placed on agro-based and small-scale industries as "engines of export growth". Special incentives are to be introduced for small-scale enterprises, including fiscal incentives, preferential credit access, institutionalized dissemination of information on export design and suitable technologies, training assistance, organization of advisory marketing boards, encouragement of subcontracting and provision of adequate infrastructure.

In order to favourably influence the business environment for private industry the Sixth Plan stresses the importance of overall attempts at deregulation (through the removal and relaxation of sanctioning procedures) which is even regarded as the main mechanism ("primum mobile") of achieving the Plan's targets. As priority areas for deregulation the Plan envisages that

- a new Industrial Investment Schedule will be announced, specifying a list of priority industries without any investment ceiling for individual industries;[2/]

1/ Cf. The Economist Intelligence Unit, Quarterly Economic Review of Pakistan, Bangladesh, Afghanistan, No. 3/1984, p.14.

2/ The new Industrial Investment Schedule has meanwhile been issued envisaging total investment of a magnitude of PRs 130 billion. Its planned investment scope thus goes far above the level of PRs 82.5 billion foreseen in the Sixth Plan in order to allow for investors' flexibility as well as for possible spillovers to the next Five Year Plan. A detailed statistical abstract of the Schedule is presented in Annex Table A-4.

- no Government sanctions will be required for industries included in the Investment Schedule, except for clearance by investment finance institutions in case the private sector borrows from these institutions (for details, see section 3.2);
- automatic access to foreign exchange licensing for the import of machinery up to a fairly liberal limit will be provided for industries included in the Schedule;
- policy guidelines will be announced for the terms of foreign equity loans, suppliers credits, royalty and technical fees, within which all individual agreements will be automatically approved with only the exceptions requiring Government clearance (see Chapter 3.2 as well as Annex C and Annex D).

3.2 Recent changes in industrial policy

In June 1984, the Ministry of Industries issued a new Industrial Policy Statement which is only the second document of this kind launched by the present regime after the Government's first Industrial Policy Statement was announced in 1978, aimed at reestablishing the confidence of private investors.[1/] The salient features of this statement which is to determine the industrial policy orientation for the near future are summarized below.

At the core of the 1984 Industrial Policy Statement is the overall attempt to achieve a substantial deregulation of the private sector's investment and production activities. To encourage the growth of private industry, investment sanctions by the Government will in the future only be required for setting up projects falling in one of the following categories:

- industries specified for reasons of over-capacity, price regulation, implementation of a programme of assembly-cum-manufacture requiring indigenization of the manufacture of components or projects of major national importance or for religious, security or socio-economic objectives (for a list of specified industries, see Annex B);

1/ Pakistan's first Industrial Policy Statement was formulated as early as 1948, the second one in 1959.

- projects involving foreign private investment;
- large projects costing PRs 300 million and above;
- projects requiring cash foreign exchange of more than PRs 50 million for plant and machinery;
- projects involving import of second hand machinery, except under NRI; and
- projects in which more than 60 per cent of the raw material will be imported provided the value of such import exceeds 20 per cent of the total investment in fixed assets.

In those cases requiring sanctions, administrative procedures are to be streamlined aiming at reaching a final decision within 90 days after the date of application. The projects are to be cleared by the Central Investment Promotion Committee (CIPC) and to be approved by the Federal Government. Furthermore, financial institutions will be involved from the beginning to assess the projects' financial viability and creditworthiness.

Furthermore, the Government has implemented new guidelines oriented towards improving the private sector's access to foreign currency resources and towards facilitating the transfer of modern technology from abroad. These new guidelines formulate specified standard conditions which if they are adhered to will subsequently no longer require clearance of foreign credits or royalty and technical fees agreements by the State Bank of Pakistan and the Ministry of Finance. Only registration with the State Bank will in future be required as a precondition for automatic authorization in these standard cases.[1/]

In order to monitor the implementation of these liberalized industrial policy guidelines, the Government has decided to set up a permanent Industrial Policy and Procedure Committee under the chairmanship of the Federal Minister for Industries. The committee will include as members the

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1/ For a detailed specification of the Guidelines for Foreign Loans/Credits, see Annex C. For those on Agreement for Transfer of Technology, see Annex D.

Federal Ministers for Planning and Production, the Provincial Ministers for Industries, Secretaries of Industries and Finance as well as the Chairman of the Pakistan Banking Council and heads of further financial institutions.

The urgent need to improve location policy aimed at achieving a wider regional dispersal of industry is explicitly recognized in the Industrial Policy Statement. The Government has given a five-year extension to the tax-holiday enjoyed by enterprises set up in approved industrial estates in less developed areas. The establishment of industrial estates in selected less developed target areas is generally given high priority and in this connection the Government has decided to establish a Regional Development Finance Corporation (as a subsidiary jointly owned by the NDFC and other financial institutions) which is to identify viable investment areas and to prepare feasibility studies. A simplification of approval procedures for private industrial investment had already been introduced in 1980, when all Provincial Governments had formulated their location guidelines in the form of negative lists of specific locations requiring prior investment permission.

A number of further new policy measures have recently been taken.[1/] In the field of foreign trade and exchange policy three specific policy elements are noteworthy:

- After the considerable depreciation of the rupee following the switch to a flexible exchange rate in January 1982, the Government was in a position to modify other export incentives. Thus, in August 1983, a decision was taken to totally eliminate compensatory export rebates for cotton and woollen yarn, to reduce these rebates from 10 to 5 per cent for grey cloth and from 12.5 to 7.5 per cent for ten other items, incl. inter alia other textile products, hand-knotted carpets and leather goods.
- On the import side, tariffs have to some extent been substituted for quantitative restrictions which may be interpreted as a first step

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1/ Cf. World Bank, Pakistan Recent Economic Developments, Report No. 4906-PAK, February 24, 1984, pp. 23 f..

leading to further import liberalization. The Import Policy Order of July 30, 1983 (and the subsequent amendments of September 15) were aimed at improving the availability of imported inputs for domestic industrial production primarily by means of replacing the previous positive import list (permitted items) by a negative import list (banned items) and at the same time removing a large number of quantitative restrictions. It was thus achieved to substantially liberalize the import of some important items such as grey cloth, caustic soda and soda ash, transport equipment and various types of machinery. Furthermore, licensing ceilings for permitted imports have been largely abolished.

- The Government has decided to allocate $200 million of free foreign exchange to the National Development Finance Corporation, the Industrial Development Bank of Pakistan and the Bankers' Equity Ltd. as the three leading development finance institutions, so that - in view also of the large amounts of foreign assistance - foreign exchange financing should not turn out to be a major constraint for industrial investment in the near future.

Concerning public sector enterprises the focus has in the recent past been on identifying suitable performance criteria and enhancing their productivity and managerial efficiency. An Experts Advisory Cell has been created in 1980 as a separate advisory body in order to monitor and evaluate each public enterprise's performance. At the centre of its so-called Signaling System is a case-by-case agreement on annual enterprise-specific profit targets. Five performance grades (achievement levels) have been established and are linked to the granting of monetary bonuses as specific incentives, in particular for top-grade managers (Management Bonus System). With the approval of the Ministry of Finance, this system has been introduced for the majority of public manufacturing units under the Ministry of Production.

A major policy change affecting the framework and terms of industrial financing is the ongoing process of islamization of the country's banking system.[1/]

- From January 1, 1985, all finance provided by the banking system to the Government, public sector corporations, as well as private and public sector joint-stock companies will be based on Islamic modes of financing.
- From April 1, 1985, all finance provided to any person or firm by banks and financial institutions will be according to the Islamic shariah and subsequently all bank dealings will be converted to conform to Islamic principles;
- From July 1, 1985, banks will no longer accept any deposits based on interest so that the banking system will have become totally Islamic excluding only foreign currency deposits in Pakistan banks as well as loans from foreign creditors.

A number of investment contracts have been developed to facilitate industrial investment. Bank deposits have been converted to a 'profit and loss sharing' (PLS) system. Banks are permitted to invest PLS funds in equity capital, 'modaraba' certificates and to enter into 'musharikah' contracts with industrial investors. Under the 'modaraba' schemes the bank provides capital to investors for a specific venture. The investors then agree to pay back the capital plus a stipulated share of their profit. 'Musharika' contracts, on the other hand, are participation agreements between financiers and entrepreneurs with no commitment to the repayment of capital. Other investment contracts have also been developed but they are mainly applicable to short-term financing and trade financing purposes.

1/ Cf. Pakistan & Gulf Economist, August 4-10, 1984, p. 8-28.

3.3 Institutional framework for industry

The Ministry of Industries is the 'parent ministry' for the formulation and implementation of industrial policy providing the framework of rules and regulations for other ministries, in particular the Ministry of Production and the Ministry of Science and Technology. The Ministry of Industries also acts as the main channel of communication between the Government and UN agencies including UNIDO. It is mainly responsible for support and guidance of private sector industrial activities and operates largely through a number of institutionalized bodies (departments) such as specialized development boards and organizations for industrial consultancy, investment promotion, quality control, etc. Among its major departments are to be mentioned:

- Investment Advisory Centre of Pakistan (IACP), a non-profit research and consultancy organization, providing information and guidance both to private and public sector industries. The IACP renders services in a number of fields such as identification of new investment opportunities, preparation of pre-investment and feasibility studies and provision of management consultancy services.

- Pakistan Industrial and Technical Assistance Centre (PITAC), providing technical services and training in the fields of design or machine workshops. PITAC is located in Lahore and has regional offices in Karachi, Peshawar and Quetta.

- Central Testing Laboratories (CTL), set up in 1951 to render technical assistance and guidance to private industry and commerce as well as to Government departments concerning assessment of the quality of raw materials and finished products. CTL operates laboratories at Karachi and Lahore and carries out branch-level research & development in the fields of cotton textiles and leather.

- Pakistan Standards Institution (PSI), established in 1951 and primarily responsible for the preparation of National Standards for various items of trade and industry and for the enforcement of these standards through the Certification Marks Ordinance of 1961.

- Textile Industry Research & Development Centre (TIRDC), established in 1973 in collaboration with UNIDO/UNDP. Its major objectives include assistance in the re-organization of the textile industry, in particular by improving its productivity through consultancy, training and applied research.

- Leather Industry Development Organization (LIDO), renders technical assistance to the leather and leather products industries, conducts market/industrial surveys and operates technical centres (Leather Products Development Centre in Karachi and Sialkot) for the training of workers and teaching of improved technologies.

- Export Processing Zone Authority (EPZA), responsible for monitoring and administrative control of Pakistan's first export-processing zone in Karachi.

Whereas the Ministry of Industries, apart from setting the general industrial policy guidelines, is concentrating on the private sector, it is the Ministry of Production which is responsible for the operational activities of public sector industrial units. The Ministry of Production came into existence after the nationalization of basic industries in 1971/72 and at the same time the Board of Industrial Management (BIM) was set up. Later on, however, it was realized that BIM had become an overly centralized institution for efficiently operating public enterprises; accordingly a decision was taken to establish sectoral industrial holding corporations. BIM was subsequently liquidated and both the industrial units previously controlled by BIM and those under the responsibility of the Pakistan Industrial Development Corporation (which had been operating own units before 1971/72) came to be transferred to these sectoral corporations. After some further changes the present stucture has emerged including a total of 9 sectoral corporations (number of production units in brackets):

- Federal Chemical and Ceramics Corporation (FCCCL; 13)
- National Fertilizer Corporation of Pakistan (NFC; 6)
- Pakistan Automobile Corporation (PACO; 10)

- Pakistan Industrial Development Corporation (PIDC; 8)[1/]
- State Cement Corporation of Pakistan (SCCP; 12)
- State Engineering Corporation (SEC; 10)
- State Petroleum Refining and Petrochemical Corporation (PERAC; 3)
- Textile Machinery Corporation (TMC; 2)
- Pakistan Steel Mills Corporation (PASMIC; 1).

The Ministry of Science and Technology contributes to the process of industrialization mainly through the services provided by a number of specialized institutions. Among these are the Pakistan Council of Science and Industrial Research (PCSIR) and the Appropriate Technology Development Organization (ATDO).

Major development schemes, including those in the industrial sector, have to be approved by the Executive Committee of the National Economic Council (ECNEC) headed by the Finance Minister as chairman provided the Planning Commission has recommended their consideration. Further members of ECNEC include the federal ministers in charge of development ministries as well as the provincial governors/chief ministers or their nominees. Following the enhancement in the sanctioning power of various authorities which took effect in April 1984, ECNEC now has to approve only those schemes costing above PRs 30 million. Administrative approval of all development schemes costing less than PRs 30 million can either be granted by the Central Development Working Party (CDWP) in the case of f deral schemes or by the provincial governments. Subject to a number of restrictive conditions, federal ministries are now allowed to handle schemes costing below PRs 10 million.

Concerning the institutional framework for the promotion of small-scale industries, mention must be made of the Provincial Small Industries Corporations (SIC) which were established some 10 years ago in Lahore, Karachi, Peshawar and Quetta. Their finanicial funds are mainly received from the regular yearly budgets in each Province. Among the major activities undertaken by these Corporations are to be found:

1/ Including those industrial units not fitting into the sectoral organization pattern.

- Provision of financial assistance to small-scale enterprises: This is arranged either with a consortium of commercial banks or together with the Industrial Development Bank of Pakistan (IDBP) the former providing local currency financing, the latter contributing foreign currency. The Small Industries Corporation assumes the responsibility to identify suitable projects, to prepare a project evaluation and to submit it to one of the commercial banks. If the bank accepts the project as being creditworthy, it will be passed to a Technical Advisory Committee. In case of final acceptance, the risk of default will be shared on an 50:50 basis between the corresponding Small Industries Corporation and the bank concerned. Furthermore, a preferential interest rate (0.75 per cent below the prevailing market rate) will be offered to the borrowing enterprise.

- Setting up of industrial estates: More than 20 industrial estates have been established in Pakistan so far in order to provide the physical infrastructure as well as some common facilities to small enterprises. The Small Industries Corporations are also operating services centres (offering, e.g., guidance in the choice of product and process technology), handicraft centres, vocational training centres and assistance in product marketing.

In Pakistan all scheduled banks were nationalized on January 1, 1974. A fairly advanced financial system[1/] is in existence consisting of:

- the State Bank of Pakistan (SBP) as the central bank, which controls and supervises the activities of all other institutions in the financial sector, as does the Ministry of Finance and the Pakistan Banking Council which regulates the financial flows to the Government-owned commercial banks;

1/ Cf. Canadian International Development Agency, Pakistan Sectoral Profile Industry, February 1984, pp. 17-19.

- Five scheduled Government-owned commercial banks (NCBs): National Bank, Habib Bank, United Bank, Allied Bank of Pakistan, Muslim Commercial Bank. They play a dominant role in the country's economy and with a branch network of around 7,200 in mid-1982 (excluding over 200 foreign branches) handled 91 per cent of all deposits and 85 per cent of advances. Their long-term lending to the manufacturing sector accounted for a high share of 37 per cent of all advances;

- Eighteen foreign commercial banks (FCBs), the operations of which are restricted to major cities and are concentrated on foreign trade operations and the financing of foreign corporations, joint venture companies and larger domestic firms;

- Four specialized commercial banks: the Agricultural Development Bank of Pakistan (ADBP) giving credit in cash and kind to agriculture and cottage industries, the Industrial Development Bank of Pakistan (IDBP) providing mainly medium- and long-term credits to smaller enterprises, the Federal Bank for Cooperatives (FBC) and the Punjab Provincial Cooperative Bank (PPCB);

- Eight non-bank development financing institutions providing long-term assistance to industry, small businesses and housing, among them the Pakistan Industrial Credit and Investment Corporation (PICIC) in which 35 per cent of the shares is owned by foreign investors and the Government-owned National Development Finance Corporation (NDFC);

- Several insurance companies;

- Two stock exchanges (Karachi, Lahore); and

- The House Building Finance Corporation, focusing entirely on financing residential constructions and home purchases.

4. RESOURCES FOR INDUSTRIAL DEVELOPMENT

4.1 Human resources

According to the latest Labour Force Survey the country's total labour force amounted to 22.6 million workers in 1981 and showed the following structural characteristics:

- The urban areas provided employment for 26.7 per cent, whereas 73.3 per cent were to be found in the rural areas.

- With a share of only 3.6 per cent of the total labour force, female working participation was almost negligible. This may partly explain the relatively low figure for the overall labour force participation rate which stood at 27.6 per cent.

- Of the total labour force, 33.2 per cent were younger than 25 years, more than half (55.5 per cent) between 25 and 59 years and 11.3 per cent 60 years and above.

- The latest available figures on the sectoral breakdown of employed persons relate to 1978/79 showing the following pattern: agriculture, forestry, hunting and fishing 52.7 per cent; manufacturing 14.5 per cent; wholesale and retail trade plus restaurants and hotels 11.1 per cent; community, social and personal services 10.1 per cent; construction 5 per cent; transport, storage and communication 4.7 per cent; all other sectors including mining and quarrying or electricity, gas and water employ less than 1 per cent each.

- The degree of unionization is very low with the total number of trade union members in 1980 reaching some 350,000 of which almost one third was concentrated in the textile industry.

- The unemployment rate as officially published was 3.1 per cent in 1981, with a below average figure of 2.3 per cent in rural areas and an above

- average figure of 5.2 per cent in urban areas. A considerable degree of underemployment has, however, to be taken into account, as indicated by the fact that 13 per cent of the total labour force worked less than 34 hours per week. Taking 48 hours as standard working time, the share falling below that threshold amounts to even 60 per cent.

Accelerated human resource development is to be regarded as one of the crucial areas determining the future potential for industrial development in Pakistan. At present the country clearly suffers both from a lack of basic education of its population in general and from a deficit of sufficiently trained and skilled technicians and mechanics required to efficiently operate modern industrial enterprises.

As far as literacy rates as the basic indicator of educational performance are concerned (Table 19) the respective figures are extremely low as compared with other developing countries [1/]: Only roughly one quarter (26.2 per cent) of the total population are literate including a very unequal

Table 19. Literacy rates of population (10 years and above) by sex and urban/rural areas, 1972 and 1981 censuses

	Total		Urban		Rural	
	1972	1981	1972	1981	1972	1981
Both sexes	21.7	26.2	41.5	47.1	14.3	17.3
Male	30.2	35.1	49.9	55.3	22.6	26.2
Female	11.6	16.0	30.9	37.3	4.7	7.3

Source: Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984.

1/ For a detailed comparison, see Luthra, K.L., 'Human Resource Development in Asia: Achievements and Tasks Ahead', in: Asian Development Review, Vol.2 (1984), No. 1, pp. 52 ff.

distribution between males (35.1 per cent) and females (16 per cent) as well as tremendous discrepancies between urban areas (47.1 per cent) and rural areas (17.3 per cent). Moreover, it has to be stated that progress made during the seventies has been very modest.

Although progress in education can not be reduced to a purely financial matter, the very low priority accorded to that sector in public expenditure certainly is among the major reasons for the poor perfomance. In 1981 only 3.1 per cent of total Central Government expenditures was channelled into the educational sector 1/. Expenditure on education as a percentage of GNP even decreased between 1972 and 1982 from 2.1 to only 1.5 per cent 2/.

To complete the picture it has to be mentioned that internal asymmetries still persist in the educational system to the disadvantage of vocational training institutes and polytechnic institutes the systematic development of which has in the past received only limited attention.

Looking at the political priorities formulated in the Sixth Five Year Plan it emerges that the Government is fully aware of the vital role of education in furthering the country's social and economic development. Accordingly the Government has decided to make substantial efforts to reduce the identified gaps. It is stated that education as a whole with particular emphasis on primary education will now receive the priority it has always deserved but not been granted in the past. Compared to a share of only 3.6 per cent in the Fifth Plan, the Sixth Plan has allocated 6.9 per cent of public sector investment to education and manpower and has launched a Special Development Programme of Primary Education. The exact internal distribution of the Plan's financial allocations for education is given in Table 20 from which it can be seen that the share of technical and vocational education programmes is also expected to increase.

1/ Cf. World Bank, World Development Report 1984.

2/ Cf. Mehmut, M., 'Education in Pakistan', Pakistan & Gulf Economist, February 25 - March 2, 1984, p. 25.

Table 20. Financial allocation for education in the Sixth Five-year Plan, 1983-1988

	Fifth Plan Expenditure	Sixth Plan Allocation	Percentage Increase	Per cent shares Fifth Plan	Per cent shares Sixth Plan
Total - Education and Manpower	5.6	19.9	255	4.6	8.3
Primary, Secondary and other basic education programmes	2.9	11.4	293	52.5	57.3
Technical and vocational education programmes	0.6	2.3	283	10.2	11.6
Higher and miscellaneous education programmes	2.1	6.2	195	37.3	31.2

Source: Government of Pakistan, Planning Commission, The Sixth Five Year Plan 1983-88, p. 340.

Human resource development in Pakistan, particularly related to the labour force, has since the early seventies been and will continue to be considerably influenced by the phenomenon of emigration of workers directed to the Middle East. These migration flows have involved the following orders of magnitude and structural characteristics 1/:

- According to different estimates between 1.7 and 2.4 million workers migrated, mostly to the Middle East up to the end of 1982. This implies that Pakistanis made up more than one third of all migrant workers in the Middle East. They are concentrated in just five countries with Saudi-Arabia absorbing 59 per cent, the United Arab Emirates 15 per cent, Qatar 8 per cent, Kuwait 6 per cent an Bahrain 3 per cent.

- The total number of Pakistanis working abroad thus amounts to roughly 10 per cent of the country's labour force. As much as one third of the increase in the labour force during the Fifth Plan period (1978-83) was

1/ The following analysis relies mainly on a recent ILO-ARTEP study on Impact of Return Migration on Domestic Employment in Pakistan - A Preliminary Analysis, April 1984. Cf. also Iqbal, M./Fahim Khan, M. Economic Implications of the Return Flow of Immigrants from the Middle East: A Preliminary Study, Pakistan Institute of Development Economics, November 1981.

thus absorbed by external migration. The Sixth Plan projects the net migration for 1983-88 to reach 550,000 workers. According to an ILO-ARTEP forecast it may, however, be substantially lower (240,000 - 310,000), implying that during that period some 6 - 8 per cent of the labour force increase may be 'exported'[1/]

- The macro-economic impact of worker emigration is underlined by the fact that over the past decade remittances contributed even more to foreign exchange earnings than did total exports, thus representing roughly 10 per cent of national income. Worker remittances peaked in 1982/83 at a level of $2.89 billion, declined by 5 per cent to $2.74 billion in 1983/84 and have even decreased by 14 per cent during the first 5 months (July-November) of 1984/85.[2/]

Whereas the generation of foreign exchange earnings has in the past been at the centre of attention it is important not to dismiss further potentially negative repercussions on the domestic economy. A considerable part of migrants have belonged to the category of skilled workers (nearly one third of the total) with mechanics, carpenters, electricians, masons and engineers alone accounting for some 20 per cent. As shortages of skilled production workers are already foreseen as a major bottleneck for the implementation of the current Five Year Plan the continuing outflow may aggravate the resulting problems and counteract the Government's skill development programmes.[3/]

Furthermore, a growing tendency in favour of using more capital-intensive technologies may emerge because of (a) labour supply constraints concerning the availability of key production skills and (b) changing consumer demand patterns induced by the expenditure of remittances and returnees incomes.

1/ In order to enhance emigration flows the Government in mid-1984 has removed the previously applied regulations on minimum wages abroad.

2/ Data supplied by the Planning Commission.

3/ Cf. also Zafar Iqbal, M., 'Vocational Training in Pakistan', Pakistan Manpower Review, Vol. 9 (1983), pp. 1-8.

To sum up, it seems that worker emigration will continue to be an important determinant of human resource development and industrialization at least in the eighties. Assuming future decreases of remittances as a consequence of falling net emigration of workers and further assuming that the Middle Eastern countries will in the future be more selective in their choice of industrial skills to be imported, the high share of Pakistanis working abroad may well become a mixed blessing.

4.2 Raw Material Resources

Agriculture

Agriculture is a priority sector which in the recent past has developed quite successfully. Although agricultural productivity is still low when measured by world standards, the major food and cash crops have recently achieved impressive growth rates due to the combined effects of favourable weather conditions, increased availability of key fertilizer inputs and policy measures like investments in water development and irrigation systems and in particular by adopting higher procurement and support prices as incentives for production increases.

Self-sufficiency has now been achieved in the case of all major food crops with the exception of edible oils. The major foodgrain crop is wheat with a total production of 12.4 million tons in 1982/83, followed by rice with 3.4 and maize with 1.0 million tons. Apart from barley, it is these three major food crops which have also reached the highest production growth rates of all crops. The quantum indices (1969/70 = 100) have in 1983/84 reached a level of 174 for wheat, 151 for maize and 145 for rice (Table 21) as compared to an average index value of 137 for total agricultural production.

Pakistan has traditionally been a rice-exporting country and now ranks amongst the four major rice exporters (after USA, Thailand and The People's Republic of China). In 1983/84 rice exports totalled $424 million or 1.3 million tons of which roughly one third was high quality Basmati rice and two thirds other varieties. In the same year wheat appeared for the first time on the export list with a small quantity of 50,000 tons.

Table 21. Quantum indices of agricultural product by principal crops, (1969/70 = 100), 1975/76-1983/84

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84 a/
TOTAL	107	110	114	119	127	132	137	143	137
Food Crops									
Rice	109	114	123	136	134	130	143	143	145
Wheat	120	123	115	136	148	157	155	170	174
Barley	125	119	117	126	115	169	153	178	183
Jowar	99	92	101	89	88	82	80	80	80
Bajra	102	103	106	105	92	71	90	72	75
Maize	120	114	123	120	131	145	139	151	151
Gram	119	128	121	106	62	66	56	97	99
Cash Crops									
Cotton	96	81	107	88	136	133	140	154	94
Sugarcane	97	112	114	104	104	123	123	123	131
Rape & Mustard	105	116	92	97	97	99	93	96	98
Sesamum	131	147	161	226	226	221	200	129	121
Tobacco	52	64	64	58	67	58	59	56	56

Source: Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984.

a/ Provisional.

Cash crop items are dominated by sugarcane and cotton with a production of 32.5 million tons and 0.8 million tons respectively in 1982/83. Whereas the provisional fig re for 1983/84 shows a 6 per cent increase of sugarcane production, the production of cotton fell drastically to only 0.5 million tons due to autumn storms and winter drought. This high vulnerability of cotton production to natural hazards is of particular importance when seen in connection with the country's dominant cotton yarn and textiles industries with their dependence on agricultural inputs.

The sharp and sustained rise in the production of sugarcane during the Fifth Plan period has contributed to the remarkable increase of sugar production which in 1982/83 absorbed 42 per cent of cane for manufacture of white/refined sugar as compared to only 30 per cent in 1977/78.

Fisheries

Pakistan disposes of significant fish stocks a large share of which has not yet been commercially exploited. Total catch in 1982 amounted to 337,200 metric tons with more than 80 per cent coming from marine sources (Table 22). Apart from their importance as being a cheap source of protein supply, fish and fish preparations have increasingly contributed to foreign exchange earnings with a share of 2.6 per cent (1982/83) in total exports. Its share of GDP, although increasing, has remained below 1 per cent.

Table 22. Total catch of fish, 1975-1982 (in '000 metric tons)

Year	Total	Inland	Marine
1975	174.1	20.0	154.1
1980a/	279.2	46.3	232.9
1981a/	317.8	56.3	261.5
1982a/	337.2	59.1	278.1

Source: Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984.

a/ Including subsistence catch.

Livestock

Livestock rearing makes a substantial contribution to GDP with a share of 7.4 per cent in 1982/83 (revised) and 7.2 per cent in 1983/84 (provisional). Table 23 indicates the production of some more important livestock products. It is noteworthy that the livestock sector holds a share of roughly 15 per cent in total export earnings with leather alone accounting for 4.8 per cent in 1983/84 (July to March). The current Five-Year Plan aims at high growth rates for livestock products, e.g., 15 per cent annually for poultry meat, which is to be achieved above all by the encouragement of large-scale private farm enterprises.

Table 23. Production of livestock products, 1975/76-1983/84

Product	Unit	1975/76	1980/81a/	1983/84a/
Milk	million tonnes	8.3	9.2	10.1
Meat (Beef/Mutton)	thousand tonnes	650	753	915
Poultry meat	thousand tonnes	25	52	85
Eggs	million nos.	1,159	2,427	3,612
Hides	million nos.	4.5	4.84	5.24
Skins	million nos.	22.8	26.95	29.7
Wool	Thousand tonnes	30.7	38.9	45.1

Source: Government of Pakistan, Economic Adviser's Wing, Finance Division, Pakistan Economic Survey 1983-84.

a/ Estimates based on growth rates of agricultural livestock censuses of 1972-76.

Mineral resources

Pakistan disposes of a wide range of non-fuel minerals including coal, chromite, gypsum, limestone, rock salt, silica sand and magnesite (for production figures, see Table 24). These resources are, however, currently insufficiently exploited. There is a lack of detailed geological surveys. The contribution of mining and quarrying to GDP has, therefore, remained below 1 per cent (0.6 per cent in 1983/84 provisionally).

1/ For figures on livestock population, see Basic Indicators No. 2.

Table 24. Mineral production, 1975/76-1982/83

Item	Unit	1975/76	1980/81	1982/83
Antimony	tonnes	360	39	-
Argonite/marble	thousand tonnes	65	114	121
Celestite	tonnes	957	295	406
Chromite	thousand tonnes	12	1	3
Coal	thousand tonnes	1,138	1,597	1,852
Dolomite	tonnes	356	24,244	100,300
Fire clay	thousand tonnes	41	60	69
Fuller earth	thousand tonnes	23	21	21
Gypsum	thousand tonnes	324	554	341
Lime stone	thousand tonnes	2,968	3,363	4,232
Magnesite	tonnes	8,118	397	1,687
Roch Salt	thousand tonnes	427	514	548
Silica Salt	thousand tonnes	43	84	141
Ochres	tonnes	11,835	445	558
Sulphur	tonnes	1,552	403	770
Soap stone	thousand tonnes	26	28	19
Baryte	thousand tonnes	11	21	20

Source: Government of Pakistan, Economic Adviser's Wing, Finance Division, Pakistan Economic Survey 1983-84.

Investment for the development of mining is accorded priority in the current Five Year Plan, partly in order to reduce the high share of imported raw materials required for the operation of the Karachi steel mill (mainly metallurgical coal, iron ore and manganese). Among others, more resources will be devoted to the activities of the Geological Survey of Pakistan as a precondition for extending area and intensity of further explorations. Coal with estimated total reserves of 1 billion tons is first-ranking in the Plan's order of priorities, followed by copper, gold and silver and by phosphate and iron ore. The exploitation of considerable copper reserves found at Saindak in Baluchistan is to be implemented soon and may, besides meeting the domestic demand, also contribute to export earnings.

4.3 Energy resources

Pakistan is an energy-deficit country with a degree of self-sufficiency of roughly three quarters (74 per cent in 1982). The remaining quarter of commercial primary energy consumption thus has to be imported. Energy imports amounted to 8.7 million tons coal equivalent in 1982 (Table 25) and were almost exclusively met by crude petroleum and petroleum products.

Table 25. Commercial primary energy balance, 1982
(thousand tons coal equivalent)

Production		Apparent Consumption	
Solid fuels	1,235	Solid fuels b/	1,700
Crude petroleum & natural gas liquids	758	Liquid fuels b/, c/	6,344
Natural gas	10,377	Natural gas b/	10,377
Hydroelectricity a/	4,399	Hydroelectricity a/	4,399
Nuclear power a/	66	Nuclear power a/	66
Total production	16,835	Total consumption	22,886
Imports		**Exports**	
Solid fuels	487	Solid fuels	23
Crude petroleum	5,847	Petroleum products	895
Petroleum products	2,326	Total exports	918
		Bunkers	531
Total supply	25,495	Increase in crude stocks	291
		Balancing item	869
		Total demand	22,495

Source: The Economist Intelligence Unit, Quarterly Review of Pakistan, Bangladesh, Afghanistan, Annual Supplement 1984.

a/ Converted by the EIU on an input basis, showing the amount of energy a thermal power station of average (28 percent) efficiency would require to produce the same amount of electricity.

b/ Assuming nil change in stocks.

c/ Including refinery consumption.

The lion's share of domestic production is provided by natural gas (62 per cent in 1982) accounting for 39 per cent of commercial consumption of primary energy. In 1983/84 there were 8 fields operational (the largest at Sui in Baluchistan) and some more under development.

Hydroelectricity ranks second among the leading domestic energy sources with a production share of 26 per cent and a share of 19 per cent in consumption. Up to now the electricity sector has been characterized by a high incidence of load shedding particularly in summer months.

The relative importance of coal as energy source has been sharply decreasing over the years. Its share in total consumption dropped drastically to some 7 per cent whereas in the early fifties it used to be over 50 per cent. Roughly two thirds of coal consumption are met from domestic production.

While the figures given above refer to commercial energy it has to be noted that in fact about one third of total primary energy consumption is based on non-commercial resources like fire-wood, charcoal and cowdung.

Looking at the end-use consumption pattern of commercial energy[1/] it emerges that in 1980/81 46 per cent were utilized by industry and 31 per cent by transportation. Household consumption followed with 15 per cent and the agricultural sector had a low share of 8 per cent which will, however, in future increase as a result of farm mechanization efforts.

Recognizing the negative effects of persistent energy shortages and load-shedding on industrial production, the Sixth Five Year Plan has given first priority to the energy sector with a share in public expenditure of 34 per cent (after 24 per cent in the Fifth Plan). Out of a total of 117

1/ Cf. Government of Pakistan, Planning Commission, The Sixth Five Year Plan 1983-88, p. 225.

billion rupees for energy development, more than 70 per cent will be spent alone on the generation, transmission and distribution of power including rural electrification. Emphasis is also placed on energy conservation measures in order to partly delink economic growth from rising energy demand.

4.4 Financial resources

Pakistan's economy has always been characterized by a comparatively low level of domestic savings. The gross domestic savings rate has in recent years fluctuated around a level of about 6 per cent reaching its minimum value of 5.5 per cent in 1982/83 after which it is estimated to have increased again to 6.6 per cent in 1983/84 (Table 26). Due to the increasing importance of net factor income from abroad (emigrant workers' remittances)[1/] a considerably higher gross national savings rate could be achieved (14.6 per cent in 1983/84) which has, however, also to be considered as relatively low when compared with that of many other developing countries. The resulting domestic savings gap has furthermore been increasing over the years as may be demonstrated by the two following trends: net factor income from abroad as a percentage of gross domestic savings has tremendously increased (from 87.7 per cent in 1977/78 to 196.7 per cent in 1982/83 and 146.3 per cent in 1983/84); on the other hand gross domestic savings have declined as a percentage of total investment, having decreased from 46.1 per cent in 1977/78 to a share as low as 32.4 per cent in 1982/83. To sustain the investment rate (total investment as percentage of GDP) of about 17 per cent Pakistan thus has had to increasingly rely on foreign financing sources, be they in the form of worker remittances or of foreign aid contributions. In particular, the former source of capital inflows can, however, not be expected to continue its impressive growth record in the future (see section 4.1).

1/ To what extent these worker remittances are actually spent for investment instead of consumption purposes, is, however, a controversial question. Cf. Zingel, op.cit., p. 274.

Table 26. Selected savings and investment indicators, 1977/78-1983/84

Indicator	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83[a/]	1983/84[b/]
Gross domestic savings rate[c/]	7.8	6.2	6.7	6.7	5.9	5.5	6.6
Gross national savings rate[d/]	14.0	12.7	13.4	13.7	12.8	14.8	14.6
Net factor income from abroad as percentage of gross domestic savings	87.7	119.5	115.9	118.9	133.5	196.7	146.3
Gross domestic savings as percentage of total investment[e/]	46.1	36.7	38.6	41.9	35.2	32.4	...
Total investment as percentage of GDP	17.3	16.9	17.3	16.1	16.7	16.9	...

Sources: Calculated from Government of Pakistan. Economic Advisor's Wing. Finance Division, Pakistan Economic Survey 1983-84, Annexure II, p. 23 and World Bank, Pakistan Recent Economic Developments, op.cit., p. 56.

a/ Revised.

b/ Provisional.

c/ As percentage of GDP at current market prices.

d/ As percentage of GNP at current market prices.

e/ Incl. fixed investment plus changes in stocks.

Although worker remittances have assumed the leading position as a source of finance from abroad in the second half of the seventies, foreign aid has continued to play a very important role. As can be calculated from Table 27, the ratio of foreign aid disbursements to Government revenues has only slightly decreased from 26.7 per cent (1977/78) to 24.6 per cent (1982/83). A drastic fall, however, has occ· ed in the ratio of net aid inflows to Government revenues, which has almost been halved from 22.6 per cent (1977/78) to 12.3 per cent (1982/83). There has also been a very pronounced declining trend in real net aid inflows which in 1983/84 stood at only 37.9 per cent of their 1975/76 real value.[1/] Both trends taken together, i.e. decreasing worker remittances plus decreasing real net aid, strongly point to the necessity to increase the country's domestic savings rate in order to meet the financial requirements for its ambitious investment plans. This would in particular apply to the public sector which has in the past only been able to finance a relatively small portion of its investment from own savings.

Table 27. Summary of consolidated public finances, 1977/78-1982/83
(in PRs million)

	1977/78	1978/79	1979/80	1980/81	1981/82[a/]	1982/83[b/]
Revenue	27,128	31,427	39,350	48,154	52,622	63,949
Expenditure	42,149	49,717	55,477	64,791	72,889	88,228
Overall deficit	-14,498	-17,315	-14,663	-14,618	-18,349	-21,541
Financing:						
Domestic resources (net)	8,369	10,604	7,712	6,877	11,999	13,671
External resources (net)	6,129	6,711	6,951	7,741	6,350	7,870
- Disbursements	7,237	9,216	12,555	11,374	12,491	15,738
- Repayments	-1,108	-2,505	-5,604	-3,633	-6,141	-7,868

Source: Jetha, N.; Akhtar, S.; Rao, G., Domestic Resource Mobilization in Pakistan - Selected Issues, World Bank Staff Working Paper No. 632, Washington, February 1984, p. 11.

a/ Revised.

b/ Budgeted.

1/ Deflated by the US $ import unit value index for Pakistan's imports. Cf. the data given in World Bank, Pakistan Recent Economic Developments, op.cit. p. 49.

Within the framework of the Sixth Five Year Plan, the national savings rate is projected to increase to an average figure of 15 per cent as compared to 12 per cent over the Fifth Plan period with private savings rising from 9.8 to 11.9 per cent and public savings from 2.4 to 3.2 per cent. Achievement of these targets would imply that 75.3 per cent of Annual Development Plan expenditures within the Sixth Plan would be financed from domestic resources and 24.7 per cent from external resources while the same figures for the Fifth Plan period stood at 73.6 per cent and 26.4 per cent respectively.[1/]

4.5 Technical assistance to industry

The UNIDO technical assistance projects in Pakistan are at present jointly executed with the Federal Ministry of Industries and its specialized organizations, the Federal Ministry of Production and its sectoral Corporations, the Ministry of Science and Technology and the Ministry of Petroleum and Natural Resources. The emphasis over the last years has been on projects assisting and supporting metallurgical and engineering industries, textile and leather industries, surveys and pre-investment studies with emphasis on small-scale industries, shop floor and specialized training in the various industrial fields. Annex Table A-6 provides a detailed listing of current UNIDO projects in Pakistan including approval date, estimated completion date and title of each individual project.

In view of the characteristics pertinent to Pakistan's industrial sector (high degree of regional disparities, widespread underemployment and unemployment, prominent role played by agro-based branches) it seems generally recommendable to focus industrial strategies and policies on strengthening the development potential of small-scale industries as well as of industries processing agricultural goods. This implies that agriculture and industry whould be more closely linked and interrelated including, e.g., the provision of agricultural machinery, transport equipment and implements by the industrial sector's engineering branches.

1/ For more details, see World Bank, Pakistan Review of the Sixth Five-Year Plan, Report No. 4706-PAK, October 20, 1983, pp. 25-28.

Throughout the various branches of industry but in particular in the broad sub-sector of engineering there is a need to establish and/or improve systems of quality control and standardization as well as to introduce a modern market-oriented approach towards industrial design and packaging techniques all of which are among the major non-price determinants of export competitiveness.

A major field of policy attention should be seen in the various integrative aspects which above all refers to the necessary integration of agriculture and industry as mentioned above.

It also refers essentially to the need to increase the integration within the industrial sector. In particular in the engineering branches large-scale and small-scale industrial units are essentially unrelated in their activities leaving a large scope for increasing the degree of industrial subcontracting. Apart from the need to develop the willingness on the side of larger enterprises to subcontract the specialized production of certain parts and components this would furthermore require a detailed nation-wide identification of the available industrial production potential represented by small-scale industries.

Another aspect of approaching the integration issue concerns the role of Pakistan's industry within a broader regional framework. Regional co-operation attempts in the West and South Asian region (RCD, SARC) are still very much in an embryonic state thus offering the opportunity to carefully analyze and determine the potential for achieving regional specialization patterns in specific branches of industry.

This raises the general question of the appropriate market orientation of the various industrial branches. What is required in this regard, is a continuous careful monitoring of key regional markets as well as the world market for a wide range of manufactured products; the demand for textile products and processed food in the Middle East and Africa are important cases in point. In general terms this monitoring process would have to include the gathering of timely information on the volume and pattern of demand; on technological changes in processes and products; on official strategies,

plans and policies pursued both by export target countries and other competitors (above all as to their technology and trade policies) and on relevant corporate strategies in key branches. As this approach would call for considerable financial and specialized research resources, the possibilities for a joint programme involving national institutions and external assistance from international organizations like UNIDO should be explored.

An important aspect of market orientation concerns the segmentation between the domestic market and external markets. Many industrial branches will continue to be basically oriented towards the domestic market including those which are still to be found in the early stages of import substitution. There are other branches, e.g., textiles, where an intra-branch segmentation is called for in the sense that certain products are trying to capture export markets while others remain domestically-oriented and may be to some extent shielded off from international competition by corresponding trade policy measures. This would imply that the former would have to adopt highly advanced often relatively capital-intensive technologies whereas the latter may continue to rely on their relatively labour-intensive processes for the production of more traditional goods. This dual strategy particularly suits the need to limit potential negative employment effects of rapid structural changes concerning the technologies applied.

A further industrial policy issue of importance to Pakistan concerns the role to be played by Government i.e. the relationship between public and private industrial activities. Since the late seventies, the Government has sought to deregulate and liberalize industrial investment with the result that private manufacturing investment has again taken the lead. A sizable public industrial sector has, however, remained in existence calling for efficient patterns of interaction and co-ordination between private and public industry. The experience of a number of East Asian countries has shown that deregulation as such is insufficient as long as a close co-operative working relationship is lacking between Government, administration and private entrepreneurs. It may thus be useful to organize seminars on specific aspects of private industry-led development strategies which would allow the decision-makers in Pakistan to share the experiences of other successful countries in the Asian region.

The Sixth Five-Year Plan places particular emphasis on the increasing role to be played by direct foreign investment (DFI) in the future and states that the major location for manufacturing DFI will be in export processing zones. The experience of other developing countries, above all in the East and Southeast Asian region, has shown that such special economic zones can, on the one hand, contribute substantially to the generation and/or promotion of manufactured exports and to the provision of productive employment opportunities. On the other hand, they have also often been characterized by one-sided sectoral structures of production; a relatively high share of foot-loose and thus vulnerable investments; a lack of backward linkages with the domestic economy and detrimental effects on the regional dispersal of industrial activities. As Pakistan has only recently adopted this particular institutional approach towards DFI it is necessary to carefully study the available policy options for shaping export processing zones in order to maximize their longer-term spin-offs and their catalytic role for overall industrial development.

ANNEXES

Annex	A:	Statistical Tables
Annex	B:	List of Specified Industries Requiring Government Investment Sanctions
Annex	C:	Guidelines for Foreign Loans/Credits
Annex	D:	Guidelines Governing Agreements for Transfer of Technology

Annex A

Table A-1: Distribution of exports and imports according to SITC categories, 1973/74 and 1982/83

	Export		Import	
	1973/74	1982/83	1973/74	1982/83
TOTAL (in thousand PRs)	10,161,215	34,441,703	13,479,211	68,150,806
Sectoral Distribution (in per cent)				
Food and live animals	27.6	18.1	18.1	6.6
Beverages and tobacco	1.1	0.4	0.1	0.0
Crude materials inedible, except fuels	8.5	14.0	5.7	5.5
Mineral fuels, lubricants and related material	1.7	2.9	11.6	30.7
Animal and vegetable oils and fats	0.0	0.0	7.0	6.1
Chemicals	1.1	0.9	15.5	11.0
Manufactured good chiefly classified by material	49.7	50.6	19.0	13.1
Machine and transport equipment	1.1	1.3	21.5	24.7
Miscellaneous manufactured articles	8.0	10.5	2.2	2.3
Commodities and transactions not classified to kind	1.2	1.3	0.0	0.1

Source: Calculated from Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984.

Table A-2: Distribution of total exports and imports by economic groupings, 1978-1983 (percentage shares)

Trade Partner Countries	Exports to						Imports from					
	1978	1979	1980	1981	1982	1983	1978	1979	1980	1981	1982	1983
Industrial Countries	44.9	42.2	36.4	35.0	39.2	34.5	56.5	57.6	50.1	47.5	48.7	51.6
Oil-Exporting Countries	19.5	20.5	23.0	25.7	25.4	38.2	21.7	20.1	28.9	30.0	31.5	28.7
Non-Oil Developing Countries	32.4	33.1	37.9	36.4	32.0	23.7	18.9	20.0	18.8	20.5	17.5	18.4
- Africa	7.4	8.1	5.9	7.5	5.5	4.8	1.4	1.2	0.9	1.1	0.8	1.3
- Asia	19.7	17.7	24.9	22.7	21.2	15.1	14.0	15.0	13.7	14.0	14.0	13.3
- Europe	3.1	1.7	2.9	2.5	1.4	1.5	1.6	1.9	1.6	2.3	1.5	2.0
- Middle East	1.7	3.6	2.4	2.4	2.9	1.3	0.2	0.2	0.7	1.9	0.3	0.5
- Western Hemisphere	0.6	2.0	1.7	1.3	1.0	1.1	1.7	1.7	1.9	1.1	0.8	1.2
USSR, Eastern Europe etc.	3.1	4.1	2.7	2.9	3.3	3.6	2.8	2.3	2.2	2.0	2.4	1.4

Source: International Monetary Fund, Direction of Trade Statistics Yearbook 1984.

Table A-3: Gross fixed capital formation in private large and medium-scale industry, 1972/73-1982/83
(PRs in million)

ITEM	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83
INDUSTRIAL GROUPS											
FOOD EXCEPT BEVERAGES AND TOBACCO	51.4	60.2	66.6	58.0	81.2	143.8	106.4	129.1	96.2	163.7	143.1
BEVERAGES	1.8	4.8	4.8	1.3	2.0	3.3	7.9	6.6	10.1	11.1	2.3
TOBACCO	7.4	5.1	18.5	1.9	9.6	5.6	37.5	75.0	22.2	81.1	73.6
SUB TOTAL	60.6	70.1	89.9	61.2	92.8	152.7	151.8	210.7	128.5	255.9	219.0
TEXTILES	156.7	132.5	195.0	306.4	403.1	302.0	317.2	356.6	268.4	255.8	299.3
FOOTWEAR, WEARING APPAREL AND OTHERS	5.0	11.1	10.6	5.1	11.3	17.4	18.9	28.6	32.2	41.1	41.1
SUB TOTAL	161.7	143.6	205.6	311.5	414.4	319.4	336.1	385.2	300.6	296.9	340.4
WOOD WORKING	5.0	0.3	1.5	0.3	0.1	0.2	2.3	1.3	3.7	3.6	3.1
FURNITURE AND FIXTURES	0.3	4.8	9.5	21.3	1.8	0.9	0.7	0.3	0.8	1.7	0.5
SUB TOTAL	5.3	5.1	11.0	21.6	1.9	1.1	3.0	1.6	4.5	5.3	3.6
PAPER ANDPAPER PRODUCTS	17.4	19.8	21.0	44.5	42.1	40.4	46.5	35.8	58.2	81.8	88.7
PRINTING AND PUBLICATIONS	9.4	8.2	3.7	7.7	3.0	1.4	11	11.1	14.3	19.5	9.6
SUB TOTAL	26.8	28.0	24.7	52.2	45.1	41.8	58.	46.9	72.5	101.3	98.3
LEATHER AND LEATHER PRODUCTS	17.1	8.0	17.1	1.5	4.4	3.8	17.4	12.0	15.9	11.0	10.9
RUBBER PRODUCTS	3.9	1.9	4.7	1.9	4.4	4.7	8.0	7.2	10.5	9.8	102.1
CHEMICAL AND CHEMICAL PRODUCTS	37.6	51.8	59.0	67.6	133.8	107.6	137.7	246.5	460.0	241.0	139.9
PRODUCTS OF PETROLEUM AND COAL	10.0	9.2	36.6	25.4	29.5	45.0	21.8	16.9	7.5	7.2	5.9
NON-METALLIC MINERALS	6.3	11.8	30.3	4.8	26.1	3.6	4.7	9.3	8.8	4.5	6.9
BASIC METAL INDUSTRIES	2.5	3.0	2.9	1.8	8.5	5.9	0.6	0.8	25.2	13.3	11.9
METAL PRODUCTS	11.5	11.1	13.7	16.4	14.8	14.8	10.8	8.9	15.0	11.7	10.1
SUB TOTAL	88.9	96.8	164.3	119.4	221.5	185.2	201.0	301.6	562.9	298.5	287.7
MACHINERY	12.8	26.1	14.4	16.0	15.8	54.8	12.5	12.8	12.4	32.1	30.1
ELECTRICAL MACHINARY AND APPLIANCES	10.3	22.8	27.4	13.3	27.1	39.9	23.0	14.9	72.7	45.0	39.8
SUB TOTAL	23.1	48.9	41.8	29.3	42.9	94.7	35.5	27.7	85.1	77.1	69.9
TRANSPORT EQUIPMENT	7.4	2.2	0.9	10.3	18.3	4.8	10.5	19.0	17.8	22.1	20.1
MISCELLANEGUS INDUSTRIES	15.3	17.0	17.0	15.7	18.6	24.5	20.6	20.4	24.6	28.3	41.9
TOTAL IN PRODUCTION	384.3	411.7	555.2	621.2	855.5	824.2	816.8	1,026.8	1,208.8	1,086.9	1,091.5

Source: World Bank, Pakistan - Recent Economic Developments, Report No. 4906-PAK, February 24, 1984.

Table A-4:

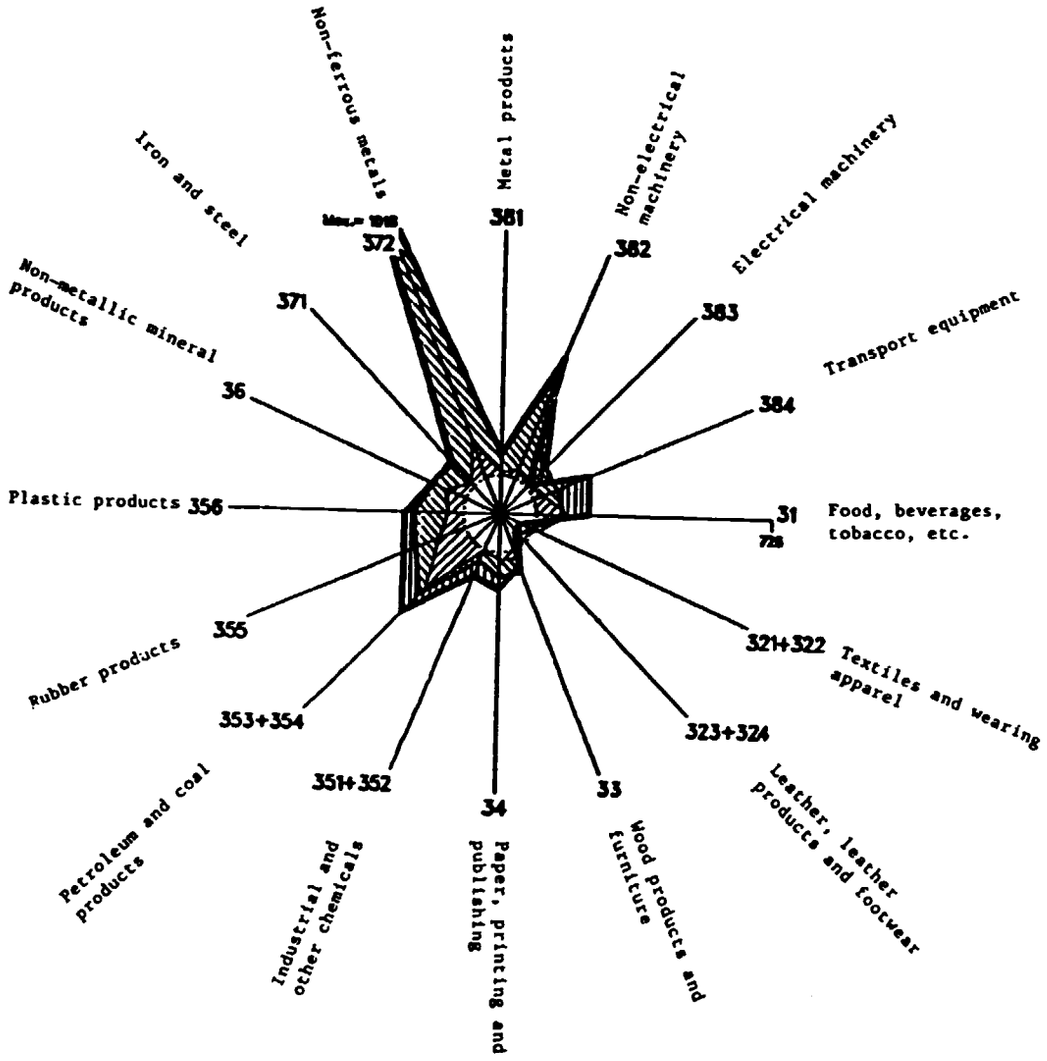
Statistical abstract of industrial investment schedule for the Sixth Five-year Plan (PRs million), 1983-88

I.	FOOD, TOBACCO & BEV.IND.	
-	Refined Sugar	5,100
-	Rice Milling	2,800
-	Milk Proc. & Milk prod.	1,820
-	Goat, Sheep & Catt.Farm	930
-	Liquid Sugar	550
-	Poultry & Animal Feeds	500
-	Others	2,883
	Sub-total	14,583
II.	TEXTILES	
-	Cotton Tex (weaving)	4,950
-	Cotton Tex (spinning)	4,000
-	Finish & Process	2,200
-	Jute Goods	720
-	Synthetic Tex. Finish	600
-	Synthetic Textile	500
-	Others	1,419
	Sub-total	14,389
III.	LEATHER FT.WR.& LEATHER GOODS	
-	Leather Tan. (skn & hds.) ch.td.	200
-	Leather Garments	150
-	Artificial Leather	62
-	Footwear-Leather ft.wr.	60
-	Others	100
	Sub-total	572
IV.	RUBBER & RBR.PRODUCTS	
-	Tyres & Tubes (4-W veh.)	2,150
-	Rubber Belting	300
-	Tyres & Tubes (2/3.W veh.)	100
-	Tyres & Tubes (bicycles)	50
	Sub-total	2,600
V.	PAPER & PULP	
-	Writ.Print, & Pack paper	2,600
-	Newsprint paper	1,600
-	Kraft Pulp & Paper	1,500
-	Tissue/Toilet paper	200
-	Paper & P/board prod.	200
-	Hard-Board	120
	Sub-total	6,220
VI.	CHEM.PHARM. & FERT.	
-	Synth. & man-made fibre F.Y.	6,600
-	Fertilizer-Nitro, fert.	3,900
-	Fertilizer-Phos.fert.	2,100
-	Synth. & man-made fibre/S.F	1,700
-	Synth. & man-made fibre/V.R.	900
-	Power Alcohol	850
-	Others	6,241
	Sub-total	22,291
VII.	PET.REF. & PETROCHEM.	
-	Naphtha Cracker/Poly Unit	7,000
-	Petroleum Refining	4,000
-	Hydro Cracker	3,740
-	P.V.C. Resin	1,250
-	Others	1,056
	Sub-total	16,966
VIII.	CEMENT & OTHER NON-MET.	
-	Dev. & Exp. of Minerals	11,801
-	Grey Cement	8,000
-	White Cement	1,400
-	Refrac & products thereof	600
-	Ceramics-Sanitaryware	450
-	Others	1,595
	Sub-total	23,846
IX.	BASIC METALS	
-	Non-ferr. (copper)	5,000
-	Iron & Steel (tin plates)	2,950
-	Ferro Alloys	790
-	Iron & Steel Products	478
-	Others	1,495
	Sub-total	10,713
X.	METAL PROD. MINUS MACHINES	
-	Surg. Med. & Dent. Instrument	800
-	Steel Pipe & Pipe Fitt.	450
-	Met. Struc. Fabrication	300
-	Cutlery, Met. Utensils En.wares/Press.-cook,etc.	210
-	Others	787
	Sub-total	2,547

Table A-4 (cont'd)

XI.	M/C OTHER THAN ELECTRICAL	
-	Power Gen.Machinery	1,020
-	Office Machines	320
-	General Purpose M/c	303
-	Textile Machinery	300
-	Major Plants, M/c & Cranes	300
-	Solar Energy System	300
-	Others	1,572
	Sub-total	4,115
XII.	ELEC. MACHINERY APPL.	
-	Elec. Motors & Gen.	495
-	Transformers LT & HT	460
-	Elec. Wires & Cables	312
-	Telephone Cables	310
-	Elec. Bulbs & Tubes	230
-	Switchgears LT & HT	195
-	Others	769
	Sub-total	2,771
XIII.	ELEC COMPONENTS	
-	TV, Radio, Tape, VCR	352
-	Elec. Component & mat.	290
-	Communications Equip.	265
-	Misc. Electronic M/c	100
-	Others	82
	Sub-total	1,089
XIV.	TRANSPORT EQUIPMENT	
-	Lt. Com.Veh. & Cars	950
-	Mech. Prop. Veh./Bus & Truck	870
-	Two & Three Wheelers	300
-	Others	238
	Sub-total	2,358
XV.	SERVICE & MISC.IND.	
-	Hotels, Motels & Hostels	1,800
-	Marble Onyx & Products	700
-	Plastic Prod. & Acrylic	675
-	Sports Goods	380
-	Ind. not elsewhere spec.	365
-	Plastic Products	250
-	Others	770
	Sub-total	4,940
	Grand Total	130,000

Table A-5 INDUSTRIAL STRUCTURAL CHANGE, 1965-80
(Index of value added: 1965=100)



The measure for structural change is defined as:

$$\cos \theta = \frac{\sum_i s_i(t).s_i(t-1)}{\sqrt{\left(\sum_i s_i(t)^2\right).\left(\sum_i s_i(t-1)^2\right)}}$$

where $s_i(t)$ is the share of the i-th branch of value added in total value added in the year t.

The value θ can be interpreted as the angle between the two vectors $s_i(t-1)$ and $s_i(t)$ measured in degrees.

Source: UNIDO. Industry and Development, Global Report, 1985.

Table A-6:

The Approved and/or Operational Technical Co-operation Projects of UNIDO (as of December 1984)

PAKISTAN

Approval Date	Estimated Completion Date	UNIDO Project Number	Project Title
3/80	1986	DP/PAK/79/002*	Improvement of policy planning, development and statistical cell of the Ministry of Industries
10/74	1985	DP/PAK/73/043*	Standardization and quality control
7/84	1985	DP/PAK/84/021*	Consultancy development in the Investment Advisory Centre of Pakistan (phase II of DP/PAK/75/062)
3/84	completed	RP/PAK/84/001	Training on planning and appraisal of agro-industrial projects
4/80	1985	DP/PAK/79/022*	Leather products development centre
8/80	completed	DP/PAK/79/020*	Preparation of master plan for iron and steel industry
7/79	1985	SI/PAK/79/802	Technical assistance to Pakistan Steel Ltd.
3/83	1985	DP/PAK/82/018	Assistance in production of quality and special steels using existing industrial facilities
6/83	1985	DP/PAK/83/011*	Assistance to Pakistan Engineering Company (PECO)
4/81	1985	ST/PAK/80/001**	Development centre for silicon technology (Associated Agency: UN/DTCD)
6/84	1985	SI/PAK/84/801	Formulating detailed plans and a project document for the establishment of a metallurgical research and development institute of excellence
4/83	1985	DP/PAK/83/009*	Energy saving in industry

10/83	1988	DP/PAK/83/014**	Assistance to Pakistan Automobile Corporation - manufacturing engineering assistances to Vendors
3/83	1985	SI/PAK/83/801	Assistance to Nowshera sheet glass factory
6/83	1985	DP/PAK/83/002*	Preventive maintenance programme of the Federal Chemical and Ceramics Corporation Ltd.
10/83	1986	DP/PAK/83/010*	Fertilizer research and development institute at Faisalabad
8/84	1986	DP/PAK/84/022*	Long-term development programme for the synthetic fibre industry
5/79	1985	DP/PAK/75/071*	State Heavy Engineering Corporation
12/84	1985	DP/PAK/84/028	Plastics technology centre - preparatory assistance

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* Large-scale project (= total allotment $150,000 or above).
** Total allotment $1 million or above.

Source: Provided by UNIDO's Division of Industrial Operations, January 1985.

Annex B

LIST OF SPECIFIED INDUSTRIES REQUIRING GOVERNMENT INVESTMENT SANCTIONS

I. National Security and Defence

Arms and Ammunitions
Security Printing, Currency and Mint
High Explosives
Defence Oriented Electronics
Radio-active Substances

II. Religious and Socio-Economic Considerations

Alcoholic and Foreign Brand Concentrate Based Synthetic Beverages

III. Projects of National Importance

Basic Steel
Manufacture of Basic Metals and Alloys
Heavy Mechanical and Heavy Electrical Plants
Basic Chemicals
Petro-chemicals
Public Utilities
Ships, Aircrafts and Railways Locomotives

IV. Indigenization

TV, Radio, Tape-Recorders, VCR Cassettes and Tapes
Manufacture of Air-conditioners, Refrigerators and Deepfreezers
Motor-cycles and Scooters (two and three wheelers)
Manufacture of Automobiles, Tractors and Farm Machinery.

V. Price Regulation

Fertilizer
Cement
Drugs and Pharmaceuticals
Vegetable Ghee

VI. Capacity

Sugar
Cotton Spinning

Source: Government of Pakistan, Ministry of Industries, Industrial Policy Statement, June 1984.

Annex C

GUIDELINES FOR FOREIGN LOANS/CREDITS

	Rate/Limit for which sanction is not required
I. Rate of Interest:	
(a) Interest on loans from banks/commercial institutions	Not exceeding 1.5 % above LIBOR.
(b) Interest on Suppliers Credits:	
(i) Foreign Credits negotiated through Development Financing Institutions viz PICIC, IDBP etc.	At the rates negotiated by the institution concerned.
(ii) In other cases	Not exceeding 1.5% above LIBOR.

Approval of Government of Pakistan will be required where credit for export is provided at concessional rate by the banks/financial institutions under the instructions or policy of foreign Governments.

II. Front end fees/charges for cash loans mentioned in I (a) above where applicable:	
(i) Commitment fee	Not exceeding 1/2% per annum.
(ii) Management fee	Not exceeding 1/2% of loan amount for syndicate loans only.
(iii) Legal Expenses:	
(a) Single Bank Loan	At actuals not exceeding $5,000.
(b) Syndicated Loan	At actuals not exceeding $10,000.

Annex D

GUIDELINES GOVERNING AGREEMENTS FOR TRANSFER OF TECHNOLOGY

I. Royalty

(1) Definition of Royalty

Royalty is a fee paid by a local firm to the foreign collaborator in consideration of: -
"Licence to use the foreign manufacture's patent/Brand Name for marketing the product(s)".

(2) No Royalty would be allowed: -

(a) On consumer goods for home market; and

(b) In cases where more than 50 per cent shares are held by the owners of the patent/Trade Mark/Brand Name.

The existing agreements will, however, continue as per terms and duration already determined.

(3) In other cases, the royalty shall be allowed as under: -

(a) Upto 3 per cent on capital goods manufactured for exports;

(b) Upto 2 per cent on consumer goods manufactured for exports; and

(c) Upto 1 per cent on capital goods manufactured for home market.

(4) Royalty shall be for a period not exceeding 5 years.

(5) Royalty will be calculated and certified by the applicants' auditors on the basis of ex-factory price less Excise Duty and Sales Tax, if any, for home market and F.O.B. price for exports.

II. Technical Fee

(1) Definition of Technical Fee:

It is a fee paid by the local firm to the foreign collaborators in consideration of: -

(a) Engineering and Technical Services including assistance on manufacturing process, testing and quality control, assistance by way of making available patented process and/or secret know-how, and rights to avail of the technical/ confidential information resulting from continuous technical research and development etc; and

(b) Technical training of local personnel.

(2) No technical fee shall be allowed on consumer goods or for simple conventional process goods, which are being produced in the country without foreign technical collaboration.

(3) Technical Fee may either be determined in lump sum to be paid in instalments or be allowed as under: -

(a) Up to 3 per cent on engineering goods and for such basic manufacture which requires sophisticated technology.

(b) Up to 1.5 per cent for product(s) other than (a) on new products only.

(c) The aggregate rate of Royalty and Technical Fee should not exceed 5 per cent.

(d) Technical Fee shall not be allowed for more than 5 years.

(e) Lump-sum technical fee will not exceed 5 per cent of foreign exchange cost of plant and machinery and will be admissible only for items (a) and (b).

(4) For basic manufacture, technical fee will be calculated and certified by the company's auditors on the basis of ex-factory price.

(5) For assembly/manufacture, technical Fee may be calculated on F.O.B. price of deleted components or parts of the product(s) which would by manufactured by local licensed firm or ex-factory price of locally produced components or parts of the product(s) whichever is less.

(6) While calculating technical fee, the Excise Duty, Sales Tax and the value of imported components and parts should be deleted from ex-factory price. Documentary evidence in support of the above may be called for from the applicants.

(7) In the agreement no provision should be made for any compulsory minimum payment of royalty/technical fee.

(8) In case of payment of technical fee in lump-sum it should be spread over a number of years and should be linked with transfer of technology/services rendered. Further the supplier of technology should affirm that the price is in line with the agreement made in other countries.

(9) There should be no requirement for purchase of raw-material components from a particular source.

(10) Agreements should be under the Pakistan Law.

(11) Arbitration should be held in Pakistan under Pakistan Law.

iii. Guidelines for Engagement of Expatriates

Foreign experts/technicians may be employed without reference to any Government agency for rendering such services as supervision of installation, commissioning of the plant, and training of personnel. Limits for per diem rates are indicated below: -

Foreign Technicians:

Canada U.S.A. Western Europe and Japan	Not exceeding $ 250 per day.
East European countries and China	The rates fixed by the Government Organization concerned of the respective countries.
All other countries	Not exceeding $ 175 per day.

Source: Government of Pakistan, Ministry of Industries, Industrial Policy Statement, June 1984.

References

Ahrens, H./ Zingel, W.-P., Towards Reducing the Dependence on Capital Imports, A Planning Model for Pakistan's Policy of Self-Reliance, Wiesbaden 1982.

Amjad, R., Small-Scale Industries and Rural Development: Implications for Rural Industrialization in Pakistan, in: Chuta, E./ Sethuraman, S.V. (eds.), Rural Small-Scale Industries and Employment in Africa.

Canadian International Development Agency, Pakistan Sectoral Profile Industry, February 1984.

The Economist Intelligence Unit, Quarterly Economic Review of Pakistan, Bangladesh, Afghanistan, several issues.

Far Eastern Economic Review, several issues.

Government of Pakistan, Economic Adviser's Wing, Finance Division, Pakistan Economic Survey 1983-84.

Government of Pakistan, Federal Bureau of Statistics, Census of Manufacturing Industries 1980-81.

Government of Pakistan, Planning Commission, The Sixth Five Year Plan 1983-88.

Government of Pakistan, Ministry of Industries, Industrial Policy Statement, June 1984.

Government of Pakistan, Federal Bureau of Statistics, Pakistan Statistical Yearbook 1984.

International Labour Organization (ILO-ARTEP), Impact of Return Migration on Domestic Employment in Pakistan - A Preliminary Analysis, April 1984.

International Monetary Fund, Direction of Trade Statistics Yearbook, 1984.

Iqbal, M. and Fahim Khan, M., Economic Implications of the Return Flow of Immigrants from the Middle East: A Preliminary Study, Pakistan Institute of Development, Economics, Islamabad, November 1981.

Jetha, N., Akhtar, S. and Rao, G., Domestic Resource Mobilization in Pakistan - Selected Issues, World Bank Staff Working Paper No. 632, February 1984.

Khan, O.A., 'Critical Perspectives on Industrial Growth in Pakistan', Pakistan Economic and Social Review, Spring-Summer 1980.

Luthra, K.L., 'Human Resource Development in Asia: Achievements and Tasks Ahead', Asian Development Review, Vol. 2 (1984), No. 1.

Naqvi, S.N.H. and Sarmad, K., Pakistan's Economy through the Seventies, Islamabad 1984.

Naqvi, S.N.H. and Kemal, A.R., The Structure of Protection in Pakistan: 1980-81, Pakistan Institute of Development Economics, Islamabad 1983.

Pakistan & Gulf Economist, several issues.

Sarmad, K., A Review of Pakistan's Development Experience (1949-50 to 1979-80), Pakistan Institute of Development Economics, Islamabad 1984.

State Bank of Pakistan, Foreign Liabilities and Assets and Foreign Investment in Pakistan 1982, Karachi 1984.

State Bank of Pakistan, Bulletin, January 1985.

World Bank, World Development Report 1984.

World Bank, Pakistan Recent Economic Developments, Report No. 4906-PAK, February 24, 1984.

World Bank, Pakistan Review of the Sixth Five-Year Plan, Report No. 4706-PAK, October 20, 1983.

Zafar Iqbal, M., 'Vocational Training in Pakistan', in: Pakistan Manpower Review, Vol. 9 (1983).

Zingel, W.P., 'Some Economic and Social Problems of Pakistan in the 1980s', Orient, Vo. 23 (1982).

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