Role of Policy in the Development of Small Scale Industry in N-WFP and its Significance for Afghanistan and Central Asia

A Dissertation Presented

by

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DECLARATION

I hereby declare that this dissertation is the result of my individual research, and it has not been submitted to any other university for any other degree.

October 02, 2003

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A Thesis entitled
"Role of Policy in the Development of Small Scale Industry in N-WFP and its
Significance for Afghanistan and Central Asia" be accepted as fulfilling this part
of the requirement for the degree of
Doctor of Philosophy in Applied Economics

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To my friends and family
Acknowledgement

The idea for this thesis was conceived during my discussions with Dr. Eric Rahim, Senior Lecturer, Dept of Economics, University of Strathclyde, the UK, and Prof. Dr. M. Anwar Khan, Area Study Centre: Central Asia, China, and Russia, University of Peshawar. Though I had worked on small scale industry, making it into a full-scale PhD thesis came from the two Professors. It sounded a little ambitious to me in the beginning, during the course of my readings, surveys, and writing I realized how such a work should have been done earlier. I am greatly indebted to these two Professors for their support, encouragement, and for going through the drafts again and again. Their continuous interest, without which this work would have taken much longer, kept me on my toes.

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Contents

Abstract ........................................................................................................................ vi

Introduction .................................................................................................................... 1

Chapter I
Industrial Development and Policies in Pakistan ...................................................... 17

Chapter II
Industrial Development and Less Developed Countries ........................................... 70

Chapter III
Empirical Review Based on Case Studies in Central Asia ...................................... 107

Chapter IV
Socio Economic Characteristics of N-WFP .............................................................. 168

Chapter V
Industrial Sector in the N-WFP ................................................................................ 194

Chapter VI
Socio-Economic Characteristics of Central Asian Republics (CARS) .................... 206

Chapter VII
Trade Potential with CARs ...................................................................................... 219

Conclusion .................................................................................................................... 266

Bibliography ................................................................................................................ 275
Abstract

The collapse of the former Soviet Union released the economies of constituent units. The five Muslim Republics in the Asian heartland, commonly referred to as the Central Asian Republics (CARS), had the opportunity to free their respective economies from the colonial bondage to Moscow. This obviously attracted external capital and expertise, on the one hand, and access to the outside markets to revamp their stunted economies, on the other. Fifty million people, enjoying per capital income three times Pakistan’s and possessing immense natural resources including gold, oil, and cotton inhabit these five CARS. They are determined to rapidly transform their communist structure into market economies, providing immeasurable opportunities for bilateral and multilateral collaboration to their immediate neighbors.

The geographic configuration of the Central Asian Republics (CARS) has a profound impact on their future trade and economic relations. In order to promote economic growth and trade, the CARs would prefer intra-regional trade with its neighbors. Their joining up of the ECO recently has brought over 300 million people together forming favorably the third largest trading bloc after the EEC, with 340 million people.

It is evident that the N-WFP suffers from certain inherent problems relating to the establishment of large-scale industrial units. In order to compensate for this, small-scale industries (SSIs) are a better, economic, cost-efficient, viable and sustainable alternative for the N-WFP. Coupled with this is the growing unemployment and population problems which threaten the weak economy of not only the province, but
of the country as well. To cater to the growing economic and employment needs of both the country and the province, it is of paramount importance that small-scale industries are given a serious consideration. In this context the SSIs acquire a vital significance due to their potential for spurring economic growth and labor absorption capacity.

Due to tremendous concentration on large-scale industries, public and private sectors have either ignored small-scale industries as an important economic component or have not considered them important enough to contribute to economic growth and generate employment opportunities. This is why there has hardly ever been a consistent and separate industrial policy that focuses on the establishment and growth of small-scale industries. If there are small-scale industries in the N-WFP, they have mostly grown by default. This has led to an industrial vacuum, which, keeping in view their success, will eventually attract entrepreneurs. While others are reaping the harvest of this important economic and industrial reality, the N-WFP has yet to formulate a viable and consistent policy that will address the very problems facing the province today, namely high unemployment and weak economy.

Small-scale industries create a climate that is conducive for both investment and for the growth of large-scale industries. The geographic proximity of this province to the Central Asian Republics affords an opportunity to learn from each other. The economy of the CARs relies heavily on large-scale industry without any links with the small scale industry, which is not healthy. The former cannot sustain without the latter. In order to utilize the industrial and natural resources of the CARs,
the N-WFP needs to concentrate on small-scale industries. Such inter-regional linkages will help promote large-scale industry of the CARs, on the one hand, and also pave way for materializing N-WFP’s dream of launching large-scale industry, on the other. It is of paramount importance that the province devises a separate and a consistent policy for the establishment and growth of the small-scale industries.
Introduction

Industrialization has been central to almost all economic policy statements by all governments in Pakistan. In recent years, the objective of industrialization has been pursued with greater urgency on account of the growing unemployment in the country.\(^1\) According to official estimates, unemployment in the country stands at about one million. This is, however, considered to be a highly conservative estimate. According to one independent estimate, unemployment and underemployment in the country has been estimated at 5 million, with about quarter to half a million persons being added every year. In this context, the small enterprise sector (SSI)\(^2\) acquires a particular significance in view of its potential for labor absorption.\(^3\)

The policy instruments applied in respect of industrial growth and development however, appears to be aimed almost exclusively at the large-scale enterprises sector. The SSI sector has been expected to develop by default, and has in fact done so. To date, there does not appear to have existed an explicit policy framework for the development of SSIs. The absence of a policy interest is also accompanied by a lack of academic interest in the subject of SSIs\(^4\). This is indicated by the paucity of domestic literature on the subject and can, perhaps, explain the deficiency of a comprehensive understanding of the dynamics of SSIs in Pakistan.

The development of SSIs in Pakistan, particularly in the metal and engineering sector, has been traced to the fillip provided by the establishment of the Railway Workshop at Mughalpura, near Lahore, about 150 years ago. The trained and experienced technical staff of the Workshop subsequently spanned out over time to set up their own
workshops. Initially, these workshops were limited to repair functions only. During the early 1940s, the British army deployed the services of these workshops to manufacture small parts and components for their war equipment.

Partition and independence in 1947 cut off competition from the rest of the subcontinent and provided a further fillip to these workshops. Initially, these workshops enjoyed strong demand for agricultural tools and implements from the owner-farmers dominating the central Punjab. Subsequently, as the regional per capita income increased and the skill endowment of the labor force improved, a number of these workshops graduated to manufacture of fans, washing machines, and gas cooking ranges, gas room heaters, air coolers and a host of other consumer durables. Some of them emerged as manufacturers of lathe machines, textile machinery, etc. A similar industrial and economic phenomenon is in the offing in a more recent context. The Pak-Iran textile projects in Quetta and Uthal, in Balochistan, have afforded the opportunity to the technical staff to acquire training in mechanical, electrical or any other such trade. Since both these units have commenced commercial production, a number of the technical staff has set up their own workshops. They have, however, not experienced the success story of their counterparts of the first half of the 20th century in the Punjab primarily due to lack of sufficient market demand for their products/services.

The above two instances point to the fact that the growth and development of SSIs is a function of a set of supply and demand related factors. The factors pertaining to supply relate to the ability of the SSIs to deliver, i.e., their financial and skill endowments. The former includes their ability to generate investment and working capital funds either through their own sources or through the financial market. The latter
includes entrepreneurial, managerial, and technical skills, which includes marketing skills and the ability to adapt and innovate. As for the demand related factors, they primarily depend on the strength of the market demand for their products/services.

That means supply and demand factors are of paramount importance in the support of SSI sectors which can be affected on three levels:

Macro Level: macroeconomic and policy environment (trade, fiscal, adjustment, etc., policies)

Meso Level: supporting institutions (professional associations, training institutions, banks, trade bodies, trade unions, etc.)

Micro Level: productive units (enterprises, workshops, etc.)

**Identifying SSI Boundaries**

Researchers, professionals, and policy makers have made various attempts to define Small and Micro Enterprises have been made on the basis of employment, capital size, etc. Suggestions have also been made to use a combination of indicators, including among others, the capital-labor ratio. The official definition of a small-scale enterprise is based on size of employment and covers those units which employ less than 10 persons. Such a definition, however, is too restrictive for purposes of this study. Defining SSIs is not an easy task given the nature of the entities. Economists or statisticians for the purpose of analyses or bankers for the purpose of granting credit require a strict definition. For the entrepreneur or a meso level support programme a strict definition, however, is not absolutely necessary given that SSIs in Pakistan are going through a process of rapid and significant evolution and change, a narrow definition of SSI would
neither be possible nor appropriate. This is why this work does not attempt any definition for the purpose of the discussion. Instead, a loose definition has been adopted by way of establishing a broad boundary. SSI s cover those enterprises, which, in general, meet the following criteria:

- there is no separation between ownership, management and "shop floor" operations

- employ less than 20 persons

- capital size does not exceed Rs. 500,000 (in current prices).

The latter two are flexible. Enterprises which possess a particularly expensive equipment, so as to render its capital size greater than Rs. 500,000 and enterprises with a very low capital base but employing more than 20 persons need not necessarily be excluded from the purview of this definition. Moreover, enterprises which are formally registered entities or are located on industrial estates, are not likely to be classified as SSIs, but would not necessarily be excluded provided they conform, more or less, to the above three criteria. The purview of SSI boundary, however, excludes marginal enterprises in the informal sector, i.e., mainly single owner operated enterprises with less than 5 employees and capital size of less than Rs. 50,000.10

Profile of SSI Sector in Pakistan

The SSI sector encompasses industrial as well as services activities. The industrial enterprises are engaged in manufacturing or/and in repair and maintenance. Service enterprises cover a large and diverse range of activities. Data related to value added, value of production, etc., of service enterprises is generally unavailable. Data on
manufacturing enterprises is published occasionally in the Survey of Small and Household Manufacturing Industries (SHMI); the last publication was brought out in the year 1983-84.

The small scale manufacturing sector in Pakistan accounts for about 5 percent of gross domestic product (GDP), 15 percent of total (large and small scale) manufacturing value added and 55 percent of total manufacturing employment.\footnote{11} The annual average real growth rate in small scale manufacturing value added and employment has been 8 and 6 percent, respectively. The major industrial sectors where SSIs dominate (in terms of value added and employment) are wood & furniture, jewellery, footwear, bakery products, rice milling and ice. SSIs in these industries account for 84, 100, 94, 75, 67, 56 and 91 percent, respectively, of total (large and small scale) value added in these industries.\footnote{12} Within the small scale manufacturing sector, the major industries are textiles, wood & furniture, jewellery, metal & engineering, nonmetallic mineral products (excluding cement) and footwear. This accounts for about 60 and 66 percent of total small scale manufacturing value added and employment, respectively. Other important industries are bakery products, ice milling, wheat milling, tobacco/cigarettes and ice. The average capital and employment size of SSIs is estimated at Rs. 25,800 (in 1983-84 prices). An analysis of distribution of SSIs by size shows that establishments employing up to 5 persons account for 96 percent of the total, 87 percent of employment and 85 percent of value added in the small scale-manufacturing sector.\footnote{13} In terms of capital size, establishments with value of fixed assets of up to Rs. 5000 account of 57 percent of enterprises, 47 percent of employment and 11 percent of value added. Establishments with value of fixed assets between Rs. 5000 and Rs. 100,000 account for 38 percent of
enterprises, 43 percent of employment and 42 percent of value added. Establishments with value of fixed assets exceeding Rs. 100,000 account for 5 percent of enterprises, 10 percent of employment and 47 percent of value added\textsuperscript{14}.

**Theoretical Considerations**

Although literature on SSI development issues in Pakistan is scarce, the SSIs have been the subject of intense academic and policy level debate, especially since late 70's in other countries. There has been the optimistic view, which holds that SSIs can have an ameliorative impact upon employment, poverty and distribution, related issues.\textsuperscript{15} Contrary to this is the opinion that SSIs produce low quality products; are technologically backward; and subsist on the exploitation of low waged and unprotected labor. The former opinion, however, holds currency as its propounders believe that SSIs are labor intensive and most of its goods and services are by the poor for the poor, which is why they are deserving of support. The rationale behind supporting SSI development has to rest largely on efficiency considerations, namely, i.e. SSIs have to exhibit relatively higher capital productivity (output-capital ratio, O/K), and higher labor intensity (capital-capital ratio, L/K). In other words, the justification for support to the SSI sector is based on the efficient use of resources, i.e. capital and labor.\textsuperscript{16}

The equity and efficiency aspects are not necessarily contradictory since the main argument for encouraging SSI rests on the resultant increase in demand for unskilled labor. What is stressed, however, is that output and productivity factors of such unskilled labor should also be considered. If SSIs used both more capital and more labor per unit of output than larger enterprises, the case for SSIs promotion would stand considerably weakened.\textsuperscript{17}
<table>
<thead>
<tr>
<th>Type</th>
<th>Units</th>
<th>%</th>
<th>Employment</th>
<th>%</th>
<th>Value Added</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile</td>
<td>46541.0</td>
<td>19.2</td>
<td>130102.0</td>
<td>23.4</td>
<td>1722.9</td>
<td>20.1</td>
</tr>
<tr>
<td>Wood &amp; Furniture</td>
<td>35167.0</td>
<td>76278.0</td>
<td>13.7</td>
<td>822.5</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>Jewellery</td>
<td>30381.0</td>
<td>12.6</td>
<td>47154.0</td>
<td>8.5</td>
<td>752.8</td>
<td>8.8</td>
</tr>
<tr>
<td>Metal &amp; Engg.</td>
<td>23304.0</td>
<td>9.6</td>
<td>54302.0</td>
<td>9.8</td>
<td>605.7</td>
<td>7.1</td>
</tr>
<tr>
<td>NMM Products</td>
<td>7270.0</td>
<td>3.0</td>
<td>14319.0</td>
<td>2.6</td>
<td>492.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Footwear</td>
<td>22171.0</td>
<td>9.2</td>
<td>45287.0</td>
<td>8.2</td>
<td>485.1</td>
<td>5.6</td>
</tr>
<tr>
<td>Bakery Products</td>
<td>6281.0</td>
<td>2.6</td>
<td>21389.0</td>
<td>3.9</td>
<td>331.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Rice Milling</td>
<td>3290.0</td>
<td>1.4</td>
<td>13736.0</td>
<td>2.5</td>
<td>307.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Wheat Milling</td>
<td>8896.0</td>
<td>3.7</td>
<td>18683.0</td>
<td>3.4</td>
<td>291.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Tobacco</td>
<td>19165.0</td>
<td>7.9</td>
<td>32509.0</td>
<td>5.8</td>
<td>164.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Ice</td>
<td>1031.0</td>
<td>0.4</td>
<td>4420.0</td>
<td>0.8</td>
<td>149.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Other</td>
<td>38399.0</td>
<td>15.9</td>
<td>97318.0</td>
<td>17.5</td>
<td>2463.6</td>
<td>28.7</td>
</tr>
<tr>
<td>Total</td>
<td>241896.0</td>
<td>100.0</td>
<td>555497.0</td>
<td>100.0</td>
<td>8589.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>


It has also been argued that if SSIs are economically efficient, then the rationale for providing subsidized support no longer exists. However, distinction has to be made here between individual firm level efficiency and collective industry level efficiency. It is
the latter case, which is of interest from the point of view of support programmes. It is acknowledged that collective efficiency is below par but has the potential for being raised through collective action complemented by exogenous support. It is, however, also recognized that there needs to be a market oriented approach, whereby SSIIs are enabled to grow on the strength of their own enhanced capabilities and viability in the market. In this context, the focus of support programmes shifts to the removal of constraints facing SSIIs rather than the provision of direct subsidized inputs.19

The efficiency arguments are somewhat complex, and are not easily amenable to generalized conclusions. The economics of each SSI sub-sector such as food processing, metal works, furniture making, etc. is uniquely different. Moreover, within a sub-sector the economics of a firm with less than 5 employees differs from that of a firm employing, say 20 persons or more. Understanding the heterogeneity of the SSI sector is important as the issues, potentials and constraints of enterprises in different industry groups and in different size cohorts are different and need to be dealt with differently.

The central issue, which arises here, therefore, is the size distribution of SSIIs and the nature and efficiency of the respective production processes. The key question herewith is: what is meant by small or micro scale? Size can be measured by employment or by capital size. In Pakistan the legal definition of small scale includes establishments employing less than 10 persons. However, this is not an appropriate measure for two reasons. One, there could be large scale multi million rupee capital intensive enterprises employing less that 10 persons. And two, there could be large-scale enterprises employing less that 10 permanent employees and the rest on contract or as temporary workers. On both counts, such enterprises will be erroneously classified as small scale.
One possible measure to overcome such anomalies could be capital-capital ratio as a supplement to either capital or employment as a size measure.\textsuperscript{20}

The size issue is important because debate has focused on the question as to which size bracket is the most efficient and as such deserving of support. One research study based on data from India, Korea, Philippines and Taiwan, covering the footwear, soap, printing, machine tools, and metal casting industries, showed that the results with respect to capital productivity were not favorable to either the very small (less than 5 employees) or the very large (more than 200 employees). The results regarding capital intensity were mixed, depending on the level of disaggregating used. In the case of India, disaggregating to the level of 32 industries showed that manufacturing units in the range of 10-49 employees were more capital intensive than larger ones\textsuperscript{21}.

**Objectives of the Study**

The last three decades (1970-2000) has seen a rapid and persistent growth in small-scale industries (SSIs) in Pakistan, has remained around 5-8% during this period. That means the government's focus on large-scale industry which in more recent times (1998-2002) has grown by less than a percent per annum, has not contributed much to the growth of large scale industry\textsuperscript{22}. The growth rate of the SSI sector, on the other hand, has been, and is uneven. It is evident that the province suffers from certain inherent problems relating to the establishment of large-scale industrial units. Hence, in order to pursue the objective of industrialization with greater urgency on account of the growing unemployment in the country on the one hand and on the other to promote policies that would lead to a more balanced growth in terms of higher per capita income. In this
context the SSIs acquires a particular significance in view of its capacity for labor potential.

Policies formulated to generate industrial growth have generally favored the large-scale industrial sector. (The SSIs as stated earlier have been expected to develop by default and they have in fact done so.) Unfortunately, there is not any explicit policy framework for the development of SSIs. Given their capacity for growth and their potential contribution to the uplift of the GDP and employment, it is imperative that the province constitutes a clearly laid-out policy for the establishment and encouragement of SSIs.

**Literature Review**

The *Asian Miracle* has received a good deal of attention lately. Private enterprise in many Asian countries has contributed significantly to growth rates in the order of 6 per cent per annum, and even higher in industry. In Africa, however, Steel (1994) argues, the miracle appears to be somewhat different. All too often, he explains, small entrepreneurs complain: 'with all the problems I face, it's a miracle I am still in business!' The challenge facing policymakers is to turn the miracle of survival into the miracle of growing by investigating how regulators, financial systems; other agencies can themselves become the agents of change and growth, but they cannot do it alone. Lessons can be learned, Steel stresses, from successful cases of change from Asia and Latin America as well as from Africa, by discussing not just what has been accomplished but how, why, and who did it. Finally, he states that focus should be on the process: what are the conditions which stimulate and empower people to make changes that help small enterprises fulfill their potential contribution to employment and income generation?
For some years, a number of Asian developing countries have promoted the growth of small enterprises through direct assistance, at the same time allowing macro-economic environment, such as trade and exchange rate policies, to favor large scale industries. Pilgrim and Meier (1994) are of the view that it is conventional wisdom in development economics that the promotion of small-scale enterprises spurs economic development and has therefore a claim on growth-minded governments. As a result, many Asian developing nations have adopted promotion programmes geared towards the small-scale sector. These programmes vary from country to country, but are usually based on the same philosophy and delivery system. They consider the lack of small enterprise participation in the design and implementation of support programmes, the centralized top-down approach and bureaucratic implementation by government agencies as some of the main reasons for the unsatisfactory results.

Hubner (1995) is of the opinion that the development of a strong and dynamic private sector capable of meeting the challenge of the market economy and taking over and operating the productive capacity of the Central and East European countries is a key element in the reform process. Further, the liberalization of the Polish economy has led to many new entrepreneurs establishing their own firms, while those already in business have now better prospects for expansion. Finally, he states that in recent years, it is the small and medium scale enterprises that have paved the way for new job creation and economy growth in most market economies.

Government policy for small and medium enterprises in the Russian Federation is required, since they face an unstable economic climate, difficulties in attracting investment, and inexperience on part of their managers in running private enterprises.
Ermakov (1995) asserts that at the start of the nineties, at the same time as the breakup of the centralized socialist economy, the rapid growth of the private sector of the economy began in Russia. He estimates that the number of SSIs will increase in the coming years by at least 30 per cent annually, although a temporary reduction in the growth rates is possible.

Goh and Li Choy (1994) are of the opinion that the strategic roles of the small enterprises and their contributions to Singapore’s economic development have been overlooked. With Singapore, her rapid economic progress has often been attributed only to multi-national corporations. However, as the nations of the world experience economic difficulties, small enterprises are increasingly seen and used by governments as instruments for providing employment and possibly economic growth. These small enterprises are now needed to support industries for the activities of the MNCs to make Singapore a more attractive destination for them and to benefit more from their presence; and as Singapore approaches the status of a developed nation, small enterprises are increasingly seen as instruments to benefit from the globalization of the Singapore economy.

Choudhary (1994) while discussing the regional development efforts in Pakistan states that little has been achieved in the form of planning for spatial convergence. The development thrust of the country; he argues, during the last four decades had a built-in bias towards urban areas and was in favor of the industrial sector. The two backward provinces i.e. NWFP and Baluchistan have, no doubt, been allocated special development funds over and above their normal share specified on population basis, yet these efforts have achieved little success.
Shafiquallah et al (1995) are of the view that the emphasis of the first industrial policy announced in 1948 was on the development of the agriculture sector and industries related to it. Large Scale industries were considered essential for the survival of the State. Import substitution was encouraged to spur the process of industrialization in the country and generate employment opportunities for the people. The 1959 industrial policy statement followed the previous one but some attention was now being diverted towards the establishment of small-scale industrial sector. Since then the share of the SSIs has been on the increase in comparison to the growth rates in the large-scale industrial sector, which enjoy the benefits of a favorable trade and industrial policy.

Sahibzada I. (1968) states that the British considered the NWFP to be economically and financially not viable. This was done ostensibly for political reasons. Except a hydroelectric power station and a fruit canning and preservation unit, no worthwhile investments took place till the early thirties. Hence the province suffered due to the biased attitude of the government rendering it less viable in terms of infrastructure, otherwise vital for promotion of industries both large and small.

Research Methodology

Almost all of the previous studies have used economic analysis for analyzing the growth of small-scale industries (SSIs). These studies can be divided into three groups:

- those using economic ratios
- those estimating production functions and elasticities
- those using regression analysis.

Some studies have used economic ratios for getting information for further research (Bruch & Hiemenz 1984, Chuta & Liedholm 1985, Cortes, Berry & 1987, Little,

For the purpose of the present study, in addition to the secondary data obtainable from the latest census of Manufacturing Industries and other related surveys of the Bureau of Statistics, a comprehensive questionnaire shall be prepared to gather primary data for this purpose. NWFP is selected as the study area on the basis rapid growth by SSIs in this region. (Amjad 1995). A two-stage sampling method is to be employed to select the sample, in the first stage three sample sectors, and in the second stage SSIs will be selected. The method of systematic random sampling will be adopted to minimize bias in the selection process and to ensure the reliability of data (Snedecory, Cochran 1980). The sample size shall be fixed accordingly.

For comparing the efficiency of different firms in different situations, i.e. before and after incentives, economic ratios, such as labor productivity (L/Y), capital productivity (Y/K), capital intensity (K/L) and profit ratios (Y-EC/K) will be used. These partial and comprehensive ratios will be calculated by using both primary and secondary data. Here both the efficiency measures are used simultaneously. This will help us analyze the efficiency of firms in detail. The partial measures are useful in assessing the effects of different variables separately, whereas, comprehensive efficiency measures give us the overall efficiency of the firm with which it uses available resources.
Notes


2. There are definitional problems in trying to identify exactly what the informal sector really is and what sort of activity forms part of it. The small scale sector is also a badly defined term, especially in Pakistan, where size constitutes units ‘not registered’ under the Industries Act. Size is also a factor, where the informal manufacturing sector consists of those unregistered manufacturing units that employ fewer than ten persons. Moreover, the informal sector and the small-scale sector are not the same thing, although they are used here interchangeably for our purposes. See Nadiy. Khalid, *Employment Creation in Urban Micro-Enterprises in the Manufacturing Sector in Pakistan*, ILO/ARTEP, Bangkok, 1990.

3. Labor market segmentation in developing countries is analyzed in Stiglitz (1974), Mazumdar (1976, 1977, 1981). In addition to this, a large “informal” literature also exists on informal labor markets.

4. There appears little evidence of any major study conducted in this respect. For details regarding this question see, Lewis and Soligo *Growth and Structural Change in Pakistan’s Manufacturing Industry (1954-64)*, (1965). Also see, *The Pakistan Development Review*, Spring, pp 94-143.


6. Ibid., pp 5-11

7. Comparative data from a number of developing countries and field surveys are analyzed in Page (1987), Bautista (1981).


9. Small enterprises exist in both the large and small scale industries, but their frequency is higher in industries classified as small in aggregate industrial classification.

10. UNIDO Scope for the use of *New Small and Medium-Scale Metalworking and Engineering Industry*, (December 1987).


16. Ibid., p.10

17. Ibid., p.45

18. The amount in “Value Added” is in Pakistani currency.
19 It is understood that in order to jump start the small scale industry in a
development context more than subsidization of inputs is required. Berger and Udell
(1989), explain this fully in, Lines of Credit, Collateral and Relationship lending in Small
Firm Finance, working Paper (S-93/17), Salomon Brothers Centre for the Study of
Financial Institutions, New York University.
20 For further details see R. Amjad, and K. Mahmood, Development of Industrial

21 Asian Development Bank, Strategies for Economic Growth and Development:
The Bank’s Role in Pakistan, Manila, 1985, p.356.
22 Burki, Shahid Javed, ‘A Historical Perspective on Development’, in Burki,
Shahid Javed and Robert Laporte, Pakistan’s Development Priorities: Choices for the
23 Ahmed, Viqar and Rashid Amjad, op cit., 1984, p. 94.
Chapter 1

Industrial Development and Policies in Pakistan

Due to the steady movement of the labor force into industry and commerce, and services, Pakistan’s economy, which is predominantly agrarian, compared with other low-income countries, has progressed at a relatively rapid rate since 1947. In the 1980’s gross domestic product (GDP) grew at the rate of 8% a year. Cotton textiles and apparel make up to 40% of its exports. The focus has shifted from accelerated growth in output and consequent increase in gross national product (GNP) per capita to generate employment, more equitable distribution of income and wealth, and provision of basic human needs on the basis of ecologically sustainable development strategies. This chapter primarily addresses the issue of the development of the different sectors of Pakistan’s economy since 1947 and focuses on the analysis of the economic policies which are responsible for the current economic situation today.

Overview of Socio – Economic Conditions

To be able to evaluate the performance and conduct of the economy of the past five decades, it is imperative that we critically analyze the socio-economic conditions prevalent in 1947. That means the criteria adopted by economists for measuring different economies are of paramount importance for us. In the 1950’s and 60’s, for example, economic development was synonymous with the growth of GNP per capita.

The United Nations set the target growth rate of 5 percent in the GNP for the Less Developed Countries (LDCs) for the decade of the 1960s. This view was greatly influenced by Rostow’s thesis of the stages of growth, whereby development preceded on a linear path through a number of stages. The most important was the “take-off” stage. As
far as poverty, un-employment and income distribution were concerned, they were given secondary importance.¹

**Growth Strategies**

It was believed that the gains from growth of GNP would ‘trickle down’ to the poor in the form of increased employment and income opportunities. The linear view was further strengthened by the Nurksian dictum of ‘vicious circles’ of low savings, small markets, low investments, and low incomes. It was argued that the removal of ‘vicious circles’ would unleash forces which would lead to higher growth. For this, Rosen stein Rodan advocated the ‘Big Push;’ Nurke ‘Balanced Growth’; and Leibenstein, ‘the critical minimum effort’, where a great deal of emphasis was laid on international aid to provide the ‘missing components’ in the form of capital and technical know how. As a result of the adoption of growth focused strategies, the GNP per capita of the developing countries grew at an average rate of 3.4 percent per annum during 1950 - 75, which was faster than either the developed countries or the LDCs had grown in any comparable period prior to 1950. But the growth of GNP per capita failed to make a significant dent in the problems of poverty, unemployment and inequalities in many developing countries. It soon became evident, that a totally growth-oriented approach to development was not possible in the developing countries: equity had to be a part of the programme.²

In the short run, this may slow down the rate of growth, but it is certain that in the long run the pay off would be substantial and would result in considerable acceleration of economic growth. Equity would contribute towards the removal of imbalances and thus towards stability, which is one of the pre-conditions of evolutionary growth. Its contribution to human capital formation in itself would be rewarding. Better health,
education and skill formation will constitute the real wealth of the poor, and will encourage them to contribute towards raising productivity.

**Failures and Successes**

Robert McNamara, the President of the World Bank, admitted in February 1970 the failure of GNP growth rate as an index of development in LDC’s in these words: ‘In the First Development Decade, the primary development objective, a five percent annual growth rate in GNP did not bring satisfactory progress in the development. In developing world at the end of the decade, malnutrition is common, infant mortality is high, illiteracy is widespread, unemployment is endemic and growing and the re-distribution of income and wealth is severely skewed’.

Since the 1970s, however, the emphasis has shifted from the growth of GNP to the quality of the development process; of progressive reduction in absolute poverty, unemployment and inequalities. All those engaged with the development process now give attention to four different, though largely complementary strategies:

- poverty alleviation
- increasing employment
- reducing inequalities in income and wealth
- meeting basic human needs

**The Problem of Poverty**

It is now evident that most of the problems are rooted in poverty. Low standards of health and high mortality rates can be attributed directly to malnutrition and squalor. Public health delivery systems barely touch the poor and barely have any relief to offer. Education, given the feeble efforts of the governments in developing countries, does not
make much progress among the poor. Much of what is offered to them is non-functional if not dysfunctional. It has little relevance to the conditions in which they live and takes little account of learning mechanisms among them. Nor does it function among them as a mobility multiplier, as it was originally assumed it would.

The high correlation between poverty and fertility has never been adequately explained, but it is a fact that fertility tends to decline progressively as people cross the threshold into freedom from want, and later move into conditions of relative plenty. Poverty is also the greatest pollutant, and the most important single factor responsible for environmental degradation. Furthermore, it breeds social and cultural corrosion. The notion of poverty is essentially relative and should be viewed in the comparative perspective. There can be no poverty if there is no affluence. Demeaning and de-humanizing poverty is made more obvious when it exists with dazzling prosperity. Conspicuous consumption, and waste, rub salt, as it were, on the wounds of the poor. Poverty has suddenly become the hot favorite of development economists and multilateral development finance institutions like the World Bank and the Asian Development Bank.⁴

Considerable research inputs are being made into the investigation of this theme. These endeavors have thrown up some useful insights, but the much-tangled skein of poverty remains unraveled. On the economic front, the problem is now beyond charity and state welfarism. The productivity of the poor needs to be raised and a more equitable distribution of income brought about. Productivity and development will pick up if poverty is alleviated. It is evident, that in a large number of developing countries there is a conspiracy to politicize poverty. The anti-poverty programmes are often just a vote
catching gimmick. Whatever little action takes place, the real target groups derive only minimal benefits. If the level of conflict in society is to be minimized, promises alone will not do; they must be matched by performance. In any case, failures on the poverty front are likely to generate lethal social and psychological trends that may unsettle the social order. For alleviating poverty and promoting development, the emphasis is now on direct provision of basic needs in terms of health, education, water, food, clothing and shelter. Empirical studies conducted by the World Bank and many development research institutes across the globe have clearly shown that there is no conflict between economic growth and basic needs strategy.

Actually this approach to economic development has been instrumental in accelerating the growth rate in a number of less developed countries. Development experience of the last five decades as well as recent strides in development economics also greatly emphasize the need to attend to the inner limits to growth set by social structure, cultural norms, value attitude systems, individual and collective motivations, work ethics, and governmental efficiency and integrity. These, however, involve such diverse cultural specifications that each society has to seek its own solutions.

**Agriculture**

Economic development in Pakistan suffers from the endemic poverty that has grown in volume in the rural areas during the last five decades. This is primarily due to the social, technological, and economic problems confronting the economy. The skewed distribution of land ownership, coupled with the lack of access and availability of necessary inputs to accelerate the production process have kept rural incomes low. On the economic front the size of farms and the farmer's inability to adopt modern methods of
cultivation have contributed little to improving the standard of living of the people living in rural areas. The resultant low rate of savings has not been enough to enable capital formation.

Pakistan witnessed severe food shortages soon after partition and the problem became acute by the late fifties. This was presumably due to the lack of policy initiatives with regard to the development of a well-conceived strategy for agricultural development. The curtailment of food imports under PL 480 during the time period also coincided with the realization on the part of policy makers towards an agricultural policy. The Green Revolution started with a scientific breakthrough in the field of production and production techniques, whereby food output jumped from 1.8 percent of the 1950s to 3.8 percent in the sixties. Such was the impact of the shift in policy that output rose by six percent during the 2nd Plan period and by 1967-68 agricultural output rose to 11 percent. But these successes achieved were, however, temporary. Agriculture output fell to less than two percent during the early seventies, which was perhaps due to the volume of subsidies involved in the initial stages of the 'green revolution.' The lack of support services led to the erosion of the progress made, as production trends could not be sustained for longer periods of time. Despite availability of improved quality seeds, fertilizers, and increased availability of irrigation, the situation was far from satisfactory as the element of allocation did not conform to the basic principles of economic efficiency. The mid-seventies once again witnessed an upward trend in agricultural output primarily due to a better policy framework and improved weather conditions.

The Role of Agriculture
Pakistan economy is still dominated by the agriculture sector. It caters to the raw
material needs of the local industry; provides employment to the bulk of the employed civilian labor force; and provides food to the growing population; and generates foreign exchange earnings to support the process of development. Since 1947, the agriculture sector has seen a good deal of transformation. Its share in GDP has declined from 53 percent in 1949-50 to 24 percent in 1992-93. As regards employment, agriculture engaged 56.4 percent of the total civilian labor force in 1978-79 as against 57.3 percent in 1969-70 and 65 percent in 1950-51. Agriculture today employs 47 percent of the labor force. Foreign exchange earnings from the agriculture sector have shown a decline from a 44.8 percent high in 1971-72 to 32.2 per cent in 1978-79. The total share in imports was only 21 percent in 1977-78, which indicates that agriculture with its resultant surpluses has been acting as a catalyst in the promotion of non-agricultural imports. Agriculture plays a significant role in the provision of food to one of the fastest (2.7 per cent) growing populations in the world. Pakistan ranks seventh in the ranks of the world’s most populous states. Urbanization at the rate of 5.6 percent is probably the highest rate anywhere in South Asia. Providing for such a diverse and rapidly growing population has been further compounded by the failure of the agriculture sector, resulting in massive imports of food grains, which further constrain the development effort.

Agriculture Policy

In order to accelerate the process of change in this otherwise ‘traditional’ sector, a major change has to be brought in the perceptions of the policy makers regarding infrastructure and know-how who have focused on bringing about change with the present level of infrastructure and know-how. Studies have revealed that under the given circumstances the traditional farmers in developing countries may be poor but are
otherwise efficient. If policy has to be seen as an instrument that would help alleviate poverty and bring about a rapid transformation in the agriculture sector, then a major shift needs to be made in order to not only change the composition of demand but also spur the process of industrialization so as to increase the consumption and saving capacity of the people. This would effectively lead to greater demand that would then require greater use of technology to enhance production, which will increase the growth rates and the capital formation with greater impetus for employment generation.

**Industry**

The industrial sector during the last five decades has transformed the structure of the economy. Out of a total of 921 industrial units during the pre-partition period, Pakistan received only 34 small units as its share. The industrial sector’s contribution to the GNP was a meager 7 per cent. Employment in these units was 26,000 persons. Since independence, Pakistan’s growth strategy has been biased towards promotion of the industrial sector. So much so, that two thirds of the foreign exchange earned in the agriculture sector was siphoned off towards the industrial sector, whereas only one-third of this amount was ploughed back into the agriculture sector. The resultant structural imbalances led to the slowdown in industrial growth during the latter part of the second five year plan, although large scale manufacturing witnessed unprecedented growth rates of 23.6 per cent during the period 1949-50 to 1954-55. During 1959-60 to 1964-65, growth rates fell to 16.9 percent, which was perhaps due to the establishment of an industrial base with almost no infrastructure and a very open market for consumer goods during the first plan period. The subsequent fall in growth rates was due to market saturation as well as a policy shift towards intermediate and light processing industries.
However, small-scale industry witnessed an upsurge from 2.3 percent to 2.9 per cent during the same period. The current rate of growth in this sector is less than 7 per cent.

Role of Industry

Since Pakistan had inherited a weak industrial base at the time of independence, focus was laid on the development of the domestic consumer goods industry. The first two five year plans witnessed substantial growth in this area. The seventies, however, saw a shift in manufacturing towards intermediate goods manufacturing sector. The structural composition of manufacturing exports shows that the textile dominates the sector industry, followed by the food and tobacco industry in the fifties to the growth of chemical, cement, paper and light engineering during the seventies and eighties. In 1947, the total number of persons employed was only 26,000. During 1950-51 this figure rose to 900,000. In 1977-78 this number further increased to 3 million. Most of this increase was witnessed in the small-scale industry. The sudden surge of the small-scale industry was due to the de-valuation and removal of excessive protection granted to large-scale capital-intensive industries. This, in effect, lent a boost to the development of the small-scale industry in the country. The contribution of the industrial sector to the GNP rose from less than 7 percent in 1947 to over 26 percent during the nineties.

Industrial Policy

Industrial Policy statement of 1948 emphasized the development of manufacturing capabilities using indigenous raw materials. Importance was also attached to the production of items that could save valuable foreign exchange. However, no effort was to be lost in case investments were required in any area that would speed up the development process. To provide impetus to private sector investment, institutions like
the PIDC and PICIC were established so as to provide credit facilities to the new entrepreneurs. The role of the public sector was confined primarily to weapons manufacturing, nuclear energy, and development of railways and other means of communications. The idea was to provide the necessary infrastructure to encourage investments and to directly invest in areas where private sector investment was shy.

The private sector was highly protected by high tariff walls till 1959, which ultimately led to the creation of a highly protected home market. The ‘enfant industry argument’ thus held sway during the First Five-year plan period. Even with a change in government in 1958, the focus was still on import substitution with some emphasis on the development of chemical, cement, and capital goods industries in the country. The share of the consumer goods, as a result, fell from 33.5 per cent in 1959-60 to 10.1 percent in 1969-70. With the coming to power of the PPP in 1972, a major shift took place as far as industrial strategy was concerned. Accepting the principle of a ‘mixed economy’ the government went on to nationalize major industries, including, banking and shipping.

This was followed by another major shift when in the PPP government was overthrown in 1977. The agriculture processing industry was among those de-nationalized by the new government. To boost industrial development a package of incentives was made available to bring some of the most backward areas of the country into mainstream economic planning. The areas demarcated for the purpose included D.I. Khan, Malakand division and the province of Baluchistan. The nineties saw another major change in policy vis-a-vis the industrial sector as a whole. The three important components of the policy were:

- deletion policy
- deregulation measures
-privatization policy

The policy of deletion was introduced in order to attain self-reliance in the engineering sector, with the prime objective of achieving technological autarky so as to be able to develop linkages between different segments of the industries. The deregulation measures were intended to open up areas which needed exemptions from the Government. Specified industries like, arms and ammunition, security printing, currency and mint; high explosives and radioactive substances are still regulated. The experiences of the government with the state owned enterprises have had a profound bearing on the decision to adopt the policy of privatization. State Owned Enterprises (SOEs) were privatized to curtail losses and to improve their productive capacities. The objective of broadening the capital markets base through hefty increases in the number of shareholders and emergence of new enterprises was a key factor.

The Role of Trade Policy

The ‘import substitution strategy’ of the 1950s held sway among the policymakers during the periods of the first and second five-year plan period. This was accomplished through a policy of protecting the local industry through overvalued exchange rates, licensing of capital and import of raw materials, foreign exchange controls and high import tariff rates. These measures proved harmful to the local small-scale industry. The overvalued exchange rate reduced the relative price of imported capital. High import tariffs, licensing procedures and exchange controls were more favorable to large scale manufacturing using capital intensive techniques thereby reducing the labor absorption capacity in such enterprises.
With the introduction of the 'managed float' in 1981 the major distortions caused due to the overvalued exchange rates had been controlled. Dismantling of exchange controls and reduction in tariff rates has further rationalized the monetary sector. Such actions have had a positive impact on the promotion of small-scale industry, at least where the sector suffered due to price distortions caused by overvalued exchange rates. The policy of promoting exports of non-traditional goods by way of export rebates have led to the utilization of idle capacity to meet the demand from exporters of such products.

The import policy also favors the medium and large-scale manufacturers. Such manufacturers benefit from importing their raw materials directly as ‘industrial importers’ thereby reducing the cost component of their imports. The small scale manufacturers importing only small levels of their raw materials suffer cost disadvantage due to the fact that such imports fall under the bracket of ‘commercial imports’, which means higher transaction costs and profit margins of intermediaries as they are not directly involved in their import.

The Role of Credit Policy

The bias against small-scale industry has been accentuated by the restrictive nature of the monetary and credit policies followed the governments till the beginning of the eighties. To begin with, the selective credit controls and low interest rates coupled with high administrative costs rendered borrowing from the financial institutions less attractive. However, large and medium enterprises benefited from such policies, as the transaction cost to such units was considered 'more economical.' Small Scale industrial units continue to be at a disadvantage due to the low literacy rates, cumbersome procedures for availing the facility of loans, time lag between actual application and
receipt of loans and a general apathy towards the very procedure for obtaining loans. On the other hand, credit bias towards the medium and large-scale industry has also failed to efficiently utilize institutional borrowings. To compensate for the lack of access to such credit SSIs resort to borrowing from the informal sector often at exorbitant rates. This factor alone testifies to the fact that the SSIs are not only financially viable but are having the ability to finance their investment and working capital needs.

The Role of Labor Policy

The existing labor laws include minimum wage legislation, social security provisions, hiring and firing regulations, collective bargaining provisions, etc. Generally, labor laws become varyingly-operative once the number of employees of a firm exceeds 9. Implementation of labor laws imposes a cost on the firm, both direct and indirect. Given that the labor laws are not applicable to firms employing less than 10 persons, SSIs enjoy a relative advantage in terms of production costs. To this extent, labor laws discriminate in favor of SSIs. As a result SSIs have been known to abstain from growing beyond a certain size. Employing for e.g. 10 or more people would entail the implementation of the labor laws and the financial and non-financial costs involved in the process. On the other hand, large-scale units have been known to fragment their operations so as to escape from the “additional burden” imposed by labor laws. The system of contract labor has also played a crucial role in the neutralizing the benefits accruing to the SSIs. Large manufacturing units as a policy induct more contract labor in order to escape from a situation that may lead to the application of the labor laws and the resultant ‘financial losses.’
Sectoral Growth

One of the major challenges to economic policy in Pakistan at this time is to energize the private SSI sector of the economy, as other sectors under present circumstances are unlikely to provide the needed growth either of output or of reasonably remunerative employment. In fact, there will be a major employment challenge over the coming years as labor supply continues to expand rapidly. Furthermore, this sector has substantial untapped potential to contribute to those objectives; economic logic and the experiences of other developing countries both point to that potential. This is not to say anything about evidence as to how it may be achieved. A dynamic SSI sector is an important complement to a more open economy. Most of the countries have not only involved, they have also reaped major benefits from exports by involving SSIs into them. Achieving the maximum contribution from SSI, however, is not automatic even though the sector often displays considerable dynamism in the face of little policy support. That dynamism is likely to be more impressive when good support is provided, which is especially pivotal in a more open economy where failure to quickly achieve adequate levels of efficiency and productivity is punished quickly.

The Role of Small and Medium Enterprises (SMEs)

That small and medium enterprise plays an important role has been increasingly recognized over the last twenty years, both in an extensive literature, which emphasizes that role, and in the policy rhetoric of many developing countries. Policy support is less far along, except for a few countries, most of them in East Asia; despite interesting advances and innovations in a number of other countries, most (including Pakistan) are far from having well designed and implemented support systems. The gap between where 30
policy is and where it should be has several causes. One is a legacy of policy disinterest in the sector, a rather natural result of its absence from the main models used to help design economic policy and of the weak organization, political voice and bargaining power of the sector. In those numerous countries confronted with macroeconomic crises or strains, this unfortunate legacy has often been compounded by the heavy, sometimes overwhelming focus on macroeconomic indicators, to the exclusion of sectoral questions, understandable enough but nonetheless something which requires rectification. Design and implementation of good SSI policy is tendered difficult by the fact that it involves a variety of different branches and levels of government and by the fact that it involves a variety of different branches and levels of government and by the fact that much of the information which would help to refine such policy is not yet readily available in most countries, most certainly including Pakistan. Now a new complication must be added; previously the contribution a country could hope for from its SSI sector was primarily related to production for protected domestic markets, now it increasingly involves competition in the international market. Much of what might has been useful policy support before, may be less so now. In short both the role of the SSI sector and the optimal policy to get the most out of it must be rethought in the new context of market integration.

**Level of Technology**

Note that the more basic distinction being made in the above discussion relates to the level of firms' technology and productivity rather than their size. A country endowed with a medium level of resources per person needs to have a large amount of those resources utilized with medium level technologies unless it wants to have a very unequal
distribution of labor across the available capital, with a few workers able to achieve very high productivity because they work with a lot of capital and the rest able to attain no more than a very low productivity due to meager capital. Since, with a few exceptions/size of enterprise is rather closely correlated with level of technology, this boils down to saying that such a country should normally have a lot of SSI’s, if it allocates too much capital to LE there will be much labor left over with little capital to complement it and this mass of resources will be mainly in very low productivity micro enterprise. In some developing countries large firms seem to be able to operate without excessively modern technology, but this is unusual.

With starting conditions like those portrayed in the figure, healthy growth, whose fruits are reasonably well distributed among the population, depends very substantially on the SSI sector and on the micro enterprise sector (the latter interpreted to include the bulk of agricultural families which have very small land holdings). The LE sector, if efficient and productive (and this is a big "if" in most countries) can contribute significantly to output growth but only very modestly to employment growth, and probably not at all, for some time to come, in many countries where trade liberalization will cut employment in some important sub sectors. LE can also contribute through efficient linkages with SSI sector which operates to the mutual benefit of both sectors. But any hope for widespread benefits from growth will depend on what happens in the other two sectors. Alleviation of poverty can be conceived as a process involving two main mechanisms: the "shifting" of employment share from the micro enterprise (low productivity) sector to the (middle productivity) SSI sector, and the raising of productivity in the remaining micro enterprise sector. Productivity in the lowest productivity sub sector determines the opportunity cost
of labor to the other sectors and hence sets a floor on earnings. Wages of workers 
(without capital) in the SSI and LE sectors will get only that. Micro enterprise 
productivity level in countries where the labor market is "undistorted" by minimum 
wages, and unions etc. In most cases some of the rents in those two sectors will be shared 
with workers/ leading to wage differentials across the three sectors, and possibly also 
repressing the employment levels in them. In any case, poverty will only be minimized ( 
itis never be eradicated!) when productivity of the lowest productivity sector rises 
above the poverty line.

Type of Industry

To consider the role further which SSIs could play in future job creation, it is 
useful to distinguish the labor demand associated with each of five separate sectors of the 
economy/ rather than just the three size-based categories mentioned above. Agriculture, 
while still important in most countries, has been and will continue to lose relative 
importance as a source of employment, even though in a few cases the economic 
liberalization should have the effect of temporarily reversing this natural process. On 
average, it is unrealistic to expect this sector to create large amounts of very remunerative 
employment. Two other important components of the economy are also unlikely to 
genenerate much employment in the short or medium run. The public sector is in most 
countries under a fiscal constraint, which impedes employment expansion. The large-
scale private sector producing tradables should generate significant employment growth 
in a few countries but downsizing has been the more normal accompaniment of 
liberalization thus far, as firms struggle to raise productivity and competitiveness while 
introducing labor saving machinery and equipment. It thus appears prudent to assume
that employment may be close to stagnant for a while in this sector before its normal
growth resumes. The rest of the private sector can be disaggregated into the SSI segment
and the very small firm (micro enterprise) segment. Micro enterprises play the very
important role of providing a minimum, albeit quite low, level of income to many people,
but it does not have the capacity to generate moderate to high incomes for a large number
of people. This leaves SSI as the sector which does not require very large amounts of
capital to grow and, should also be able to produce good levels of income for many
people.

The Key Question: How Large a Role Can SSI Play?

The above discussion reflects a straightforward logic which suggests that an
economy's performance is better both in terms of output and of income distribution and
employment generation if it focuses a sizeable share of its resources on technologies of
middle-level capital intensity, rather than allocating a high share of the capital to a few
workers employing quite modern technologies and almost none to the rest of the labor
force. The SSI sector's contribution to economic performance could in principle be
improved either by raising the internal efficiency of the resources already employed
within it or by increasing the share of the economy's resources employed by it. The
important question is how much difference such changes could make in quantitative
terms.

Focusing on the trade-off between use of resources in SSI and in other ways gives
a static efficiency perspective. But dynamics are equally or more important, including
both the implications of the size SSI sector for savings, investment and technological
change--what we may call the growth implications, and also the dynamics of adjustment
when an attempt is made to reshuffle the structure of the economy (by size in this case) with a view to raising its efficiency.

**The Overall Contribution of the SSI Sector and its Potential**

Recent literature from virtually all parts of the world emphasizes the important contribution which SSIs can make towards strengthening the performance of an economy be it the United States (Audrearsch 1998), Japan (Urata and Kawai 1998), Developing East Asia (Berry and Mazumdar 1991), Africa (Liedholm and Mead 1999), or Latin America. For the most part the increasingly positive reassessment of that role owes itself to a combination of a better understanding of the static economics of and a better recognition of the scope of SSIs in economies and a more careful thinking through of the role of firm dynamics in economic structure and performance. Perhaps most important has been the empirical evidence that some of the world's best performing economies, notably Taiwan and Hong Kong, are very heavily based on small enterprises. A few experiences from countries elsewhere confirm that the SSI sector can be a major source of dynamism, as in the case of Colombian manufacturing from the late 1960s to the early 1980s (Cortes et al. 1987).

Most of the economies, especially the successful ones, where SSIs have played a demonstrably large role have also been outward-oriented East Asian countries. These countries have been very successful at hooking the SSIs into the export process, through some combination of direct exporting by smaller firms (often through relatively small intermediary agents, as in the case of Taiwan) or through subcontracting by SSIs with bigger firms, as in Japan over a long period and Korea with increasing intensity since the mid-1970s. This record of achievement under export orientation is particularly attractive
to the countries of Latin America at present, given the challenge to succeed in a more open context and to do so on both the growth and the distribution fronts.

**Static Efficiency of SSI—The Empirical Evidence**

Total factor productivity (TFP) analyses have been carried out on occasion in developing countries, both to assess the relative efficiency of different branches of industry, different sizes, etc., and to measure the change in such efficiency over time. The literature does not point to any consensus conclusions on the relationships between size and productivity. Many studies do not include sufficiently accurate measurement of inputs—to provide much confidence in any conclusions towards which they might point. A good number of studies have reported rising TFP by size. Many others have found TFP peaking somewhere in the middle of the size distribution, usually within the SSI range. Almost none of these can boast of very satisfactory measurement within the micro enterprise and SSI SIZE RANGE. The most careful set of studies in terms of measurement/carried out under the guidance of Lied Holm and Mead at Michigan State University, come to a different conclusion, finding that TFP is typically a declining function of size once the unit gets to the range of a few workers (but above the single person plant (Lied Holm and Mead, 1999). Though most of these studies have been undertaken in African countries (along with the Dominican Republic and Jamaica) and have focused mainly on the lower end of the size range, the contrast between their findings and those of the many other studies, which report lower TFP for smaller firms than for either medium or large ones (regardless of which of the latter two comes out better) does raise serious doubts about the validity of those other studies, which tend to suffer from measurement problems ranging from fairly to very serious.
The Dynamic Efficiency of SSIs

Since many smaller firms are also young, any assessment of the economic potential and contribution of SSIs should take account of firm's life trajectories, not just their point of time status. Rates of entry and exit are higher for smaller establishments than for larger ones, so in this respect as in many others, SSIs are the middle of the spectrum between micro enterprise and large enterprise. Many young small firms do not survive, and that there is some loss of societal resources in that process of failed attempts, though the great majority of the lost resources are those of the entrepreneur himself/herself. Those firms that do survive for a few years and typically grow to a small (as opposed to very small) size are, according to the Michigan State studies already quite efficient from a static point of view. In addition, however, any of them are in a position to grow further, to contribute to the process of accumulation of resources, and often co-innovate technologically in terms of management/etc. Most large firms began their life as relatively small ones, so the contribution of SSIs in the early years of their history is in that sense inextricably linked to the larger firms of a few years farther on.

In an overall assessment of the role of SSI in an economy, the considerable rate of turnover which characterizes even the small-radium sized firms in most economies does not appear to have any clear-cut implications for the sector's usefulness to the economy.

The Economic Context of SSIs

Before considering how public policy may encourage a strong performance from SSIs, it is necessary to have a reasonable understanding of their setting and hence of their problems and needs. Like other firms, SSIs exist in networks of suppliers, buyers and competitors. More than larger firms, which at least have the option of handling many of
their needs in-house. SSIs rely on other firms or institutions for their inputs, for the training of their workers, often for help with their marketing needs, and so on. One can distinguish three broad groups of SSIs according to the nature of their relationships with other firms: those which are subcontractors (usually but not always with larger firms); those which are members of "clusters" made up mainly of small firms; and those which are more or less independent in that they fall in neither of the above two categories. Its needs vary considerably as to where or to which of these groups an SSI stands closest.

Subcontractors can receive considerable help from the contractors with which they do business; members of clusters tend to satisfy a number of their needs by collective action—e.g. in the areas of marketing, technical assistance, training of workers, purchases of some inputs, and so on. Independent firms are, as the term implies, more dependent on themselves.18

Many needs are common regardless of setting. Firms must achieve a certain level of efficiency either to have success as independents or to qualify as candidates for either of the other two arrangements. Contractors are not willing to invest their time or efforts with subcontractors that are not close to being efficient producers. And a cluster must have a high level of collective efficiency if it is to compete in world markets, as many of the most effective clusters do. At present, interesting efforts are being made in various developing countries (e.g. Brazil) to facilitate large-small firm links, to develop denser subcontracting systems and to foster effective collective action among SSIs in areas like sporting/purchase of inputs, etc. These developments are encouraging and indicative of creativity; some of them will probably provide interesting models that can be generalized.
Regardless of the context in which an SSI finds itself, it is increasingly likely that its success will depend on ability to participate effectively in international trade, either as direct or indirect exporter or as successful competitor with imports. It is thus important to consider what policies help SSIs to achieve success of this sort.

**Policy vs. Exogenous Factors in the Performance of SSIs**

What hope is there that SSIs, even if the entrepreneurs are ready and willing, can succeed in an increasingly competitive world? The answer is "considerable," especially if policy is supportive and effective. The increasing prevalence of flexible specialization has persuaded many analysts that smaller firms will play an increasing role in the industrial structures of the future. The major role of SSIs in employment creation in Canada, the U.S.A, and a number of European countries over the last couple of decades appears to support this view (Audretsch 1998). Closer to home in terms of economic structure and level are the experiences of several of the East Asian countries, especially Japan, Taiwan, and Korea. Japan has been and remains the prototype of the economy in which the SSI sector plays a major role, principally via subcontracting with large firms, which tends to be engaged in international trade. Taiwan is the prototype in which the SSI sector plays a pivotal role by itself, without the high level of dependence on large firms that characterizes the Japanese model. Many students of Taiwan's experience believe that its outstanding success in achieving both dramatically fast growth and perhaps the lowest level of inequality of any developing market economy are substantially attributable to this dominant SSIs role (Pei, Kwo and Ranis, 1979).

Although it is hard to be very precise quantitatively, the evidence alluded to above does suggest that the SSI sector could loom large and important in an economy and that
when it does so, both the growth and the income distribution performances can benefit greatly. There remains however the biggest question of all-to what extent does such impressive success owe itself to exogenous factors like a wealth of entrepreneurial talent/a culture which favors the business characteristics that are friendly to the development of SSIs/a topography conducive to a dense network of small firms/or a history which did not produce a lot of large firms? In other words, how much of the experience of a country like Taiwan is plain luck and hence could not be repeated even by the most astute and well executed policy in some other country that did not share the same institutional or other features, which helped it down that particular road.

There has been a good deal of skepticism in many developing countries as to whether they, given their different institutional and cultural backgrounds from those of the better known success stories, could achieve such success. This skepticism needs to be taken seriously, yet not overdrawn. And it is true that any judgments as to the impact of policy must be qualified, since there are few experiences that provide good tests of what a concerted and well-organized attempt to support strong SSIs growth can do. But the experience of Korea since the mid-1970s is at least close to being such a test, and the lessons it suggests are interesting and encouraging. As of the early 1970s its industrial structure was more similar to that of countries like Brazil, Mexico, Indonesia and probably Pakistan than to that of Taiwan, at least in the sense of its being dominated by large, vertically integrated firms which did relatively little subcontracting, and in that the SSI sector was accordingly much less important than in Taiwan or Japan. Since that time, however, South Korea’s SSI output and employment growth has been very fast indeed, such that its share of those two variables in the manufacturing sector has risen rapidly.
(Chow 1995). At the same time the level of inequality in the country has diminished. Most of the SSIs growth has been due to rapid increase in the density of subcontracting, i.e. to a move towards Japanese model of industrial structure. This experience is relevant to Pakistan; it suggests that in economies with some structural similarity to Pakistan’s, a rapid increase in the role of SSI can be achieved when conditions are right. In the Korean case the sharp shift of structure was due in part to an increase in competitive pressures associated with the appreciation of the yen in the mid-70s and of the Won with it, and to a concerted effort through public policy to expand the role of SSIs. Both these conditions could be approximated in Pakistan. The partial opening to international trade will have an effect somewhat parallel to the appreciation of the Korean currency; probably the modest level of subcontracting by larger Pakistani firms has been in part a product of the high levels of protection. The second condition, a well-designed and vigorous set of policy supports is at the disposal of these countries if they take up the challenge seriously enough. A well-designed policy package is not expensive, but it does require a level of serious dedication, which has been for the most part absent in the past.

The World Economy and SSIs

It is important to recognize the potentially great difference between success and failure in integrating SSIs directly and indirectly into the world economy. Potential failure is implicit in the fact that integration with the world economy can be a daunting prospect for small firms, and a quick reduction of import barriers can decimate some SSI sectors, especially when the real exchange rate is allowed to fluctuate, creating periodic waves of imports. Although SSIs often live by their flexibility and agility, many of them are at the same time vulnerable to major external shocks. One of the challenges to
effective support policy is an understanding of this fact and its implications in a given country. But success has been achieved both by whole countries like those mentioned from East Asia and, around the developing world, by internationally competitive clusters of firms from various countries as well as by competitive industries which draw some of their strength from a considerable amount of subcontracting.

**The Current Setting in Pakistan**

After a creditable growth record over much of the period since 1947, Pakistan has stumbled in the 1990s, with growth falling to an average of 3.75% over 1992-97. With population growth still growing at a rapid 2.65% per year, per capita output was rising at just over 1% per year. Together with the well-known fiscal challenge and the need to raise the domestic savings rate if the macroeconomic requisites of fast growth are to be in place, Pakistan also faces a severe employment challenge. The approximately one million annual increases in the labor force will be matched by decently remunerative jobs, the failure in which can easily translate into an income distribution crisis.

As noted above, a five-sector desegregation of where new jobs will or should come from provides insights into severity of the possible employment/distribution challenge and how the SSI sector fits into it. Good job opportunities should be sought in all of this sectors/but realism suggests that even when this is done, several will be unable to contribute many net new jobs with decent earnings levels attached to them. Agriculture still provides 45-50% of employment in Pakistan; the share of new jobs provided over the last couple of decades appears to have been in the range 30-40%, with this share naturally expected to fall over time unless the economy is in severe difficulties. It is inevitable that, if the present trends in the absolute level of agricultural employment continue, many of
the new jobs will be of low productivity, making it desirable that other sectors shoulder a bigger share of the job creation task. Though the public sector may continue to create some net employment, the fiscal situation makes it imprudent to expect much from it. Micro enterprise can provide a sizeable number of relatively low-income jobs and should be encouraged and assisted in doing so, but its potential to expand quickly without a significant decline in the income levels generated is very limited. This leaves only the large-scale private non-agricultural sector and SSI. The former, while it will hopefully create many jobs eventually, will probably not contribute much in the short run. As of the early 1990s, it probably accounted for around 5% of all employment. And, under the influence of increasingly open economies this sector is likely to see a good deal of downsizing, raising of labor productivity to increases competitiveness, etc. Necessary as this may be, it does nothing for employment creation. Unlike the large firm sector, SSIs can create a good deal of employment with a modest amount of capital. The success in some segments of this sector, including the clusters mentioned above, suggest that the supply of entrepreneurial talent for SSIs may be reasonably adequate, if properly complemented by collectively provided services. In short, the SSI sector is strategically placed to make a major contribution to the overall successful performance of the Pakistani economy over the next decade or so, at least.

Although formal sector data on Pakistani manufacturing (based on the annual manufacturing establishment’s survey) report that since only a small share of reported employment is located in the SSI sector, the micro enterprise sector is quite large and the SSI sector is probably somewhat, perhaps considerably, bigger than the data suggest. In any case the small size of the formal sector, both in manufacturing and in overall
employment, makes it clear that it will not be dominating the employment structure of Pakistan for many years to come. If the country is to achieve broad-based healthy and rapid growth, this is likely to be based on agriculture and on rural and urban small enterprise, with SSI playing a modest role in the beginning but one, which increases with time. It is very important that rural non-agricultural activities expand both in numbers and in productivity. Successful growth experiences of countries from Pakistan's current level typically involve a strong symbiosis between growing agriculture and complementary rural non-agricultural activities, including those which involve trade and processing of agricultural raw materials and those which produce and trade consumer goods for the rural population, and those rural clusters which are specialized in goods for sale elsewhere in the country. Data are not available for Pakistan on the relative importance of rural clusters in rural manufacturing and overall non-agricultural activity, but judging from that of a number of other countries plus case studies and anecdotal evidence for Pakistan this sort of activity may be substantial. Evidence from other countries is also encouraging with respect to the potential of such clusters for raising productivity, especially those that sell to outside markets. Given the present and likely future scope of rural non-agricultural activity, it would be a major contribution to growth with equity if enough of the currently quite small enterprises could grow into SSIs with significantly higher productivity. The key to rapid increases in the income of families whose current base is in agriculture will be an increasing income from such rural non-agricultural activities, if we may judge by the experiences of most other countries, developed and developing.20
Not only is the large scale private sector so small that it would be hard for it to achieve a growth rate which would contribute much to employment expansion, but much of it is in any case of doubtful economic efficiency. Increasing competition will lay such inefficiency bare, with some firms having to close and others surviving by scaling down their labor forces. Eventually large enterprise should and hopefully will constitute a major share of the country's employment, but most of those firms will probably have grown out of today's SSIs. This pattern tends to be true even in developed countries with already extensive LI sectors. It is the more true in a country like Pakistan's whose LI sector is currently not only small but also subject to considerable inefficiency leaving parts of it open to adjustment/downsizing.

There are enough examples of effective groups of clustered SSIs in Pakistan (surgical instruments, rubber balls, etc.) to provide assurance that such experiences can and should become more general. For such an expansion it will be important that local entrepreneurship be encouraged and complemented by public policies. As elaborated in studies undertaken as part of the Pakistan 2010: Longer Term Perspective Study such policies include a major strengthening of the "national innovation system" through attention to the R&D institutions and to the participation of the private sector in the process of distribution of public funds for innovation (DRI/McGraw-Hill, 1998a and 1998b). Though much effort would be required to multiply the success stories of this sort, the presence of several impressive successes together with an underutilized R&D and entrepreneurial capacity bodes well for the future if such an effort is made.

POLICIES THAT CAN HELP THE MOST TO INDUCE A STRONG PERFORMANCE FROM SSIS

45
The SSI sector is a very heterogeneous one, so it should not be expected that the same policy package would be optimal across branches, across countries at different levels of development, between SSIIs which are subcontractors and those which are part of clusters, producers of tradable vs producers of non-tradable products. It must also be recognized that in some areas our understanding of what good policy may be remains incomplete for lack of policy experiments and careful analysis. These caveats aside, a number of important conclusions are now possible.21 First, it is necessary to recognize that Pakistan is at present seriously lagging in the overall quality of its support systems for SSIs. Knowing that an effective system involves participation from diverse branches of government and from private collective institutions, which are not yet strong in Pakistan, imposes a real challenge to the quick development of strong systems. In the well functioning systems around the world, (of which Taiwan and now Korea are example) there is generally good coordination among the purveyors of different services and the institutions, which help to determine the context for SSI performance.

One of the probable reasons for the presence of successful clusters of SSIs in countries where overall SSI development is not particularly successful lies in the needed degree of coordination among the elements of a good policy package which is, often easier to achieve at the local than the national level. At the national level, policymaking is currently most often dominated by macro concerns and macroeconomic specialists (The State Bank, the Ministry of Finance, etc.). With the increasing specialization over the years among the branches of economics, this has meant that those in charge of the main levers of policy are unfamiliar with the varying situations and needs of specific groups of firms defined by sector or, as in the case of SSIs by size. For informed, effective policy at
the national level this hurdle must somehow be overcome. Better knowledge among the
decision makers would help; and so would the more frequent presence of representatives
of the SSI sector at the policy-making table. In most countries their political voice is
muted; it is, however, strong in Taiwan where SSIs are more successful. At the local
level, neither the macroeconomic bias of decision-makers nor the absence of SSI voice is
such a problem, and there are the added advantages that the various firms and local policy
makers tend to share a desire to see the region succeed, and that their personal
acquaintance makes collaboration easier.

Exchange Rate Management and SSIs

One policy which matters to more and more SSIs as economic integration
proceeds is exchange rate management. Although SSIs show various types of flexibility
and agility—in fact this is often what keeps the survivors afloat—they can be quite
vulnerable to certain types of external shocks. In general they are more so than their
larger counterparts, which typically have the reserves (economic and political) to weather
storms and are often more diversified to start with, rendering them less vulnerable to
what happens in special small sectors of the market, in the present era, with its inflows
and outflows of hot money putting pressure (in one direction or the other) on the
exchange rate, the risk of damage or death to essentially healthy SSIs (healthy in the
sense of their having the potential to be economically productive over a lengthy period) is
high.

Most of the other key policies in support of SSIs are more microeconomic in
character. Most have as their objective helping these firms to be more efficient and
competitive while at the same time creating relatively good-income jobs. Many
simultaneously increase a firm's performance capability and also increase the likelihood that it will be able to enter a useful subcontracting relationship with a large firm or be a productive member of a cluster. Large firms are only interested in subcontracting work out to smaller firms at or above a minimum performance level.

Marketing success constitutes one of the key challenges for many SSIs. A valuable experience for SSIs in many industries is participation in trade fairs—at home and/or abroad, the latter of which can be a good means of penetrating export markets. (Trade fairs also turn out to be an important source of technological learning.) More generally, however, governments' institutional capability to deliver marketing support is weak in most developing countries. The developing world is littered with failed export support programs and 'white elephant' export institutions. A better approach is intervention with a "light touch" that provides firms with the wherewithal to find buyers for themselves, rather than attempting to substitute for efforts by putative exporters. Export marketing support should also be decentralized and tailored to the specific realities of individual marketplaces so as to be able to respond to the enormous diversity of players and market mechanisms across sub sectors. The experience in Colombia exemplifies. The performance of the national export agency, PROEXPO (created in 1967), in providing direct marketing support to SSIs has been less than impressive, judging by the fact that relatively few of the Colombian SSI exporters which used collective support reported that it came from PROEXPO. The industry associations, by contrast, show considerable promise in this area, especially those in the leather and, more recently, garments industries. Working closely with their member firms, they have been developing the sort of sector-specific knowledge and skills, which cannot realistically be expected from
general purpose agencies like PROEXPO. A successful hybrid arrangement which is beginning to take hold is for PROEXPO and other public sector agencies to work collaboratively with industry associations with the public agencies providing some funding to help organize fairs and assist visits abroad by potential exporters.

**Technology Upgrading**

It is the key to the continuing success of SSIs, especially those which produce tradable. In general, private rather than collective mechanisms are the main external (to the firm) sources of technological capability. In Japan, strong vertical and horizontal inter-firm relations drive the technology acquisition process, and such links are important in many other countries even if less dense than in Japan. Where such helpful private-sector links are limited, the challenge of technological acquisition is a formidable one and the consequence can be technological isolation and resort to ad hoc learning. Yet a number of experiences from outside the region (such as that of Korea's engineering based SSIs) and within it (various industries in Brazil and Argentina, Colombia's craft-based leather and garment SSIs, Chile's wood-processing) suggest that it is possible to successfully surmount this challenge via activist strategies at both the firm and collective levels.23

Collective technical support can be "broad-based", contributing to the emergence of an "information-rich" environment, or it can promote "high-intensity" technological learning by supplying technical inputs directly to firms. The former works to enhance the overall availability of usable information, leaving firms to judge what information sources might be most useful, and how they might be adapted to a firm's specific needs. It involves things like sponsoring courses on specialized topics; facilitating the use of
specialized consultants to a range of firms; and promoting information sharing among firms. Such support appears to be useful in most countries of Latin America.

Broad-based collective support has been most effectively delivered by decentralized institutions—either by industry associations, independent non-governmental organizations, or by local governments in specialized industrial districts. The record of centralized institutions in delivering services is more uneven. The desirability of decentralized delivery reflects the wide diversity across activities in the kind of information that is useful, and consequently the need for delivery of broad-based collective technical support that is close to—and appropriate for—reasonably homogenous client groups. The goal of high-intensity collective support is to meet those specific technological needs of firms, which are not adequately addressed through other channels. Demand for support along these lines is likely to emerge only at relatively high levels of technological complexity. For countries that lack an overall record of strong performance by parastatals, an effort to establish a high-intensity network of collective technical support, say along the lines of Korea's successful system, would appear to be risky.

Where assistance is provided collectively, it often makes sense to do so to groups of clients. Chile has taken the approach of subsidizing privately supplied technical assistance. Sharing of the cost with the client is clearly appropriate; the risk associated with subsidized private supply is that ineffective service suppliers will be induced into existence. It remains to be seen how broad a supply of quality services will emerge in response to such a system.

The role of access to credit in the healthy evolution of the SSI sector has been controversial, both with respect to whether lack thereof is typically one of the major
impediments and with respect to whether financial liberalization is more likely to improve access or weaken it. The evidence is thus far ambiguous on both counts.\textsuperscript{24} There is little doubt that many SSIs could grow more efficiently with better access to credit, but it is less clear what the limits to the likely performance of a financial system in terms of allocating such credit to the "right" borrowers are. Perhaps the only valid generalization is that a financial system will work better when it has better designed rules to guide lending to SSIs and more SSI specific personal expertise, that is, more people who have enough feel for the context of SSIs to be discerning lenders. Not too many institutions in Latin America or elsewhere in the developing world have performed impressively in this regard.

The impacts of financial liberalization are a source of optimism to those who believe that the public-sector banks which focused on SSIs were ineffective and that the private sector could do a better job, especially when interest rates were brought closer to equilibrium levels so that credit allocation would more likely be guided by which sectors had a strong effective demand for credit. Research by Jaramillo et al on Ecuador led them to conclude that the process improved the access of smaller firms to private sources of credit. Survey evidence reported by Levy et al (1999) for Colombia and Indonesia indicated that smaller and generally less well placed SSIs relied more heavily on public sector banks while their better placed counterparts draw more on the private banks. It seems likely that the access of small and otherwise disadvantaged SSIs to external sources of finance, and especially to bank loans, depends heavily on the degree of development of the financial markets; in countries like Japan it is relatively good while in most Latin American countries it is considerably less so.
Another significant difference between better financial systems and weaker ones involves the performance of credit guarantee systems. Such systems work relatively smoothly in Japan, in part because it is primarily operated by local associations (which naturally have better information than outsiders on the reliability and credit-worthiness of various possible borrowers in their geographic area), and in Korea where, because the guarantees are only partial, banks have considerable incentive to be careful both in their credit evaluations and in credit collection. In both these countries default rates have been kept to manageable levels. By contrast, and especially in their early stages, several of the Latin American schemes (e.g. that of Colombia) have suffered major incentive and other problems, producing high rates of loan default often accompanied by long delays by the guarantee system in compensating the banks making the defaulted loans. As a result, lending institutions have often become leery of extending credit to SSIs except where strict collateral requirements could be satisfied more often the case with the larger and better-endowed SSIs. The insistence on collateral, even when the loans are guaranteed, tends to defeat the purpose of the guarantee system.

**Training and Support**

Support for appropriate education and training is another important element of an effective support system for SSIs. It is often noted that training institutions play a significant role in the development of such SSI clusters as Novo Hamburgo in Southern Brazil (Schmitz, 1995) and Rafaela in Argentina (Quintar et. al, 1993). SSIs do not and cannot be expected to supply most of the needed learning in-house, both for lack of resources and out of fear of "poaching" by other firms. Most of Latin America's vocational training institutions and systems were originally designed to take care of the

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needs of larger firms. Increasingly it is recognized that their efforts should now be mainly focused on SSIs (Berry and Mender, 1998). Encouragement of SSI suppliers through public sector purchasing may also play a role, as in the Ceara programme (as described by Tendler, 1997, Chapter 5).

Several types of support are directed to improving inter-firm cooperation involving SSIs (either among themselves or with larger firms) or to take advantage of economies of scale available by providing services jointly to many SSIs; support for relevant business associations—or umbrella SSI associations, sometimes industry-specific ones, often-local; practically oriented support for large-small linkages, e.g. along the lines of the SEBRAE programme in Brazil (Marx, 1993, cited by Humphrey and Schmitz, 1995, 19).

SSI network support programmes, of which the Danish Network Cooperation Programme and Chile’s PROFOs are good examples (Berry 1997); subcontracting exchanges; though it is not clear whether they will often have a large payoff, their modest costs makes them a logical component. With respect to how to carry out SSI support policies, two points deserve comment. First, support should be provided on a group basis where feasible, in order to increase the chances of inter-firm cooperation. Second, the modus operandi of support systems and their components should usually be one-shot or time-limited when possible in order to avoid the creation of permanent bureaucracies, at least until the benefits are clearly satisfactory. Thus, for example, subsidies for participation in any given network should normally be time-limited.

To backstop effective SSI policy it is essential that information on the SSI sector be collected, organized, and analyzed so that policy decisions are no longer taken on the
basis of partial, mainly anecdotal, understanding of the characteristics and needs of SSIs. Related to this is an urgent need for serious monitoring of the programmes which are put into place: many programmes will of necessity have an experimental character for the time being since so little is known about which instruments work well in which situations.

**Industrial and Infrastructural Sector Policies**

The economic development of Pakistan started from scratch in 1947. Inheriting only 34 small industrial units out of total 921 in the sub-continent, economic planners set out on a daunting task of setting the scene for a major thrust towards industrialization. The inherited units included units in the textile, cigarettes, sugar, rice husking, cotton ginning and flour milling sectors. Employing approximately 26,000 workers and contributing a paltry 7% to the GNP, the industrial sector presented a challenging exercise. It soon became evident that policies being pursued by the economic managers were aimed at achieving rapid rates of industrialization. Therefore, an explicit bias in favor of industrialization emerged. The strategy adopted to promote industrialization was that of import substitution, which was not only employed in full, but it also carried with it an additional problem of focusing on large scale and capital-intensive industrialization.

Industrial experience of Pakistan can be divided into different phases:

1. Industrial policies of 1948-58: (The phase of import substitution).
2. Industrial policies of 1958-68 (The phase of export expansion).
4. The phase of the return of the functional inequality grafted with basic need concern (1979-1990)
Early emphasis as indicated by the "Statement Industrial Policy" announced in 1948 stated that "the most striking feature of Pakistan's economy is the marked contrast between its vast natural resources and its extreme industrial backwardness. A country producing nearly 75% of the world's production of jute does not possess a single jute mills. There is an annual production of over 15 lack bales of good quality cotton, but very few cotton mills to utilize it. There is an abundant production of hides and skins, wool, sugarcane and tobacco—to name a few of the cotton products. Pakistan's considerable resources in minerals, petroleum and power remain as yet untapped. In laying down any policy of industrialization, note has to be taken of these deficiencies and handicaps and a conceived effort made to overcome them.

Pakistan, therefore, seeks, in the first place, to manufacture in its own territories the products of its raw material, in particular jute, cotton, hides and skins etc. for which there is an assured market whether at home or abroad. At the same time to meet the requirements, of home market, efforts would be made to develop consumer goods industry for which Pakistan is dependent, at present, on outside resources."

There seemed an evident focus on consumer goods industries but every effort would have to be made to ensure setting up of large-scale industries that would promote a well-balanced economic setting. Then in 1952 came the recommendations of the Economic Appraisal Committee that prioritized areas that need to be looked at. The main consideration of the policy is given below:

(i) Use of our own materials, e.g. cotton, jute, bamboos, sugarcane, wools, hides, skin.
(ii) Reduction of imports, particularly essential items in which we should have certain minimum indigenous productive capacity.
(iii) Maximum productivity in relation to the capital invested and maximum employment.

**Net social and Economic Advantages to the Country**

The establishment of Pakistan Industrial Finance Corporation and Pakistan Industrial Credit and Investment Corporation in 1948 created avenues for credit requirements of private investors. In 1952 the government established the Pakistan Industrial Development Corporation (PIDC) to spur the private sector into action. PIDC was supported to play the role of catalyst and gap filler and the moment an industrial unit became viable, it was aimed to be transferred to the private sector. Moreover, to create skilled human labor for the rapid industrial growth, a Swedish Pak Institute of Technology was established in 1955-56. Pakistan Industrial Technical Assistance Center was also established in 1957 in collaboration with USAID Mission. Thus, Pakistan established a substantial industrial structure in a very short period. The policy of import substitution, largely of consumer goods, was initially aided by high walls of tariffs and quantitative restrictions on import and later through the growth of domestic and foreign demand. The policy of import controls initiated in 1952 remained in effect until 1959 and resulted in the creation of the highly protected home market.

Thus, the first decade (1948-58) recorded some important structural changes in the history of Pakistan. The share of manufacturing and mining in GDP rose from 7.97% in 1949-50 to 12.40% in 1959-60. The contribution of these sectors in employment rose from 9.6% in 1949-50 to 13.43%. in 1959-60. The import substitution policy persuaded during the decade under review also paid dividend as import of consumer goods in total imports fell from 49.7% in 1949-50 to 33.8% in 1959-60.

**Industrial Policy of 1958-70**
In 1958, a military government came into power in Pakistan and undertook comprehensive review of various economic spheres. Among other things, it felt necessary to announce a new industrial policy in February 1959. This policy was basically a reiteration of the earlier statement of 1948. The new government acknowledged contribution to the industrial growth during the fifties both by public and private sector. In such a situation government would initiate and operate such industries only which were essential to life of community through special constituted corporation. The industries though sponsored, however, would be transferred to private sector as circumstances permitted. Consistent with the absolute centralized political system inherent in a military government, the responsibility of the entire industrial development including first action of targets and priorities, location and determination of level of production etc. was completely vested in the hands of central government with the abrogation of Federal Constitution and induction of emerged regime headed by the Chief Martial Law Administrator. It was no longer felt necessary to consult the provinces in the matter. This was in contrast to the policy of 1948 under which the central government of the day had to persuade the provincial political bosses to agree to hand over 27 industries to central planning.

Industrial policy of 1959 laid renewed emphasis on private sector and development of the agro based industries with a particular focus on export industries. The decade under review covers the period of second and third Five-Year plans of Pakistan. The allocation of industry, however, declined from 36% to 31% in pre-plan (1950-55) and first plan (1955-60) respectively to 28% and 26% during the second plan (1960-65) and third plan (1965-70) respectively. This was done to restore some balance between 57
industry and agriculture and to overcome recurrent food shortages, which characterize the first decade.  

There was also a shift away from its light consumer goods and easy processing category towards intermediate and capital industries, *i.e.* electrical, chemical, machine tools, etc. Since capital goods industry has long gestation periods, the shift did not emerge clearly during the period under review. Exports promotion device was super headed by the Export Promotion Bureau scheme in 1959 and was aided by other specialized institutions like Export Credit Guarantee Scheme in 1962, Export Promotion Bureau in 1966, Export Market Development Fund (1966) and Pakistan International House that was established in 1968.  

During 1959-60 to 1963-64 the manufacturing sector grew annually at 16% but slowed down in the second phase, *i.e.* half of the sixties (1963-64 to 1970-71) when it stood at 8%. The war with India, the suspension of US aid, recurring floods, political and social unrest and drought were the factors responsible for slowing down the pace of industrial development. The pace of structural changes in the economy also slowed down compared to the first decade. The share of manufacturing sector rose from 12.41% in 1959-60 to 16.53% in 1969-70. Its contribution to total employment registered even a more modest increase from 13.43% in 1959-60 to 15.57% in 1969-70. With the persistence in the policy of imports substitution, particularly in the final half of the decade, the share of consumer goods in total imports further reduced from 33.5% in 1959-60 to only 10.1% in 1969-70.  

**Industrial Policy of 1972-77**  
The main feature of PPP government's industrial policy can be summarized as
under:

(a) The principle of "mixed economy" was accepted for the country and government took over the management of 32 industrial units belonging to the following basic units:

Iron and steel industries;
Basic metal industries;
Heavy engineering industries;
Assembly and manufacture of motor vehicles;
Tractor plants;
Heavy and basic chemicals;
Petrochemical industries;
Cement industries; and

Public utility including electrical generations, gas, oil refineries.

These industries were selected for nationalization because they bear upon the life of every citizen and form the base without which no industrial development in real sense can take place.

(b) In August 1973, notifications were issued under reforms order, to enable the Federal Government to acquire majority share ownership of these units on the basis of compensation to the old owners. In November 1973, the government issued orders to acquire majority ownership on the public limited company. Rules were amended in March 1974 in order to provide for payment of compensation of the acquired shares at market price. The nationalized companies and units were put under the newly created Board of Industrial Management (BIM). Later, these along with the Pakistan Industrial
Development Corporation were constituted into ten holding corporations. These corporations are listed below:

(i) Federal Chemicals and Ceramics Corporation Limited;
    Federal Light Engineering Corporation Limited;
    National Design and Industrial Services Corporation Limited;
    National Fertilizer Corporation of Pakistan;
    Pakistan Automobile Corporation Limited;
    Pakistan Industrial Development Corporation of Pakistan;
    Pakistan Steel Mills Corporation;
    State Cement Corporation Limited;
    Heavy Engineering and Machine Tools Corporation Limited; and
    State Petroleum Refining and Petrochemical Refinery Limited

These public sector corporations were partly financed by the government and partly by Pakistan Development Finance Corporation.

(c) As regards the industries left to the private sector, measures were taken to broaden the share ownership and the management of companies.

(d) The managing agency system was abolished. It was provided with a mechanism, which had enabled a few families to get control over the industrial sector.

(e) For the election of Board of Directors of the companies left in the private hands, a system of cumulating voting and proportional representation was introduced so that the minority shareholders could also send their representatives to the boards.

(f) Under the Special Ordinance dated 2nd September, 26 industrial units producing vegetable ghee were also nationalized. The Ordinance was later replaced by the
Hydrogenated Oil Industry Act 1973. The act regulated the operation and further development of the industry.

(g) The shipping industry was nationalized in January 1974 through the Pakistan Maritime Shipping Act. The management of the National Shipping Corporation and of 9 other shipping companies was taken over by the government. It was claimed that the performance for the public sector was very good.

(h) In July 1976, the government took over the control of some agriculture processing industries to eliminate the middleman from the society and thus ensure a fair play to farmers and consumers. These included cotton ginning, paddy industry and large flourmills. Those under foreign ownership were exempted.

Other measures taken by the government to which were expected directly and indirectly to affect industries included:

(i) Labor reforms giving the industrial worker a say in the factory. Abolition of bonus voucher system and devaluation of rupee

(ii) Increase in re-imposition of export duties, reduction of sales tax rate on imports, revision of import policy to minimize administrative control.

(iii) Fiscal incentives were given for the establishment of industrial units in the less developed areas of the country.

**Industrial Policy of 1978-90**

In 1977 martial law was imposed in the country marked another turnabout in industrial strategy. The military regime brought back the old economic set up/structure visualized in sixties. According to the report of the Planning Commission:
(a) The manufacturing sector has been under pressure in the recent years due to a variety of national and international factors. The present government feels that the major cause has been the policies of the previous government, particularly that of nationalization of industries. In this context it has taken various steps to stabilize the industrial sector of the economy. It, by a decision taken in October 1977, demarcated the role of public and private sectors and gave assurance of no more nationalization.

(b) It denationalized some nationalized industries, particularly the agriculture processing industries mentioned above which had been nationalized in July 1976 by the previous government.

(c) By a Presidential Order, the federal government offered for transfer of shares of proprietary interests to their former holders in respect of a managed establishment required by the government under Article 7-B of the Economic Reforms Order 1978. i.e. this opened a way to denationalization of the industries nationalized by the previous government.

(d) Fiscal and monetary incentives including tax holiday have been given particularly for less developed areas. In March 1978, government announced five years tax holiday and revision of import duty on machinery for industries set up in Dera Ismail Khan and Malakand Division. Earlier five-year tax holiday was announced for Balochistan.

(e) To boost industrial concession a package of fiscal concessions and financial benefits have been granted and corrective measures have been taken as demanded by private sector. These measures include:

(i) Reduction in interest charged by banks to 12.5% on all fixed investments.
(ii) Reduction in the margin requirement for opening letter of credit for the import of industrial raw material

(iii) Removal of tax on issues of bonus shares

(iv) Increase in tax credit from 1% to 5% of the cost of machinery and equipment meant for balancing modernization

(v) Fixing standard rebate of excise duty on additional 17 items.

(vi) Rate of interest on bank advances for financing export of items covered by the Export Finance Scheme was also reduced

**Industrial Policy in 1990s**

The new industrial policy has the following three important components:

1. Deletion Policy

2. Deregulation Measures

3. Privatization Policy In the following, we discuss each of these in detail:

**Deletion Policy**

In order to attain broad objectives of self-reliance in the engineering sector, and to ensure transfer of technology and developing linkage between various segments of industries, the government announced a comprehensive deletion policy in 1987.

The level of deletion achieved so far by some major industries include transformers (100%), electric pumps (95%), electric meters (100%), tractors (84%), electricity meters (85%), deep freezers (80%), switchgears (75%), sugar plants (79%), motorcycles (74%), packed air-conditioners (61%), motor vehicles (47%) and trucks and buses (50%).

**Deregulation Measures**
Almost all industrial sectors have been exempted from the requirement of Government sanctions except those, which fall under the list of specified industries. Sanction for projects out of specified industries irrespective of their cost and size is not required. The following industries fall under the category of specified industries:

- Arms and ammunition;
- Security printing, currency and mint;
- High explosives; and Radioactive substances

All the four provincial governments have notified negative areas where a project cannot be set up for reason of security, defense or environment. Outside these negative areas, the entrepreneurs are free to set up their projects without going through the formalities of getting an NOC from the provincial governments. However, if any entrepreneur is interested to set up industry in a negative area and has justification for the same, he is required to obtain an NOC from the concerned provincial government.

**Privatization Policy**

Privatization of public assets has been regarded to act as a catalyst for economic recovery and growth. The government at the time regarded privatization as a key to the economic growth and continues to accord it high priority. The privatization process has been more transparent, speedier and conformant to the principles of broad-based participation in the acquisition of ownership of divested industrial assets. A comprehensive new privatization policy and detailed criteria for its implementation has been formulated and announced by the governments.

**Objectives:**

The main objectives of the privatization policy are as under:
(i) To improve upon the operational efficiency and overall performance of state-owned enterprises being privatized and to promote competition;

(ii) To reduce the financial burden imposed upon Government by public enterprises and to release resources for utilization on alternate urgent requirements including those of social sectors and development of physical and technological infrastructure;

(iii) To promote and strengthen the capital market by broadening and developing it’s base through enlarging the number of shareholders and listing new enterprises.

Strategy

While pursuing these objectives, as enumerated above, the policy statement has recommended that the following strategy should be adopted:

(i) Safeguard the interests of the consumers by formulating a regulatory framework prior to divestiture, particularly in the case of utilities.

(ii) Avoid concentration of economic power in a few hands and to secure widespread ownership of assets being divested.

(iii) Provide reasonable compensation to the employees rendered surplus as a result of privatization and help in their retraining for employment elsewhere.

Methodology

It was decided to keep the following basis in view while selecting the appropriate methodology out of multiple choices:

(i) Widespread dispersal of ownership (incorporating provisions for participation of employees and the management) without excluding experienced entrepreneurs especially in the sectors where managerial efficiency is of vital importance;

(ii) Transparency in the process of sale and transfer;
(iii) Thoroughness in the preparation of reports, information sheets and bidding documents; and

(iv) Strong public awareness campaigns to build understanding and support among the employees, investors and the general public.

Implementation

Industrial Sector: In the industrial sector, 118 enterprises have been identified for privatization. Out of these, 67 enterprises have been privatized and transferred to the private sector. The buyers include 9 employees groups, 5 foreign firms and 8 ex-owners.

Financial Sector: In the financial sector, out of four nationalized commercial banks, two banks namely Muslim Commercial Bank and Allied Bank Limited have been privatized (purchased by its employees). It was proposed to divest two more commercial banks and two development finance institutions.

Communication Sector: In the telecommunication sector, preparation for divestiture of Pakistan Telecommunication Corporation (PTC) is at advanced stage and necessary regulatory and legal framework is in process. It has been decided to offer 26 percent shares of PTC to a consortium of core investors.

Table 2

Industry-Wise Position of Privatization

(Number of Units)

<table>
<thead>
<tr>
<th></th>
<th>Identified for Privatization</th>
<th>Privatized</th>
<th>Under Privatization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobile</td>
<td>11</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

66
<table>
<thead>
<tr>
<th>Category</th>
<th>15</th>
<th>9</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement</td>
<td>14</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Chemicals</td>
<td>7</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>12</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Engineering Vegetable Ghee Rote</td>
<td>51</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Plants</td>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Rice Mills</td>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Miscellaneous Units</td>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>118</td>
<td>67</td>
<td>51</td>
</tr>
</tbody>
</table>


*Power Sector:* In the power sector, it is intended to privatize at least one thermal power generating plant and one power distributing company in the first phase. Work on regulatory and legal framework has been started in the power Sector and services of foreign consultants have been obtained for this purpose.

*Transport Sector:* In the transport sector, 10 percent shares of Pakistan International Airlines have already been divested and new private airlines have been allowed. Privatization of Pakistan National Shipping Corporation is under consideration and necessary studies have been commissioned.
Notes

1Income distribution and poverty estimates come with long lags in Pakistan, which complicates the assessment of current trends, but it is worrisome that, with per capita income still growing fairly strongly over the period 1987-88, Amjad and Kemal (1997) estimate the incidence of poverty to have risen from 17.3% to 22.4%. However, generally it is estimated that poverty almost doubled during the nineties.


7Govt. of Pakistan, First Five Year Plan, p. 310.

8For details see Rashid Amjad et al., The Management of Pakistan’s Economy 1947-82, UGC Monograph Series in Economics, pp.108-112.


12Although one should note that its primary focus has been on the provision of credit for exporters, an activity which it apparently has undertaken impressively.

13Little, Mazumdar and Page (1987) in their review of literature consider this to be a relatively frequent outcome.

14The labor force survey of 1993-94 indicates that the whole formal sector, including the public sector and formal private sector employment accounted for only 10% of all employment (Irfan, 1997). Whatever the precise distribution between the public and private components, it is clear that both of them are small.


17 Comparison of the manufacturing survey data with those of the household surveys imply that only about one sixth of all manufacturing employment is caught in the former, and hence that the great majority is in the micro enterprise sector.

18 A particularly detailed study is that of Aw et al (1997) on Taiwan.

19 In Japan, technical centers under the umbrella of local governments are the primary providers of broad-based collective technical support.


Chapter II

Industrial Development and Less Developed Countries

Industrial policy and interventions by governments to promote industrial development beyond what would be achieved by free markets have been under increasing attack over the past two decades\(^1\). This follows the demise of old-fashioned interventionist strategies, with wholesale import substitution led by large public sectors and managed by comprehensive controls and plans. The swing, away from import substitution strategies, has been justified by neoclassical economic theory and with reference to the performance of the East Asian newly industrializing economies (NIEs). Theory and beliefs about the inherent inefficiency of governments have together given rise to the current neo-liberal political economy\(^2\). The essential presumptions of neo-liberalism are that free markets are efficient and that any imperfections that exist are either trivial or else cannot be solved by government interventions.

Neo-liberalism in some form or another has been widely accepted (willingly or otherwise) by many developing and formerly socialist countries undergoing structural adjustment. It forms the basis of the so-called "Washington consensus", the policy advice and conditions accompanying loans by the IMF and the World Bank. It also forms the basis of recent multilateral trade negotiations, and is accepted by most major aid donors to the developing world. By common agreement, therefore, some of the most important tools of industrial policy that were used by countries now are being ruled out of bounds. The entire context of government policy in development is changing and narrowing. Perhaps not, as is argued\(^3\).
There remain many unresolved issues about the efficiency of markets and the correct role of the government in adjusting economies. The need for policy reform and the removal of irrational and inefficient interventions is accepted, and failures of classic import substitution are acknowledged. However, it is suggested that economic theory provides a sound basis for interventions when markets are not perfect and do not lead to optimal resource allocation. The empirical basis of much of neo-liberal development policy analysis, the contribution of free markets to the success of the Asian NIEs, is open to a very different interpretation from the one normally accepted.

Industrial policy is needed when markets are imperfect, and interventions are meant to remedy market failures, not to replace markets. Industrial policy has two main elements: functional interventions and selective interventions. Functional interventions are those that remedy market failures without favoring any selected activity over another. Selective interventions are designed to favor individual activities or groups of activities in order to remedy specific failures or externalities that would lead to sub optimal resource allocation, either in static or a dynamic sense. While the normal connotation of industrial policy is confined to selective interventions ("picking winners"), in fact the theoretical debate is much wider, and ranges over both functional and selective interventions. Three different approaches may be distinguished: the "pure" neo-liberal, the "market friendly" or moderate neo-liberal; and the "structuralist." Their analyses are all based on the same corpus of neoclassical economics, so it is not the theory that differentiates them. Their differences lie instead in the assumptions that are made about how markets function in
developing countries; how capable governments are of coping with market failures (where these exist); and what we learn from the East Asian model.

The pure neo-liberal would argue that all markets are perfect and that by definition any intervention would distort resource allocation. The static optimization of resource allocation given by free markets would also lead to maximum growth over time (neoclassical economics has tended to equate the two). To the pure neo-liberal the East Asian experience provides empirical support for this set of assumptions. Much of the trade strategy debate of the 1970s and 1980s was couched in these terms by its main neo-liberal protagonists like Balassa, Krueger, Little and Harberger and (until recently) by institutions such as the World Bank.

A more moderate neo-liberal would argue that developing countries did suffer some market failures. These called for both functional and selective interventions, but in practice only the former were feasible and desirable, either because the failures that called for selectivity were insignificant for industrial development or because selective remedies were inherently more costly than the failures they were addressing. (That is government failures were always greater than market failures for this class of situations). Thus, there was no role for industrial policy in the narrower sense (selective promotion) in industrialization. This approach has been termed "market friendly" by the World Bank, most recently in a study (1993) that examines the role of the government in the rapid growth of East Asia. However, the analysis of market failures in the market friendly approach is limited, hampered by unrealistic assumptions about how technologies are
absorbed and upgraded in developing economies. It is these assumptions that comprise the basic case for industrial policy.

The "structuralist" would argue that both functional and selective interventions were needed to promote industrial development, and that governments could be capable of providing both. In the absence of selective interventions, industrialization may well take place, but its pattern and depth would be affected, and in most circumstances in developing countries would tend to be stunted and shallow. The experience of East Asia is interpreted to show that there is no uniform model of the NIEs, and that the pattern of intervention determined the pattern of industrial structure and technological capabilities that resulted.

THE THEORY OF INDUSTRIAL POLICY

Theoretical antecedents

The case of industrial policy rests on the efficiency of markets. If markets worked perfectly, in line with the assumptions of textbook economic theory, they would achieve optimal results that by definition could not be improved by intervention. Where markets were not perfect in this sense, however, there might be a case for interventions to improve economic (and trade) performance. The case would depend upon the nature and extent of the market failures and the ability of governments to design and implement the necessary interventions (the potential cost of government failures). As stated earlier, traditional neoclassical theory simply assumes that all markets are fully efficient. There is perfect competition with no scale economies, identical technologies and levels of efficiency in the use of technologies across firms and countries, perfect information (with
no risk and uncertainty), two factors of production (capital and undifferentiated labor), homogeneous products and small firms that essentially operate in local markets. Prices perfectly reflect relative factor requirements and endowments, and firms costlessly choose techniques that are optimal to those endowments. Over time, relative endowments change only with the accumulation of capital and growth of the labor force. Under these assumptions, there is no role in competitiveness for such factors as technological or efficiency differences (since by assumption all firms have access to identical technologies which are instantaneously and costlessly absorbed); skill gaps (as labor is undifferentiated and presumably equally productive); scale economies; or marketing and product differentiation (tastes are identical and products homogeneous). Since all firms are assumed to be small and to have access to the same knowledge, skills, and other inputs, firms cannot create competitive advantages by their individual efforts to learn or create technologies, skills and brand names. Such advantages only evolve at a national level with capital and labor accumulation. There is then no role for the government (apart from ensuring the macroeconomic conditions for savings and investment) in influencing comparative advantage, and free markets by assumption ensure the optimal allocation of resources, and, by implication, long-term growth. Any intervention must necessarily be distorting.

There have been several amendments to traditional theory. Within the neoclassical tradition, "new" strategic trade theories admit that in some industries scale and learning economies can play a crucial part in determining competitive advantage. In these cases, there may be a role for strategic interventions by governments to secure for
their firms the advantages of being the first-comer, and thus preempting potential
competitors by securing scale economies and traveling down the learning curve. This
model is generally applied to industries with a few large, dominant firms operating in
global markets, and the learning curve is taken to be predictable and confined to frontier
technologies. It is largely of relevance to the industrialized rather than the developing
countries. As far as the latter go, it seems to be assumed that the technologies in use are
well diffused and operated efficiently. Thus, developing countries still optimize their
trading position by free market policies and by allowing the free inflow of technologies
that suit their national factor endowments, and that are assumed to be costlessly absorbed.
There are, in other words, still no market failures in any of the important markets that
determine their growth and comparative advantage.

Other theories have consciously rejected neoclassical assumptions of efficient
markets with identical production functions, equal access to knowledge, identical tastes,
small firms and homogeneous products. This group of "neo-technology" theories assigns
a central role to technological and taste differences. Competitive advantage is created by
individual firms operating in imperfect markets rather than by national factor
endowments (though national conditions do determine where technologies are created
and exploited). The technological differences that drive competitive advantages in these
models are based on innovations -- major breakthroughs in products and processes -- and
give rise to international investment as well as to trade. Much of the resulting trade is
within industries with broadly similar factor requirements rather than between industries.
These theories have remained largely analytical rather than prescriptive. They have not followed up the implications of admitting widespread market imperfections by exploring the possible role of governments in overcoming such market failures to promote competitive advantage. While some recent versions of this approach (in particular by business school analysts such as Porter, 1990) argue for interventions to strengthen the national base of skills and technology in otherwise freely competitive markets, the lack of a proper and full treatment of market failures means that their analysis remains partial and incomplete. The concern of neo-technology trade theories with major innovations means that developing countries are treated as largely passive recipients of mature technologies from the more advanced countries. The best policy for them remains to be open to free trade, and to attract technology transfer through direct investment. Industrial policy can only take the form of creating an "enabling environment" for the entry of multinational companies.

Industrial policy thus receives little or no support from much of traditional theory. There are several reasons for this. First, the simplifying assumptions of neoclassical economics rule out the need for interventions (though the theory can readily incorporate them once market failures are admitted). Second, the narrow focus of neo-technology theories on major innovations and the continued assumption that developing countries can costlessly and passively absorb new technologies, mean that some critical areas of potential market failure are ignored. Third, there are differences between the coverage of trade theories and industrial policy. Trade theories do not generally concern themselves with the functioning of factor markets within countries, these are taken as given.
parameters within which trade patterns are determined. Industrial policy is legitimately concerned with these markets as they affect industrial development.

The Capabilities Approach

Let us, therefore, now look at more structuralist approaches that are derived from recent work on the microeconomics of industrial development. The common assumption of neoclassical economics that technology is costlessly and passively selected and absorbed by developing country firms (operating in efficient factor and product markets) is a misleading simplification. Most industrial technologies are generally operated at low levels of technical proficiency in developing countries, and technical inefficiency tends to be a much larger cause of low productivity than allocative inefficiency (that is, inefficiency arising from choosing wrong techniques or investments because of distorted prices). The process of selecting, absorbing and mastering technology is neither passive nor costless, and differences in the efficiency with which mastery is achieved are themselves a major source of differences in industrial performance between countries. This is neglected in received theory, and accounts in part for the general dismissal of industrial policy. This section shows how the nature of technological mastery itself can create a case for interventions to support industry.

The process of gaining technological mastery and dynamism requires the development of new knowledge, skills, organizational forms, and interlinkages between enterprises on the acquisition of, let's say, new technological capabilities (TCs). Technological capabilities do not just mean the ability to innovate new technologies but, at least at the start, also the ability to efficiently use imported technologies. This is so
because technology is not perfectly transferable like a physical product; it has many "tacit" elements that need the buyer to invest in developing new skills and technical and organizational information. The process of gaining technological competence cannot be instantaneous, costless or automatic, even if the technology is well diffused elsewhere. It is risky and unpredictable, and often itself has to be learnt in developing countries where new firms may not even know what their deficiencies are or how to go about remediating them (Stiglitz, 1987, pp 125-155)

The TC learning process is necessarily firm-specific. There is no predictable learning curve down which all firms travel. Though any enterprise that tries to use a new technology acquires some TCs as an automatic result of the production process, such passive learning goes only a part of the way to developing the necessary capabilities. In simple industries, say, for example, the assembly of imported kits or garment manufacture for the domestic market, this may be enough for efficiency. Such passive learning is, however, generally insufficient to ensure efficiency as more complex technology is considered, or if more demanding markets are tackled. For more complex industries, to reach even static "best practice" levels, as established in advanced countries, involves an enterprise in a longer and more demanding process sometimes taking years of production, engineering and research. This conscious and purposive learning process means that different firms can experience quite different rates of technological development and end up with different levels of efficiency in using the same technologies.
The development of industrial competitiveness over time is not just about gaining mastery of new industrial activities. As economies progress and mature, it involves deepening in any or all of four forms of technological upgrading of products and processes within industries, entry into progressively more complex and demanding new activities, increasing local content, and mastering more complex technological tasks within industries.13 Each process involves its own learning costs which differ by activity, rising with the sophistication of the technology, the extent of linkages and the level of technological capabilities aimed at progressive deepening is to some extent a natural part of industrial development, but it is not inevitable. Its pattern and incidence differ greatly, depending on the strategies pursued by the government.

Market failures

The process of capability development may face various market failures. In product markets free markets may not give correct signals for resource allocation of various kinds. In factor markets, similarly, free markets may not lead to the optimal supply of the inputs, particularly of skills and information, needed to keep abreast of international markets. These are taken in turn.

(a) Product market failures

Free markets may suffer market failures which affect the optimal allocation of investments between activities that have different learning costs and periods, or face scale economies and externalities. This is the basis of the classic case for infant industry protection. In the presence of learning costs, a late-comer to industry necessarily faces a disadvantage compared to those that have undergone the learning process.14 Since
technologies have very different requirements for learning, those that are "difficult" (i.e. where costs are unpredictable, newcomers lack the information they need to know how to develop the necessary capabilities, which is a lengthy or risky process) would tend to lose resources to those that have relatively easy and predictable learning needs. In addition, investments in developing new skills and technical knowledge face the risk of leakages, since other firms can access those skills and information at low cost. These market failures would lead to resource misallocation that is assumed away in standard neoclassical models with perfect information and costless absorption of technology.

There is another form of externality, called "technological externalities" that may distort resource allocation is vertically interlinked activities it is very difficult for individual firms to plan their investments so as to anticipate each other's learning processes (Pack and Westphal, 1986, pp. 87-128; World Bank, 1993). This provides a case for intervening to coordinate investment decisions to achieve a socially desirable outcome in such activities because these externalities would tend to vary across industries. Moreover, there may be a valid case for promoting selected sets of activities that have more beneficial and widespread externalities than others. This is the rationale for supporting "strategic" groups of industries that enhance local integration. Apart from the production benefits, greater integration can speed the diffusion of technology within the country, increase specialization among industries and firms, create greater linkages with the local engineering and capital goods industries, and thus ultimately raise the ability of the country to compete and to react flexibly to changes in international markets. These market failures may be overcome by several complementary means, basically by
intervening in capital markets and/or sending strong signals to investors to enter difficult or strategic activities by providing subsidies or protection against competing imports. Historically, the most important measure, used by practically every developed country in its early stages of industrialization, has been import protection. However, direct interventions in the allocation of investible resources has also been common. In particular, subsidized and directed credit has been extensively employed in East Asia to channel investments in selected industries. The need for such measures has diminished as capital markets have improved and firms have become better able to evaluate and bear risks.

It is widely accepted, however, that such market failures are endemic to early stages of industrial development. Under these conditions, exposure to free trade can prevent entry by local firms into activities with relatively difficult technologies (multinationals face fewer, and different, market failures, noted below). It has to be stressed that the extent of market failures is crucially dependent on the nature of the technologies involved, which indeed is difficult and complex, and suffer from failures the most in TC development. In the presence of such failures, the absence of industrial policy (in the form of, say, protection for infant industries) would lead countries to specialize in relatively easy technologies and in areas of established competitiveness (in natural resource-based activities or in industries that have already been mastered, perhaps behind previous protective barriers). The diversification of comparative advantages will then be relatively slow, and its scope may remain limited in comparison with a regime where careful selective interventions have been undertaken.
Given inherent technological differences between activities, it follows that in order to ensure efficient resource allocation interventions have to be selective. Uniform protection extended to all activities, which are recommended by many neoclassical development economists, would fail to address the market failures involved. In simple activities the need for protection may be minimal, because the learning period is relatively brief, easy to get information on, and predictable. In fact, in intensive activities like garment assembly, the wage cost advantage of developing countries may offset the low learning costs completely, making protection unnecessary. By contrast, in complex activities -- with large scales, advanced information and skill needs, wide linkages and intricate organizations -- the learning process could spread over years, even decades. Such activities may never be undertaken unless there is a strong natural resource cost advantage, or unless protection is given or an investor who has already undergone the learning process and is able to finance it (typically a multinational firm, see below) is prepared to take them up.

Protection and subsidization are, however, dangerous tools of industrial policy. They can rather create than reduce distortions and can remove the incentive to invest in TCs. If, for instance, protection is granted indiscriminately, unrelated to learning costs and periods, and not offset by measures to induce firms to invest in TC development, it can lead to inefficiency, technological stagnation and waste. This is the lesson of much of import substitution in the developing world, where protection was not used selectively, but spread over all activities without limit or offset. This was not the kind of infant industry protection that the consideration of market failures demands. The experience of
import-substituting strategies should not, therefore, be taken as a refutation of the case for protection, as it is in much of the traditional trade strategy literature.

Where protection was granted in export-oriented regimes (that provided the incentive to invest in the acquisition and constant upgrading of TCs), confined to a relatively few selected activities, and carefully monitored to ensure that competitiveness was achieved, the results were strikingly different. The experience of the most successful industrializing countries of East Asia (Japan, Republic of Korea and Taiwan) suggests that protection was a necessary condition for diversifying into heavy and technologically advanced industries and developing a strong indigenous technological base. Export orientation provided the incentives and discipline needed to make the promotion of infant industry work -- this is the major difference between the export and inward oriented strategies (Moreira 1993). This experience also provides powerful empirical support for the theory of industrial policy based on an analysis of market failures in technological learning.

(b) Factor markets

Two types of market failures stand out here: skills and technology. The realization of comparative advantage depends on these failures being addressed, and they are taken in turn. Skills are imparted both by the formal education and training system as well as by employee training and experience. Less advanced or more specialized firms need a smaller range than those in large-scale and technologically complex industries. But even the simplest technology, if it is to be operated at world levels of efficiency, needs a range of worker, supervisory, maintenance, quality control and adaptive skills. At
the lowest end of the technological spectrum, simple literacy and some vocational training, complemented by a few higher-level technical skills, may be sufficient to ensure adequate TCs (even garment assembly for export requires good supervisory, layout, and maintenance skills). In more sophisticated technologies, the requirements are more diverse and the range of special skills wider.

Primary and secondary schooling provide the necessary base for shop-floor capabilities in all activities, regardless of technological complexity. More advanced technical training becomes critical as the industrial structure develops. All countries accept the need for the State to intervene in the provision of such schooling, and most accept a large role in the provision of tertiary education. Market failures here can arise from a number of factors, including imperfect information and foresight, risk aversion, lumpiness of facilities, assurance of relevance and quality, and so on. Where the government seeks to promote new industries, there is also the danger that the composition of skills created by the training system may not correctly anticipate the needs of the new technologies. The government may then have to intervene to guide the system in line with planned needs. Interventions in skill markets have to be closely geared to interventions in industrial investments.

A very important part of skill creation takes place after employment, by training financed by enterprises, which is a growing trend in developed countries. Most enterprises in developing countries, however, invest relatively little in upgrading the skills of their employees for several reasons. First, there may be an information failure: managers may not be fully aware of the skill needs of the technologies they are using. Or
they may be rooted in traditional ways of manufacturing and training (such as the apprenticeship system in Africa) that is unsuited to the needs of modern technologies or to the upgrading of existing technologies.20 Their own level of education may, in certain cases, make them averse to the further training of employees. Second, there may be missing or deficient markets for the provision of skills and training: managers may realize that employee skills are deficient, but may not be able to remedy this. They may not have access to trainers in-house. Overseas training may be out of the question. And there may be no local institutions, official or private, that can offer the right level and quality of training. Finally, there may be failures caused by the externalities inherent in training: employers may be unsure of recouping the full benefits of their investments. Trained employees may leave the firm, taking the benefits of training to competitors. All these point to the need to intervene to encourage (and sometimes finance part of) employee training, and to intervene more in those industries where training needs are the greatest.

Most development analysts now accept the risk of market failures in skill creation, and recommend interventions to promote human capital formation. However, these interventions are currently described as "market friendly", i.e. as purely functional: they simply strengthen factor markets without supporting some activities over others.21 This description is often not justified. Many forms of educational investments are non-selective, providing a general base of skills for all activities: particularly for schooling and non-technical higher education. However, more specialized forms of tertiary education and vocational training can be highly industry specific, and policies to address
these needs have necessarily to be selective. Thus, the creation of particular skills can be used to encourage industrial development in particular directions. In such cases the normal distinction drawn between industrial and education policies could be misleading. More importantly, the tendency to regard functional interventions, instead of selective interventions, as "market friendly," and recommend the former, may be a biased interpretation of the nature of the market failures involved.\textsuperscript{14}

The second kind of allocation of resources is related to failures in information and technology markets. This may be further subdivided between technology inflows from abroad and domestic technological activity. As for technological imports, it is evident that all developing countries have to depend on large and sustained inflows of technology from more industrialized countries. However, there are important policy choices to be made regarding the mode of technology import. Not all modes are equal in their effects on the development of long-term comparative advantage. In particular, a distinction has to be drawn between "internalized," modes like foreign owned ventures, where the supplier provides the hardware and software, does the start-up, training and adaptation, manages the operation and marketing, and continues to supply technology and skills from the parent company and "externalized" modes, where the technology is purchased at arm's length in the form of equipment, licenses or other contracts, while the local firm retains control.

International technology markets are known to be imperfect and oligopolistic, but the real market failure of relevance lies in the possibility that some modes of technology import lead to less indigenous technological deepening than others. This possibility is far
greater with internalized modes. Foreign direct investment offers many advantages. It is a very effective, and relatively less risky, way of gaining access to new operational technologies, some of which may not be available at arm's length. A large multinational investor generally faces far fewer market failures in creating TCs than a domestic newcomer. It has larger internal capital markets to finance the learning process, and greater reserves of skills and technical know-how. Most importantly, it has undergone the learning process many times in different circumstances, and as such does not face the information gap that a developing country might. In addition, it can promote exports by providing access to its marketing networks, international brand names and production systems that are integrated across several countries.

However, while foreign investment may be a very effective way to introduce new technologies and to promote exports in certain activities, it is not the only means of technology transfer and it may not have the same economic benefits as the absorption of technologies by local firms and the development of local exporting capabilities. In activities in which local firms can efficiently acquire the technology, skills and marketing capabilities needed to be competitive, there may be several external benefits associated with local ownership. There are strong reasons for multinationals to concentrate their innovative activities in a few centers in developed countries that have advanced science infrastructures and skill bases, and where most of their suppliers are located. The development of local research capabilities in developing countries requires additional costs and risks that they may not be willing to bear.
It may, however, be in the long-term interests of the host country to develop those capabilities because of the associated benefits to industrial upgrading and beneficial spillover effects. A passive dependence on foreign investors to provide technology may restrict the development of local R&D capabilities, limiting the long-term diversification of comparative advantage, and subjecting it to the global sourcing strategies of the multinationals. This is a form of market failure, affecting the allocation of resources to the development of local capabilities. In addition, even countries that opt for primary reliance on multinationals for technology transfer have to develop local research skills and capabilities in order to upgrade multinational operations in their economies. The ability to enter more complex activities and take on design and development functions locally itself constitutes a catalyst for foreign investors to set up R&D facilities. The development of such abilities may also require interventions in skill and information support systems. In addition, it may require intervention in the investment decisions of multinationals to induce them to deepen their technological activities, as in Singapore. Many developing countries (and some presently developed ones) have felt it in their long-term interest to promote local ownership in technologically important activities. The countries that have managed to develop independent technological capabilities in design and development in complex industries have done so primarily where local enterprises have been deliberately promoted and foreign technologies obtained in externalized forms. Japan, the Republic of Korea and Taiwan Province of China have used industrial policy in the sphere of foreign investment to achieve just this objective, and it may be
plausibly argued that their base of comparative advantage is stronger than many
developing countries that have followed passive open door policies to foreign investment.
Different countries do, however, deliberately adopt different strategies towards the
promotion of local innovative capabilities to "dynamize" their comparative advantage.
For some, a passive dependence on foreign investments is acceptable, and no market
failure is perceived with the resulting pattern of comparative advantage. For others (such
as the Republic of Korea, see below), such dependence may be regarded as harmful to
long-run international competitiveness. Thus the definition of market failure and the need
for industrial policy depend to some extent on the objectives of the government. Where a
country has technological ambitions, therefore, it may be necessary at certain stages of
industrial development to selectively restrict technology imports in internalized forms
and promote those in externalized forms to ensure a socially optimal allocation of
 technological resources. Again, any intervention to deepen domestic capabilities has to be
selective.

This is not an argument for indiscriminate restrictions on foreign investment.
There are many technologies that are only available through direct investment, or that are
too complex for local capabilities; these have to be imported in internalized forms.
Moreover, there is a growing range of industries where production facilities are
integrated across national boundaries, or where strategic cooperation with technological
leaders is imperative to keep abreast of innovation. The growing internationalization of
production also means that in several industries the potential for "going it alone" is more
limited now than a decade or so ago. Thus, the case for technological deepening has to be
weighed against the risks of being isolated from global technological progress. It is also not an argument for promoting inefficient local enterprises in an import-substituting framework: the incentive regime has to be conducive to local technological development, by forcing firms to compete in international markets.

Coming now to *domestic technological effort*, Arrow (1962) noted long ago that a free market might fail to ensure optimal innovative activity in developed countries because of the imperfect appropriability of returns to R&D. This applies also to investments in TCs in developing countries. The process of mastering and adapting new technologies is not very different in kind from investing in costly and uncertain innovation for the individual firm (although the degree of risk may well differ). Market failures may arise from several factors.

Many firms in developing countries in early stages of industrialization may not know that they have to undertake a deliberate technological effort to achieve efficient operation. When they wish to undertake the effort, they may not have properly functioning information and technical support services to draw upon. As they enter more complex activities, they generally have to undertake formal R&D. However, they may be too small to finance (or raise the finance from the banking system), and bear the risk of investing in, R&D. In this case the promotion of firm size may be one way to solve the market failure (though it may have repercussions in terms of domestic competition policy). Research by industrial firms may also need numerous supporting facilities from a science and technology infrastructure that may not exist in the country. Finally, the returns to investments in technology may be greatly reduced by externalities and the
danger of losing the knowledge to other firms, which would retard technological activity by industrial firms.

Government interventions in information and technology markets may be needed to remedy such failures. Many forms of technical information are available free to firms: from journals, contacts with capital goods suppliers and buyers of export products, visits to fairs, plants and conferences, interactions with subcontractors and other suppliers, and so on. More complex or closely held information is available commercially from consultants, more advanced firms (on license), or as part of a package of direct investment. There is little need for policy intervention here, except to guide firms to the right sources of information.

Apart from these, however, there are many information and support services that are not provided by the market in any country, especially by markets in developing countries. There are several technological functions that have "public goods" features, whose rewards are difficult to appropriate by private firms, and as such suffer from market failure. These include the encouragement of technological activity in general (overcoming risk aversion and the "learning to learn" barrier); the development of special research skills; the setting of industrial standards and the promotion of quality awareness; the provision of metrology (industrial measurement and calibration) services; the undertaking of contract research, testing or information search for firms that lack the facilities or skills; other extension services for small enterprises; and the undertaking and coordination of basic (pre-commercial) research activities. The provision of these
services then has to be undertaken as an infrastructure service or as a cooperative activity by the enterprises concerned.²³

Many institutional solutions for these technological market failures cannot be functional, since they have to be specific to the technologies concerned. Thus, a research facility to support electronics must be geared to the development of electronics manufacturers and not to industry in general. Selectivity is inherent in such interventions. To conserve scarce intervention resources the government has to pick technological "winners" that offer the largest externalities and scope for dynamizing comparative advantage.

The financing of technological activity is another area of possible interventions. Capital market failures are widespread in developing countries (Stiglitz, 1989, pp. 197-202; World Bank, 1993). Some such failures are policy induced, but there are also several that are endemic to the economies of these countries. Financial intermediaries may suffer from inadequate information, especially on small borrowers, and may be exceptionally risk averse because of problems in collecting sufficient information and enforcing contracts. They may be particularly reluctant to finance technological development because of their lack of knowledge of what this involves (they know even less about it than the firms involved), and the risk inherent in all technological activity. A large part of TC development, especially at the lower levels, is not the result of formal research activity but of problem solving in the course of production. The financing of this form of TC activity does not require special instruments. The market failures that occur here are part of the broader failures that affect industry in general, and have to be addressed in that
context. The rest of TC development is based on more formal technological effort, involving longer-term search and experimentation that may face considerable market risk. The financing of such technological activity calls for different mechanisms, such as subsidized R&D, venture capital financing, technology "incubators" and the like, to overcome market failures. It may also, as noted above, call for the promotion of large size in private firms. All these mechanisms were extensively used in the Republic of Korea to promote domestic entry into demanding technological activities, including subsidized credit, direct participation in risky research, the promotion of large firm size and incentives for collaborating with the technology institutions (Operations Evaluation Department [OED], 1993).

Therefore the development of industrial competitiveness and its dynamic evolution over time requires firms to invest continuously in learning new capabilities and upgrading them over time. The learning process faces a number of market failures that conventional trade theory ignores or assumes away. Once they are taken into account, however, the scope for industrial policy in creating and sustaining comparative advantage becomes more apparent.

This concludes the analysis of the market failures that may affect industrial development. Let us now consider the evidence on how industrial policy has been used in developing countries to develop industry and what happens when liberalization ignores market failures and the need for interventions.

**Developing a Competitive Industrial Base: The East Asian "Model"**
This section and the next consider some experiences in the exercise of industrial policy. The present section takes countries that were successful in developing efficient industrial structures. The next takes some cases where past interventions were inefficient, but where the process of reform resorted to free markets (that is, no selective interventions). It is taken as a starting point that industrial interventions in most developing countries have been inefficient. However, this is not necessarily so because interventions are inherently uneconomic, and were not designed to remedy market failures. In most import-substitution economies, interventions were addressed to a number of non-economic objectives, based on poor information and designed with little understanding of market failures. As a result they tended to be haphazard and unselective. In addition to this, they were poorly implemented and subject to political and special interest group pressures.

Such interventions could not meet the needs of efficient industrialization. The effects of "correct" industrial policy as suggested by the analysis of capability development should be assessed in cases where interventions were truly selective and attempted to deal with market failures in building up competitive industry. The most successful set of cases of industrial development are in East Asia, in particular the four "Tigers" that constitute the bulk of the analysis or trade strategy. What was the role of industrial policy in their industrial development?

The first thing to note is that there is no unique East Asian model of industrial development, despite the fact that the four NIEs have been generally treated as a homogeneous group in the industrial and trade strategy literature. Over the 1980s it was
widely argued that the East Asian model was one of liberal trade and industrial policies, and that the success of the NIEs proved the benefits of market driven resource allocation. This line of argument has now been thoroughly demolished by the evidence, including the World Bank's (1993) study of the East Asian miracle, which will be discussed further below. It is now accepted that the strategy of each NIE differed from the others. These differences are vital to the understanding of industrial policy.

At one end is Hong Kong, with a laissez-faire policy that comes closest to the neoclassical paradigm. It has not intervened in product markets, either to support particular industries or to protect manufacturing in general. It has not guided investments in other ways, by interfering in the allocation of domestic credit or foreign investments. It has provided a stable administrative and macroeconomic regime. Its growth performance has been impressive, if not at the level of the larger NIEs. It intervened "functionally" to provide education and training, subsidized land to manufacturers, export information and support services. Its Productivity Center performed various technological services to help producers to improve their technologies. It even selected the clothing sector to support by setting up a large and well-funded textile and garments design and training center. However, its interventions were predominantly non-selective, and there was no attempt to "pick winners". Moreover, even its functional interventions in education, while impressive by third world standards, were not as intense as those of the larger NIEs.24

Does this have lessons for other industrializing economies? It does, but not necessarily that laissez faire is everywhere the best way to promote competitive manufacturing. Two important features of the Hong Kong experience have to be noted in
this context. First, it started with several unique advantages for industrialization which other developing countries, even free trade centers, lacked. Its century and a half of entrepot trading experience gave it a range of capabilities and infrastructure for trading and finance. The presence of several British business and finance houses (the "Hongs") provided a constant supply of foreign skills as well as training for local employees. Most important for manufacturing, its textile, garment and toy industries took off only after the communist take-over, when there was an influx of experienced Chinese entrepreneurs, engineers and technicians from Shanghai. Much of the "learning" for these industries had already been undergone earlier, and the technologies were sufficiently simple that subsequent training could be given to a workforce with good primary and secondary education. The free trade environment, combined with existing capabilities in trade and finance and a supply of cheap intensive, enabled these advantages to be fully exploited, mainly by Chinese entrepreneurs. There was considerable foreign investment, but in manufacturing the lead stayed firmly in local hands (in sharp contrast to Singapore, discussed later).

Second, the ensuing pattern of industrialization in Hong Kong reflected the non-selective policies of its government. The colony started and stayed with light intensive-intensive manufacturing industry\textsuperscript{25}, though within this there was considerable upgrading of quality. This pattern of industrial development was dictated by the lack of selective interventions to promote more complex industries. Its success was based on an impressive development of operational and marketing capabilities, but there was little industrial deepening and diversification. There was some "natural" progression up the
ladder of industrial complexity, but it was relatively limited in relation to other NIEs. As wages and land costs rose, the colony had to relocate its manufacturing to other countries, mainly mainland China, and suffered a significant loss of industrial activity at home (over 1986-1992 it lost about 35 per cent of its manufacturing employment, and the process continues). The growth of its manufactured exports has slowed down considerably, and lags well behind those of the other NIEs. Hong Kong has been able to continue to grow in services and trade because of its unique location, connections and events in the adjoining mainland. However, its pattern of success in industrialization is clearly not open to other developing countries. Simple recourse to free trade is unlikely to lead to such dynamic growth, even by other small countries. No other similar free trade centers, of which there are several in the developing world, have achieved much industrial success. They have not been able to undertake even the relatively easy learning required of light industry. More important, even larger economies that can attract intensive-intensive foreign investments are unlikely to be able to sustain their industrial deepening by "natural" progression if they do not undertake interventions to promote the move into more complex activities. Reliance on foreign direct investments can reduce some of the learning requirements, but any development of local technological capabilities is bound to need supporting selective interventions. The development of Hong Kong's comparative advantage thus has special characteristics. It consists of moving upmarket in existing light industry and diversifying out of manufacturing altogether, not of taking on the more complex technologies that can enable it to retain a manufacturing base with rising wage costs. By contrast, Switzerland, with only one million more people, retains a growing and
deep industrial sector (with chemicals, heavy machinery, food processing and so on) with much higher wages than Hong Kong. The difference lies precisely in the fact that Switzerland, with judicious periods of protection, promotion and disregard of intellectual property laws, has over the past century built up a deep technological base. The industrial flexibility of Hong Kong is in essence to deindustrialize without losing out in growth, a feature that depends crucially on its location and ability to act as a conduit for the mainland.

The Republic of Korea is at the other extreme. Its record of export development, in terms of growth, diversification and deepening, is perhaps the most impressive in modern economic history (even more so than Japan's in view of the periods and initial conditions involved). Its government intervened extensively, both functionally and selectively, in all product and factor markets. It offered high, variable and prolonged periods of protection to selected activities, while forcing those that approached competitiveness to export significant parts of their output. It directed domestic investible resources to infant industries, and deliberately fostered the emergence of giant private conglomerates that could internalize various imperfect markets. It invested heavily in education, especially technical education, and forced firms to launch employee training schemes. It also invested in R&D and technology infrastructure institutions, while inducing (through subsidies and other incentives) and cajoling local firms to develop their independent research capabilities. All these factor market interventions had highly selective aspects, being integrated into the overall direction of industrial development as driven by trade and industrial policies.
Perhaps the most interesting aspect of the Republic of Korea industrial success for present purposes is that it was largely based on indigenous enterprises that imported and assimilated a range of complex technologies rather than on technology transfer via direct investment. The Government of the Republic of Korea was until recently highly selective on foreign direct investments, and in some instances induced Japanese investors to sell out to the chaebol after some years in the country. In technological terms this strategy called for far more domestic skill and technology creation than one that set up the same range of industries but with a heavy reliance on foreign direct investment. The Republic of Korea's investments in education and R&D, and the fostering of the giant chaebol, were a necessary part of its nationalist strategy, driven by the objective of being efficient in world markets. A strategy of nationalism with inward orientation (like India) would have led to far less efficiency, and would consequently have demanded less interventions in supporting factor markets. A strategy of outward orientation with reliance on foreign investors, like Singapore, might have led to less deepening, or to lower domestic innovative capabilities.

The fact that the Republic of Korea has a research and manufacturing base that is able to copy, adapt and build upon state-of-the-art industrial technologies gives it a flexibility that is probably unmatched, especially in advanced manufacturing activities. This flexibility is thus of a completely different order from that of Hong Kong -- it conduces to sustained industrial expansion rather than to deindustrialization. It is also different from that of liberalizing economies with diverse industrial economies that are heavily dependent on FDI for technology, like Mexico (Mexican enterprises spend some
0.03 per cent of GNP on R&D, around 10 per cent of total national R&D, which is itself very low). Such economies are unable to enter world class production of new high technology items of the type that the Republic of Korea is launching, and their most important industrial exports (automobiles in the case of Mexico) are those that have matured after long periods of import substitution and can now form part of the global sourcing strategies of multinational companies.

The implication of this is that indigenous research capability has many dynamic benefits for the industries that possess the capability. Apart from significantly lowering the cost of technology transfer, it allows independent diversification into more advanced areas of comparative advantage than may be permitted by a foreign investor that controls fully the same technology. The underlying market failure with FDI-driven technology transfer has been noted above, viz. with a "Korean-type" strategy, the local firm is forced to develop more advanced skills and technical knowledge than is needed simply to operate a technology imported in a fully "packaged" form.

The development of local R&D capabilities can also have several externalities and linkages. It feeds into local capital goods and component production. It enables the accumulated technical knowledge to be applied by other industries or even by competitors. It leads to interaction between industry and the technology infrastructure (universities, research institutions, quality assurance centers, and so on). All this conduces to overall flexibility in the manner displayed by the Republic of Korea (and also, to a great extent, by Taiwan).
In Singapore, by far the smallest of the NIEs, the government has been very interventionist, but the form of interventionism has been very different from that of the Republic of Korea (Hobday, 1994). The economy started with a base of trading, ship servicing and petroleum refining. After a brief period of import substitution, it moved into export-oriented industrialization based overwhelmingly on foreign investment and technology transfer by multinational companies. Unlike Hong Kong, there was a weak tradition of local entrepreneurship, and there was no sudden influx of technical and entrepreneurial know-how from China. There was a decade or so of light industrial activity (garment and semiconductor assembly), after which the Singapore Government acted firmly to upgrade the industrial structure and comparative advantage by intervening in the entry of foreign investors to guide them to higher value-added activities, and in education to create specific high-level technical skills. The government itself entered into a number of activities to create new areas of comparative advantage.

Specific areas of both manufacturing and services (like banking, freighting and aircraft servicing) were selected for promotion, but the policy instruments used did not include trade protection. They comprised a range of incentives, pressure, subsidies and support that guided the allocation of resources and lowered the cost of entry into difficult activities. Manufacturing activity was highly specialized in particular processes and products, with no attempt to increase local content or the degree of vertical integration. Such specialization, along with the heavy reliance on foreign investments for technology and skill transfer, greatly reduced the need for indigenous technological investments (as compared, say, to the Republic of Korea). Thus, while selective interventions led
Singapore’s industry into sophisticated producer and consumer electronics, precision instruments, optics and so on, the technological depth of the enterprises located there was comparatively low. Some design and development activity did develop over time, again with considerable urging and support from the government (Hobday, 1994), and this is an area that is targeted for the island’s future in industrial activity.

The lessons of Singapore, to the extent that an economy of three million without an agricultural hinterland can be considered relevant to most of the developing world, are twofold. First, FDI can take a small economy a long way if it is carefully selected and guided, supplied with superlative infrastructure and a disciplined and trained workforce, and given a competitive and stable investment environment. Second, it is not necessary to offer import protection to technologically complex activities if the main sources of operational and other technologies remain foreign, production is integrated with that in foreign countries (rather than with local suppliers) and is concentrated on some stages of production. This strategy requires both functional and selective interventions by the government: the contrasting experiences of Singapore and Hong Kong with respect to the deepening of industrial activity illustrate this clearly.

For larger countries that wish to develop their comparative advantage “a la Korea”, however, this level of selectivity may not be enough. The significantly higher learning costs involved may only be met by local enterprises by higher levels of support (protection or subsidies), and by the creation of large domestic firms that can partly internalize defective risk, capital and information markets.
Finally, we come to Taiwan. Its economy, with about half the population of the Republic of Korea, has been practically as dynamic as the latter. Some 30 years ago Taiwan was considered more developed than the Republic of Korea and was better endowed with human resources. Like Hong Kong, it had a large influx of capital, skills and entrepreneurship from mainland China after the revolution. Its development strategy had elements of the "Korean-style" attempts to select and promote local industries, by protection. Credit allocation and selectivity in letting in FDI in areas of future comparative advantage. However, its selectivity was far less detailed than that of the Republic of Korea, and it did not attempt to create giant private conglomerates or to push so heavily into advanced technologies or capital-intensive activities. The less intense relationship of Taiwan Province of China with private industry meant that many of its more ambitious forays into heavy industry had to be led by the public sector, and it has the largest public sector of the NIEs.

The strength of Taiwan has lain in its small and medium-sized enterprises that tapped its large base of human capital and the infant industry promotion offered by the government to grow and diversify in skill-intensive activities. The resulting industrial structure is "lighter" than that of the Republic of Korea, with greater emphasis on meeting market niches rather than mass production, less in-house R&D and less emphasis on creating international brand names. The inherent disadvantages of small size for technical upgrading have been partly offset by the government's provision of a wide range of technology support services, including R&D, and their inherent flexibility in
meeting changing demand conditions have until now enabled Taiwan Province of China to keep up nearly as high rates of export growth as the Republic of Korea. The evolution of the comparative advantage of Taiwan Province of China is thus different from that of the industry of the Republic of Korea. A large proportion of small enterprises are specialized in intensive-intensive manufacturing that faces the problems of Hong Kong industry, and may only survive by relocating overseas, perhaps moving up market in their domestic operations while winding down manufacturing. Unlike Hong Kong, however, there are many firms with the ability to enter higher value-added activities and to tap a large technology infrastructure. There are also a growing proportion of larger firms that can invest in their own R&D and brand names. This gives it some of the capabilities arising from industrial depth, as in the Republic of Korea. It is debatable which of these two economies has the greater competitive strength in the longer term, one dominated by large firms, the other with smaller and more nimble, but technologically lighter, enterprises.
Notes

2 Ibid., p. 130.
6 Ibid., pp. 333-35.
7 World Bank Annual Report, 2001
9 However, the theoretical case for free trade does not establish the links between optimal resource allocation in a static sense and higher rates of growth over time. This is the basis for the “new growth” theories (for instance, see Lucas, 1986).
10 See, in particular, Bell and Pavitt (1993, pp.157-210).
12 For an analysis of the long run learning process in the engineering industry of the Republic of Korea, see Jacobsson (1993, pp. 407-420).
13 For instance, from assembly to greater manufacturing, adaptation and improvement of the technology, and finally design, development and innovation.
14 On the case for protection to industrial late comers, John Stuart Mill states that it is essential that the protection should be confined to cases in which there is good ground for assurance that the industry which it fosters will after a time be able to dispense with it; nor should the domestic producers ever be allowed to expect that it will be continued to them beyond the time necessary for a fair trial of what they are capable of accomplishing. (Mill, 1940, p. 922).
15 This is argued by some “new” growth theorists, who trace differences in sustained growth rates partly to the ability of some countries to specialize in more technology-intensive sets of activities that promote greater technological development and growth (Young, 1991, pp.369-405).
16 On the role of capital; goods sector as a “hub” of technical progress in the US, see Rosenberg 1986.
17 See Jacobsson(1993), on the heavy engineering industry in the Republic of Korea.
18 In addition, most import-substituting regimes did not intervene in factor markets to ensure that the skill and technical information needs of their protected industries were properly met.
19 The provision of some physical infrastructure faces also obvious market failures because of its public goods characteristics.
20 This is the reasoning underlying the "market friendly" terminology adopted by the World Bank in its *World Development Report*, 1991 and its 1993 "Miracle" study.

21 See the World Bank Operations Evaluation Department's (OED) 1993 study on technology development.

22 This represents the first step towards direct government funding for R&D and, by implication, the creation of a government industrial policy.

23 The details are well known and given in publications such as Ansden (1989), and OED (1990 and 1993).

24 For the case study of the electronic industry, see Moody (1990, pp.291-314).

25 This class of market failures is ignored by the restrictive framework adopted by the World Bank's "Miracle" study.
Chapter III

Empirical Review Based on Case Studies in Central Asia

The collapse of the Soviet Union in the mid eighties led to a long period of isolation of the Central Asian states of the former Soviet Union, i.e., Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. They faced the tough challenge of achieving a market framework, integrating their economies with the rest of the world, and improving living standards. Since then, all five countries have made progress toward decentralizing their economies, expanding international links, and diversifying and increasing production and trade. Comparisons with other transforming economies, however, indicate that much more remains to be done. In most of these countries, the private sector's share still constitutes less than one-half of the economic activity; banking systems continue to be heavily state controlled; and per capita foreign direct investment remains relatively low. A set of indicators, developed by the European Bank for Reconstruction and Development (EBRD), to measure progress in privatization, enterprise restructuring, and price, trade, and financial sector reforms, indicate that this group of transition countries lags behind most of the others.

Policies and Structural Reforms

The pace and intensity of reform have varied widely across the five Central Asian transition countries influenced partly by differences in natural resource endowments, economic structures, and socio cultural factors. The two fastest reformers—Kazakhstan and the Kyrgyz Republic—started out at opposite ends of the spectrum, in many respects, with the former having a much richer resource base and a more diversified economic structure. Kazakhstan was quick to take advantage of its initial
relative strengths, while the Kyrgyz Republic strove to overcome its initial limitations.

By contrast, economic reforms in Turkmenistan and Uzbekistan—which fall somewhere in the middle on the resource and output diversity spectrums—were more sporadic; they were more of a reaction rather than an anticipation of the events ensuing the disintegration of the USSR. In Tajikistan, reforms were initially constrained by civil conflict but have finally begun to move forward. The following table shows a comparative view of some of the key indicators.

<table>
<thead>
<tr>
<th>Country</th>
<th>PopM³</th>
<th>GDP⁴</th>
<th>Pri Sec⁵</th>
<th>Foreign⁶</th>
<th>FDI⁷</th>
<th>EBRD⁸</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>17.2</td>
<td>965</td>
<td>55</td>
<td>28</td>
<td>67</td>
<td>3-</td>
</tr>
<tr>
<td>Kyrgyzia</td>
<td>4.7</td>
<td>380</td>
<td>70</td>
<td>37</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>6.1</td>
<td>344</td>
<td>30</td>
<td>54</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>4.4</td>
<td>654</td>
<td>25</td>
<td>47</td>
<td>14</td>
<td>1+</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>23.9</td>
<td>673</td>
<td>45</td>
<td>20</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>


The early years of transition were characterized by sharp output declines and an erosion of living standards in all five countries (Table 1). In addition to the severe disruptions to input supplies and traditional lines of production associated with transition, special circumstances, such as civil unrest, as in Tajikistan, and reliance on traditional trade routes and regional energy pipelines, in the case of Kazakhstan and Turkmenistan, constrained export markets and output growth. The negative impact of structural dislocations on growth was aggravated by high inflation resulting from price
liberalization and the monetization of large fiscal deficits. By the same token, the rapid reduction of inflation and the depth of structural reforms were instrumental in bringing about strong, durable recoveries in 1996—99. Successful adjustment helped boost confidence and attract foreign direct investment, especially in Kazakhstan, which buttressed economic recovery.

Kazakhstan is representative of a vast transitional zone lacking a stable identity. Efforts to bring this about through accelerated development during the last decade have only intensified regional variations and internal tensions. From an economic point of view, Kazakhstan is midway between the developed areas of Russia and western Siberia and Central Asia's southern 'periphery'. Its national income structure is entirely different to the latter: industry-1 represented 30 percent in 1995 and services 58 percent, while agriculture, dominant in the other former Soviet Asian republics, contributed only 12 percent.9

Economic diversification through the country's regions, as well as the tendency towards the integration of certain northern areas with neighboring regions (the Volga, Urals or Siberia) has given a centrifugal aspect to the development of Kazakhstan, weakening national cohesion. During the 1960s, proposals for territorial restructuring, such as the integration of iron deposits in Kustanai with Russia's economic region along the Ural Mountains, were pushed through so as to 'increase the economic effectiveness thereof. However, Russian-oriented patterns of trade with Kazakhstan have remained dominant during the last decade, at between 70 and 80 percent, as trade with the other Asian republics have only accounted for 12-15 percent.
Case Study: Kazakhstan:

Kazakhstan has various economic strengths based on its natural resources like energy and mining, agriculture, a strong industrial system (excavation industry, metallurgy, chemicals, petrochemicals and heavy industry), which still remain a revenue service to Russia. However, the Kazak industrial network is unbalanced and is lacking in internal specialization to such an extent that Kazakhstan is obliged to import half the finished products consumed, while more than three quarters of its exports consist of raw and partly-manufactured materials. After gaining independence, the Kazak government attempted to correct this situation, with the economic problems typical of a 'decolonialisation' phase, by adopting measures aimed at the reorientation of the entire economic system and the attraction of foreign investors. Kazakhstan has great potential, which goes some way to justify its view of itself as a new 'Eldorado.' But reality, not merely from an economic point of view, uncovers several anomalies. Western analysts have identified four problems that hindered the Kazak economy during the Soviet era: chronic trade deficits; high unemployment; the economic predominance of strong industrial regions; and finally 'intersected' transport with Russia the only aspect which has improved.

In 1997, the scene changed as the Russian financial crisis had an immediate impact on the Kazak economy, demonstrating Russia's continuing importance to Kazakhstan. In 1999, the effects of the Ruble devaluation were still reverberating, causing a contraction of Kazakh national wealth. The poor prospect for oil prices in the winter of 1998, in which the cost fell to US$10 a barrel, the lowest price in the last ten
years, seemed to negate any chance of the economy staging a recovery, and the tenge seemed likely to continue its slide. However, in the autumn of 1999, the per-barrel cost was more than US$24, determining better prospects for the Kazak economy. Notwithstanding the incredible recovery of the cost of oil, the country still has serious economic problems, and President Nazarbaev will do his best to distance himself from the government's economic failure, but with little success. As conditions worsen throughout the country he will have to rely ever more heavily on the security services to retain control. There are two possible outcomes. The optimistic one sees Kazakhstan as the leading beneficiary by a long way among the CIS countries of foreign investment (calculated at US$180 per capita between 1992 and 1996). Three quarters of such investments are concentrated in hydrocarbons, a long-term and therefore 'non volatile' sector, giving stability to the country. The second view is pessimistic, and sees Kazakhstan's structural problems as the same as those of Russia (corruption, crumbling plants, foreign debt etc). It sees Kazakhstan as nothing other than a backward Russia and foresees an inevitable devaluation of the tenge.

**The Industrial System**

The large industrial centers developed mostly in the northeast are heavily dependent on mining deposits, but above all on consumers along the Ural river, in Siberia and in the CIS's European regions. Over the ten-year period (1940-50), a time of decisive industrial development, a few primary processing industries were established (metallurgy, basic chemistry, and energy production). The Qaraghandy basin was the first to be used, and in the midst of the First World War a large steel plant was installed in the
vicinity of the Temirtau. Large metallurgy plants were set up in the mining centers of Kazakhstan's central region. The copper production plant at Jeqazghan, situated in a semi-arid area (with an average annual rainfall of 208 mm), was linked to a canal bringing water from Siberia's Irtysk River via Karaghandy. These plants were more accessible, and extraction conditions were more favorable than their counterparts along the Urals and in Siberia. As the deposits lie close to the surface, opencast mining is possible, and this is much cheaper than the alternative, although it has detrimental effects on the environment.

Other conditions also favor these locations: there is an abundance of deposits, and the climate is better than that in Siberia. Conversely, the exploitation of southern deposits was hindered by the scarcity of water, a problem prevalent in the whole of Central Asia. At the end of 1994, Kazakhstan had about 19,000 industrial complexes, factories and mines, employing about 1.5 million people. The availability of energy, from petroleum and hydro-electricity has made the country the most industrially developed in Central Asia. Iron and steel, non-ferrous metallurgy, chemistry and petrochemistry (manure, rubber, plastic and pneumatic materials), heavy industry (mining and metallurgy machinery) and machines for livestock made up about six percent of the Soviet era total for 1991. At present these are the industrial sectors that are forging ahead, but the contributions of the spinning and textiles industries are particularly important, especially with respect to wool, cotton (four percent of the CIS total in 1992) and cloth, although the latter dropped from 188 million square meters in 1993 to 28 million in 1996.

While most of the plants are situated in the north and east, exceptions to this include Shymkent, the 'city of ammunition' (it hosts one of the biggest former Soviet
factories), the large industrial and railways center, Zhambyl (now Taraz), which is now the main chemical center, and Almaty, which boasts of a large textile industry. The processing industries have remained small-scale and have not experienced much development. Kazakhstan has been forced to accelerate the development of this sector, as well as the consumer goods sector, because it is also believed that the restructuring of the military factories (about one hundred companies) will further increase unemployment.

The Metallurgy Kombinat of Temirtau, or Karmet Kombinat, in the Qaraghandy area, is the only iron and steel factory in Kazakhstan, but is colossal, the largest white iron producing unit in the entire CIS (producing an average of 5.5 million tons of steel per annum, or 10 percent of the Kazak national product). Production dropped to two million tonnes in 1996. Two other large enterprises produce iron alloys, one situated in Aqtobe (making iron-chrome alloys) and integrated into the local chrome-mining industry, the other at Yermak, producing a third of the former USSR's iron-silicon alloys. These two factories produce a total of approximately one million tonnes per year.

Non-ferrous metallurgy is Kazakhstan's strong point. In addition to the many centers involved in the enrichment of the minerals extracted, lead is processed by the Lead Kombinat at Zyrian (formerly Zvrianovsk) and Shymkent, where it is also used in the massive ammunition manufacturing industry. Lead is often produced along with zinc, at the Kombinat in Oskemen, Zhayrem (Jczqazghan Oblisy) and Tekeli (Taldyqorghan). Various metals are manufactured by other enterprises, independently or jointly. Examples are the Kombinat in Karagayly (processing lead-zinc, baryta, silver and rare metals), those in Leninogor (processing zinc, lead, copper, antimony and rare elements such as...
tellurium, selenium, thallium, gold and silver), that along the Irtysh at Glubokoye (eastern Kazakhstan) and Achpolymetall at Ashchysay (processing lead, zinc and baryta).

Copper metallurgy is also very important. Three large enterprises dedicate themselves exclusively to the refining of copper. These are Balqashmed in Ballqash, which, because of the exhaustion of neighboring mines now refines imported copper; “Jezqazghanmet” in Jezqazghan (the most important); and the Copper Chemical Kombinat of Eastern Kazakhstan integrated into the Irtysh ‘poly-metallic’ complex. Chrome is extracted and processed at Khroidtau in the Aqtoe region by a company called Donski. This large plant, where chromite (chrome and iron oxide) and sodium dichromate are manufactured, was the largest of the few centers specialized in chrome processing in the whole of the Comecon (Council of Mutual Economic Assistance). In conclusion, enterprises involved with auriferous extraction are AltaYzoloto in Bakyrtchik (near Semey) and Maykain (in the Pavlodar region). The state-owned company Kazzoloto administers all activity related to gold mining. Kazakhstan’s chemical industry makes use of local mining resources, mainly phosphorous and its derivative phosphates. Phosphate manufacturing is one of the most important industries. Used in agriculture, it is produced by various plants, in addition to the Chemical Kombinat of Alga (in the Aqtoe Oblasy), but the most important is Khimprom in Taraz, which also specializes in the use of phosphate by-products in the livestock industry).12

The Agricultural and Food Processing-Sector

In March 1954, when Khrushchev launched the so-called Virgin Lands Programme for agriculture which endured for the remainder of the 1950s and part of the
1960s, a young leader named Leonid Brezhnev, having distinguished himself in the agricultural management of the Socialist Soviet Republic of Moldova, was elected to power. Kazakhstan, along with Siberia, became 'the new frontier' for Soviet development, and an immense area of land (estimated at 23 million hectares) was brought under the plough, while in the south of the country, important irrigation canals were built on the Syr Darya. As was often the case with large-scale Soviet projects, there was a great deal of over-optimistic enthusiasm, but also some real improvement. Thousands of workers from western USSR were sent to northern Kazakhstan, south of the Ural River, and western Siberia. During the first few years, they endured extremely difficult conditions, living in pitiful tent cities and deprived of even the basics. But it was not a complete failure: the main objective—to provide Kazakhstan with the base for cereal production—was achieved (in 1990; 25 million tonnes of cereal were produced, 11-12 percent of Soviet production, approximately one percent of the world total). To this day, the country's principal agricultural produce remains cereals, 70 percent of which is grown in the northern 'virgin lands.'

However, harvest yields always remain below expectation, despite the efforts to improve productivity through mechanization. The main problem of the cereal sectors is caused by the irregularity of harvesting: not even the gradual movement of the cereal production zones eastwards has helped to decrease the extreme annual variations in the way that the planners had hoped. Nonetheless, the average yield is generally satisfactory. During the period 1986-90, production stood at about 23 million tonnes per year, but the 1991, 1995, 1996 harvests were a disaster. The exploitation of Kazakhstan's 'black lands'
was logical; the area's agricultural and climatic conditions are reasonable. The average usable temperature (over 10°C) is conducive to vegetable farming, even though the off-season is severe (with temperatures averaging around -15°C) and does not allow for sowing to take place in winter. The rainfall is, nevertheless, able to ensure 'dry cultivation', even if for every five-year period there are one or two arid years, one of which will be a disaster.

Soils are generally fertile, though fragile, because of a thin topsoil layer, and the use of normal ploughing and tillage systems weakens the soil's structure. Especially during the spring, the driest period, the wind blows away a substantial proportion of this topsoil. To combat this alluvial erosion, 'softer' tilling methods were devised and different soil protection schemes introduced. A large proportion, about a fifth of arable land, was left fallow (necessary for the maintenance of herds); agricultural rotation alternated cereals and plants with 'grasping' properties (like mustard); the stubble was left in the ground to assist the adhesion of snow and moisture during winter; rows of trees were planted as windbreaks. However, these practices became less prevalent, and by the end of the 1960s hundreds of thousands of hectares were lost.

The Virgin Lands Programme promoted the establishment of hundreds of villages and gigantic sovchoz (between 15,000 and 20,000 hectares), which were later scaled down. The activity of these sovchoz was divided almost equally between agriculture and stock farming. Most of the land acquired through the Virgin Lands Programme is still sown with cereals during spring, especially the type of wheat of which Kazakhstan is the Soviet's main producer (12 percent of the total in 1990). Yields have an unrealized
potential, but progress towards extensive mechanized farming is slow, involving the substitution of an intensive method that makes use of manure and selected seeds while attempting to adhere strictly to crop rotation.

Economic Policy

Since the declaration of national sovereignty in October 1990, Kazak authorities have been adopting measures to ease the country towards a mixed economy. Over a few years, about 150 laws were passed, and Nazarbaev showed himself to have great ambitions, albeit in stark contrast to the reality. On 16 May 1992, on the eve of an official visit to the USA, Nazarbaev published an important article in Kazakhstanskaya Pravda entitled 'A Development and Renewal Strategy for Kazakhstan as a Sovereign State.' Projected policies were mentioned: the creation of a market economy, economic liberty for all citizens, the introduction of a national currency, entry into world markets, involvement in the production of consumer goods, and the attraction of foreign investment, with monitoring of its effectiveness.

The programme envisaged three stages. The first, to be completed between the end of 1991 and 1995, was to involve the privatization of state-owned industry and the creation of a demand-driven consumer economy. The second stage, to take effect between 1996 and 2005, envisaged a gradual move away from Kazakhstan's traditional reliance on raw materials, running alongside a programme of transport and communications development and the creation of capital goods and a job market. The third and final stage, over a period of seven or more years (from 2005 onwards), envisaged the development of an open economy, the consolidation of international
commerce, and recognition as an industrialized country. The 'destatisation' phase was launched in September 1991 with large-scale privatization, although some sectors were excluded: education, health, energy, broadcasting, newspapers, and mining. Foreign capital was sought for telecommunications and air transport. Privatization did not affect land ownership: in fact, it was decided that land should remain the property of the state, and should not be sold, but could be leased or ceded through inheritance to the new privatized peasant co-operatives. Not being in a position to rely on bank credit, however, they struggled to get started and develop, and directors of the kolkhoz and sovkhоз are intent on slowing the process down.

As in other former Soviet republics, although a quarter of the shares placed on the market were theoretically reserved for employees and pensioners of the companies concerned, problems soon emerged. The Russian and Kazak press frequently uses the word, privatizatsiya, a contraction of the words for 'privatization' and 'buying up'. What has developed is a process of acquisition under conditions favorable to former leaders of the Communist Party, a type of privatization that favors the nomenklature. The fact that Slavs are well represented in the leadership bodies of businesses -- and therefore among those in a position to take advantage of conditions -- has made obstacles for an Anti-corruption Committee, which has had to tread carefully to avoid re-igniting ethnic tensions. Faced with the poor economic results of 1992, 1993 and 1994, other measures were introduced. Kazakhstan was obliged to align itself with Russia's policy of liberalization, but kept rents and the price of certain essential commodities unchanged, although their actual cost had risen between three and five times. Sharp increases in the
cost of kerosene, coal, and fuel have occurred, while the price of bread, milk, and gas has remained more stable. Nevertheless, strikes by miners and the dissatisfaction caused by the sharp decline in buying power (which decreased, according to one economist, by 1000 percent), have forced the government to back down, withdrawing its increases on the price of bread and milk.

Value Added Tax (VAT) was introduced in 1992 and fixed at 28 percent, while other indirect taxation was applied to alcohol, tobacco, tea and petrol. The social security system was modified in 1991 with the creation of a 'pension fund' (for old age pensions and family maintenance) and a 'state insurance fund' (for illness and maternity), both funded by businesses (37 percent) and wage-earners (1 percent) the balance being covered by state funds. New labor legislation, adopted in July 1991, created a 'job fund' to come to terms with unemployment, which is running high and is not expected to be curbed for a number of years. It is financed by businesses, which pay 3 percent of their wage bill. Various reasons may be put forward to explain these poor, even serious, economic results—the persistently unfavorable conditions, or international economic trends towards recession—but the main reason lies in the break-up of the USSR or, more accurately, the break-up of economic relations between the former republics. This has had very serious consequences for Kazakhstan, which is a supplier of raw materials, and is dependent on other states for almost all its end products. The liberalization of prices in Russia has put Kazak leaders in a difficult situation, one for which they were unprepared. At the beginning of 1992, agreements with Russia guaranteed the preservation of 70 percent of reciprocal trade. Russian companies -- with their government’s approval --
found it preferable to export to oilier countries for more valuable currency, breaking those agreements.

Of the numerous laws passed governing economic activity, some deal with national investment issues—businesses, rural areas and agriculture, destatisation, privatization, limitation of monopolies etc—while others relate to the facilitation of foreign investment and the basic principles of 'external' economic activity. At the end of 1996, of a total of 6,900,000 people of working age, about 20 percent were unemployed (but only 2.6 officially registered), mostly because of the lack of job opportunities. The suffering of the unemployed is heightened by the fact that even a few years ago such conditions were virtually unheard of. Within the technical and industrial sectors, the threat of unemployment is exacerbated since they are specialized, not very flexible or adaptable to the country's new industrial requirements. Social disintegration has brought with it a significant increase in crime. A substantial decline in real wages was partly offset by generous consumer subsidies and income from informal market activity.

Developments in employment and wages were also influenced by the degree to which countries were willing to restructure their state enterprise sectors. Restructuring entailed imposing hard budget constraints, notably phasing out budgetary support and directed credits to enterprises; this led to higher unemployment. In Turkmenistan, Tajikistan, and Uzbekistan, where this process was delayed, open unemployment rates remained low.

Given the loss of transfers from the Soviet budget, a lack of domestic financing from non-Bank sources, an inability to fully benefit from energy terms of trade gains because of a shortage of pipelines (this was particularly a problem for Turkmenistan), and
limited access to international capital markets, the Central Asian transition countries had little choice but to implement major fiscal structural reforms to meet their stabilization objectives. However, fiscal imbalances were reduced primarily by stopgap measures. The countries relied heavily on expenditure sequestration and ad hoc revenue measures—particularly in the initial years of transition—and governments and state enterprises were far too tolerant of payment arrears. Moreover, large quasi-fiscal operations conducted outside the budget, mainly by the banking sector, weakened fiscal transparency and management. The adjustments that took place, therefore, represented only the first phase of a more substantive fiscal reform process, aimed at substantially rebuilding revenue and reprioritizing expenditure. Following the introduction of their national currencies in 1993-95, the Central Asian transition countries intensified efforts to sharply lower inflation from peak rates in the four digits. They had to choose between exchange rate and money-based stabilization programmes. The two main arguments for an exchange rate peg—the instability of money demand during the turbulent transition period and the likelihood of exchange rate overshooting with money-based stabilization—were valid, but these countries failed to meet the conditions required for a successful peg (restrained fiscal policies and ample international reserves). Moreover, with a peg, real shocks (such as sharp terms of trade shocks) could not be absorbed. Therefore, all five countries initially opted for money-based stabilization programmes, with limited exchange rate flexibility. The burden of stabilization fell primarily on fiscal adjustment, which entailed cutting expenditures (particularly real wages, subsidies, and capital outlays) and tightening budget constraints on state enterprises. Kazakhstan and the Kyrgyz Republic
focused on state enterprise restructuring early and eliminated directed credits, but the other three countries moved much more slowly in this area.

All five countries reduced inflation dramatically; currencies were stabilized—some even appreciated in real terms; and parallel market premiums were reduced (except in Uzbekistan until very recently, and in Turkmenistan). These moves were accompanied by the liberalization of exchange regimes at various speeds, with the faster reformers taking the lead. As stabilization took hold, Kazakhstan had to protect its economy from the destabilizing effects of surges in capital inflows, which entailed striking an appropriate balance between fiscal tightening, sterilized interventions, and currency appreciation. The rest of the group, however, has yet to face such challenges.\textsuperscript{14} The financial crisis in Russia in August 1998, considerably altered the external economic environment for the Central Asian transition countries. Russian demand for their exports dropped sharply. Capital flows were also affected, as foreign investors reassessed the risks in the region, and exchange rates came under pressure. The five countries were faced with resisting a reversal in exchange and trade liberalization.

Table 2

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<tr>
<th>Selected Macroeconomic Indicators</th>
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<tr>
<td>Kazakhstan</td>
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<tr>
<td>Inflation (end of Period: percent)</td>
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<tr>
<td>Real GDP (% Change)</td>
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<tr>
<td>Fiscal deficit (% of GDP)</td>
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<tr>
<td>Current account</td>
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122
Kazakhstan started showing early signs of recovery. By 1998, progress had been made towards transforming its economy into a market-based system. Output was growing, following upon the trend started in the mid-1996. With inflation under control at 10 percent, the external account deficit, though large, was now being financed by large FDI inflows, mainly in the oil, gas, and metallurgy sectors. In the mid-1998, Kazakhstan was hit by a series of large shocks: a decline of commodity process, resulting in a fall of Kazakhstan's terms of trade of 14 percent during 1998; a sharp nominal depreciation of the Russian Ruble and other CIS countries, leading to a real effective appreciation of the Kazakh tenge of more than 10 percent between early August and late September; turmoil in emerging markets, which temporarily cut off Kazakh borrowers from international financial markets; and a severe drought. These shocks had a profound impact on domestic economic developments. Real GDP fell by 2.5 percent in 1998. Influenced by the decline in import prices, consumer prices fell in March 1999 to a level 1.2 percent below that of March 1998. The current account deficit widened from 3.6 percent of GDP in 1997 to 5.4 percent of GDP in 1998, as the impact widened from 3.6 percent of GDP in 1997 to 5.4 percent in 1998, the impact on exports of the fall of commodity process exceeded the influence on imports of the decline in activity.
A series of large external shocks had affected the Kazakhstan’s economy in 1998 and halted the resumption in economic growth seen since mid-1996. Steps have since been taken to restore conditions for sustainable growth, including the switch to a freely floating exchange rate regime, and have made progress in many important aspects of structural reforms. However, the response of the authorities to address the main challenges posed by these developments will help consolidate the fiscal position, maintain a prudent monetary policy, and pursue the transition process, in order to return the economy to a sustainable growth path.

A change in the exchange rate regime was appropriate in the light of the large price fluctuations in Kazakhstan’s main exports and the uncertainties affecting its external environment. For the exchange rate policy to help strengthen competitiveness and restore confidence in the domestic currency, monetary policy supported by appropriate fiscal and structural policies should remain tight to prevent any entrenchment of inflation. However, additional steps would be required to improve the investment climate for private sector development. In this connection, the improved rules-based system for investment incentives will have a positive effect on FDI inflows into the country. Moreover, the recent reversals of trade liberalization in the form of imposing trade on imports from neighboring countries will have a negative effect on investor’s confidence. Reduction in average tariffs and a decrease in a proliferation of specific and mixed tariffs will affect the economy.

Case Study: Kyrgyz Republic

Up until 1924, the territory of contemporary Kyrgyzstan was included as a simple district
in the Russian Soviet Federal Socialist Republic (RSFSR). In 1925, on the basis of partitioning or national delimitation the Republic of Kara-Kyrgyz was instituted within the same republic. In February 1926, this changed status from autonomous region to Autonomous Soviet Socialist Republic (ASSR), simply called Kyrgyzia, and its inhabitants referred to as Kyrgyz. About ten years later, on 5 December 1936, the Soviet Socialist Republic (SSR) of Kyrgyzia was proclaimed polities.\textsuperscript{15}

The Economy

In 1995, 35 percent of the active population was involved in agricultural activity, which produced 43 percent of the national yield. Kyrgyzstan's typical economic activity is stock rearing. Sheep farming is the country's economic strong point, thanks to the population's nomadic origins, the mountainous territory and the climate. During the twentieth century, while remaining a major resource, sheep farming has nevertheless declined in favor of other agricultural and industrial activities.

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<th>Table 3</th>
<th>Selected Macroeconomic Indicators</th>
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<tbody>
<tr>
<td><strong>Kyrgyz Republic</strong></td>
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<tr>
<td>Inflation (end of Period: percent)</td>
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<tr>
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<tr>
<td>Gross Official Reserves (months Of imports)</td>
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<td>External Debt</td>
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</table>
The transition from a command economy to a market economy coupled to the specific economic, political and geographical problems of the various former Soviet States requires special approaches to be developed and special attention to be paid to the problems.

Despite having a considerable amount of natural resources, a highly skilled workforce and a beneficial geographical position, Kyrgyzstan faced many problems with the restructuring of the economy. The Kyrgyzstan economy entered a difficult period of economic adjustment in which the effects of the dissolution of the Soviet Union had to be faced and a new national government is now unable to call on customary support from former Soviet allies. The most significant of these effects included:

- direct results of the dislocation of the Soviet monetary and central planning systems: hyperinflation, recurrent arrears, and the loss of several inter-enterprise and inter-republican production and distribution links;
- a sharp fall in demand from former Soviet republics because of contractions in defense budgets, overall economic decline, and gradual build-up of customs and exchange barriers;
- weakened domestic demand resulting from the loss of direct Soviet budgetary support and hidden subsidies such as low-priced fuel; and
- a sharp deterioration in terms of external trade because of changes in relative prices and the total removal of subsidies, the overall affect being to render much of the enterprise sector uncompetitive.
In these circumstances, output fell dramatically across the entire Kyrgyz economy. GDP fell by about 10% in 1991, by 16.5% in 1993, and by over 20% in 1994. The industrial sector experienced the sharpest loss in output, with annual declines in 1992, 1993 and 1994 of roughly 25%.\textsuperscript{16}

Nevertheless during late 1991 and 1992 Kyrgyzstan took initial steps to transform the old centrally planned and administratively controlled economy into one governed by market forces and consumer preferences. A number of far-reaching changes to the legal system were enacted, including guarantees to the rights and property of foreign investors. Substantial progress was also made in liberalizing prices.

**Financial Sector**

Of principle importance in the establishment of an independent monetary system were adoptions of two banking laws in December 1992 and the introduction of the national currency, the Som, in May 1993. The new banking legislation sharply reduced the government's power over the National Bank of the Kyrgyz Republic: although the Chairman is nominated by the President of the Republic and approved by the Jogorku Kenesh, the NBKR is now quite independent of the ministries. The introduction of the som minimized the effects on the Kyrgyz economy of external monetary and other economic shocks originating within the Ruble zone. The resulting increase in both budgetary discipline and control over the money supply was further enhanced by the introduction later in 1993 of the Treasury bill auctions, which, with the inauguration of refinance credit auctions and Lombard facilities, was also a positive development for the commercial banking sector. Following these important reforms, it was agreed between
the Government and the World Bank that at this stage of transformation process a more
stable and efficient financial sector, with an effective banking system at its core, would be essential to help sustain macroeconomic stability, stimulate savings mobilization, support output recovery and expansion, and enhance the development of the private sector.

A comprehensive Financial Sector Reform Programme supported by a Financial Sector Adjustment Credit (FINSAC) was launched in 1996. The Financial Sector Reform Programme supported by FINSAC focuses in five key objectives:

- the creation of a policy and regulatory environment conducive to the sound growth of a competitive and efficient private banking system;
- the liquidation of the two dominant and insolvent state-owned banks: Agroprombank and Elbank, which through their practices, stifle the growth of their young private competitors;
- the downsizing and financial restructuring through private recapitalization of two large and insolvent former state banks: Promstroi and AKB Kyrgyzstan Banks, the survival of which have been only possible through preferential treatment and assistance from the National Bank;
- the establishment of temporary Debt Resolution Agency (DEBRA) to help collect, restructure, sell or write off the old non-performing loans, and thus accelerate enterprise restructuring or liquidation in the process;
- the creation of a regulatory and supervisory framework, and supporting policies and infrastructure, for the development and growth of emerging non-bank financial institutions (NBFIs).

At the same time, a stabilization and structural adjustment programme was initiated with support from the International Monetary Fund and the World Bank.
The years 1994 to 1996 have seen further progress in the face of extremely difficult economic circumstances. The government has put in place the fundamentals of a market-oriented policy framework: prices, external trade, the foreign exchange regime, and interest rates have been fully liberalized and legal and policy barriers to private sector activity have been eliminated.  

**Privatization**

Privatization has made considerable progress, and competitiveness and transparency of privatization has been enhanced through cash and coupon auctions. The privatization programme launched in 1991 has opened up every sector of the economy to private ownership and enterprise. With the exemption of some of the largest industrial and infrastructure companies, the majority of commercial enterprises are now private and corporate entities. The first phase, from 1991 to 1993, set up necessary legal and institutional frameworks; it also saw a large number of relatively small enterprises privatized by cash auction. The mass privatization programme also began at this time, with the issue of Special Payments Means vouchers that could be exchanged for equity in largest enterprises. Technical problems with the voucher led to their replacement by Privatization Coupons in 1994, the beginning of the second phase. Unlike the vouchers, the coupons have always had a genuine market value and can be freely traded for shares or cash; more than three quarters of the population received them. This broad participation in privatization was regarded as essential to the encouragement of an enterprise culture and is arguably as important an achievement of the second phase as the
fact that it completed the privatization of more than half of industry and construction, more than 40% of agriculture and transport, and virtually all trade and consumer services.

Despite the faults and errors made in the course of a transformation of the property relations, it is pertinent to mention the realistic progress achieved during the years of reforms in the economy of Kyrgyzstan. If we are to evaluate the property structure by a number of enterprises, then as of the moment, 62.1% of the enterprises are operating in the non-state sector and 37.7% are working in the state sector. More than half of the fixed assets are held by the non-state sector.

As a result of the denationalization and privatization, more than 2.5 thousand entities owned by private individuals and more than 2 thousand collectively owned entities emerged in the non-state sector of the economy Kyrgyz Republic. The positive results of 5 years of the privatization program could be summed up the following way:

- firstly, the authentically multiform economy has been developed in Kyrgyzstan;
- secondly, along with the implementation of reforms in two directions, the structural overlapping have been eliminated in the economy;
- thirdly, the institute of private property has been founded and developed into a basis for carrying out economic activity in Kyrgyzstan.

Further objective of the Government in this regard is a post privatization enterprise restructuring. It is essential to provide a thorough financial and technical assistance to the privatized enterprises in order to more effectively adapt them to a competitive market environment. The peculiarity of the current stage is a transition to
demonopolization and privatization of enterprises of the main sectors of the economy. The Government of Kyrgyzstan is currently in the process of privatizing enterprises in number of strategic sectors, including:

- Energy sector
- Telecommunications
- Civil Aviation
- Fuel and Energy
- Mining

**Industrial Policy And Enterprise Reform**

The development of an industrial sector plays a key role in the economic development and improvement of living standards. The dynamic and an efficient operation of the enterprises are required for a sustainable growth and improvement of the economy. The macroeconomic stabilization cannot be achieved and a certain activation of the industrial production cannot be entertained if a radical improvement in the country's industrial sector fails to materialize. Despite a certain progress in the industrial production made last year, which has been mainly assured by two enterprises (Kumtor gold company JV and Kara-Balta Mining Plant) the crisis symptoms are still observed in the industry.

The economic recession is continuing in such an important sector as Light industry (11%), food industry (18%), and electric energy (6%). The number of loss-making and idle enterprises remains at a high level - more than 250. The following areas,
ensuring developments of an efficient enterprise sector should have been given priority in the government industrial policy in 1998-2000:

- first, preservation and development of a viable enterprises through a broad-scale introduction of the corporate governance principles;
- second, transformation of enterprises through a decisive reorganization and liquidation of non-viable enterprises;
- third, technical modernization of the whole industrial sector with a broad-scale introduction on new technologies;
- forth, development and fast growth of new industries with attraction of foreign investments.

**Agriculture**

It is thus clear that one of the keys to economic recovery is the development of strong private agricultural sector. Just as with industry, agriculture has suffered a considerable reduction in production volumes and thus income. The productivity of the farms reduced and system of material and technical support collapsed. Under these circumstances the Government commenced the implementation of agrarian reforms. From 1991, the creation of agricultural farms commenced and was followed by mass restructuring of collective and Soviet State Farms (kolkhozes and sovkhozes) from 1993.

To ensure successful implementation of reforms in this sector the programme of Privatization in Agriculture and the Restructuring of Agricultural Enterprises was commenced. The aim was to develop land markets, remove monopolies and privatize the large State concerns in the area of the sale and processing of agricultural products and
remove distortions in pricing and trade. Further, restrictions on the export of agricultural products were removed.

In order that there will be a stabilizing of agricultural production in the farms and related enterprises, the following measures are to be implemented:

- finalizing of the process of privatization and restructuring, creation of a land market and improvement of the development and administration of law for the sector;
- creation of special agricultural funding, attraction of foreign investors for agriculture and development of sale of agricultural products by way of auctions;
- creation of a system of co-operatives and technical service centers for agrarians.

Years of reforming in the agriculture sector permitted to create necessary legal and organizational conditions for functioning a multistructural agriculture. Some of 38 thousand peasants' farms are created. Recently, due to persistent measures in land reforming a considerable growth of agricultural production has been achieved. Nevertheless a number of vitally important problems need to be urgently resolved. One of the main problems continues to be finishing the land reform. Lately the government has managed to achieve some results in this regard. More than 700 thousand certificates to use plots of lands have been handed over. More than 661 thousand hectares of arable land has gone to the possession of farms. Peasants' psychology has been deeply transformed, they feel themselves real owners of land. As a result the land reform acquired irreversible features with multiple forms of property set up in the agrarian sector.

**Development of Small And Medium Size Enterprises**
Every year small and medium size enterprises in Kyrgyzstan are growing their potential, thus making a significant contribution to the economic development of the country. As of today, the number of small and medium size enterprises is about 27 thousand, number of farms and peasants 38 thousand. The share of small and medium size enterprises in the GDP has reached 20%.

Truly, a comprehensive development and dissemination of small and medium size enterprises constitute a basis for a dynamic development of the economy. The main objective of the Government is to create an explosive wave of developing small and medium size enterprises that would gain a vigour of a “ninth wave” exactly in the future and would bring into being conditions for economic growth. Besides, this way we would solve the problem of unemployment, since small and medium size enterprises represent one of the main economic sectors that provide employment.

The following objectives should be accomplished in order to achieve this goal:

- promotion of the legal, economic and organizational infrastructure for the development of small businesses;
- development of the efficient system of Government support to small and medium size enterprises;
- development of the financial, credit and investment mechanisms to support small businesses;
- quest of required financial resources.

The efficient and rational use of the available financial resources provided in the framework of foreign credit-lines for the development of small and medium size enterprises attracts a special attention. Currently they have not been used efficiently
enough. Successful implementation of these credit lines will allow creating a good basis for further institutional improvement of the system of crediting of small and medium size enterprises.

The Government also should direct a serious attention to the issue of supporting small and medium size enterprises in remote regions of the republic through establishment of a special holiday regimes. As of today, the small and medium size enterprises located in large cities are the main recipients of the financial assistance. At the same time the remote regions are characterized with a low level of business activity, which consequently leads to a difficult situation. The regional principle of financial and technical assistance to small and medium size enterprises should become one of the priority directions.

**External Trade Policy**

Since the beginning of market reforms in external trade of Kyrgyzstan serious changes have occurred. The volume of external trade turnover with the CIS countries in 1997 comprised about 60% of the total external trade volume. It has significantly decreased in comparison with 1992, when it was 80%. In 1997 the volume of export into the CIS countries has declined by 20% compared to the 1996. All this demonstrates that the republic is losing its traditional markets without gaining any new ones.

In the export policy of the republic the orientation towards the CIS countries will be preserved in a long run, especially to Customs and Central Asian Unions. Therefore it is essential to actively increase commodity turnover with our traditional partners. Kyrgyzstan also can and should use its economic relations with the ECO countries for
additional increase of the volume of external trade. New connections with developed
countries of Europe, North America, and South-East Asia should also actively work for
the expansion of export. In fact, trade relations with foreign countries have been growing
quite rapidly thanks to development of an open economic system in Kyrgyzstan. In this
regard, our objective is to support the current liberal trade regime.

However, a direct competition with goods made in the developed countries in
near future will remain an extremely difficult task for Kyrgyzstan. Therefore, efforts
aimed at preservation of traditional markets in the CIS countries needs to be ensured.¹⁸

Special attention should be paid to the policy of import substitution. Considerable
currency reserves of the country are used for procurement of the items that could have
been successfully produced locally. Instead of this, using the saved money could have
brought modern equipment and new technologies for modernization of the appropriate
branches of the industry.

In this connection, it is important to highlight the need for a number of new laws.
In particular, this refers to the legislation on intellectual property, copyright and exclusive
rights, patents, trademarks, and commercial secret, antidumping and other. It needed to
introduce several amendments and changes into Customs and Civil Codes (in parts deal
with an intellectual property and other). Without a proper legal basis it will not be able to
ensure Kyrgyz Republic's full-fledged entrance on to international markets. The adoption
of such legislation will also allow accelerating the accession of the republic to the World
Trade Organization.
The advantages that are created by the developed export sector include closer ties with the world economy, which enables to gain new technologies for the increase of production efficiency and inflow of significant currency resources for import of materials needed for production. All countries, which lately achieved an economic growth and maintain it at a high level, reached this stage thanks to the fast expansion of export-oriented activities.

The Poverty

Success in reforming is first of all assessed by the level of people's life. However, this macroeconomic stability has been achieved at the expense of the living standards of the population. Today, one of the biggest problems is that of the growth of poverty among the population.

The poverty scale is still high. According to investigations of the level of life realized by the WB 60% of the Republic's population live below the poverty line. Presently National Strategy of Sustainable Human Development is worked out, whose main task is to elaborate a policy on reducing poverty, improve people's level of life, efficient and quality securing in Education and Healthcare.

The main task of the State on realizing the strategy of sustainable human development will consist in raising people's well-being. Struggle against poverty is one of the most prioritized tasks in the framework of this strategy. In the field of social support with the limited financial means, measures have to be focused on the exactness of the addressee the assistance is rendered to. The State must first of all help most vulnerable part of the population, for example those who are most in need.
Reduction of unemployment is another way of combatting poverty. Last year the government managed to partially reduce tension with unemployment. The number of officially registered unemployed diminished from 78 thousand to 55 thousand people as of today. Nine thousand new jobs created last year was also a good sign. Thus, the unemployment was reduced to 3.2% compared with 4.5%. Fighting the unemployment by creating reliable and efficient employment service, a system of professional training and re-training is to be developed. It is essential to actively involve local labor resources to release large-scale projects on the territory of Kyrgyzstan.

The current social and economic situation of the Republic as well as in other CIS countries is characterized by social stratification of the society. The figures obtained today by the National Statistics Committee show that 20% of incomes of the most well off part of the population exceeds that of 20% of the least well-off part six fold, which is well below than in many other CIS countries.

**Current Economic Situation**

Gradually these economic reforms have begun to pay off. In that comparatively short time Kyrgyzstan has achieved an impressive degree of political and economic stability through a carefully planned programme of comprehensive market-oriented reform. The positive results of these reforms are evident in a number of key economic indicators: comparatively high growth in real GDP and international trade, strengthened international reserves position, stable exchange rate for the national currency, low inflation, improved fiscal situation and substantial reduction of the current account balance. These developments have been underscored by strict monetary and credit
policies, supported by a sizable reduction in the budget deficit, and by wide-ranging structural reforms. There has been significant progress in reform of the financial sector, budgetary procedures, privatization programme, and enterprise restructuring. These factors, combined with a number of other attractive features of the Kyrgyz economy -- a skilled labor force, rich natural resources and favorable market regulations -- make for an attractively stable investment environment.

The last seven years have witnessed a significant recovery in economic output. Following a cumulative decline of about 50% during 1991-1994, real GDP increased by 0.5% in 1995, by 5.6% in 1996 and by 10.4% in 1997. Strong increases across the industrial sector have led to a growing share of GDP. Agriculture and some services have also shown the significant growth.

In 1997 industrial production grew by 46.8% and agricultural production by 10.7%. A large portion of GDP growth can be attributed to output from the Kumtor gold mine, one example of the republic's successful foreign investment projects. Continued steady economic growth is forecast at 4.5% through 2000. With the introduction of the Som, the national currency, in 1993 and application of a carefully planned set of macro-economic policies, inflation has gradually come under control. Tight monetary and budget policies succeeded in steadily reducing inflation from 87% in 1994 to 32% in 1995, to 14% in 1997. The Government aims to reduce the annual rate of inflation still further to 10% in 1998 and 8% by the year 2000. In addition, the republic's liberal series of foreign exchange and trade policies are to remain in force. There are no restrictions on holding and transfers of any currency -- domestic or foreign.
Such policies of macroeconomic stabilization have been implemented in co-operation with the IMF, and supported by resources of the IMF, credits of the World Bank, and the combined efforts of various bilateral donors and other multilateral assistance institutions. Economic reforms continue to be achieved in accordance with long-term, sustainable economic growth and development plans.

In general terms, analyzing the economic situation in the country, we can say that we have achieved our main objective set for 1997 - enhancement of the macroeconomic stabilization and continuance of the economic growth and we have completed the first stage of transition to the market economy.

Kyrgyzstan has now entered into second stage of transition to the market economy. It is believed that it will be even more difficult than the first stage. There is a need to overcome unbalanced production and marketing sectors where there is too great a concentration of resources in certain sectors and not enough in others that is effectively restricting overall growth and development of the economy. Real changes at the macro level of the economy must be supported by progress on the micro level of the economy. In addition to those areas already mentioned, progress on strengthening of the management of companies, creation of an institutional basis in the spheres of advisory, marketing and insurance services, revival of the financial sector, development of capital markets, strengthening of the judicial system and strengthening of environmental protection are all major requirements.

Breeding is the predominant activity among the mountainous areas, and concerns mainly sheep and goats, with a high percentage of sheep (there were estimated to be a
total of six million head in 1996). Cattle's rearing is also important (just less than one
million head), and takes place in the middle and higher mountain regions. The famous
Kyrgyz horses (about 300,000), are noted for being short-legged but stocky. The yak has
also been tamed, and is bred for meat, milk and as a pack animal. A good production of
meat, milk and leather is obtained from stock rearing. In 1987, these activities accounted
for about 3 percent of the Soviet total. By 1991, however, each had dropped by half.
Other industries, such as wool production, have remained more stable. Kyrgyzstan
remains the third-largest wool producer in the CIS, with a share of total output that
fluctuates around 10 percent (21,100 tonnes in 1994).19

In the period from after the war until the present, stock rearing has decreased due
to the extension of the arable farming--made possible by major dam projects. These have
created extensive irrigated territories, like those around Bishkek (hundreds of thousands
of hectares), in the southern valleys or around artificial basins. The country's mountains
provide good forestry, which annually supply about 6000 cubic meters of wood.
Kyrgyzstan also has the world's largest natural-growth walnut forest. Some industrial
cultivation (cotton, tobacco and, to a lesser extent, jute and hemp) has been incorporated
into the cultivation along the mountain slopes and valleys (Bishkek and Ysvk Kol
regions; Talas, Chu and Naryn river basins). The agricultural mechanization process was
rapid, given the relatively limited extent of cultivated territory, the major part being given
over to pasture. Mechanization has allowed Kyrgyzstan to become self-sufficient in food
production, with the exception of cereals.
Given the country's northerly position, cotton plays a minor role in Kyrgyz agriculture, compared with the other Asian republics. It is mostly grown in the south, along with rice, soybeans and tobacco. The country's orchards (using apricot terracing with gravity irrigation), vegetable gardens, vineyards, and more generally the production of cucurbits (melons, watermelons, pumpkins and cucumbers) occupy a prominent position. Sugar beet, an unusual crop for central Asia, was introduced into Kyrgyzstan at the beginning of the century by the Russian colonists, as were potatoes. There is also considerable bee farming and silkworm breeding.

Over the last few years, favorable weather conditions have allowed the spread, totally unchecked, of clandestine Indian hemp cannabis (from which hashish is extracted) and opium poppies. The cultivation of the latter is helped by the availability of seed, due to the fact that in Soviet times Kyrgyzstan provided almost 75 percent of opium for pharmaceutical use. The production and sale of drugs is becoming one of Central Asia's most serious problems.

**Mineral Reserves and Energy**

A variety of resources are extracted from the ground. The availability of mercury and antimony (of which the country is one of the CIS's top producers) is of international importance. Also present are rare earth metals such as tungsten, uranium and bismuth. Extraction of various non-ferrous metals, such as copper, tin, lead, zinc and gold occurs in the region.

The uranium of the Chu Valley will probably not be further exploited. Initially, it was proposed that Kyrgyzstan's supply be handed over to India, with the justification that
there had been a drop in demand from traditional former Soviet clients. Kyrgyzstan then altered its position and committed itself to adhering to the nuclear non-proliferation treaty (TNP).

The production and reserves of coal deposits in Osh and Tash Kumyr to the extreme east of the Fergana basin, and those east of the Ysyk Kol Lake, made Kyrgyzstan the CIS's fifth largest coal producer in 1993, although its output (0.5 percent of the CIS total) is insignificant in world terms. However, given the country's size it is able to meet its own domestic requirements. Coal production has dropped from 1.7 million tonnes in 1993 to 400,000 in 1996.

Hydroelectric energy is plentiful in Kyrgyzstan, thanks to the consistent water supplies provided by artificial reservoirs like Toktogui. Various thermal centers are linked to this reservoir, and are fed by coal and the modest extraction from petroleum reserves, run by Kyrgoil. The Toktogui hydroelectric plant produces 1200MW from one of the three large dams on the Naryn. These artificial reservoirs all serve the dual-purpose of irrigation and energy. The country is self-sufficient in energy production, and can supply other parts of Central Asia. In the short term, energy production and export should increase following the construction of thousands of small hydroelectric stations in the mountains. Production has increased from 11 billion to 13.7 billion KWh between 1993 and 1996.

**Industry and Communications Networks**

Kyrgyzstan's industrial sector (which involves 28 percent of the active population and accounts for 32 percent of the national yield) may be sub-divided into three different
technological levels. The first is the oldest and most backward, the manufacture of agricultural products and craftsmanship. The use of metal deposits boosted the second, based around the metallurgical, mechanical and electrical sectors. Over the last few decades, a third has formed on a higher technological level, founded primarily on textiles, but evolving into mechanical instrumentation, the electrical industry (particularly electrical motors) and electronics (the making of components).

The industrial system began developing from the treatment of agricultural raw materials, and even today this sector accounts for half of the country’s industrial production. The industrial system involves the preserved food industry, tanning, shoe manufacturing, animal slaughter, tobacco processing industry (wool, cotton and silk). Unlike the other Central Asian countries, which are generally not equipped, Kyrgyzstan has developed a small textile industry producing wool cloth (30 million square meters in 1996). Industry is concentrated in the northern and southwestern areas of the country. Larger production units are situated in the north.

The industries in the north are orientated towards the production of electrical materials: light bulbs (20 percent of 1990 Soviet production), voltage regulatory insulating materials, electrical pumps, various machineries, including a small number of televisions, and washing machines. Also produced are mechanical devices (parts for motors and agricultural machinery, such as forage harvesters, of which Kyrgyzstan supplied almost the entire Soviet production). In the lee of the Fergana basin, in the southwest of the country, are all the industries dealing with the treatment of non-ferrous
minerals. These are mainly refined and then exported to Russia. Also concentrated in this region are the textile production factories.

Pure industry is always flanked by traditional and artisan activity. This includes the manufacture of carpets, of which the best-known varieties are the Shirdak, Alakis and Tushkis (the latter are embroidered cloth which hang from tents, a tradition passed on at the specialist school in Chokmorov), and goldsmithing.

As with most of the former Soviet Central Asian region, industrial development began in the 1930s and progressed very rapidly following the establishment of factories in the area during the pre-war and war period. There was also a strong resurgence in the 1960s. At the end of the 1980s, an attempt was made to orient the industrial system towards sectors, which needed large workforces and little water, like textiles. This, however, clashed with the very low availability of skilled manpower, and especially with the serious inefficiency of the transport system.

Given the countries many mountains, numerous areas remain hard to reach, and the main problem remains geographical isolation. Roads are few and in poor condition. The only railway of any importance is a mere 250kms long, and leads from the capital to the city of Ysyk-Kol. This is a spur of the regional main line connecting Almaty to Tashkent, from which Kyrgyzstan remains, isolated. In 1995, the rail network measured less than 400kms (of Soviet gauge), and the road network measured 30,000kms (two-thirds tarred). The only international airport is in the capital city. The modernization of this airport has been financed with the Japanese funds. Telephone subscription was 7.5 percent of the population (or 342,000). The national telephone network still belongs to a
state-owned company, while data transmission and mobile telephony have been entrusted to Kyrgyz Telecom, a joint venture between some Kyrgyz companies and the US company IBCS.

**The IMF and Economic Policy**

Kyrgyzstan remains a regional exception on the monetary level. It was the first to leave the ruble economic zone, or as the political leaders put it the first to flee the ruble inflation zone, and adopt a national currency (on 10 May 1993). The som, or KGS, is subdivided in 100 tyiyn. The decision came as a surprise to other CIS states, and was taken on the advice and with the financial backing (to the tune of $62 million) of the IMF. In addition to this, loans have come from national governments; these included Turkey (with a $75 million loan in 1993), Japan, the Netherlands and Switzerland, which together with funds from the World Bank amounted to $200 million. In 1994, the IMF granted a further loan of $104 million, payable over three years, the only such loan in Central Asia. In February 1995, the European Union offered Kyrgyzstan most favored commercial nation status. In 1996, the republic received more US aid per capita than any other former Soviet Republic except Armenia. Due to the fragile banking system (20 banks are undercapitalized, five of them state-owned) Goskominvest has recently been set up with the role of managing the flow of investment and foreign loans.

Kyrgyzstan has received more credit than any other member of the CIS, but it remains to be seen whether it will be able to honor repayment or not. At the end of 1994, industrial production dropped by 24 percent, indicating a grave under-production in the economy.
For their part, the Kyrgyz leaders, with the rather forced adoption of the som, have always expressed a desire to attract foreign investors by liberalizing the regulation of foreign capital. One of the most frequently suggested solutions, and one, in which the government places great faith, is the attempt to increase tourism as much as possible. This would then allow the country to obtain a certain amount of hard currency. Kyrgyzstan's image -- the mountains, the undiscovered natural beauty, the customs, traditional feasts and a very favorable exchange rate -- have created interest from some large tour operators (Swiss, Italian and French). Meanwhile, the influx of tourists is starting to rise. Nevertheless, lack of roads, insufficient airports and the unsuitable hotel accommodation hinder the development of tourism.

The economic reform programme, without a doubt the most ambitious and advanced in de-sovietised Central Asia, foresees the transition towards a mixed economy in which the market functions as a regulatory mechanism of the whole economic system. The way in which this has been conceived shares many features with the reform programme adopted in Russia.

The main priority is agricultural reform, providing land on leases, which have been extended, from 49 to 99 years. The principle of privatization has been projected into the future. The number of private farmers had already risen to 20,000 by the end of 1994. According to Akayev, the lack of agricultural regulations led to the 1990 ethnic clashes between Kyrgyz and the Uzbeks in Osh.

The years following independence have underlined the economic distinctions between North and South, and it seems that the reform process in the South has entered a
stagnant phase. Kyrgyzstan is distant from markets, and dependent on other countries for many consumer goods and chemical products. It also lacks large natural resources. The consequently restricted efforts to build a modern nation are further hampered by a high level of debt. Secondly, the nature of much of the country militates against anything but regional development of a market economy for Kyrgyzstan. Lastly, on a social level, the political transition has been unable to prevent a general impoverishment of the population (in particular pensioners and the unemployed, who accounted for 7.8 per-cent of the active population in December 1996, according to the International Labor Organization, or ILO). 20

Case Study: Tajikistan

The economy of Tajikistan is characterized by lack of industry and a heavy reliance on agriculture, a sector that employs 47 percent of the country’s active population. Of the former republics of the Soviet Union it was the poorest and least industrialized, and had the second-lowest per capita GDP. 21 This was mainly due to the gap in the development between the industrialized northern regions and the rural southern ones. The Tajik economy has been gravely weakened by four years of civil conflict (economic growth has dropped 62 percent during 1993-1996). This has left Tajikistan dependent on Russia and Uzbekistan, and on international humanitarian assistance, for much of its basic needs.

Nonetheless, Tajikistan does possess some under-exploited ore deposits, mainly in the north and in the Pamir Mountains: 480 have been assessed, but only 143 are being worked. Minerals extracted include lead, zinc, copper, silver and gold. According to
Western sources, gold extraction for 1993 was 500kms per annum, 1 percent of the CIS total. The same sources also state that these deposits were encrusted to British Commonwealth Minerals. Other resources include rare elements: antimony (in Anzob and Skalnoje), arsenic, mercury and pitchblende (a uranium oxide from which radium and uranium are extracted). However, as these are radioactive elements, no official data is available for reference. Nevertheless, their production appears to be consistent. There is great potential in the rock-salt mines and metal deposits near Yavan and Kalininabad, south of the capital. Tajikistan is the largest former Soviet producer of certain mineral salts, such as strontium, marble, almost all of which is exported: Lenin’s mausoleum in-Moscow was entirely built with Tajik marble. From the earliest times, lapis-lazuli has been extracted.

Agriculture

For decades, the agricultural economy of Tajikistan was backward, and the labour surplus greatly limited the progress of mechanization. Even now, 47 percent of the country's active population is involved in agriculture, the highest percentage in the CIS. However, agriculture suffers from the lack of arable land (which accounts for 6 percent of the territory, the lowest proportion in the whole region). Three-quarters of this limited area has been brought under cultivation through irrigation, and since 1913 the arable area has tripled. Modern agricultural practices have been developed along valley floors and in the areas that can be reached by canals. This contrasts with the more traditional rural life of the high valleys and plateaus.
Cotton is the main crop in irrigated areas, and is of a superior quality (being the long-fiber variety) to that grown in much of the rest of Central Asia. Around the mid-1980s, in an attempt to limit reliance on cotton, increase employment and achieve economic self-sufficiency, the 'green bridge' idea was mooted. The theory was to return to vegetable and fruit production, easily achieved in areas of favorable climate or in greenhouses, for export to Russia's northern region. The large funds required to initiate the project and the ensuing political events killed the project, which in any case would have had to contend with a disastrous communications and supply system.

The Industrial System

Despite its energy potential, Tajikistan was the least industrialized of the former Soviet republics. Three hundred and seventy-three large, state-owned factories dominate industry, and occupy a mere 20 percent of the labor-force (the lowest percentage in the CIS, equal with Turkmenistan). Industry is labor intensive and low technology, relies on the country's raw and semi-manufactured materials, and has suffered grave crisis in recent years (in 1993, industrial production decreased by 19.5 percent, in 1994 by 31 percent, and in 1996 by 20 percent).

Since the beginning of the 1950s, the availability of energy has given the region a special status, and it has for decades received industrial investment. This gave use to powerful non-ferrous metallurgy and chemistry sectors. The aluminum sector is the most important (Tajikistan is the former Soviet Union's third-largest producer, accounting for 15 percent of the 1991 total, and around the world's eighth-largest). The gigantic aluminum smelting plant in Regar (formerly Tursun Zade) is supplied by raw materials
from Azerbaijan, where bauxite is enriched with Guinean metal (Guinean is the top world producer of bauxite). The low cost of electricity (17,000 kwh is required to produce one tonne of aluminum) justifies the long distance transport.

Almost all senior executives in the mechanical and textile industries were of Slav-descent, and their exodus has led to a drop in production. There are other industries linked to agriculture: cotton spinning (1.4 percent of the CIS total for yarn, although Tajikistan produced 11 percent of the fiber); silk manufacture (3.8 percent of CIS cloth output); wool, which is mainly used in the famous local carpets (9.8 percent of the CIS total); food processing (abattoirs, curing facilities, crushers, preserved food producers and a dairy industry) and tanneries (which fed an industry and produced nine million pairs of slices).

Economic Policy

In 1994, 78 percent of the workforce was involved in state-owned industries or collective factories (a reduction on 1985, when the figure was 84 percent). 22 percent were employed mainly in private factories and co-operatives, one of the highest percentages in the former USSR. The authorities in newly independent Tajikistan were very reluctant to promote radical economic reform, but did privatize 840 small and medium-sized businesses, favoring foreign investment (which was scarce), and introducing price liberalization. Political instability and civil war led to the departure of a great number of Russian technicians. The price of the civil war was heavy, as it led to economic stagnation, and industry was only possible at all in the north. However, various regional states, China for example, offered help in national reconstruction.
Before the outbreak of war, Tajikistan was orientated towards the exportation of a part of its energy resources to Iran and Pakistan, rather than CIS countries, justifying this stance with the need for precious foreign currency. Since independence, export has cantered around aluminum (making up 70 percent of the total), of which the Netherlands has become a major importer. More than half of the cotton crop (28 percent of the export) goes to Western countries (among them the USA, Italy, and Switzerland). As a result of differences between the more industrialized and developed north and the poorer south, which is agricultural and a prey to civil war, it may be that a reconstruction plan could lead to the economic integration of northern Tajikistan with Uzbekistan. It may also lead to the revival of the same levels of trade as before independence, that trade being mainly with Russia and Uzbekistan. Constant political turmoil and the continued dominance of former Communists have impeded the introduction of the meaningful economic reforms which the IMF and the World Bank expected.\(^22\)

**Table 4**

**Selected Macroeconomic Indicators**

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<tr>
<td><strong>Tajikistan</strong></td>
<td></td>
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<tr>
<td>Inflation (end of Period: percent)</td>
<td>2,133.3</td>
<td>40.5</td>
<td>163.6</td>
<td>2.7</td>
<td>31.3</td>
</tr>
<tr>
<td>Real GDP (% Change)</td>
<td>-12.5</td>
<td>-4.4</td>
<td>1.7</td>
<td>5.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Fiscal deficit (% of GDP)</td>
<td>-11.9</td>
<td>-5.8</td>
<td>-3.3</td>
<td>-3.8</td>
<td>-3.1</td>
</tr>
<tr>
<td>Current account Balance (%of GDP)</td>
<td>-16.2</td>
<td>-7.3</td>
<td>-6.0</td>
<td>-9.3</td>
<td>-3.7</td>
</tr>
<tr>
<td>Gross Official Reserves (months of imports)</td>
<td>0.1</td>
<td>0.3</td>
<td>0.6</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>External Debt</td>
<td>142.1</td>
<td>91.7</td>
<td>108.7</td>
<td>92.6</td>
<td>103.3</td>
</tr>
</tbody>
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152
Case Study: Turkmenistan

The Economy

Turkmenistan has specialized in hydrocarbons and cotton due to the prevalent Soviet system of centralized planning. However, things began to change in the 1980’s when problems concerning the structure, availability and under-employment of labor and raw materials began to surface. The structural problems confronting the Turkmen economy lead to steady deterioration of conditions conducive for revival of the economy. These problems concerned the lack of skills of the labor force, youth unemployment and difficulties with communication networks.\(^{23}\)

Table 5

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<td><strong>Turkmenistan</strong></td>
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<tr>
<td>Inflation (end of Period: percent)</td>
<td>1,261.5</td>
<td>445.9</td>
<td>21.5</td>
<td>19.8</td>
<td>20.1</td>
</tr>
<tr>
<td>Real GDP (% Change)</td>
<td>-8.2</td>
<td>-7.7</td>
<td>-11.3</td>
<td>5.0</td>
<td>16.0</td>
</tr>
<tr>
<td>Fiscal deficit (% of GDP)</td>
<td>-2.0</td>
<td>0.0</td>
<td>0.0</td>
<td>-2.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Current account Balance (% of GDP)</td>
<td>1.3</td>
<td>2.1</td>
<td>-21.6</td>
<td>-32.7</td>
<td>-16.0</td>
</tr>
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<td>Gross Official Reserves (months of imports)</td>
<td>8.5</td>
<td>9.2</td>
<td>15.3</td>
<td>14.6</td>
<td>13.7</td>
</tr>
<tr>
<td>External Debt (% of GDP)</td>
<td>29.7</td>
<td>28.1</td>
<td>50.6</td>
<td>61.1</td>
<td>53.9</td>
</tr>
</tbody>
</table>

Agriculture

Turkmenistan’s is a nomadic society. The country’s main agricultural activity has been typical of a subsistence economy based on the nomadic farming of sheep, horses and camels, and on cultivation near oases. These stock-raising practices continue even today, despite the fact that the livestock heritage was greatly diminished during the Soviet era. This was due to dry conditions, emigration, decisions adopted by planners, and above all as the result of the slaughter of large numbers of cattle as part of herd collectivization during the 1930s.

In 1987, Turkmenistan was the USSR's second-largest, tenth in the world, accounting for 15.7 percent of its total. In 1991, this percentage had risen to 18.4 (1,433,000 tons), but decreased after independence (1,341,000 in 1993, 1,283,00 in 1994, 1,293,000 in 1995). In 1996, production was down to 450,000 because of a fungus, which decimated the plantations. The picked cotton undergoes its first manufacturing procedure in 22 cleaning workshops. The laborers in these workshops are mainly Turkmen’s and Uzbeks. Machinery is used, which, though simple and sturdy, uses much energy. The local labor force is employed by the country's many spinning mills (in 1987, Turkmenistan produced 13.9 percent of all Soviet spun cotton). There are virtually no textile factories (only 0.5 percent of Soviet cotton fabric was manufactured in Turkmenistan), which ironically means, that the country has to import cotton fabrics and clothing from Russia.

Other agricultural production is cereal (wheat, maize and barley), a large percentage of which is obtained by 'dry cultivation' grown on land which yields only one
harvest before the summer drought. Irrigated land, however, often yields two harvests per year. Rice is an important resource, cultivated on irrigated lands from the beginning of the 1950s. It was stimulated by the breakdown of diplomatic relations with China, which suspended rice exports to Russia. Fruit and vegetable production is good, especially dates, figs and grapes. There is also cultivation of oleaginous plants, such as sesame and olives, used with cotton seeds in the production of edible oil. Land is sub-divided, and lucerne grown, in an attempt to protect cattle farming from the effects of drought. Despite the availability of irrigated water, dry climatic conditions continue to pose serious risks. Agriculture, along with the primary sectors and other activities, involves almost half the labor-force (46.4 percent) and accounts for 42 percent of the national income.²⁴

The Industrial Sector

Turkmenistan's industrial development began with mining and agriculture, initially on a small scale. Mining, practiced according to the Soviet standards during the 1930s, gave way to the development of heavy industry, which in Turkmenistan involves primary chemicals and petro-chemicals. Agriculture led the way to the manufacture of agricultural products. The Turkmen industrial system is orientated towards chemicals: sulphuric acid (788,000 tons in 1991, the CIS’s fifth-largest producer, with about 3 percent of total production, but dropping to 120,000 in 1996), ammonia, detergents, caustic soda and the treatment of mineral salts (partly 'processed into fertilizers). Metallurgical and mechanical industries are limited, and the very small-scale steel production is used in making water pumps and in the construction industry. Farming machinery and cement production form part of the more recently developed sectors. The
agro-industrial sector is traditional by nature: even if leather works and foodstuff industries (abattoirs, mills, presses, etc) have greatly increased in number, they remain hindered by the under-development of industrial plants, and by the low level of mechanization and lack of skills in the force-force. Turkmenistan has no textile factories, only spinning and clothing factories. Apart from cotton, there is good production of animal fiber, such as silk and wool (8 percent of the CIS total, 16,300 tons, in 1991), used mainly in the manufacture of local carpets. These are part of a great historical tradition, and are of excellent quality. Almost the entire production is exported. In respect of handicraft work, the use of Astrakhan is also noteworthy.

The problem of under-investment in the industrial system (19.6 percent of the force-force earn 20.8 percent of the national income) is serious. Large production units dominate industry, while light industry and the production of consumer goods remain insignificant. The industrial network is obsolete and pollutes the environment. The Turkmen government endeavors to develop joint-ventures with foreign companies which are capable of providing the necessary technology to update the plants, increase productivity, lower pollution levels and, in the medium term, make the country less dependent on importation.25

Natural Gas

Turkmenistan has strongly encouraged the extraction of natural gas, of which it has enormous supplies, and an important accord was concluded with the French multinational Elf-Aquitaine for the exploitation of deposits. Details of the deal appeared in the August 1993 issue of the specialist magazine Russian Petroleum Investor. One of
the most important joint ventures in this country is with the Dutch company LERMAG, and this is still ongoing. LERMAG and the Argentinean Company Bridas are the two most important foreign companies in Turkmenistan, and both are involved in natural gas.

The state of chaos following the break-up of the USSR (the world's leading producer and exporter of natural gas) and the increasingly unstable situation in Algeria (the second-largest producer worldwide) had brought about tremendous fluctuations in world prices.

On 25 October 1997, an international consortium led by the Californian Unocal (the Saudi Delta Oil is also a participant) signed a contract for the construction of a gas pipeline to transport Turkmen gas to Pakistan. It will cross around 800kms of Afghan territory.

**Case Study: Uzbekistan**

Though poorest of the former Soviet Unions republics, in 1999, Uzbekistan, along with Kazakhstan was the most advanced CIS Central Asian territory. Shaken by poverty, caused partly by the transition and partly due to the reluctance on the part of policy makers to bring about radical changes following independence, the government sought to prop up its Soviet-style command economy with subsidies and tight controls on production and prices. Faced with high rates of inflation, however, the government stepped up the pace of reform in the first half of 1994 by expanding privatization, slightly reducing the role of the state in the economy, and by improving the environment for foreign investors. Nevertheless, the state continues to be a dominating influence in the economy, and reforms have so far failed to bring about much-needed structural change.
The International Monetary Fund (IMF) suspended a $185 million standby arrangement in late 1996 because of governmental steps that made the fulfillment of the conditions for funds impossible. Notwithstanding the fact that 1996 was a year of positive growth (production growth 6 percent, GDP 2 percent) after a series of negative results, the fear of an expansion of the Asian crisis is widespread.

**Agriculture**

Farming has always been practiced near oases, often in areas such as the Syr Darya basin, around its tributary, the Chirchik, in the Fergana basin. It has also taken place along the lower valleys of the Zeravshan and Amu Darya. In 1996, the farming-sector employed 41 percent of the active, population, and was based on an intensive system of single-crop cotton cultivation. For decades, this has been and still is the primary activity of Uzbekistan and the entire region. Cotton accounts for 84 percent of Uzbekistan's exports. However, the enormous output of cotton has led to serious desertification.

It is difficult to establish cotton output figures, as harvest figures were falsified, but according to unreliable official statistics Uzbekistan produced an average of four million tons per annum between 1980 and 1990. This equals 60-70 percent of the USSR's total production. According to this data, in 1990 Uzbekistan produced 10 percent of the world's total production and was the third largest producer after China and the United States. Despite the drop in production figures issued in the 1990s confirmed these results.

**Industry**

Uzbekistan's industry benefits from the country's natural gas
deposits, which allow self-sufficiency in energy. The industrial structure improved during
the 1930s, following the start up of energy, mining, and mechanical construction sectors.
The majority of factories (about 55 percent) are concerned with the processing of
agricultural raw material, and this predominance is one of the problems facing potential
rest structuring. The chemical sector is important, with a certain number of industrial
plants. Symbolic of the development of basic industries during the 1950s and 1960s
various 'new chemical cities' developed during this time, such as Nawa and
Superfосfatны, and the industrial zones of Quqon and Samarqand were created.

In the 1950s, in order to promote the expansion of cotton cultivation, industry
moved to produce farming machinery (shovels and bulldozers to till irrigated areas, seed
drills and harvesters). In 1990, these constituted the entire Soviet output of these
products. Manufacture of machinery for the treatment of fibers (spinning machines and
textiles) was also established. Nevertheless, sectors for the processing of agricultural raw
materials remain dependent on Russia, and are obsolete. The canning industry is
important; vegetable oil, which is obtained from cottonseeds. Uzbekistan was the third-
largest producer of this product in the CIS in 1995.

Cotton fiber is only partially processed in the area. Most of the output is sent to
large textile plants north of Moscow, although the world's largest cotton mill is situated in
Tashkent. This, together with its other types of production, establishes Uzbekistan as the
CIS's main, and the world's third-largest, cotton-fiber producer overall. The imbalance
between the intensive production of agricultural raw materials like cotton, and the
scarcity of finished products is also evident in animal fibers, wool and silk.
There is also heavy manufacturing of products for irrigation and the construction of roads, as well as assembly of industrial vehicles. Light industries have very little impact on the economy. Clothing, shoe and printing industries have a solely regional role. Hundreds of products for even-day use need to be imported from Russia.

**Cotton**

Although evident throughout Central Asia, the northern limit of cotton cultivation runs across north-central Uzbekistan and southern Kazakhstan. Since ancient times, the cotton cultivated here was a local variety of poor quality. It was the Russian governor, Konstantin Kaufman, who introduced the American short-fiber variety (*Gossypium hirsutum* or Upland Cotton) and imported processing machines from the US. The greatest advances in cotton cultivation came during the second half of the nineteenth century when Russia went to war against Great Britain and Russian merchants were excluded from the London market.

In Uzbekistan, cotton’s expansion has occurred to the detriment of other food crops (fodder shortage for example), which in turn led to an increased dependency on imports for the feeding of the population. Foreign dependency not only put great pressure on transport networks, but also increased the prices and decreased the availability of numerous products. This led to the disappearance of certain foodstuffs from the Uzbek diet, highlighting the country’s increasing pauperization.

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Selected Macroeconomic Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uzbekistan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>116.9</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Inflation (end of Period: percent)</td>
<td>-0.9</td>
</tr>
<tr>
<td>Real GDP (%) Change</td>
<td>-4.1</td>
</tr>
<tr>
<td>Fiscal deficit (% of GDP)</td>
<td>-0.2</td>
</tr>
<tr>
<td>Current account Balance (% of GDP)</td>
<td>6.9</td>
</tr>
<tr>
<td>Gross Official Reserves (months of imports)</td>
<td>17.5</td>
</tr>
<tr>
<td>External Debt (% of GDP)</td>
<td></td>
</tr>
</tbody>
</table>

Sources: National authorities; and IMF staff estimates.

Turkmenistan and Uzbekistan initially intensified exchange controls, while the other three countries combined financial restraint with exchange market intervention to ward off the pressures on their economies. Nevertheless, the currencies of Kazakhstan, the Kyrgyz Republic, and Tajikistan depreciated sharply, in nominal terms, by the end of 1998 and into 1999. Inflation flared up again. These events underscored the need to strengthen external debt management, following years of heavy borrowing, to compensate for low domestic saving rates and sustain investment. The countries should continue to take a cautious approach to external borrowing—even Kazakhstan, which has gained the favor of international markets (particularly since oil was discovered there) and recently repaid its IMF loan, well ahead of schedule. Progress with structural reforms has been mixed. All five countries were relatively quick to initiate price liberalization, although each has proceeded at a different pace, and there have been temporary reversals, primarily to avert social unrest. In almost all cases, controlled prices were maintained for essential foodstuffs, energy, public transportation, and utilities. State enterprise restructuring proved particularly difficult, given the magnitude of the task and the
reluctance of authorities to disrupt production and the provision of social services by enterprises. Considerable progress was made in Kazakhstan and the Kyrgyz Republic in initiating restructuring programme and in building the needed institutional frameworks. All countries experienced large domestic payment arrears in their state enterprise sectors, which partly mirrored the phasing out of traditional sources of finance (particularly directed credits) to this still dominant sector. Privatization proved to be particularly daunting, although the faster reformers progressed considerably beyond the first stage of small enterprise privatization to mass privatization of medium and large-scale enterprises. The ground was also laid for the privatization of agriculture through land-lease programme and the phasing out of state orders, although privatization of agricultural services fell behind. Legal and regulatory reforms, on the other hand, proceeded in piecemeal fashion, with only Kazakhstan and the Kyrgyz Republic undertaking more in-depth reforms of their civil codes.\textsuperscript{39}

The slowest reformers in this group—Turkmenistan and Uzbekistan—will need to switch from crisis management to policies designed to contain macroeconomic imbalances and prepare the ground for sustainable growth. Such a shift requires the formulation and determined implementation of comprehensive and internally consistent economic stabilization and reform programs. Tajikistan has already initiated this process. For Kazakhstan and the Kyrgyz Republic, the major challenge will be to deepen, and build upon, the structural changes introduced so far, while taking care not to re-ignite inflation and balance of payments pressures by easing fiscal and monetary policies too much, too soon. In all five countries, successful adjustment requires government
ownership of reforms as well as endorsement of reforms by influential groups outside the government. Further action is needed in five key areas: enhancing the quality of fiscal adjustment; strengthening financial intermediation and financial institutions; improving external debt management; increasing the depth and scope of structural reforms; and addressing governance and corruption issues. The brunt of fiscal adjustment in the Central Asian transition countries has been borne by expenditure cuts and payment arrears, with insufficient attention paid to the level and quality of government expenditure on social services (notably health and education), basic infrastructure, and operations and maintenance. Efforts to raise revenue have been thwarted by tax administrations that are ill equipped to enforce tax collection, the prevalence of domestic payment of arrears (including by governments), and flourishing underground economies that largely escape taxation. Future efforts will need to be directed at raising revenue collections substantially and better prioritizing of spending. To avoid the recurrence of payment arrears and dismantle a widespread system of mutually offsetting expenditure and tax arrears, these countries will need to undertake civil service reforms, curtail nonproductive spending, and adopt public investment programmes. Also, as reforms take hold and economic distortions disappear; underground economies can be expected to shrink. Notwithstanding some cross-country differences, the banking systems of the Central Asian transition countries are still at a fairly rudimentary stage of development. A few large state banks continue to account for the bulk of transactions, acting more like state agents than like independent financial intermediaries. An important task for these countries will be to restructure their banking systems with a view toward strengthening
monetary policy and supporting the economic recovery. Action in this area will also be needed to safeguard against protracted structural lending to bail out failing banks and enterprises, arrest currency substitution, and promote an efficient and solvent banking system. Such action will entail improving the legal and accounting frameworks, adopting effective prudential regulations, and strengthening bank supervision.

External borrowing by the Central Asian transition countries has grown rapidly, primarily to finance budget deficits, meet growing import bills, and benefit from cheaper sources of finance. For the most part, borrowing strategies were based on short-term considerations, with insufficient attention to debt sustainability in the medium term. Accordingly, the funds borrowed were not always channeled to uses that would generate the earnings needed to service them. The institutional arrangements for managing and monitoring the external debt were generally weak. To avoid debt-servicing difficulties and disruptions to reforms, these countries will need to keep their borrowing strategies under close review, formulate such strategies within a medium-term framework, and strengthen the institutional arrangements for external debt management and monitoring. While all five Central Asian transition countries have begun implementing structural reforms, the depth and determination with which they have been undertaken vary considerably. The slower reformers need to give priority to catching up in such key areas as privatization and enterprise restructuring. For countries that have made substantial progress in these areas, the next stage might be to reform labor markets, the civil service, and the trade and regulatory systems, while pursuing sectoral (notably agrarian) reforms. At the same time, to bolster the confidence of private savers and investors, state
intervention must be limited, essentially to the provision of reliable public services, establishing a simple and transparent regulatory framework, and enforcing a fair judicial system.

Finally, firmly tackling governance and corruption will be an important challenge for the Central Asian transition countries. There is considerable evidence that corruption is associated with lower investment, slower economic growth, concentration of government spending on less productive activities, and a greater incidence of income inequality and poverty. The most effective way to strengthen governance and fight corruption is to implement structural, institutional, and legal reforms. Such reforms, by better balancing the roles of the state and the market and clearly establishing the rule of law, can eliminate some of the conditions that breed corruption and help restore confidence, which is essential to promoting private sector activity and attracting foreign capital to the Central Asian transition countries.
Notes

1 Evolving views on the economies of transition can be traced through the Annual Surveys of the IMF as well as in the World Bank’s Studies in Transition.
3 PopM stands for “population in millions.”
4 Read, “GDP per capita in US $.”
5 Pri Sec is “Private Sector.” The numbers show % of GDP of the private sector.
6 Shows Foreign % of GDP.
7 Read, “FDI per capita.”
8 EBRD is “European Bank Reconstruction and Development transition indicators 1998.”
9 The Kazak series of GDP 1991-95 and Uzbek series 1991-3 are on the database of the UN Economic Commission for Europe.
10 Evolving views on the economies of transition can be traced through the Annual Surveys of the IMF as well as in the World Bank’s Studies in Transition. There is little published material on the economy of Central Asia: Rumor (1989), McAuley (1992), and the chapters on Kazakhstan and on Central Asia in Williamson (1993) are the most recent studies.
11 The data has been drawn from IMF Staff Country Reports: No.96/22, Kazakhstan: Recent Economic Developments, No. 96/73, (March 1996), Uzbekistan.
14 The Chapters on Central Asian Countries in Europa Publications (1992) contain useful historical synopses.
16 According to the estimates of international experts, the GDP of Kyrgyzstan should grow by 0.4 percent in 1995, by 7.7 percent in 1996, and by 4.7 percent in 1997. IMF Survey, 12 September 1994, p.274.
20 These and much other data are from Basic Results of Social and Economic Development of the Republic of Uzbekistan, (January-June 1996).
22 In April 1992 the IMF published a series of economic surveys of successor states to the Soviet Union, which focused on the current situation (a follow-up series of more substantial surveys appeared in 1993).
28 The Uzbek data for 1995 are from the IMF Country Study (96/73, Table 3).
29 For further details see Lubin (1984) pp.102-103.
Chapter IV

Socio-Economic Characteristics of the N-WFP

Unlike the provinces of Sind and the Punjab, the N-WFP has been particularly handicapped on the following grounds:

- Distance from supply sources and to major markets remains as a primary obstacle to N-WFP development
- Lack of infrastructure
- Insufficiencies in human resources
- Geo-political situation
- Distance from supply sources and to major markets remains as a primary obstacle to NWFP development1.

A more detailed and point by point examination of these aspects follows.

The province is separated from the country’s main economic and population centers by long distances:

- Rawalpindi and Islamabad (population 2 million people) are at 170 km from Peshawar
- Lahore (population 4.5 million people) is at 400 km from Peshawar
- Karachi (population 8.7 million people) is at 1725 km from Peshawar

This situation has been aggravated by the quasi-closure of the western borders: Loss of significant markets for some industrial products (cigarettes, textiles, food products, matches, etc.) are some of the examples that the N.W.F.P has the capacity to produce2.

Interruption of traditional trade flows with and through Iran and Afghanistan in comparison with the industrial centers of Sind and the Punjab, distances have made many
industrial activities in NWFP non-economic, because of the high cost of "importing" raw materials from other provinces (e.g. hides, cotton, chemicals, metals, etc.) and shipping finished products to the major markets "down country." In addition to this industrialists perceive the energy situation as difficult: Although home to almost 1/3 of the nation's energy, energy supply cost remains high, and does not offset other disadvantages

- Load shedding is not uncommon

- Bulk storage for furnace oil is scarce

- Telecommunications are difficult

- Support services, if any, are not comparable with what the larger cities can offer

- Road and rail facilities are limited

Finally, logistical support in industrial estates is often not deemed sufficient. There is a dearth of skilled labour. The existing infrastructure for vocational training is not sufficient to provide the required labour force. Many workers must be "imported" from the Punjab, with inflated costs and high turnover rates. The urban centers of Pakistan and the Middle East countries have drained large numbers of trained people out of the province. Managerial resources are also scarce. Entrepreneurship tends to focus on fast-return ventures such as in consumer goods rather than industrial development.

Professional management in small private sector units is rare. The commitment and professional qualifications of managers in the public sector are open to question. Furthermore, local markets are limited due to population dispersion and low-income levels. This stands in the way of visualizing economic-scale units for most products.
Geo-political situation

As already underlined, the absence of any counterbalancing measures and the costs on account of the isolation of the Province and limited markets it can offer, have acted as the basic obstacles to any new investment. In addition, the traditional difficulty to administer tribal areas, where many of the natural resources are, has discouraged private sector initiatives. In public sector ventures, all the units established by FATA DC have been closed down owing to a complexity of factors. Finally, the war in Afghanistan and its spillover into NWFP has also been an important factor in creating a situation of overall uncertainty. This has clearly been a deterrent to new capital investment.

Institutional obstacles

Institutional obstacles have also been regarded as major stumbling block to NWFP’s industrial development. Official committee reports, consultants' studies, views expressed in private interviews and press releases have frequently focused on a set of issues relating to public institutions:

- Overlapping or conflicting authorities on industrial development
- Limited cooperation of institutions towards entrepreneurs
- Inadequate data base for economic analysis
- Lack of proper planning Negative economic impact of government policies
- Failure of public sector enterprises to spawn off economic activity
- Non-involvement of private sector in decisions bearing upon their initiative

It is quite understandable that such issues are sensitive, since they are primarily concerned with government responsibilities, public sector activities and political deci-
sion-making. They also are not peculiar to the N-WFP, except possibly for specific examples of authority overlap or poor planning.

However, since these issues have been bearing heavily on the attitudes of investors and maintaining their perception of opportunities, they are briefly reviewed in the following pages for record.

**Overlapping or conflicting authorities and industrial development**

In the wood industry, the operational problems experienced by the huge Dir complex since its inception were reportedly compounded by the lack of coordination between the Complex’s management and the Forests management. In the mineral industry, there is a multiplicity of authorities involved in planning and development, both lack coordination. The major public sector institutions involved with the exploration and management of minerals in the N-WFP are:

- Pakistan Mineral Development Corporation
- Directorate of Mineral Development, Government of NWFP
- Sarhad Development Authority
- Mineral Coordination Board, Ministry of Planning and Development
- FATA Development Corporation State Enterprises (GEMCORP,
- Swat Ceramics, etc.; Pakistan Industrial Development Corporation Pakistan

Geological Survey

Similarly, planning and industrial development has generally not been coordinated among the various agencies involved. Studies on similar topics originated from a variety of quarters:
Each one of these agencies performs according to its own charter of duties and carries out its responsibility within its own hierarchical structure. The common goal thus is never achieved. Basic economic data relating to production, employment, trade flows or consumption patterns, are scarce, contradictory or not existent. Even source documents such as the returns from the Census of Manufacturing Industries have not been accurate, or properly gathered and compiled. Official data prepared by different government organizations often conflict, not only between organizations but also for the same organization over time. Data on the informal sector are not reported and no concerted effort has been made to quantify smuggling or focus on the effects it has on developing the local production base. Professional statistics do not seem to exist, and the private sector is generally reluctant to disclose activity levels, costs or profits.

Furthermore, frequent variability in past government policies had rendered business economics uncertain. Protection measures affect the industry in many ways: tariffs, duties and quotas, price regulations, special incentives, exemptions, etc.; their changes modify the business equation and, when unexpected and drastic changes are brought about they tend to provoke some negative reactions in the business community. Smuggling is pervasive and undermines the viability of regular enterprises (e.g. silk mills, tyres, consumer white-goods, automotive parts, electronics, etc). If entrepreneurs are not
convinced that effective curbs are or can be introduced, they will not touch many of these businesses.

Overall, general uncertainty in the "rules of the game" set by the government has made capital shy. The entrepreneurs feel that a profitable business opportunity today could be a disaster tomorrow. In conclusion, several institutional hurdles have compounded the difficulties of the economic environment. While these have been pointed out time and again incentives from the government has been perceived to be the major way to the development of the Province.

**Economic Reforms and the New National Strategy for Industrialization**

The package of Economic Reforms announced in 1991 is supposed to be part of a new national strategy for industrialization. The main features of these reforms are:

- Institutional economic reforms, constitutional protection to reforms
- The stability of investment incentives guaranteed by law
- Nothing to inhibit entrepreneurship
- New vistas, including infrastructure, hydel-power generation thrown open to private sector
- Foreign investment completely deregulated. No ceiling on the share of foreign equity
- Machinery not manufactured locally fully or partially exempted from duty
- Minimization of controls, simplification of procedures, and a package of incentives
- Tax holidays, exemption from customs duty and sales tax (in certain cases)
- Private sector re-assured. Environment made conducive for investment (with the accompanying legislation)

These reforms have been well received by national business houses as well as multinationals many of which have already responded positively.

**The Impact of the Reforms**

The economic reforms are expected to create an impact by way of increasing motivation. This may be achieved by:

- releasing the potentialities of private initiative
- liberalizing the conditions within which economic activity can germinate
- increasing capital flows

The effects of these reforms are clearly discernible by way of:

- new interest from the earlier entrepreneurial groups
- initiatives by new entrants

The established entrepreneurial groups have shown tangible interest in the privatization process as well as in reaching out for new ventures in trade, production, and finance, as we can see from the establishment of regional banks.¹⁹

Local offices of DFI's have reported considerable interest by new entrants over time. 1DBP, PICIC and others have all reported not only queries but also applications. IACP (Peshawar) have processed 60 applications during 1995-96. The S1DB has also been active. However, there is always a time lag between reforms and the desired results. There is sufficient evidence of a change in the overall outlook.

**The Importance of Youth and Women in Rural Areas**
- New focus on youth, women and rural areas is expected to create opportunities of self-employment for youth.
- Bring women into the mainstream of economic activity and induct them into the body enterprise.

Industrialize rural Pakistan with the objectives of:
- Developing the rural areas
- Improving the lot of rural people
- Control out-migration, urban congestion, and other attending evils.

The establishment of the First Women's Bank and its operations in the field of investment loans, advice, and guidance to female investors, saving, and banking schemes are all important landmarks. The induction of NGO's (Non-Governmental Organizations) in the rather broad front of "Women in Development," and the skills and entrepreneurship development programmes of various ministries, both provincial and federal, are expected to work up a noticeable impact over time.

The newly set up Micro Finance Credit programme, along with other international organizations are also doing good work among rural women. Specialized fora of women entrepreneurs are creating the necessary awareness and securing the participation of women in their own uplift. The shift away from charity to make them self-reliant is an important change in the attitude towards what needs to be done for women.

A comprehensive incentives and policy reform package has been announced by the government to stimulate investment in rural industry.

**Industry**
The package of incentives and concessions announced by the government includes, among others, tax holiday from income tax, exemption from, or reduction in the rate of customs duties, sales tax, import surcharge and import license fee. For granting these incentives, the country has been divided into three separate categories of areas depending upon their existing industrial level.

A. Rural Areas:

The areas identified as rural include the whole country excluding those with relatively developed manufacturing facilities. Among the rural areas, the backward ones have been brought into focus as under:

a) Backward Rural Areas:

Balochistan (excluding Hub Chowki area), NWFP; Federally Administered Tribal Areas; Northern Areas; Azad Kashmir: the divisions of Dera Ghazi Khan and Bahawalpur in the Punjab, and of Sukkur and Larkana in Sindh.

b) Rural Areas:

All areas outside the limits of any municipal corporations, municipal committees, cantonment boards and Islamabad capital territory and, in no case, within the following areas, namely:

i) Industrial estates of Hub, Nooriabad, Chunian, Hattar and Gadoon and areas up to ten kilometres outside the limits of such estates.

ii) Up to forty kilometers from the municipal or Cantonment limits of Karachi.

iii) Up to thirty kilometers from the municipal or cantonment limits of Lahore; and
iv) Up to ten kilometers from the existing limits or municipal corporations/committees and cantonment boards.

c) Other Areas:

Areas excluded under clauses a) and b) above are not classified as rural.

Incentives

a) Tax Holiday:

i) An eight-year tax holiday will be available to industrial units set up between December 1, 1990 and June 30, 1995 in the backward rural areas.

ii) A five-year tax holiday will be available to industrial units set up between December 1, 1990 and end June 1995 in the rural area outside backward areas.

iii) A three-year tax holiday will be granted to industrial units established from December 1, 1990 to June 30, 1995 in other areas.

b) Customs duty, surcharge and sales tax:

i) Complete exemption from customs duty, surcharge and sales tax chargeable on such plants and machinery as is not manufactured locally and is imported between December 1, 1990 and June 30, 1995 is accorded, if such plant and machinery is destined to be installed in backward or rural area\(^1\).

Exemption from customs duty leviable on plant and machinery as is not manufactured locally and imported between December 1, 1990 and June 30, 1995 is accorded to the extent depending upon the area it is destined to be installed in as specified against each category below and the whole of the sale tax chargeable thereon will also be exempted.

177
c. Other Concessions

In order to accelerate the pace of rural industrialization, the following additional concessions have also been announced:

(i) No question would be asked about the source of investment, provided letters of credit are established or contracts for local plant and machinery are signed by June 30, 1992.

Debt-equity ratio for all industrial units based on imported machinery has been fixed at 70:30. For projects involving local machinery the debt-equity ratio would be 80:20.

(ii) Creation of power generation by the entrepreneurs of such industries individually or collectively will be encouraged and in case where there is excess of electricity after meeting own demand, WAPDA will purchase the same.

(iii) Government institutions will acquire necessary technology from abroad for its transmission to the rural entrepreneurs at nominal rates. These institutions will provide required technical assistance and marketing expertise for rural industrial projects.

(iv) The import license fee is reduced from 6 per cent to 2 per cent for import of plant and machinery not manufactured locally and to be installed in rural areas. Since the requirement of import license has been done away with the fee will be payable at the time of opening of letters of credit.

Qualifications for Eligibility:

1. Tax holiday:

Eligibility for tax holiday is subject to the following qualifications.

a) Formation of a new company for operating the project:
Tax holiday would be available only to a project owned and managed by a company formed exclusively for operating the new industrial undertaking. An existing company installing another unit in the same premises or at some other place would not be eligible for this concession.

b) Manufacture of goods or materials etc.:

An industrial undertaking not engaged in the manufacture of goods or materials or the subjection of goods or materials to a manufacturing process would not qualify for tax-holiday concession.

c) Installation of plant and machinery:

It is necessary that the machinery and plant to be installed in the new industrial undertaking should not have been previously used in any business in Pakistan.

d) Plant and machinery imported under NRI Scheme:

An industrial undertaking set up with plant and machinery imported under Non-repatriable Investment Scheme would also be eligible for tax holiday subject to fulfillment of other conditions.

e) Industrial estates:

Industrial undertakings set up in the following industrial estates would continue to enjoy tax holiday as under:-

i) Nooribad-Five Years.

ii) Hattar-Eight years

iii) Gadoon-Ten years
New undertakings to be set up in the industrial estates of Hub and Chunian would enjoy three years tax holiday.

f) Industrial undertaking in non-taxable territory:

If the new industrial undertaking is set up in a territory otherwise not taxable, by a company registered in a non taxable territory, it would be outside the regime of the Income Tax Ordinance, 1979. However, if the undertaking is set up in such a territory by a company registered in a taxable territory, it would be eligible for tax holiday if all other conditions are fulfilled.

g) Investment of un-utilized funds:

The Income Tax Ordinance, 1979, does not impose any restriction on the investment of company's funds. However, exemption would be available only to the profits and gains from the new industrial undertaking.

h) Opening of letters of credit etc.:

To avail these concessions, it is essential to open the letters of credit for import of plant and machinery before June 30, 1992 and, in case of the locally manufactured plant and machinery, a firms order for its purchase has to be placed before that date.

i). Exemption from Customs duties and sales tax:

Exemption from customs duties and sales tax is subject to the following qualifications:

a) that the industrial unit is established in the relevant exemption area,
b) that it is owned and managed by a company formed exclusively for operating the said industrial undertaking and registered under the Companies Ordinance, 1988, with its registered office in Pakistan.

c) that it is not formed by the splitting up or reconstruction of business already in existence or by transfer to a new business of any machinery or plant used in a business which was being carried on in Pakistan at any time before the commencement of the new business.

d) that it is engaged in the manufacture of goods or materials or the subjection of goods or materials to a manufacturing process or mining (excluding petroleum and gas) or extraction of timber.

If loan is extended out of a credit line provided by a multilateral agency, the debt-equity ratio laid down by the concerned multilateral loan-giving agency will be followed.

**Incentives Zones in NWFP**

For the purpose of the rural industrialization, the entire province of NWFP as well as the Federally Administered Tribal Areas, the Northern Areas and Azad Kashmir are classified as backward rural areas and as such eligible for incentives packages. Investors in these areas are thus entitled to maximum benefits offered in terms of tax holiday and exemption from customs duties, surcharge and sales tax. Gadoon Amazai enjoys a ten-year tax holiday.

The skyline of the business activity of tomorrow can considerably change its professional business advice and investment guidance is readily and conveniently available to those sending remittances home. According to estimates, over US$ 10 billion
in remittances have been sent home by the N-WFP workers in Gulf during the 80's. Some of this has been sent through the normal banking channels but the bulk of it has found its way through unofficial means and methods. Most of it has been spent on the acquisition of real estates, construction of houses, jewellery, and other forms of durable consumer goods. Although this pattern of utilization has been the result of complex factors, and some of it would have anyway taken this route, it is strongly felt, and numerous 'Gulf' workers have also voiced the desire, that they did not have any access to proper investment guidance. Such an effort could channel a sizable chunk of these remittances into investment activity, create employment opportunities and give the returnees a sense of active involvement.11

The Overseas Pakistanis' Foundation (OPF) has been established to see to the welfare of the migrant workers and their families, especially regarding housing facilities, schools (for their children) etc. However, this institution does not have a high profile in providing investment advice and guidelines. Moreover, being situated in Islamabad it is beyond the reach of the migrant workers from the interior of the N-WFP. It is suggested that some institutions similar to the OPF (in the private sector) but with the major thrust and area of intervention being in the channeling of saving and investment in the productive lines bringing in income and returns to the families of the migrant workers, be established. This will bring together the three elements of finance, international currency and potential entrepreneurs.

However, no picture of investment opportunities can be complete without taking cognizance of the size and dynamism displayed by the informal sector. Other than being
a manifestation of the sociological transformation, the informal sector is as much an
economic sector, howsoever chaotic and unorganized. There is order in this anarchic
response to fill the vacuum created by the inability of the institutional apparatus to cater
to goods and services in demand, and by acting as the market supply channel where the
"formal" sector cannot be motivated to act or acts in a manner that is 'promotive' of
parallel sources.12

This sector is home to a great deal of economic activity and investment, and by
virtue of being informal and non-branded, it harbors anything from a social parasite to
vendors of truly scarce and genuinely needed goods and services. Efforts have been made
from time to time to 'formalize' certain segments of it and curb others, but it thrives
regardless, and gives people an opportunity to be creative.

Informal sector operations take place in social sectors (Health and Education), in
the housing and human settlement sector, in the trade and commerce, transport
manufacturing, and finance sectors. In fact, there are broad and extensive linkages
between the formal and informal sectors including linkages for:

-Production
-Credit and finance
-Exports and Imports
-Distribution
-Input procurement and supply

There is even an informal counterpart of the law enforcement system—a mechanism of
contract enforcement. The purpose of the foregoing is not to quantify the informal sector
or to identify investment opportunities in it, but certainly to point to its potential. No picture of investment opportunities can be complete without bearing the potential of the informal sector in view. Investment opportunities are seized more for what they offer rather than what 'status' they command. Why else would even the most organized expression of all governments be known to have used it as a conduit? It is quite possible that the recently announced liberalization measures and the establishment of a Free Trade Zone in or around Peshawar may furnish channels to the dynamism of this sector.

With peace in Afghanistan and the independence of the Central Asian Republics, N-WFP could pick up the path of history to travel the distances of the future. Far-reaching changes have taken place across the Western Borders and the geopolitics of the North West has changed completely. Peshawar, which in the past was the entrepot trade center for Afghanistan and Central Asia can once again be the economic and financial hub of activity. And the bold economic reforms and liberalization measures of the government can go a long way in substantiating the benefits that can accrue from the geopolitical changes. Much will, however, depend upon the political and entrepreneurial stewardship of this region.

There is, once again, a strong case for establishing a Free Trade Zone at Peshawar. Such a measure will be conducive to freer and bigger trade with Afghanistan, enhance the possibility of re-exporting goods of Afghan origin with or without some measure of processing, open up fresh outlets for the entrepreneurial class in such industries as processing, packaging, etc., open up avenues for Pak-Afghan joint ventures in the establishment of export-oriented industries, eliminate smuggling of the non-
Afghan-Origin foreign goods by providing alternative channels of employment and enterprise, bring prosperity to the region, and demonstrate that political frontiers do not have to be economic barriers.

The development of an entrepot market is a function of certain facilities such as storage, finance, transport, and the free availability of the currencies with which to acquire the commodities put up for display and sale in the market Peshawar has had the experience of handling such a trade for a long time and contains many of the facilities required. Additional facilities can be easily provided. Unofficial remittances can with benefit be invested here in the foreign exchange form.

Free trade zones are known to be most effective in places that are "geographically well-located for entrepot or re-export trade." From this point of view, Peshawar is an ideal intermediate trans-shipment point—a fact for which history had selected it to perform its natural function.

With the re-opening of the land route over Afghanistan to and from the Central Asian Republics and other parts of the world, and the prospects of greater Pak-Afghan economic cooperation, the exploitation of this natural advantage must be one of the chief foci of economic policy-making. The location of such a zone may also enable N-WFP to develop a sub-sector of manufacturing activity, which may be based upon raw materials imported from Afghanistan and the Central Asian Republics. As regards cost competitiveness, N-WFP's locational factor is fundamental and points to two circumstances being clearly favourable.
### Classification of N-WFP’s Locational Advantage

<table>
<thead>
<tr>
<th>CASE</th>
<th>LOCAL RAW</th>
<th>MARKET</th>
<th>TRANSPORT NEEDED (TRIPS)</th>
<th>FOR NWFP PRODUCER</th>
<th>FOR OTHER PROVINCE PRODUCER</th>
<th>NET NWFP ADVANTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UNIQUE</td>
<td>LOCAL</td>
<td></td>
<td>0</td>
<td>2</td>
<td>+2</td>
</tr>
<tr>
<td>2</td>
<td>COMMON</td>
<td>LOCAL</td>
<td></td>
<td>0</td>
<td>1</td>
<td>+1</td>
</tr>
<tr>
<td>3</td>
<td>UNIQUE</td>
<td>OTHER PROVINCE</td>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>NONE</td>
<td>LOCAL</td>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>COMMON</td>
<td>OTHER PROVINCE</td>
<td></td>
<td>1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>6</td>
<td>NONE</td>
<td>OTHER PROVINCE</td>
<td></td>
<td>2</td>
<td>0</td>
<td>+2</td>
</tr>
</tbody>
</table>

Economic analysis confirms that, other things being equal, local raw materials and local markets provide the best, competitive basis. Taking into account the local raw materials cost, transport advantage and production costs with other things being equal, an N-WFP product can afford to be less cost efficient, but only within the range of the transportation cost differential. The afore-going analysis warrants the following conclusions:
Agribusiness offers numerous opportunities

- The food product group bears a good promise in animal feed, corn processing and in the processing of fruits and vegetables.

- The potential in the dairy industry is at the moment clouded by its organization and competition from low-cost household ventures.

- Industries based on sugarcane by-products have a potential but in view of the variability of the raw material supply position, these will have to be carefully planned; Private sector will, however, have to wait for its turn till fresh sources of supply in addition to the present ones are available.

- This may be possible as part of the downstream industrialization in the wake of the impact of the Chashma Right Bank Canal.

- Prima facie, the mineral sector seems to have limited potential and that is being exploited, but this is not the end of the road.

- Work on a number of viable prospects is already underway.
- Most other minerals suffer from certain drawbacks. Either the reserves are not proven, or there are disadvantages of accessibility and lack of infrastructure, poor quality, or lack of quality assessment. In some cases, value added is too low to justify heavy investment.

- When it comes to the processing of some of the minerals, the initial advantages are greatly offset by the requirements of huge capital inputs, and the cost and difficulty of acquiring the technology.

- The full potential of the cement sector does not seem to have been realized. Cement can furnish the base of a vast range of finished products of great value, or as an input into the construction industry and infrastructure development.

- Rock salt can itself be the base of some 15 industries—a potential that needs a closer look.

As such, activity in the manufacturing sector has picked up somewhat over the last few years and this interest can be further sustained. The disadvantages of markets and geography are a function of one set of distances to Rawalpindi, Lahore, and Karachi. If markets and sources of raw material get re-orientated towards the West as a result of peace in Afghanistan and independence of the Central Asian Republics, N-WFP will come in a position of advantage.

Disadvantages of distances to markets are also a function of the cost and mode of transportation as well as the freight structure. Changes in these variables can vastly dilute the impact of distances southwards. While N-WFP has advantages in respect of certain raw materials, a whole new sector of industries oriented towards exports to the
Western neighbors, or processing the consignment shipments to and from these neighbors, or joint ventures processing their raw materials, can change the dimensions of viability. This is part of the "new developments" and has far-reaching potential.

The development potential again is high in the Tourism Sector

Natural beauty is a unique and hardly exploited resource in N-WFP. However, as indiscriminate tourism development bears the risk of spoiling that resource, the authorities, the local communities, and the private sector need to make concerted efforts and do careful planning for the development and promotion of tourism.

Without such a "Master Plan", sizeable investments intended to attract tourists and visitors may not even be desirable. However, immediate opportunities exist in the "middle-of-the-line" hotel and restaurant business due to the "push" effect of increased tourist flows on the route of the northern areas. Other longer-term prospects requiring careful research and planning should also be considered, such as tourist resorts and amusement parks. Tourism is a wide-open field for small entrepreneurs in such areas as low-price accommodation, restaurants, handicrafts, and special-interest tours. However, viable prospects cannot become real-life, functional projects without entrepreneurs who are willing able to take risks. Entrepreneurs are however interested in the profitability of their venture, the security of their investment, and the constancy and consistency of the policies bearing on their interests. Risk-taking is made up of two words-of risk, and taking it. While risk in gain is the natural function of an entrepreneur, other risks can be reduced for him. This is precisely what the new reforms have done. Besides, the qualities of professional evaluation and assessment of projects in the related staff of the concerned
government agencies and financial institutions is a must. To establish a sound foundation for sound economic development, the removal of institutional blockages is the prime condition of anything that can be undertaken. This is a pivotal factor in making the availability of incentives presently offered, possible. Removing the deficiencies of the infrastructure and the inadequacies of the database will have to be accorded the weight and importance they deserve.

The decision-making processes will have to be streamlined

The decision-making process in a society committed to economic and industrial development has to be differently oriented. The interest of the beneficiaries is not to be regarded as the byproduct of a process that has to proceed within the matrix of another set of values. This matrix itself has to undergo a change. Thus private sector has to be involved in the decision-making process itself, if the decisions so made bear on its interests.\textsuperscript{15} This does not mean swaying from one extreme to another. The government alone carries the responsibility for combining the interests of the private sector and the public at large.

There is need to take time out and watch the side shows

The \textit{informal sector} is showing the way in numerous enterprises both in the known and the not-so-well-known product lines, where large-scale services and production contracts are undertaken and executed. Construction, catering, sizable orders for the multiplication of "genuine" pieces of automobile spare parts—a veritable "reverse engineering" industry—are examples of informal sector activity.
Manufacture of squashes and fruit juices is another line that has been virtually
taken over by para-professionals trained or 'experienced' at the Agricultural Research
Institute, Tarnab. They have carved out a market of their own. It is not a low-price
market that sacrifices quality for cost. It is simply a market where a familiar location has
obviated the need for known brand names or easily recognizable packaging. The annual
turnover is in millions of rupees. Enterprise is not shy: only, it thrives in "side shows".

And here is yet another tip. A truly rich industrial potential lies dormant in the existing
crafts. Some of the 'family secrets' in the brass and copper works trade and manufacture,
processing of medicinal herbs, etc., are likely to die away if not brought into the
mainstream. However, they may be interested, or get interested, in (cooperatively
managed "turnkey" propositions).

Again, the 'softwood'—poplars, etc.—from the NWFP forms the raw material for
a number of small and medium size ventures in Punjab. Obviously, such ventures cater to
a bustling market of end-users there. Nonetheless, it will be quite possible to incorporate
some value added in this otherwise high bulk-low value trade, as ready availability of
project profiles can be educative and helpful.

Although no substitute for professional investment advice, project profiles and
pre-feasibility studies have an important role to play. They "announce" a viable prospect
and contain well-researched information about markets, demand and supply, raw
materials, costs, technology, and rudimentary business economics. Eventually, a full-
scale feasibility exercise can be undertaken. Such project profiles and pre-feasibility
studies were prepared by the IACP (1983,1986), and are being provided by the Project
Development Unit of S.I.D.B. as well as other organizations. However, there is still need for up-to-date and professionally carried out studies as well as their ready availability and knowledge about their availability. This is an area where the industries department can be most helpful by getting such studies to be conducted and/or sponsored by other financial institutions, banks, DFIs, etc.

**The implementation of the recently announced economic reforms and incentives packages needs to be monitored**

While far reaching economic reforms and wide ranging industrial incentives have been announced, their desired impact may require some restructuring in the existing set-up. The implementation of these reforms and the dispensation of the accompanying incentives will depend upon a complexity of organizational and psychological factors. It will therefore be necessary to monitor their progress and impact and detect snags. The N-WFP has tremendous potential for employment in the industrial sector. Compared to some of the main sectors the province is much below the national average in terms of providing jobs except for employment related to trade.
Notes

1 Industrialization of N-WFP. Board of Economic Enquiry, University of Peshawar, January, 1970, pp 1-10.
2 For details see, “Identification of Industrial Potential in the North West Frontier Province,” Vol II, Department of Economics, University of Peshawar, 1992. The project was funded by the Pakistan Banking Council.
3 Unlike Karachi and the Lahore-Gujranwala industrial enclaves where entrepreneurship spawned as a result of their distinct characteristics whereas the N-WFP has had no similar base to start from, as detailed in the report of the Swiss Contact Report on Small Scale Industry in Pakistan, 1995.
4 Details can be seen in the study titled, “Identification of Industrial Potential in the N-WFP,” Vol I, Department of Economics, University of Peshawar, 1992. The project was funded by the Pakistan Banking Council.
12 The role of the informal sector grows wherever policy orientation is primarily geared towards the promotion of large scale industry. The vacuum is filled as demand and supply conditions are viable for setting up such ventures. The idea is detailed in Liedholm and Mead, “Small Scale Industry in Developing Countries: Empirical Evidence and Policy Implications,” MSU International Development Paper No.9, Michigan State University, East Lansing, Michigan, 1987.
14 The idea that tourism can play an important role in the development of N-WFP is detailed in Malik, Muhammad Bilal, The Role of Tourism in the Economic Development of Pakistan, A Case Study of Northern Areas. A Ph.D Thesis of Muhammad Bilal Malik, Centre for applied Economic Studies, University of Peshawar, 1998.
17 The Dawn, Jan 26, 2002
Chapter V

Industrial Sector in the N-WFP

Smallest of Pakistan's four provinces, the North West Frontier Province (N-WFP) covers an area equivalent to 74521 square kms. The population of the province according to the N-WFP Development Statistics 1994 stands at 11.061mi. This comes to 13.13 per cent in terms of total national population. Literacy rate is 16.7 percent as compared to over 26 per cent at the national level. The population density rate is 241 persons per square km. The province comprises 6 divisions and 18 administrative districts. The total population of the province stands at 11061000 persons according to the 1981 census. The estimates for the period 1992 - 93 show the population to have increased to 16286000\(^1\). This is 13.1 and 13.5 per cent of the total population of the country. The total area of the province is 74521 sq kms that is 9.4 per cent of the total of 796095 sq kms for the entire country. Urban population of the province at 15.1 percent again is significantly lower than the national average that is 28.9 percent. This further shows that close to 85 percent of the people of the province are located in rural areas\(^2\).

Unlike the provinces of Punjab and Sind, N-WFP has been particularly handicapped on the following grounds:

- distance from the main markets and source of supply within the country
- lack of infrastructure
- insufficiency in human resources
- Geo-political situation

The province is separated from the country's main economic and population centers by long distances\(^3\).

- Rawalpindi/Islamabad (2 million people) are at 170 km from Peshawar
- Lahore (4.5 million people) is at 400 km from Peshawar
Karachi (87 million people) is at 1725 km from Peshawar

This situation can be reversed with the development and enhancement of the more traditional and natural trading partners vis a vis Afghanistan and the emerging Central Asian markets. There has been a traditionally significant market for some industrial products (cigarettes, textiles, food products, matches, etc.) The geo-political situation in turn has also affected trade with and through Iran. This situation will improve and will eventually open up a vast market for exports from the N-WFP in particular and Pakistan in general.

In comparison to the industrial centers of Sind and Punjab, distances have made many industrial activities in N-WFP less viable, because of the high cost of ‘importing’ raw materials from other provinces (e.g. hides, cotton, chemicals, metals, etc) and shipping finished products to the major markets ‘down country’. This isolation is reinforced by a severe lack of infrastructure. Many areas with natural resources (minerals, agriculture, forests, etc.) are still isolated and cannot attract investments private or even public without prior major infrastructure work on roads, railways, energy distribution, housing, etc. In addition, industrialists perceive the energy situation as difficult.

Although home to almost one-third of the nation’s energy, energy supply costs remain high and do not offset other disadvantages. Load shedding is not uncommon. In addition, energy shortage is further compounded by the lack of bulk storage for furnace oil. Finally, logistical support in industrial estates is often not deemed sufficient. Telecommunications are difficult. Support services, if any, are not comparable with what the larger cities can offer. Road and rail facilities are limited. In addition, skills and markets are insufficient for many industrial activities. There is a dearth of skilled labor.
The existing infrastructure for vocational training is not sufficient to provide the required labor force. Many workers must be ‘imported’ from Punjab, with flattered costs and high turnover. This is partly due to migration of trained people to other urban centers in the country or the Middle East countries. Managerial resources are also scarce. This is due to the fact that entrepreneurship tends to focus on fast-return ventures such as, consumer goods rather than industrial development. Professional management in private sector enterprises is rare. The commitment and professional qualifications of managers in the public sector are open to question. Furthermore, local markets are limited due to population dispersion and low-income levels. This stands in the way of visualizing large economic-scale units for most products. Finally, the difficult geo-political situation has also tended to discourage industrial investment. As already underlined, and in the absence of any counterbalancing measures, the costs on account of the isolation of the Province and limited markets it can offer, acted as the basic obstacles to any new investment.

In addition, the traditional difficulty to administer tribal areas, where many of the natural resources are, had discouraged private sector initiatives. In public sector ventures, all the units established by FATA DC have been closed down owing to a complexity of factors.

**District-wise Number of Establishments and Employment by Type of Economic Activity (1998)**

The spatial distribution of economic activity in the Province is un-even. With the district of Peshawar accounting for nearly 30.2 percent i.e. 6,090 units from 20,151 manufacturing units located within the administrative jurisdiction of the district of Peshawar. This is symbiotic of the existence of a relatively well-developed market. The
infrastructure, in the form of availability of services like finance and insurance etc, account for 38.8 per cent of the total available for the whole province. Likewise transport and communication account for 18.2 per cent; electricity, gas and water for 33.8 per cent and the important community and personal services account for 25.5 per cent of the total available in the province. The district of Peshawar has the highest rate of employment in the manufacturing sector, accounting for nearly 40.6 per cent of the total.

The Magnitude of Industrial Employment in N-WFP

The magnitude of industrial investment in N-WFP is well below the national average.

<table>
<thead>
<tr>
<th>Sector wise employment (percentage)</th>
<th>Pakistan</th>
<th>N-WFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>51.15%</td>
<td>5.31%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12.69%</td>
<td>13.35%</td>
</tr>
<tr>
<td>Construction</td>
<td>5.28%</td>
<td>3.73%</td>
</tr>
<tr>
<td>Transport</td>
<td>5.89%</td>
<td>5.31%</td>
</tr>
<tr>
<td>Other</td>
<td>24.89%</td>
<td>72.3%</td>
</tr>
</tbody>
</table>

It becomes clear that sector wise employment in the N-WFP is concentrated in trade and related areas. The agriculture sector that employs a substantial percentage of the total national employment levels plays a rather less important role in the local economy. Cross border trade with Afghanistan and the emerging Central Asian markets are a major
source of employment. In the given context SSI sector employs more people on a percentage basis that the national average.

**Sector wise Industrial Employment in the N-WFP**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Cumuli %</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, Beverages &amp; Tobacco</td>
<td>22838</td>
<td>33</td>
<td>497</td>
</tr>
<tr>
<td>Textile</td>
<td>20408</td>
<td>62</td>
<td>357</td>
</tr>
<tr>
<td>Metal &amp; Metal Products</td>
<td>10353</td>
<td>77</td>
<td>190</td>
</tr>
<tr>
<td>Mineral &amp; Mineral Pdts</td>
<td>5429</td>
<td>84</td>
<td>172</td>
</tr>
<tr>
<td>Paper &amp; Paper Products</td>
<td>3444</td>
<td>89</td>
<td>22</td>
</tr>
<tr>
<td>Chemicals &amp; Pharmaceuticals</td>
<td>5938</td>
<td>98</td>
<td>129</td>
</tr>
<tr>
<td>Wood &amp; Wood Products</td>
<td>1648</td>
<td>100</td>
<td>68</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70058</td>
<td>--------</td>
<td>1352</td>
</tr>
</tbody>
</table>

Food, beverages and tobacco industry is the dominant sector of the NWFP economy.

More jobs are created in this sector than in any other sector. This is primarily due to the fact that the province enjoys a variety of climatic zones that provide good growing conditions for most fruits grown in the region. N-WFP is also home to tobacco crop. However, the textile industry that employed a significant percentage of the civilian employed labor force now employs only a fraction as most of the units have closed down due to among other reasons the prohibitive cost overruns caused by high transportation costs of both the raw materials and the finished products.
### Sector-wise Number of Industrial Investment and Employment in N-WFP until Dec 31, 1998

<table>
<thead>
<tr>
<th>Sector</th>
<th>No of Units</th>
<th>Investment (Rs in Mil)</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, beverages &amp; Tobacco</td>
<td>460</td>
<td>5511.495</td>
<td>16989</td>
</tr>
<tr>
<td>Textile, wearing apparel and footwear products</td>
<td>415</td>
<td>13613.451</td>
<td>20276</td>
</tr>
<tr>
<td>Wood, Wood products, Printing Press</td>
<td>84</td>
<td>575.304</td>
<td>1498</td>
</tr>
<tr>
<td>Paper, Paper products, Printing Press</td>
<td>42</td>
<td>1143.874</td>
<td>2160</td>
</tr>
<tr>
<td>Chemicals, Petroleum, Rubber &amp; Plastic Products</td>
<td>289</td>
<td>56011.604</td>
<td>10802</td>
</tr>
<tr>
<td>Mineral products</td>
<td>226</td>
<td>109997.226</td>
<td>6774</td>
</tr>
<tr>
<td>Metal &amp; Metal Products</td>
<td>170</td>
<td>4950.463</td>
<td>8604</td>
</tr>
<tr>
<td>Electric/Electronic Goods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other manufacturing Industries</td>
<td>24</td>
<td>269.954</td>
<td>727</td>
</tr>
</tbody>
</table>

Total: 1710  42753.371  67830

### Sector wise % Position of Industrial Units Established in N-WFP until Dec 1998

<table>
<thead>
<tr>
<th>Industry</th>
<th>No of Units</th>
<th>Employment</th>
<th>Investment (Rs in mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, Beverages &amp; Tobacco</td>
<td>460</td>
<td>16989</td>
<td>5511.495, 25.05%</td>
</tr>
<tr>
<td>Textile, Wearing apparel, Leather &amp; Foot-Wear Pdts</td>
<td>415</td>
<td>20276</td>
<td>13613.451, 31.84%</td>
</tr>
<tr>
<td>Industry</td>
<td>Establishments</td>
<td>Employment</td>
<td>Establishments</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Wood, Wood products and Cork</td>
<td>84</td>
<td>1498</td>
<td>575,304</td>
</tr>
<tr>
<td></td>
<td>4.91%</td>
<td>2.21%</td>
<td></td>
</tr>
<tr>
<td>Paper, Paper Products and Printing Press</td>
<td>42</td>
<td>2160</td>
<td>1143.874</td>
</tr>
<tr>
<td></td>
<td>2.45%</td>
<td>3.18%</td>
<td></td>
</tr>
<tr>
<td>Chemicals, Petroleum, Rubber and Plastic Products</td>
<td>289</td>
<td>1080.2</td>
<td>5691.604</td>
</tr>
<tr>
<td></td>
<td>16.88%</td>
<td>15.93%</td>
<td></td>
</tr>
<tr>
<td>Mineral Products</td>
<td>226</td>
<td>6774</td>
<td>10997.226</td>
</tr>
<tr>
<td></td>
<td>13.20%</td>
<td>9.99%</td>
<td></td>
</tr>
<tr>
<td>Metal &amp; Metal Products, Electric &amp; Electronic Goods</td>
<td>170</td>
<td>8604</td>
<td>4950.463</td>
</tr>
<tr>
<td></td>
<td>9.99%</td>
<td>12.68%</td>
<td></td>
</tr>
<tr>
<td>Other Manufacturing Industries</td>
<td>24</td>
<td>727</td>
<td>269.954</td>
</tr>
<tr>
<td></td>
<td>1.40%</td>
<td>1.07%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1710</strong></td>
<td><strong>67830</strong></td>
<td><strong>42753.371</strong></td>
</tr>
</tbody>
</table>

**Distribution of N-WFP Establishment by Employment Size (1998)**

<table>
<thead>
<tr>
<th>Employment Size (Persons)</th>
<th>Establishments</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nos</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>163,964</td>
<td>65.9</td>
</tr>
<tr>
<td>2-4</td>
<td>70,197</td>
<td>28.2</td>
</tr>
<tr>
<td>5-9</td>
<td>8,974</td>
<td>3.6</td>
</tr>
<tr>
<td>10-19</td>
<td>3,156</td>
<td>1.3</td>
</tr>
<tr>
<td>20-49</td>
<td>1,781</td>
<td>0.7</td>
</tr>
<tr>
<td>50-99</td>
<td>407</td>
<td>0.2</td>
</tr>
<tr>
<td>100-199</td>
<td>187</td>
<td>0.1</td>
</tr>
<tr>
<td>200-499</td>
<td>103</td>
<td>0.0</td>
</tr>
</tbody>
</table>

200
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Count</th>
<th>%</th>
<th>Unit Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-999</td>
<td>34</td>
<td>0.0</td>
<td>22,144</td>
<td>3.6</td>
</tr>
<tr>
<td>1000 &amp; more</td>
<td>16</td>
<td>0.0</td>
<td>31,328</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>248,819</td>
<td>100</td>
<td>623,644</td>
<td>100</td>
</tr>
</tbody>
</table>

The spatial distribution of economic activity in the Province is un-even. With the district of Peshawar accounting for nearly 30.2 percent i.e. 6,090 units from 20,151 manufacturing units located within the administrative jurisdiction of the district of Peshawar. This is symbiotic of the existence of a relatively well-developed market. The infrastructure, in the form of availability of services like finance and insurance etc, account for 38.8 per cent of the total available for the whole province. Likewise transport and communication account for 18.2 per cent; electricity, gas and water for 33.8 per cent and the important community and personal services account for 25.5 per cent of the total available in the province. The district of Peshawar has the highest rate of employment in the manufacturing sector, accounting for nearly 40.6 per cent of the total\textsuperscript{13}.

**Area and Population**

The total population of the province stands at 11061000 persons according to the 1981 census. The estimates for the period 1992 - 93 show the population to have increased to 16286000. This is 13.1 and 13.5 per cent of the total population of the country. The total area of the province is 74521 sq kms that is 9.4 per cent of the total of 796095 sq kms for the entire country. Urban population of the province at 15.1 percent again is significantly lower than the national average that is 28.9 percent. This further shows that close to 85 percent of the people of the province are located in rural areas\textsuperscript{14}. 

201
Institutional Obstacles

Institutional obstacles have also been regarded as major stumbling blocks to N-WFP's industrial development. Official committee reports, consultants' studies, views expressed in the private interviews and press releases have frequently focused on a set of issues relating to public institutions. Overlapping or conflicting authorities in specific areas of the public sector operations have been hindering industrial development. In the wood industry, the operational problems experienced since inception by the huge Dir complex are reportedly compounded by the lack of coordination between the Complex's management and the Forests' management.15

In the mineral industry, there is a multiplicity of authorities involved in planning and development, and coordination is not their hallmark, these are:

- Pakistan Mineral Development Corporation
- Directorate of Mineral Development, Government of NWFP
- Sarhad Development Authority
- Mineral Coordination Board, Ministry of Planning and Development
- FATA Development Corporation
- State Enterprises (GEMCORP, Swat Ceramics, etc.)
- Pakistan Industrial Development Corporation
- Pakistan Geological Survey
- Inadequate database for economic analysis

Overall, the database required for planning or analyzing business activities is simply not there. Basic economic data relating to production, employment, trade flows or consumption pattern, are scarce, contradictory or not existent. Even source documents such as the returns from the Census of manufacturing Industries have not been accurate, or properly gathered and compiled. Official data prepared by different government
organizations often conflict, not only between organizations but also for the same organization over time. Data on the informal sector are not reported and no concerted effort has been made to quantify or focus on the effects it has on developing the local production base. Professional statistics do not seem to exist, and the private sector is generally reluctant to disclose activity levels, costs or profits. With this background, planning has been inadequate and faulty resulting in many failures in the public sector.

In addition the following factors have been responsible for N-WFP’s tardy growth:

-Negative economic impact of government policies

-Failure of public sector enterprises to spawn off economic activity

-Non-involvement of private sector in decision bearing upon their initiative

It is quite understandable that such issues are sensitive, since they are primarily concerned with government responsibilities, public sector activities and political decision-making. They also are not peculiar to N-WFP, except possibly for specific examples of authority overlap or poor planning. Furthermore business economics had been rendered uncertain by frequent variability in past government policies. Protection measures affect the industry in many ways, these include:

-Tariffs, duties and quotas

-price regulations

-special incentives/exemptions etc

Changes in such measures will modify the business equation and, when unexpected and drastic, such changes tend to provoke some negative reactions in the business community. Smuggling is pervasive and undermines the viability of regular enterprises
e.g. silk mills, tires, consumer goods, automotive parts, electronics, etc). If entrepreneurs are not convinced that effective curbs are or can be, introduced, they will not touch many of these businesses. Overall, general uncertainty in the ‘rules of the game’ set by the government had made capital shy, as entrepreneurs felt that a profitable business opportunity today could be a disaster tomorrow\textsuperscript{17}.

In conclusion, the difficulties of the economic environment have been compounded by several institutional hurdles, while these have been pointed out time and again. The major way to develop the province has been perceived to be by way of obtaining ‘incentives’ from the government. The local establishment and the people have wished for all sorts of ‘incentives’. These include:

- Fiscal relief by reducing or waiving all types of taxes (octroi, export tax, provincial tax, import charges, iqr, central excise tax, etc.)
- Extension of existing tax breaks (tax holidays, exemption from tax on capital gains on the sale of fixed assets, duty free schemes etc.)
- Concessional rates (energy, freight, interest rates, special export rebates, etc.)
- Specific protection (quotas, monopoly status, captive GOP markets, limits of overall national capacity, etc.).
Notes

1 N-WFP Development Statistics, 1995
2 Ibid., pp. 35-46.
3 For details see, "Identification of Industrial Potential in the North West Frontier Province," Department of Economics, University of Peshawar, 1992. The project was funded by the Pakistan Banking Council.
4 Sarwar Khan Mohmand, President, Interview by author, hand writing, Peshawar, May 7, 2002.
8 The data given in this table is based on the survey and field work specifically undertaken for this study.
9 Facts and figures given here are based on the records of the Federal Bureau of Statistics and the Sarhad Chambers of Commerce and Industry. I thank the officials of these two establishments for their cooperation and for allowing me to take down all this information. Some of the numbers may vary in this report from the ones I have given in my work as this work was completed in 1992.
10 As above.
11 As above.
12 As above.
Chapter VI

Socio-Economic Characteristics of Central Asian Republics (CARs)

This chapter primarily discusses the broad parameters of the pre-reform setting in the Central Asian states, including demographic features and natural resource endowments, and their possible impact on the approaches to reform. The chapter also reviewed the growth experiences of the Central Asian states during transition and finds that, apart from the predictable disruptions associated with transition and special factors such as civil strife and growth performance was influenced by success in achieving economic stabilization as well as by the scope and pace of structural reforms\(^1\). Fiscal adjustment policies and the role of the public sector were examined, underscoring the desirability of further curtailing state involvement in these economies and of strengthening the quality of fiscal reforms. The experiences of the Central Asian states were also traced with regard to monetary policy reforms and stabilization since the introduction of their national currencies, focusing on the choice between monetary and exchange rate-based stabilization programs.

At the outset of their transition to a market economy, the social and economic indicators in the Central Asian states of the former Soviet Union--Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan--generally fell short of the standards of the region as a whole\(^2\). Notably, per capita incomes ranged from just over 50 percent (Tajikistan) to about 90 percent (Kazakhstan) of the Soviet Union average,\(^3\) while social indicators, such as life expectancy, infant mortality, health facilities, and housing conditions, were considerably worse in most cases. All five Central Asian states—landlocked and distant from world markets—depended heavily on an intricate Soviet
system of trade routes and energy pipelines for essential input supplies and exports. Rich agricultural, mineral, and fuel resources of the region, however, made them a potentially attractive outlet for foreign investors. Following a long period of isolation and catering to the needs of the Soviet Union, these countries faced the tough challenge of how to exploit more effectively their natural resources to improve living standards, while simultaneously introducing the systemic changes needed to achieve a market framework and to integrate their economies with the rest of the world.\textsuperscript{4}

The Central Asian states have gone part of the way toward meeting this challenge since their independence at the beginning of the decade. There is visible evidence of progress by all five countries toward decentralizing their economies, expanding international links, and intensifying efforts to diversify and increase production and trade. Comparisons with other transforming economies inside and outside of the region, however, indicate that considerable ground still needs to be covered in a number of areas.\textsuperscript{5} Notably, the private sector's share constitutes less than one-half of economic activity in most of the Central Asian states, and banking systems (except in the Kyrgyz Republic) continue to be heavily state controlled, while per capita foreign direct investment into the region (except for Kazakhstan) remains relatively low. Also, a set of transition indicators, developed by the European Bank for Reconstruction and Development (EBRD) to measure progress with privatization, enterprise restructuring, price, trade, and financial sector reforms in transition economies, indicates a mixed performance by the Central Asian states, with considerable catching up needed in Tajikistan, Turkmenistan, and Uzbekistan.\textsuperscript{6}

207
The pace and intensity of reforms have varied widely across the countries in the group. While differences in natural resource endowments, economic structures, and sociocultural factors undoubtedly influenced attitudes toward reform, the two fastest reformers—Kazakhstan and the Kyrgyz Republic—were at opposite ends of the spectrum, in many respects, at the outset of transformation, with Kazakhstan having a much richer resource base and a more diversified economic structure. These differences appear to have motivated each country to move in the same direction, by either taking quick advantage of initial relative strengths (as in Kazakhstan) or by striving to overcome initial limitations (as in the Kyrgyz Republic). By contrast, economic reforms in Turkmenistan and Uzbekistan—which fall somewhere in the middle along the spectrum of resource endowments and output diversity—were, for the most part, more sporadic and came in reaction to events rather than in anticipation of them. In Tajikistan, reform efforts were, until recently, constrained by civil conflict.

The initial years of transition were characterized by sharp output declines and erosion in living standards in all the Central Asian states. In addition to severe disruptions to input supplies and traditional lines of production, special circumstances such as civil unrest in Tajikistan and an excessive reliance on traditional trade routes—particularly regional energy pipelines—in Kazakhstan and Turkmenistan constrained export markets and adversely affected growth. The negative impact on growth from structural dislocations was further aggravated by high inflation resulting from price liberalization and the monetization of large fiscal deficits to sustain output and employment, notably following the introduction of national currencies. By converse relationship, however, the
speed with which inflation was reduced and the depth of structural reforms implemented were instrumental in the recoveries that were initiated during 1996–98. There is evidence in the region that steadfast implementation of stabilization policies in the faster reformers produced, with expected lags, a positive output and investment response by boosting confidence in the economies and strengthening the perceptions of the newly emerging private sectors as to the consistency and sustainability of policies.\(^9\)

Success with stabilization, in addition to augmenting domestic savings, helped attract foreign direct investment (Kazakhstan),\(^{10}\) which aided the recovery process and brought in much needed capital and technological expertise. Improvements in factor efficiency associated with the reallocation of resources played an important role in the resumption of growth in some cases (Kazakhstan and the Kyrgyz Republic), but were less apparent in others (Turkmenistan and Uzbekistan).\(^{11}\) Trade liberalization also contributed to growth in the Central Asian states, at first by reinstating steady input supplies and, over time, by improving the efficiency of resource allocation, helping diversification, and ensuring greater transparency in the trade system.

While all the Central Asian countries suffered employment and real income losses during transition, unemployment lagged far behind sharp declines in output. The substantial real wage erosions experienced were partly compensated for by generous consumer subsidies and income from informal market activity, which are not adequately captured in the official statistics. Developments in employment and wages were also influenced by the degree to which countries were willing to restructure their state enterprise sectors. This entailed the imposition of hard budget constraints, notably the
phasing out of budgetary support and directed credits to enterprises. In Turkmenistan, Tajikistan, and Uzbekistan, where such restructuring was delayed, open unemployment rates remained correspondingly low, notwithstanding persistent output contractions. Restructuring delays often reflected inadequacies in the social safety net systems to cope with the associated short-term disruptions to employment. Widespread disguised unemployment provided some protection, but at the expense of preventing reallocation of labor to more productive activities.

Given the loss of traditional revenue sources (particularly transfers from the Soviet budget) at the start of transition, the lack of domestic financing from nonbank sources, and limited access to international capital markets, the Central Asian states were left with little choice but to implement major fiscal structural reforms to meet their stabilization objectives in a sustainable fashion. Moreover, many of the reform measures—including price liberalization and exchange rate devaluation—tended to aggravate the fiscal deficits by raising expenditure more than revenue. While all the countries in the region underwent fiscal adjustment during the period reviewed, reductions in fiscal imbalances were accomplished primarily by stopgap measures. There was heavy reliance on expenditure sequestration and ad hoc revenue measures—particularly in the initial years of transition—and insufficient attention paid to growing payments arrears by governments and state enterprises. Moreover, large quasi-fiscal operations—conducted outside the budget, mainly by the banking sectors—weakened fiscal transparency and management. The adjustments that took place, therefore, represented only the first phase
of a more substantive fiscal reform process, aimed at substantially rebuilding revenue and reprioritizing expenditure.

The Central Asian states, following the introduction of their national currencies, intensified efforts to stabilize their economies and sharply reduce inflation from peak rates of as high as four-digit levels\textsuperscript{14}. The countries were faced with a choice between adopting exchange rate or money-based stabilization programmes. The two main arguments for an exchange rate peg—the instability of money demand during the turbulent transition period and the likelihood of the exchange rate overshooting with money-based stabilization—held sway in the Central Asian countries at the outset of transition. However, the conditions required to make this approach a success (notably restrained fiscal policies and ample international reserves) were mostly absent. Moreover, real shocks, such as sharp terms-of-trade shocks, could not effectively be absorbed if an exchange rate peg was chosen. All five countries, therefore, initially opted for money-based stabilization programs,\textsuperscript{15} with some exchange rate flexibility allowed under-managed floats. Under these programmes, the burden of stabilization fell primarily on fiscal adjustment, which entailed cuts in expenditure (notably real wages, subsidies, and capital outlays) and the tightening of budget constraints on state enterprises. Progress in the latter area varied across countries. Kazakhstan and the Kyrgyz Republic focused attention on state enterprise restructuring early on and eliminated directed credits, while the other countries in the group moved much more slowly.

Despite the absence of an exchange rate peg until mid 1998, considerable disinflation was achieved in all five countries, exchange rates were stabilized or even
appreciated in real terms in some cases, and parallel market premiums were reduced (with the exception of Uzbekistan and, to a lesser extent, Turkmenistan). These moves were accompanied by a liberalization of exchange regimes at varied paces, again, with the faster reformers taking the lead. As stabilization took hold, Kazakhstan was confronted with having to protect its economy from destabilizing effects of surges in capital inflows. Protection entailed striking an appropriate balance between further fiscal tightening, sterilized interventions, and exchange rate appreciation. Most countries in the region, however, have not yet faced such tough policy challenges.\footnote{16}

The financial crisis in Russia in August 1998 considerably altered the external economic environment for the Central Asian states. The crisis had an adverse economic impact on most of these countries, mainly because of declining Russian demand for their exports. Capital flows were also affected as foreign investors reassessed the risks of financing countries in the region and exchange rates came under heavy pressure. These developments brought to the fore the need to improve external debt management, following a period of sizable accumulated foreign liabilities by the countries, mainly to finance investment at a time of low domestic savings. Also, in countering the impact of the Russian crisis, the Central Asian states were faced with the challenge of resisting the temptation to reverse the exchange and trade liberalization policies already under way\footnote{17}. Turkmenistan and Uzbekistan were less successful in meeting this challenge and intensified exchange controls. Other countries combined restrained financial policies with intervention in the exchange market to ward off the pressures on their economies in the aftermath of the Russian crisis.
Progress with structural reforms was mixed among the Central Asian states. All of the countries were relatively quick to initiate price liberalization, although their subsequent paces varied and there were instances of temporary reversals, primarily to guard against social unrest. In almost all instances, controlled prices were maintained for essential foodstuffs, energy, public transportation, and utilities. State enterprise restructuring proved particularly difficult, given the magnitude of the task and the reluctance of the authorities to face disruptions to production and the provision of social services by enterprises. Considerable progress was made in Kazakhstan and the Kyrgyz Republic, though, in initiating restructuring programmes and in building the needed institutional frameworks. All countries experienced large domestic payments arrears in their state enterprise sectors, which partly mirrored the phasing out of the traditional sources of finance, such as directed credits, to this still dominant sector.

Privatization also proved to be a daunting task, although the faster reformers progressed considerably beyond the first stage of small enterprise privatization to mass privatization of medium and large-scale enterprises. Encouraging progress was also made in initiating the privatization of agriculture through land-lease programmes and the phasing out of state orders, although privatization of agricultural services fell behind. Legal and regulatory reforms, on the other hand, proceeded in piecemeal fashion, with only Kazakhstan and, more notably, the Kyrgyz Republic undertaking more in-depth reforms of their civil codes. All five countries passed bankruptcy laws at the outset of transition to liquidate persistently loss-making enterprises, although these laws were not rigorously implemented. They also enacted a series of laws to level the playing field for
small and large enterprises and to promote competition. Nevertheless, much remains to be accomplished in these countries to achieve a simple and transparent regulatory framework that is fairly enforced.

Recently, the Central Asian states have focused increasingly on reforming their financial systems (both bank and nonbank) as an integral part of their stabilization and reform programmes. Banks have not yet been transformed fully from administrators of financial flows to effective intermediaries between savers and investors, so that, again, more progress needs to be made in this area in the next stage of reforms. Also, nonbank financial systems need to be captured in adjustment operations, as is increasingly becoming the case in the Kyrgyz Republic.²¹

Notwithstanding the progress to date, a heavy structural reform agenda remains for the Central Asian states, in order to strengthen their recent stabilization gains and to ensure sustainable and widely shared growth. Deeper and more persistent changes will be needed to improve the quality of fiscal adjustment; rehabilitate or liquidate state enterprises; strengthen banking systems and financial intermediation; restructure pension, health, and education systems; provide more affordable and well-targeted social safety nets; and broaden agricultural and other sectoral reforms. Finally, the scaling back of the still dominant public sectors and the firm integration of these economies into a market framework will require further progress in privatization, as well as continued modification of the extensive regulatory controls already in place. There will also be a growing need to strengthen legal and institutional reforms, as well as to address transparency and governance issues, with a view to limiting opportunities for corruption,
enhancing public accountability, and promoting constructive links between governments and newly emerging private businesses.\textsuperscript{22}
Notes

4 Ibid., p. 46.
5 The degree of openness is difficult to quantify. Havrylyshyn and al-Atrash (1998) conclude that the Kyrgyz Republic and Uzbekistan are significantly more closed and Kazakhstan more open than other economies at similar level of development, but this is based on trade/GDP ratios using purchasing power parity GDP. Using GDP at market prices Kazakhstan is more closed than the other two. Given the large exchange rate fluctuations that have occurred for the Turkmen manat and the Tajik rouble, trade/GDP ratios for these countries are difficult to interpret.
7 The Kyrgyz Republic received the most concessional financing per head from the World Bank and IMF, and by 1996 had the second-highest debt/GDP ratio (43 per cent) of any former Soviet republic. Tajikistan’s debt/GDP ratio was 84 per cent (mainly war-related concession loans from Russia). Turkmenistan (with a debt/GDP ratio of 32 per cent), Kazakhstan (19 per cent) and Uzbekistan (17 percent) acquired most of their debt on commercial terms (Kapur and van der Mensbrugghe, 1997).
8 The CARs are among the former Soviet republics for which progress has been slowest. In both the World Bank’s *Statistical Handbook 1993: States of the Former Soviet Union and the IMF’s Supplement to International Financial Statistics* on the former Soviet Union (published in late 1993), the number of blank entries is exceptionally high for the CARs.
10 Kazakhstan’s 1990 GNP per capita was similar to that of Brazil (the highest in Latin America), higher than that of any African country or any Asian country apart from Japan, the NIEs and Saudi Arabia, but lower than that of almost all European countries (including Russia). The other four CARs, with GNP per capita between $1.130 and $1.690 were bunched with Peru, Thailand, Tunisia, and Turkey in the international rankings.
11 In Uzbekistan, government expenditure as a share of GDP increased from 35 percent in 1987-1989 to 46 percent in 1990 and 55 percent in 1991, mainly because of increasing explicit subsidies (accounting for about a quarter of all expenditures by 1992).
Meanwhile, government revenue as a share of GDP remained more or less stable at 25-28 percent over the period 1987-1991.

12 Within industry employment increased in the energy sector in response to the change in relative prices.

13 The IMF Economic Review 5; Kazakhstan, No. 31, (June 1993), table 29 estimates that the average effective lending rate was 21 percent per year.


16 Aslund (1989, 106) explains the lack of reform in the Central Asian republics by their abundant labor (central planning was relatively efficient at labor absorption, but less efficient when labor was scarce, as in the western USSR) and by their low development level (where quality was less important than meeting basic needs). These explanations do not fit the Chinese experience, where reforms were often started in poorer areas and where labor abundance was universal in the late 1970s. The parallel between the Central Asian republics and China lies in the slow spread of Chinese reform experiments to culturally subdued provinces, such as Tibet and, to a lesser extent, Xinjiang and Inner Mongolia.


18 According to IMF estimates for 1991 and 1992, Kazakhstan was the only former Soviet republic to reduce the government budget deficit as a share of GDP. World Economic Outlook, (May 1993), 59.


21 In July 1993 the IMF announced its first assistance, an $86 million credit to Kazakhstan under the Systemic Transformation Facility. Following the introduction of the tinge in November 1993, with IMF technical support, the International Monetary Fund approved in January 1994 a second drawing under the STF of $85 million plus a standby credit of $170 million available over the next twelve months. Meanwhile World Bank approved a $62 million environmental protection project. The Japanese government announced parallel financing to the IMF loans and the U.S. Environmental Protection Agency backed a $25 million scheme to study the Caspian Sea’s ecology. The IMF estimated (Press Release No. 94/2, January 26, 1994) that these projects brought commitments of financial assistance to Kazakhstan of over a billion dollars, which is a strong endorsement of the government’s policies even if disbursements fall short of this.
total. In January 1994 Kazakhstan became the first CAR to be admitted to the Asian Development Bank, another international seal of approval after the parallel applications of Kazakhstan, Kyrgyzstan, and Uzbekistan had been held up for months.

Chapter VII
Trade Potential with Central Asian Republics

The collapse of the former Soviet Union brought about the need for a change in the economic structures of the Central Asian countries due to a major disruption of previous inter-regional economic ties. Since then the Central Asian states have been trying to diversify their economies and are seeking new partners in regional and economic cooperation. The region is rich in mineral resources like, oil, gas, coal, ferrous and non-ferrous metals, rare minerals and metals, hydro-electric power and irrigation networks, besides being the main producers of cotton, wool, silk etc. Freedom from the policies of the central command economies have provided its people to an opportunity to attach high hopes to the more market oriented economies in order to reap the resulting economic benefits. On the other hand, The Central Asian states are encountering serious problems due to the decline in production, high inflation and low incomes. It is becoming difficult for these states to retain the benefits of socialism, such as mass education, healthcare, housing, cheap public transport, subsidized food, etc. In 1991, subsidies from the USSR to the region amounted to 24 billion rubles. Now the absence of hefty subsidies from Moscow is bound to push large sections of fast growing population in Central Asia below the poverty line, which in turn will only exacerbate social tensions and discontent among the political leadership.¹

The underdeveloped industrial base continues to be the key problem in Central Asia.² Local agricultural produce mainly cotton and mineral resources like gold, silver, chromium etc., will have to be shipped to Russia and other republics of CIS for
processing, till such industries develop in Central Asia. Turkmenistan produces about 85 million cubic meters of gas a year, almost all of which is carried by pipeline to Russia and Ukraine. Another problem is that the indigenous labor force is low skilled, whereas two-thirds of the skilled industrial workers are Slavs. And the exodus of the Russians and Ukrainians from Central Asia is going to adversely affect the industrial sector in the Central Asian states. Conscious of these pitfalls and in an effort to stabilize and transform their economies, the Central Asian states have intensified the process of privatization of the economy and opening foreign investment. Underdeveloped production structure, disruption in previous economic ties and shortage of hard currency has forced these states to look for alternative sources of supply, markets and remunerative prices for their raw materials. Prices of agricultural produce and natural resources have been revised upwards to ensure higher returns for their exports.  

On the other hand, Pakistan has been eyeing for establishing a direct overland link via Afghanistan. It was in May 1992, at the ECO summit meeting held in Ashkabad, that the participating countries agreed to establish trans-Asian rail and road network linking Islamabad, Tehran, Kabul, Istanbul, with terminal at Karachi, Pasni, Gwadar, etc. By 1999, the economic transition from centrally planned economies has already developed its own history and specifics, and the countries of the world, which are undergoing substantial economic changes, have each pursued different paths. The development of market reforms has differed between cases, and has given scholars the basis for major arguments regarding the evaluation of the process.
After declaring independence in 1991, the Central Asian States sought to define the directions in which their economic reforms were to take place, and have made a measure of progress in their strategies. In 1991, the economies of these states displayed the main features from the legacy of the Soviet period in that the particular industrial-agricultural type of the national economies of Central Asia was a part of the whole economic system of the Soviet Union.4

The economic policy of the newly independent Central Asian states was targeted to the creation of new national economies. This has included different aspects of transformation: tight monetary policy, liberalization of foreign economic activity, restructuring of property rights and the development of entrepreneurship. By 1999, these economies achieved different levels of economic development and their economic structures were most dissimilar. Therefore, one may benefit from drawing a comparison the major economic indicators of these states (see map 8.1).

**Emerging Trade Patterns in a Regional Context**

The collapse of the Soviet Union brought with it changes that the Central Asian Republics had not envisaged and could certainly do without. The area was so intricately woven into the Soviet economy that once these states gained independence they immediately realized the gravity of there new found ‘freedom’. The economic structure was centered on the production of raw materials, especially cotton and mineral and energy products, for use in industries elsewhere in the USSR; the main exceptions were the industrial base in Tashkent created after the 1941 German invasion and the grain sector established in northern Kazakhstan by the virgin lands
campaign of the late 1950s, which were also both tied to internal markets of the USSR. Thus, on the eve of independence, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan all had open economies as measured by trade/GDP ratios, but very little of their trade was in world markets\(^5\).

During the period 1991 to 1993, the new independent states created national institutions, including ministries dealing with such areas as foreign policy and international trade that had previously been managed in Moscow, amidst conditions of severe economic disruption. In all five countries, output fell and external transfer payments dwindled, so that average living standards dropped, while economic inequality widened and hyperinflation destroyed the value of financial assets. The transition from sheltered intra-USSR trade to competing under world market conditions was briefly eased by retention of the ruble zone, but that too had disintegrated by the end of 1993. After 1994, the Central Asian countries apart from Turkmenistan succeeded in increasing their export earnings and diversifying their trading partners but it was a difficult process and for the Kyrgyz Republic and Tajikistan Involved low levels of trade (Table 1).

The underlying themes are the contrasting pulls of trying to retain existing ties either within the Commonwealth of Independent States (which in practice means a focus on relations with Russia), or creating regional ties either within Central Asia or within the broader Economic Cooperation Organization which contains the countries southern neighbors, or letting market forces determine trade orientation by pursuing non-discriminatory policies under the aegis of World Trade Organization principles.
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Source: Statistical Committee data, as reported in ECE (1997, 205) and Islamov (1998, Table 4). Note: Figures in the parentheses are the percentage share of the CIS total.

Transition: conceptual and empirical issues

It has been a decade since the academic world started to use the term post-communist transition. The starting point of academic debates and policy makers' discussions was, in the initial stage of transition, its speed. This issue was addressed in
-terms of the choice between "big bang" and gradualism. (Bruno, 1993; Mizsei, 1993, Sachs and Lipton, 1991; Winiecki, 1993)

Developments have shown records of different paths of transition, which include gradualist and shock therapy approaches. What is more interesting is to consider the cases where the path of transition was 'a shock without therapy' (Lavigne, 1999, p. 120). One of the main examples of this phenomenon has been the Russian economy, where "the debate over shock therapy versus gradualism and the discussion of optimal sequencing of reforms is simply uninteresting' (Boone and Fedorov, 1997).

The Central Asian economic transition has been a rare topic in the economic literature (Kalyuzhnova, 1998 a, b and c; Kaser, 1997a; Pomfret, 1995). Nevertheless, important conceptual issues have already been raised by Central Asia's economic development. The Central Asian economies could not follow the rapid approach due to inherited 'regional specifics': a complete absence of previous experience with market institutions, coordination and practice, attitudes of population as well as the challenge of building new national economies and adapting their economic systems, which were not economic systems themselves, to the new requirements of the transition period.

Analyzing the specific examples of these countries it is possible to see that even after several years of transition conceptual approaches have varied in different cases. The set of measures dealing with institutional and microeconomic developments in Kazakhstan allows us to conclude that the country had definitely applied a gradualist policy (Kaser, 1997b, Kalyuzhnova, 1998a). The Kazakhstan reality may be compared to the Russian one, where 'shock but no therapy' to the economy was
prevalent. Perhaps the time has come to give more conceptual clarity to this path of transition, which was implemented in a piecemeal fashion, and thereby to introduce a third transition—'a piece-meal strategy towards transition.'

It is clear that 'many people were under illusions about the results to be expected from the change of system' (Kornai, 1998). There were big disappointments in Central Asia following the first experience with reform. Transition has not been simple for any country in the world—the task has been to save the previous 'positive' economic legacy or these countries, eliminate weaknesses of the economic mechanisms and develop market institutions. In reality, an incentive-conscious rent-seeking approach was introduced, which limited itself to an economic-blueprint for change taking into account the need for political feasibility and an overall enabling environment for economic and social transformation. It is evident and time has demonstrated that the national interests as articulated by any government never expressed the interests of all the people (Kalyuzhnova, 1998c, p. 71). Rather, they either reflect special interest groups or cater to organized groups in order to sustain themselves in power. This tendency was very much developed by the transitional policy makers in various Central Asian countries. The economic reforms were strictly dependent upon the interests of these various economic groups. The outcome of the reforms was put in the context of the rent-seeking inclination of government bureaucracy. Change does not occur on its own. It is a product of social forces, interest group pressures and political realities. Economic change in transition is a product of governmental actions in the formal sense of eliminating economic weaknesses; the
actual outcome, however, could be quite different from the intended one. Negative
tendencies might be increased and a coherent socialist system may reach the point of
disequilibria, or indeed chaos, which the government may not be able to handle.

The experience of transformation shows, therefore, that clearly there is a third
path of transition. This third path may be referred to as an ‘incentive conscious rent-
seeking approach.’ This approach constitutes the pursuit of reform in a piecemeal
strategy that takes into account political feasibility and the rent-seeking tendencies of
the governmental elite.

TRANSITION TO NEW NATIONAL ECONOMIES

Economic Reforms

By 1993, the Kazakh and Uzbek economies were widely perceived to be in
crisis. As a result, these governments were forced to develop anti-crisis reforms. The
‘Program of Urgent Anti-Crisis Measures and the Promotion of Socio-Economic
Reforms’ (1993) was the first attempt to construct a Kazakhstan-specific method of
transition. The programme proposed a strong decrease in credit as well as a large
reduction in budget expenditures. The document's details were mainly concerned with
analysis of the economic situation as well as the main goals and programme’s steps in
reforms, plans of major changes of different sectors of the economy including such
measures as privatization, antimonopoly policy and so on. Unfortunately, the aim of
the programme was unclear from the actual text, and presumably the Kazakh
government had just started to take into consideration the main requirements of
international economic organizations in general and the IMF in particular. Therefore,
following this 'international inspiration', the first step (in 1993) was announced as a period of reduction of inflation, halting of the decline in the production sphere, and changing the composition of the ownership structure. The second step (in 1994) included priorities in institutional transformation, and the development of market structures. The concluding period (in 1995) of the market transformation was meant to be a step towards the creation of the regulatory mechanism of a market economy.

The Uzbek path of transition remains debatable. Much Western opinion holds that Uzbekistan's gradual approach in fact is not moving towards a market economy. Uzbekistan has received a lot of criticism regarding the speed of reform. After independence, the Uzbek authorities announced adherence to the principle of a 'social market-orientated economy' based on self-sufficiency. President Karimov formulated five principles for a model of economic transition which were to reflect the specific national mentality and express the 'Eastern' pattern of economic development:

- Karimov announced the de-ideologization of economic relations to place economic priorities over political. This sought to guarantee the impossibility of nationalization and confiscation of investors' property through political motivations.

- The president defined the state as the main architect and guarantor of reforms. In reality, this has meant that the regime of Karimov and his circle have held the right to define the leading priorities of the economic and political development of the country.

- Karimov stressed the need for the rule of law. This principle declared obligations for everybody without exception to adhere to constitutional and legislative acts.

However, in modern Uzbekistan, this principle has acquired selective dimensions. For
a number of people, the rule of law is only window-dressing which little connection to reality.

- Emphasis was placed on a strong social policy. Similar to the previous principle this has acquired certain selectivity in modern Uzbekistan.

- Finally, President Karimov announced a gradualist approach in the methods of reform.6

It is not possible to isolate particular anti-crisis measures by the government of Uzbekistan from those articulated in the various books by President Karimov such as Don't Knock Down the Old House Before You Have Built The New One, Along the Road of Deepening Reform, and Uzbekistan on the threshold of the Twenty-first Century (Karimov, 1991, 1995, 1997). In these books, the president defined several priorities that Uzbekistan's economy has followed. In particular, the president emphasized the development of the oil and gas industry, the electro-energy sector, the metallurgical complex, machine-building complex, gas-chemical complex, the manufacturing industry (wool and cotton processing, introduction of new types of products, light processing and production of shoes and new types of domestic appliances) and the agricultural food-processing industry.

This blueprint by President Karimov is an approach to economic reform which is diametrically different to that taken by the Kazakh authorities. While the Uzbek programmatic conception is clear, it is nonetheless difficult to picture a scenario where it can be implemented successfully within a visible time-frame needed by Uzbekistan. The inability of Kazakhstan and Uzbekistan to lead their own monetary policy (at the
beginning of 1990s, these countries remained in the ruble zone) meant that the Kazakh and Uzbek economies could not operate in isolation from other former Soviet Republics. The monetary policy of Kazakhstan and Uzbekistan was formulated with the participation of other members of the ruble zone/especially Russia. Kazakhstan and Uzbekistan were faced with a lack of cash and also inter-enterprise arrears due to attempts by their National Banks to maintain control over the volume of credit of the government. It is self-evident that Kazakhstan and Uzbekistan could not expect to escape the inflation, which took place in all the newly independent states. The strong monetary dependence of Kazakhstan and Uzbekistan upon the Russian ruble as well as the constant attempts by Russia to push other participants from the ruble zone made the financial situation for these countries untenable. The fact was that Kazakhstan and Uzbekistan were already independent states, but at the same time until November 1993 (the date of the introduction of the new Kazakhstan! Currency—Tenge) and July 1994 (the date of the introduction of the new Uzbek currency—Som) the single monetary zone did not allow Kazakhstan and Uzbekistan to conduct their own economic policies. The devaluation of the new national currency began very soon after its introduction.

The economic crisis grew worse in 1994, characterized by hyperinflation and a further collapse in output in the industrial and other sectors of the Kazakh and Uzbek economies. The governments were required to create coherent economic strategies that would be able to prevent economic turmoil. The problem with all of the Kazakhstan’s anti-crisis programmes was the unclear economic position taken by the government as
well as the absence of concrete aims for reform. The economic transition in Kazakhstan had, of course, 'objective' difficulties (such as interdependence with other CIS countries, the economic structure of the dominant sector of raw materials' extraction). Nevertheless, the 'subjective' problems (such as the lack of competence within the government bureaucracy, clumsy composition of the anti-crisis programmes, and a lack of realistic plans for the economic transformation) played a more negative role in the economic development of the new country.

In 1994, the government of Uzbekistan was probably the last government in the former Soviet Union to introduce a programme of economic reform. The main feature of this programme was its emphasis on gradualism. Its main concept has been the minimization of economic and social discontent during the transition to the market-oriented system. In fact, considerable progress was made under the programme in reducing the fiscal deficit, bringing down inflation, and re-establishing growth.

National Policies

In the early 1990s, the top priority for the new independent states was to try to maintain existing trade links in order to retain security of input supplies and of markets. A major problem was in ensuring payment. Within the ruble zone in 1992 to 1993, inter-enterprise debts accumulated on paper without being settled, and even after the adoption of national currencies during 1993 inter-enterprise arrears, continued to be a problem. By the end of 1993, all the Soviet successor states except Tajikistan had national currencies and, although inter-enterprise arrears continued to build up, they could now be treated as hard debts rather than part of firms' soft budget constraints.
Initially national trade policies typically involved the introduction of export
taxes, primarily as a revenue measure when a few key commodities (e.g. oil, minerals
or cotton)\(^8\) offered the easiest tax base. By the mid 1990s the export taxes had largely
been phased out as other tax sources were developed and the costs of export taxes
were recognized. Some indirect export taxes, implemented via compulsory marketing
channels still remain, of which Uzbekistan's treatment of cotton is the most important
(Pomfret, 2000), but they are intended to be eliminated.

Import duties are generally low and with a low variance. What proportion of
legislated duty is actually collected is unclear. Apart from the bulk deals for major
commodities much trade within the CIS remains unmonitored, as is the substantial
activity of shuttle traders operating between Central Asia and cities in the Gulf, China,
India, Pakistan or Southeast Asia. The pace at which transparent liberal trade policies
are being established varies from country to country. The Kyrgyz Republic,
Kazakhstan and Uzbekistan have all applied for membership in the World Trade
Organization (WTO) and have accepted IMF Article VIII commitments guaranteeing
full current account convertibility and non-discriminatory currency arrangements. The
Kyrgyz Republic has, however, been the most successful in actually implementing
such a trade regime, and in July 1998 became the first of the Central Asian countries
to accede to the WTO. Kazakhstan has legislated liberal trade policies, but there are
more frequent reports of poor implementation than from the Kyrgyz Republic.
Uzbekistan has had a significantly less liberal trade policy than the other two, and
moreover that policy has been undermined since the second half of 1996 by the
reintroduction of strict exchange controls, which contradict the Article VII commitment. In Turkmenistan also, trade policy has been largely nugatory because tight administrative controls over foreign exchange are the real constraint on traders' activities. Turkmenistan and Tajikistan were the only former Soviet republics not to have applied for WTO membership (Michalopoulos, 1998). Tajikistan's stance has been difficult to establish because liberalization episodes have been disrupted by political uncertainty and intermittent civil war.  

All five countries are members of the CIS, but have differing views towards that organization. They have also participated in several intra-CIS bilateral agreements. Kazakhstan and the Kyrgyz Republic are, with Russia and Belarus, members of a customs union set out in a March 1996 treaty but not yet functioning. Although all five countries are concerned about supranational bodies (which are likely to be dominated by Russia), Kazakhstan and the Kyrgyz Republic have been more ready to consider preferential relations within the CIS than Uzbekistan or Turkmenistan, which have both explicitly, opposed a CIS customs union. Tajikistan has resided in a contradictory position as a major recipient of Russian military aid, but also most distant from Russia; Tajikistan has involved itself most actively in CIS arrangements (Webber, 1997, pp. 26-7), but intra-CIS trade relations have diminished in relative importance.

The other regional trading arrangement involving the Central Asian countries is the Economic Cooperation Organization (ECO), which included all the non-Arab Islamic countries of western and Central Asia (Pomfret, 1997). The three original
ECO members, Iran, Pakistan and Turkey signed a protocol on preferential tariffs in 1991. After the 1992 enlargement of ECO to include Afghanistan, Azerbaijan and the five Central Asian countries, all ten members should have introduced preferential tariffs, although in practice this failed to happen and even the original members' preferences were trivial. ECO has continued to function and provide a useful discussion forum, but its practical impact has been limited. Even on measures such as reaching a transit agreement there has been discord, with Uzbekistan refusing to cooperate. At the 1996 ECO summit in Ashkhabad, Uzbekistan took the opportunity to defend the USA and attack Iran, and again at the 1998 summit in Almaty, Uzbekistan refused to sign a much watered down transit agreement.

Trade Patterns

Given the pre-existing specialization in primary products, the national development strategies have been outward-oriented. Although there have been measures to encourage greater food and energy self-sufficiency, to protect domestic industries and to tax exports, trade policies have generally been liberal with low formal trade barriers and the economies have remained open. Trade performance has, however, been mixed. Some countries enjoyed reasonable export growth in the mid 1990s, but trade patterns have changed slowly, as has the ability to find new export markets. Only by 1996 did the share of trade going outside the former USSR exceed half (ECE, 1997, 179).

The main reason that the economies were so open in Soviet times and have remained open is their commodity specialization. Turkmenistan's exports have been
dominated by natural gas and cotton, Uzbekistan's by cotton and gold, Kazakhstan by oil, minerals and grain, and Tajikistan's by aluminum and cotton. Tajikistan and the Kyrgyz Republic have been the least favored in this respect, but they have been the biggest-beneficiaries of capital flows, which have enabled them to purchase imports beyond their export earnings. A consequence of the concentration of exports in limited commodity bundles has been that, in view of the volatility of primary product prices, the value of exports (and of the composition and destinations) can fluctuate substantially. For example, cotton prices were buoyant in the early 1990s but fell substantially between July 1995 and July 1996, while oil and grain prices were stronger in 1996 than they had been earlier in the decade - although they subsequently dropped sharply.

Kazakhstan's exports in 1997 amounted to $6.8 billion and imports to $7.2 billion, although the latter is an approximation given the prevalence of unrecorded imports. Four-fifths of exports consisted of a limited number of primary products: 33 per cent were fuel and oil products, 15 per cent ferrous metals, 11 per cent copper and copper products, 8 per cent grain, 6 per cent inorganic chemicals, 4 per cent ores, slag and cinders, and 3 per cent zinc and zinc products. Apart from the already mentioned oil exports, other products are directed to Russia as part of long-established vertical integration; thus coal goes from the Karaganda mines to Russian power stations. Diversification of destinations has been slow, but by 1997 the share of Kazakhstan's exports going to CIS destinations had fallen to 45 per cent; 27 per cent went to the
European Union and 28 per cent to the rest of the world, with China (7 per cent) and Switzerland (5 per cent) as the main destinations.

On the import side, Kazakhstan has remained heavily dependent on CIS suppliers, from which 54 per cent of imports came in 1997, with 46 per cent of total imports coming from Russia. The EU supplied 22 per cent of imports, the USA 5 per cent, Turkey 4 per cent and South Korea 3 per cent. The most dramatic shift in import shares has concerned China, which dominated non-CIS sources in 1992, but then quickly declined into a minor supplier.

Uzbekistan's exports amounted to $4.4 billion in 1997, of which cotton accounted for 36 per cent and energy products 12 per cent (up from 6 per cent in 1996). The main destinations were the CIS (34 per cent), followed by Switzerland (10 per cent) South Korea (7 per cent), the United Kingdom (6 per cent) and Italy 4 per cent; less than 1 per cent of exports went to the USA in 1997, down from 7 per cent in 1996. Uzbekistan's imports in 1997 amounted to $4.5 billion, of which 28 per cent came from the CIS. The other leading source countries were South Korea (19 per cent - up from 7 per cent in 1996, mainly as a result of Daewoo's construction and operation of a car factory), Germany 10 per cent, the USA 8 per cent, and Turkey 7 per cent. The major changes in the composition of imports since independence have been the declining shares of food and energy products, with food accounting for less than a fifth of imports in 1997 and energy products less than one per cent.

Uzbekistan was expected to fare less well from the shift to world prices than Kazakhstan or Turkmenistan (Tarr, 1994), but in practice its trade performance was
not bad in the years following independence. Its two main exports, cotton and gold, benefited from buoyant world prices, and they were not dependent on traditional destinations. Already in 1993, half of Uzbekistan's cotton exports were going outside the CIS, despite protests from Russian cotton mill managers, and by 1996, 92 per cent of Uzbekistan's cotton was going outside the CIS. Information on gold exports is unavailable, but gold is easily transportable to destinations where the world price can be obtained. At the same time, domestic production of major import items for which the shift to world prices would be adverse for Uzbekistan could be increased, and energy imports became negligible (from $656 million in 1993) and grain imports were reduced. The strategy was upset in 1996 when depressed cotton prices led to a large balance of payments deficit, which was met by the re-imposition of draconian exchange controls in the second half of the year. In 1997, the balance of payments situation was much better, but there are substantial resource misallocation costs from the current foreign exchange regime. The push for self-sufficiency in grain may have long-term costs if land is being converted from cotton production to grain at too great a rate, although true social costs are difficult to evaluate as long as domestic farm gate prices for the two crops remain distorted and important inputs such as water are provided free instead of at prices reflecting their social cost (Pomfret, 2000). Finally, providing cotton to domestic mills at subsidized prices increases self-sufficiency almost certainly at a substantial social cost.

Turkmenistan's exports have been heavily concentrated in natural gas (60 per cent of the total in 1996), cotton (19 per cent) and oil products (12 per cent). The
pipeline network to traditional customers within the CIS directs most of the natural gas exports, and Turkmenistan has experienced difficulties realizing world prices or even obtaining full payment at negotiated prices. Most cotton and oil exports now go to non-CIS markets. In 1996, Turkmenistan’s main export markets were Russia ($1056 million), Switzerland ($110m), Hong Kong ($104m), Turkey ($79m), Kazakhstan ($54m), USA ($43m) and UK ($41m), which together accounted for seven-eighths of the total — although this may be misleading because exports to Russia include gas destined for eventual delivery to Ukraine, Georgia, Armenia and Azerbaijan and some of the other listed destinations may not be the end-users. The commodity structure of imports was more diversified as was the distribution of source countries, with the main countries in 1996 being the USA ($395m), Ukraine ($266m), Turkey ($200m), Russia ($155m), Cyprus ($59m), Germany ($51m) and Iran ($45m). The deficit on services trade declined from $428 million in 1995 to $120 million in 1996, reflecting different treatment of gas transit fees (starting in 1996 gas exports are recorded f.o.b.) and transit fees starting to accrue from the rail connection to Iran which opened in May 1996; revenue from Turkmenistan’s transit role can be expected to increase in the coming years.

Tajikistan’s export volume remained fairly flat from 1993 to 1996, although total value and composition have changed substantially as relative prices for the main products have been volatile. The main exports are aluminum ($263 million in 1996), cotton ($157m) and electricity ($175m), which together accounted for over three-quarters of the 1996 total, but in 1993, the respective shares had been 50 per cent, 26
per cent and 7 per cent, compared to 34 per cent, 20 per cent and 23 per cent in 1996. Is
Imports are connected to exports, with aluminum accounting for 22 per cent of 1995
imports and 14 per cent in 1996, and electricity becoming more important in both
The direction of trade data for Tajikistan has been especially problematic because the
largest import and export items (alumina and aluminum) are reported from and to the
country where the trade took place (mainly in Eastern Europe), rather than the ultimate
provenance or destination. Thus, 50 per cent of 1996 exports were recorded as going
to Europe and 37 per cent of imports as coming from Europe. Within the CIS,
Uzbekistan is the largest trading partner with a quarter of both exports and imports,
mainly associated with the electricity trade.11

The Kyrgyz Republic had the poorest export potential in 1992. Exports have
remained the lowest among the five Central Asian countries, and the trade deficit
mushroomed in 1996, largely due to imports associated with the country's one large
foreign investment project, the Kumtor gold mine, whose exports began in 1997. In
1996, Kyrgyz imports and exports were more diversified than those of other Central
Asian republics, including net imports of food and energy products even though food
is the largest export item and electricity the fourth largest export. The main export
destinations in 1996 were Russia ($162m), Uzbekistan ($95m), Kazakhstan ($88m),
China ($73m), UK ($26m) and Tajikistan ($17m). The main import sources in 1996
were Russia ($178m), Kazakhstan ($126m), Uzbekistan ($119m), Cuba ($60m),
Turkey ($51m), USA ($45m), Germany ($22m), China ($21m), Canada ($18m), Japan

238
($15m) and Tajikistan ($10m). The Kyrgyz Republic is also believed to be a major producer of narcotics, but the value and destination of these crops are unrecorded.

**Regional Integration or Competition**

The Central Asian states have diversified their trade patterns since independence, but has this been in the direction of greater regional integration? Clearly the orientation of trade towards former Soviet markets has declined, but the new markets since independence have tended to be global rather than regional. To some extent, this conclusion may be affected by the large amount of unrecorded trade across the porous borders of the region, but there is also a large amount of unrecorded trade by those who are traveling outside the region (as well as the unrecorded trade in narcotics), so the net bias from under-reporting is unclear.

Exports to each other by Kazakhstan, the Kyrgyz Republic and Uzbekistan declined from $785 million in 1994 (when the three countries reached a trilateral agreement to form a united economic zone) to $664 million in 1995 and $645 million in 1996, when overall trade by the three countries was growing substantially in dollar terms (ECE, 1997, p. 206). The March 1996 customs union-treaty could have increased Kazakhstan-Kyrgyz Republic trade, but also diverted trade away from other Central Asian partners in favor of Russia and Belarus. There is, however, little evidence of this having happened, as the share of intra-CIS trade in the total trade of Kazakhstan and the Kyrgyz Republic has continued to decline.

Within the wider regional grouping of ECO, there is also little sign of increased regional integration. The importance of Turkey and Iran as trading partners...
of the Central Asian countries has increased since the latter's independence, but has not become a major feature. The physical infrastructure has not been conducive to large increases in intra-ECO trade. As with infra-Central Asian, trade, however, the main reason why intra-ECO trade has not boomed is the similarity of the resource endowments of the three original members and of the five Central Asian economies. Cotton is important for Turkey and especially for Pakistan, for whom cotton and cotton-based manufacturer account for about three-fifths of merchandise exports. Energy products dominate Iran's exports. Turkey and to a lesser extent Pakistan and Iran have more diversified manufacturing sectors which can provide some consumer goods to Central Asia/ but even in these product lines the major suppliers, are outside the region.  

In both the narrower and wider regional settings, political factors have been disruptive as well as constructive. Within Central Asia/ there is an ongoing struggle for regional leadership between the two largest countries, Kazakhstan (which has the largest land area and GDP) and Uzbekistan (with the biggest population, central location and historic urban centers). The regime in Tajikistan has been closely associated with Uzbekistan, as its main regional ally in the civil war, while the Kyrgyz Republic has been closely attached to Kazakhstan. Within ECO, the three original members all see themselves as natural gateways for Central Asian trade and where economies of scale exist, as in pipelines and other infrastructure projects, competition is heightened. For Pakistan being a physical gateway presumes resolution of the Afghan conflict, which has itself been a source of tension between Pakistan (which
supports the Taliban) and Iran (which opposes the Taliban). Turkey and Iran have become involved in competition for the main pipeline route, with Iran offering the least cost option but being opposed by the USA, which favors the Turkish option, and also in competition for the hearts and minds of Central Asia.

Nevertheless, the fundamental reason for the failure to strengthen regional economic ties has been economic. In minor part, it has reflected politically driven attempts to promote self-sufficiency, which obstruct some natural regional specialization such as Uzbekistan’s purchases of wheat from Kazakhstan, but more importantly the economies of the region are similar rather than complementary.¹⁴

Since becoming independent, the five Central Asian countries have diversified their trade patterns away from the former Soviet Union. The process has been slow, due to the tight integration of their economies into the Soviet economy before 1992 and the difficulty of redirecting exports given the inherited infrastructure of pipelines, railways and other transport modes. Only by 1996 did the share of trade going outside the CIS exceed half, but this share can be expected to increase as physical links with southern and eastern neighbors and access to Indian and Pacific Ocean ports improve. The diversification of trade patterns has not been accompanied by regional integration. Despite much talk of united economic zones, freer regional trade or a mini-CIS customs union, implementation has been limited and the impact on trade flows negligible. Likewise, the attempt to promote a regional grouping of all the non-Arab Islamic countries of west and Central Asia has involved more statements of intent than actual regional integration. Within ECO, the summits and other meetings may have
contributed to confidence-building and reduced regional tensions (although even that appears to be debatable in light of the ongoing Afghan conflict), but on practical economic matters, such as simplified transit arrangements, progress has been minimal.

Why has regional integration been so limited in Central Asia in the 1990s? The fundamental reason for the limited degree of regional integration is the narrow export base of the regional economies, with overlapping commodity composition. The natural export markets are outside the region. Similarly, given that comparative advantage lies in a limited range of commodities, the natural suppliers of the broad range of imports reside also outside the region. Integration into the global economy has its drawbacks. The national economies are exposed to new external shocks\(^\text{15}\); of which the most important are price fluctuations for key export commodities. Events like the East Asian crisis of 1997 also had an echo in Central Asia, especially where Korean firms had been active. At the same time, however, localization spreads risks; the Russian currency crisis of 1998, for example, had a far more limited impact on Central Asia (more for Kazakhstan, and less for the other four countries) than it would have done if the Central Asian countries had pursued a more CIS-oriented strategy since independence.

The conclusion that post-independence trade patterns have not increased regional integration is neither to deny the benefits of some infra-regional trade nor to argue against attempts to liberalize intra-regional trade. There are, for example, obvious potential gains from trading electricity through the Central Asian countries' inherited common grid. Trade facilitation through simplification of border procedures
and transit arrangements would be mutually beneficial, as would coordination on regional infrastructure projects. Far more important, however, is multilateral trade liberalization, which allows the Central Asian countries to benefit as much as possible from participation in world markets. The Kyrgyz Republic's accession to the World Trade Organization in July 1998 is likely to be a more significant harbinger of future trade policy developments for the Central Asian countries than the numerous preferential arrangements that have been mooted.

Privatization and Restructuring

The changing of property rights was one of the new elements in Kazakhstan and Uzbek economic policies. Kazakhstan's privatization began in 1991, but during the period of actual privatization, the Kazakh government made a number of substantial and important conceptual errors, which were recently acknowledged by the President (Panorama, N40, 1998). Uzbekistan was probably the last CIS country to adopt a course of privatization. The country has chosen a slow speed of privatization. In fact, this process has been mainly nominal, with its main problem not in its slow pace but its quality. The main problem of Kazakhstan privatization was a lack of distinction between political and economic aspects of this process. One aspect, which caused the failure of privatization, was the political influence that was brought to bear on transforming ownership from state to private hands. Uzbek privatization in fact represented a formality.

State of SSI’s in Kazakhstan
By 1996, the privatization of small-scale enterprises had been completed, and about 94 per cent of all state-owned enterprises had been transferred to private hands. However, the state retained indirect control by means of the share holding of state structures (such as sectoral ministries and state-owned banks) and through the State Property Committee. The role of the state as well as the speed of privatization has often been portrayed as a negative influence on 'efficient corporate governance and enterprise restructuring'. This has not necessarily been the case, and should be considered in the light of the lack of privatization knowledge in Uzbekistan before transition, and an understandable reluctance to 'dive in feet first' in the early stages of transition. Consequently, the role of the state has remained invaluable at this early juncture.

Kazakhstan privatization followed three major phases: housing privatization \((vía\) flat coupons), mass privatization \((vía\) investment privatization coupons) and individual projects privatization.\(^{16}\) The Coupon Mechanism and Privatizing of Housing were introduced in Kazakhstan with the purpose of giving the population an opportunity to own the flats and houses where they were currently living. Coupons were distributed free to the population; according to the formula devised for a citizen who has worked for 21 years; according to the logic of the first privatization programme, the rest of coupons which the population had after purchases of flats and houses where they used to live previously, were supposed to be transferred to the second stage \(mass\ privatization\) (1993-1995). Unfortunately, the programme for the second phase completely omitted the role of flats. Until 1999, the Uzbek government
established two programmes to support newly privatized enterprises. The Uzgosfund is managed by the State Property Committee (SPC) and all privatization proceeds in the first instance go to the SPC, from which 50 per cent is transferred into the Uzgosfund, which will then lend approximately forty per cent of its resources at concessional interest rates to enterprises. The majority of such loans are for one year, but facilities exist for them to be extended to two years.

The Business Fund was created in July 1995 to take part in a wide range of activities, which include trust management, brokering and factoring services, providing credit, providing technical assistance, feasibility studies, and arranging the leasing of foreign equipment. The Business Fund receives 50 per cent of the privatization proceeds and 10 per cent of the Employment Fund receipts. Loans, offered through the offices of an agent commercial bank, have a maximum term of 10 years, with a 2 to 3 year built in grace period, and concessional interest terms (15 to 35 per cent per annum). The aim is to lend to private, small-scale ventures, particularly rural ones, in six sectors (agro-processing, farms, tourism, construction and building materials industry, local industry and services).

The Privatization Funds Scheme was expected to increase the role of external non-state ownership, but privatization had problems with bureaucracy, a shortage of skilled managers, and a low level of competition. This has led to bankruptcies and unemployment. The official figures for unemployment (0.34 per cent in 1997) failed to take into account unpaid leave and short working hours. In late 1996, Uzbekistan
finally launched a mass privatization program for medium-sized enterprises based on the Privatization Funds Scheme.

Sometimes the government of Uzbekistan has displayed a certain lack of clarity on whether or not to change property rights. An example of this was the long-awaited sale of a 40 per cent stake in the Almalyk Mining and Metallurgical Combine, which is Uzbekistan's only copper and silver producer, and its second largest gold producer. The impending sale of the share, valued at approximately $400 million was announced several times prior to the 19 February 1998 announcement of an increase of 11 per cent in the plant's production. At the same time, the government announced that it was delaying the tender, as more time was needed to improve the tender documentation, and re-evaluate the assets of the Combine, previously valued at $1 billion. The decision to postpone the privatization of this plant was probably dictated by the fact that the plant increased production in the last year, which indicates that the state-owned enterprise remains profitable. It is difficult to criticize the government for this decision, as it is debatable whether private ownership of such a huge enterprise will necessarily improve profitability.

There is some evidence that international organizations such as the EBRD and the World Bank have showed concrete interest in speeding up the process of privatization in Uzbekistan. This interest has been expressed monetarily in the announcement in January 1998 of substantial loans to support newly privatized companies. Reuters reported that on 29 January 1998, the World Bank granted a loan of $28 million for the support of post-privatization enterprises, and on 25 February
1998, the EBRD placed $33.5 million (out of a sum total of $40.2 million) into a venture capital fund to support newly privatized companies.

Despite the appearance of such a document as the list of Investment Projects Proposed for Foreign Investors Participation (Uzbekistan-Business Partner, Tashkent, 1996), there remained a lack of coherence and clarity, perhaps even of commitment, on the behalf of the Uzbekistan government towards its precise needs in terms of privatization.

In February 1998, the Uzbek government announced a privatization programme concerning the large industrial and telecommunications companies. Later in the year the Uzbek authorities announced that the privatization of large companies in the oil and gas sectors would be implemented only from the year 2001. Additionally, such sectors of the economy as gold mining, fuel and energy have been exempted from the privatization programme and will remain under state control.

Comparing the privatization strategies in Kazakhstan and Uzbekistan, one can say that the Kazakhstan’s strategy has already failed to achieve the major purpose of ownership transformation (to make sectors of the economy more productive and efficient), while the Uzbek strategy has been characterized by international economic organizations as very slow and inefficient. The question remains open whether an assessment of the results of privatization should be conducted, not on the basis of the number of privatized enterprises or branches, but through the share of the privatized sector in the country's GDP as well as an estimate of the situation in sectoral spectrums.
The decline in output has been constant since 1991 (Figure 8.1). In Kazakhstan, the decline in industrial output was around 60 per cent of the 1991 level, and the recovery was more fragile than for the aggregate output. Uzbekistan has had a smaller reduction, with production declining by 31 per cent.

Between 1992 and 1998, structural changes took place in the Kazakhstan’s economy. Since 1994, 40 per cent of the industrial production has belonged to the electro-energy and fuel industry, because during the decline of the total volume of production from 1991 to 1997 by two and a half times, the decline in the food industry was of the order of five times, light industry declined by eight times, but electro-energy and fuel industry had a decline of only one third. The Kazakh economy was the most industrially developed economy among Central Asian economies prior to transition. The composition of Kazakhstan’s industrial output has changed substantially during the years of transition, with a strong emphasis on the extraction of oil and gas sectors and (in real terms) the virtual disappearance of final manufactured products. The industrial sector in Kazakhstan has become more orientated towards raw materials at the expense of manufactured goods. (Kalyuzhnova, 1998a, 8). By 1999, industry in Kazakhstan is represented by two main export sectors, in oil and semi-processed metals. Industry’s share of GDP declined from 31.2 per cent in 1992 to 20.2 percent in 1997, but industry’s share of employment has remained unchanged since 1991 (21 per cent), due to the decline in aggregate employment. 18

Industrial decline in Uzbekistan was relatively modest, mainly due to the fact that the share of industrial enterprises was small, compared with Kazakhstan. The
Uzbek inheritance from the economic structure of the Soviet Union was less industrially based than that of other CIS countries, and this is reflected in the relatively small decline in industrial output since independence. The production structure has remained relatively unchanged. By 1997, the level of industrial production in Uzbekistan compared with 1990 was 70 per cent. According to the Uzbek State Statistical Agency, in 1996 the production of GDP compared with the previous year was 301.6 per cent. The general volume of industrial production was increased by 106 per cent, which is the greatest value in this indicator throughout the CIS countries. In 1997, industrial production was 104.2 per cent of the previous year. Some sub-sectors have experienced decline due to the governmental policy of shifting the structure of the economy towards a more industrialized structure. One of the reasons for this decline of all industrial enterprises in Kazakhstan and Uzbekistan was the lack of financial resources. In the earlier stage of transition, the share of resources available to state-enterprises was not enough to halt the reduction in investment activity. The reduction in investment activity was dominated by the decline of investment in the state sector of the economy. The share of state investment (sources of republican and local budgets, as well as own sources of state enterprises and joint stock ventures, where the proportion of shares which belong to the state is more than 50 per cent) in the total volume of investment was 34 per cent by 1997.

One of the main reasons for the crisis in the investment sphere was that privatization has not been supported by adequate activity in the distribution of investment resources, and therefore has not affected the property sphere. In spite of
appearances, privatization has not created a system of economic measures that will transform Kazakhstan's economy to a market system. The very complicated development of privatization and imperfections in the stock market make it difficult to evaluate their influence on the general situation of investment activity.

A lack of internal financial sources in Uzbekistan has been accompanied by non-convertibility of the local currency. A dual exchange rate was established in 1996 while the black market was expanded. The economic rationale of this has been to subsidize imports for state owned enterprises and support domestic production. This measure created little incentive for foreign investors to put money in the Uzbek economy. The share of fixed investment in GDP was relatively stable, and even demonstrated some growth from 1992 to 1996. In Kazakhstan, the same indicator was in decline year by year. In 1992, the figure of fixed capital investment was 27.5 per cent of GDP; however in 1996 the same figure dramatically decreased and achieved only 7.5 per cent of GDP.19

A number of international sources such as the Economist Intelligence Unit were disappointed in the results of FDI, stating that data from the IMF reveals that FDI in Uzbekistan has been meager, in contrast to the official figures announced by Uzbekistan. The conclusion drawn by the EIU was that the Uzbek government was attempting to 'pull the wool over potential investors' eyes'. In January 1998, the Uzbek government announced a VAT exemption for equipment and plant imported for priority and foreign-financed projects, with the explicit aim of making FDI more attractive. The Uzbek government was more willing to explore the internal investment

250
opportunities as opposed to rushing towards foreign investment. Local data about total investment in 1997 are of questionable accuracy. State investment is growing and, according to the foreign investment agency, accounted for 53.5 per cent of total investment in 1997.

In times of economic recession, foreign investment is very important in support national investment activity. The share of foreign investment in the Kazakhstan's total investment for 1996 and 1997 was 13 per cent and 26.2 per cent respectively. The imperfections inherent in the legislative base, the lack of a mechanism for choice and realization of investment projects, added to rent-seeking behavior corruption and other disincentives, and constituted the main difficulty in attracting foreign credits. There have been various attempts at legislating foreign investments in Kazakhstan, notably in 1991, 1995 and 1997. The government has tried to attract foreign investors into the industrial sector of the Kazakhstan's economy, but the bureaucracy has represented a major problem for any project, which lacks clear and influential high-level political backing. Foreign companies, which have leased Kazakhstan's enterprises, invariably experienced considerable difficulties.

The economic challenges were exacerbated by the two financial crises in South East Asia and Russia. The first implications of the influence of the South Asian financial crisis were the absence of large investment projects with foreign firm participation in addition to a slowing down of share transaction activities. In 1998, the Kazakhstan's state budget received only 13.5 billion Tenge from privatization. This figure was 3.3 times less than was expected. The various foreign firms that received
management control of enterprises in the raw material sector have not fulfilled the requirements of their agreements, although some have partially addressed these requirements. This was the main reason for breaking contracts in the Pavlodar refinery plant and of enterprises in the phosphor industry in Jambul oblast. The impact of the South East Asian crisis was also seen in Uzbekistan where the strategic investor Daewoo cut the number of working places and general expenses in joint ventures. The financial crisis in the countries of South-East Asia, as well as decline of prices on the world market, has led to decline of enterprise income. Therefore, in the mining industry, a primarily export orientated sector, more than half of the enterprises are experiencing a difficult financial situation.

Banking and Capital Market

The capital markets in the whole of Central Asia remain shallow and extremely inefficient. There is no culture of the capital market in this region. In addition, the governments (particularly Uzbek) feel themselves to be under no compulsion to develop their capital markets financing most of their deficits through foreign borrowing. Similarly FDI is preferred to portfolio investments. The development of the banking sector in Kazakhstan has been quite impressive in comparison with other CIS countries. Over a short time the Central Bank has managed to slow inflation and has tried to supervise the work of commercial banks burdened with indebtedness and in 1997-1998 withdrew licenses from six commercial banks with negative capital. Risk appraisal has proven problematic in a society where risk and capital are novel concepts.
The dominant feature of the Uzbek banking sector has been the state-owned banks. The National Bank of Uzbekistan; People's Bank; Promstroibank; and Pakhta Bank control over 85 per cent of the assets of the banking sector. The remaining 30 commercial banks consisted of small private banks, including some joint ventures, but their activity has been limited due to an inability to operate according to market principles and to have an effect on the enterprise sector which has been catered for solely by larger banks and/or on concessionary terms.

There is a fundamental difference between cash and non-cash money which saps the confidence in the banking system and adversely affects the allocation of resources. What is more, commercial banks often played the role of agents of the state in areas such as enforcing tax, trade and wage regulations. This role is in large part due to the fact that enterprises have to have a single account with a 'house' bank, which is no longer the case for enterprises with foreign participation. Most of the state-owned banks have remained in a precarious financial situation. For example, in 1996, overdue interest and principal was estimated to comprise 12 per cent of the commercial bank's portfolio; realistically, the bad debts problem is much greater. The result was restrictions exercised by the Central Bank of Uzbekistan (CBU) on the lending operations of such banks. In late 1996, 17 banks were under these restrictions, and by mid 1997, the figure stood at 11.

The obstacles for further development of the banking sector have resided in the problem of currency compatibility and the exchange rate regime. The official rate is used mainly for accounting and customs purposes, and for exchanging export receipts
under the obligatory surrender requirement. The auction rate is used for such transactions as those of importers and those with privileged access to foreign exchange (debt payments, imported inputs and investment goods for high priority companies etc).

The policy of the government of Kazakhstan regarding banking activity has become clear, as it abandoned the lax supervisory regime of the recent past and sought to restrict and reduce the total number of banks. Consolidation of banks has become increasingly prevalent, which will allow improvement of financial intermediaries. The National Bank of Kazakhstan has tried to create some measures for stimulating small and medium business, in the form of micro-credits, and credits for agriculture.

Unfortunately, the commercial banks were not ready for the post-privatization process where newly privatized enterprises were looking for funding. The quota of 10 per cent of the credit portfolio to small business, established by the National Bank for commercial banks, was never met. A number of large banks do not invest in the development of small business because they preferred investing in Treasury Bills, even given the low yields. The main argument here is that even failing yields on government securities are far more secure than loans towards a weak and unpredictable sector of the economy.22 Such reluctance by banks to invest in the national economy has damaged the plans of the government aimed at creating a new class of small business proprietors to reduce the long-term effect of the distortion of the economy inherited from the Soviet system. The aim was to dilute the domination of heavy industry and develop final manufacturing products (food, consumer goods
industries etc). There is a state policy aimed at developing new branches of the economy in order to ease growing social tension. It was the hope of the government that reducing unemployment observed during the process of privatization would decrease these tensions.

The introduction of Eurobonds has met with limited success to date. On one hand, the demand on cooperative securities took place from 1995 to early 1997 (before Kazakhstan received a country rating) the main categories of investments were Hedge Funds (usually small funds which accumulate money on risk investments). The security market has been inactive, the causal factors being external problems (world financial crises) and personnel changes in the Kazakhstan government. These factors have had a demoralizing effect upon investors considering Kazakhstan for investment. As a result, share prices have decreased by half and the volume of sales has fallen significantly. Two key reform packages, blue-chip privatization and pension reform have been the driving force behind the capital market development in Kazakhstan.

On paper, Uzbekistan's Republican Stock Exchange has been the deepest in the region, with listings exceeding 400. However, most of the trade is between state agencies and PIFs.

**Agriculture**

Agriculture always played a crucial role in the economic life of both countries. Before transition, Kazakhstan had a strong agricultural sector. The orientation of the agricultural sector was changed after the process of privatization, and agricultural output in 1995 was only 53 per cent of 1990. The cotton crop drove the Uzbek
agricultural sector. Uzbekistan is the world's fourth largest producer of cotton, which represents 50 per cent of all export earnings and 75 per cent of hard currency export earnings. Other crops include wheat, barley, jute, tobacco and vegetables.

The process of farm privatization was extremely subjective in Kazakhstan, because unfortunately the legislative base for this was very weak, and there were no overall strategy or procedures in place when the process began. An interesting factor that emerged after the privatization had taken its course was that the increase in non-state enterprises was inversely proportional to the decrease in livestock. Livestock production was the most important sector in agriculture for Kazakhstan, and the use of this livestock as food in the period since independence left low levels of stock. The main managing principle of agriculture in Uzbekistan has been the administrated system. The gradualist method of reform sought to develop producers' incentives. To pursue such targets, the Uzbek government has implemented some steps including changes of the number of managers (on the level of farms/districts and oblasty) in the agricultural sector after the poor harvest in 1996 and the moderate harvest in 1997. A new technology for the production of cotton under plastic sheeting was introduced on 13 per cent of the cotton area in 1997. It is necessary to point out that the decline in the Uzbek agricultural sector during the transition has been less than in other Central Asian countries.

The official policy in Uzbekistan is to privatize the agricultural sector. For example, around 40 per cent of the country's state farms were on 99-year leases for privatization by the end of 1995. At the same time, there is compulsory state
purchasing, called *goszakaz*. The share of *goszakaz* was reduced from 75 percent (1995) to 50 per cent (1997). The prices, which are guaranteed by the government for *non-goszakaz* purchases, are substantially below world levels. Therefore, the farmers have no incentive to produce more than the figures required by the *goszakaz*. The obstacles here have included also the shortage of machinery and fuel, as well as a prohibition on the private ownership of land.

Financially, the agricultural sector has been in a prolonged state of deterioration. The delays in payments for the procurement of agricultural goods, as well as high inflation, have deprived producers of working capital. The Kazakhstan’s government tried to react to all these difficulties and created the Agriculture Support Fund (ASF). The main target of this was the transformation of agricultural debts to this fund. Agriculture remained in crisis. It is clear that the government needs to put a lot of effort into the restructuring of the agricultural sector. The financial problems have become worse year after year. The share of investment in agriculture decreased from 28 per cent of total investment in 1989 (the year of the most intensive investment) to 2 per cent in 1996-97. The lack of a clear economic policy of using investment, under-estimation of potential investment projects and ill-advised expectations from potential investment led to the point that, at the beginning of the reform in the agricultural sector, there were a number of foreign credits distributed under the governmental guarantees for a number of projects. Finally, these projects became unrealistic due to different circumstances. In some cases, these credits were not used specifically, and they have become a part of the current external debt of the
country. The majority of enterprises have been unable to pay back credits and so they have been paid by the state. Such a situation has damaged the credibility of a Kazakhstan's enterprises as creditors.

Policy Analysis and Potential Lessons

The foremost lesson to be learnt from the analysis of the first decade of economic transition in Kazakhstan and Uzbekistan is that the methods, which these countries chose, for their transformation are different and require detailed academic study. The transition in Kazakhstan (territorially the second largest former Soviet Republic) has remained controversial. As defined in the initial section of this chapter, it is possible to call this path of transition an incentive-conscious rent-seeking approach. Such an approach emerged from the experience of transition on the ground. It included, on the one hand, substantial economic transformation (such as halting inflation, completion of privatization and trade liberalization). On the other hand, it has been characterized by the challenges, which have emerged from the shift of the industrial structure (towards a more raw material basis). The heavy decline in the major economic indicators after transition in Kazakhstan could be explained by the relatively high level of development in the period previous to the market transformation. However, mismanagement and failed attempts to provide a required framework for the implementation of the reform leads us to conclude that Kazakhstan did not gain much from rapid economic changes. There is a danger that the economy might become more dependent on externalities, even divided into economic spheres of influence between neighboring countries.
The Uzbek method of transition has very often been equated with the absence of reforms. In fact, slow reforming changes are taking place in this country, while the bureaucracy and currency regime keep a tight rein on the economy. Observing the time schedule of Uzbek economic changes, it is not difficult to clarify this type of transition as a gradualist approach, which was started with very slow changes in the industrial sector (in contrast China started its gradualist transformation from the agricultural sector), a moderate speed of privatization and substantial state control of the whole economic activity. The decline in GDP and other macroeconomic indicators was relatively small in Uzbekistan compared with other CIS countries. On the one hand, this may be explained by Uzbekistan's low economic development prior to transition. On the other hand, the positive aspect of the Uzbek transition resides in the gains, which the country may receive from the administrative method of management of economic life, avoiding the chaotic destruction and even disappearance of some branches of industry. The transition in Uzbekistan has been planned to span not less than 30 years. We cannot expect any rapid changes and must expect that all the attempts by the international financial organizations will be met by explanations from Uzbek governmental ministers that there are "difficulties in meeting the time frame." It is already clear that Uzbekistan can avoid many mistakes of its neighbors in the reform process. They will never be first in the process, they probably will never be the first to complete it, but they will not be last.

Transition is not an easy process. It is more difficult to evaluate this process in Central Asia, a part of the world where the authoritarian method of management is
considered positive and where the mentality of people is so different from the European. The shadow of the centrally planned economy remains strong in some Central Asian countries, while in others it is already impossible to find any sign of it. Searching for a suitable economic strategy sometimes leads to deeper crisis. Uncertainty and a lack of competence are the main features for the major Central Asian countries. In practice, the incentive-conscious rent-seeking approach has distorted the Kazakh transition.

In conclusion, given all the above factors, the most appropriate and realistic method of transition for Central Asian economies appears to be the gradualist one. Since becoming independent, the five Central Asian countries have diversified their trade patterns away from the former Soviet Union. The process has been slow, due to the tight integration of their economies into the Soviet economy before 1992 and the difficulty of redirecting exports given the inherited infrastructure of pipelines, railways and other transport modes. Only by 1996 did the share of trade going outside the CIS exceed half, but this share can be expected to increase as physical links with southern and eastern neighbors and access to Indian and Pacific Ocean ports improve.

The diversification of trade patterns has not been accompanied by regional integration. Despite much talk of united economic zones, freer regional trade or a mini-CIS customs union, implementation has been limited and the impact on trade flows negligible. Likewise, the attempt to promote a regional grouping of all the non-Arab Islamic countries of west and Central Asia has involved more statements of intent than actual regional integration. Within ECO, the summits and other meetings
may have contributed to confidence-building and reduced regional tensions (although even that appears to be debatable in light of the ongoing Afghan conflict), but on practical economic matters, such as simplified transit arrangements, progress has been minimal.

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The conclusion that post-independence trade patterns have not increased regional integration is neither to deny the benefits of some infra-regional trade nor to argue against attempts to liberalize intra-regional trade. There are, for example, obvious potential gains from trading electricity through the Central Asian countries'
inherited common grid. Trade facilitation through simplification of border procedures and transit arrangements would be mutually beneficial, as would coordination on regional infrastructure projects. Far more important, however, is multilateral trade liberalization, which allows the Central Asian countries to benefit as much as possible from participation in world markets. The Kyrgyz Republic's accession to the World Trade Organization in July 1998 is likely to be a more significant harbinger of future trade policy developments for the Central Asian countries than the numerous preferential arrangements that have been mooted.
Notes

1In April 1992 the IMF published a series of economic surveys of successor states to the Soviet Union, which focused on the current situation (a follow up series of more substantial surveys appeared in 1993).

2The Chapters on Central Asian countries in Europa Publications (1992) contain useful historical synopses.


7Longer term patterns cannot be established for Tajikistan because before the establishment of the national currency in May 1995 almost all trade was with the regime's two major external supporters: in 1994, Russia and Uzbekistan accounted for 95 per cent of imports and 75 per cent of exports (ECE, 1997, p. 205).

8In 1996, the world’s top six producers of seed cotton, cottonseed and cotton lint were the USA with 21.2 million metric tonnes, China 22.6mmt, India 15.4mmt, Pakistan 9.5mmt, Uzbekistan 6.4mmt and Turkey 4.2mmt (Food and Agriculture Organization of the United Nations FAO, Yearbook, Production, Vol. 50, United Nations, Rome, 1997, pp. 116-19 and 182-3). As mentioned earlier in the text, cotton is the second biggest export for both Tajikistan and; it is also important for the Chimgent district of southern Kazakstan.

9Aslund (1989, 106) explains the lack of reform in the Central Asian republics by their abundant labor (central planning was relatively efficient at labor absorption, but less efficient when labor was scarce, as in the western USSR) and by their low development level (where quality was less important than meeting basic needs). These explanations do not fit the Chinese experience, where reforms were often started in poorer areas and where labor abundance was universal in the late 1970s. The parallel between the Central Asian republics and China lies in the slow spread of Chinese reform experiments to culturally subdued provinces, such as Tibet and, to a lesser extent, Xingjian and Inner Mongolia.

10The CARs are among the former Soviet republics for which progress has been slowest. In both the World Bank's Statistical Handbook 1993: States of the Former Soviet Union; and the IMF’s Supplement to International Financial Statistics on the former Soviet Union (published in late 1993), the number of blank entries is exceptionally high for the CARs.
According to IMF estimates for 1991 and 1992, Kazakhstan was the only former Soviet republic to reduce the government budget deficit as a share of GDP. World Economic Outlook, (May 1993), 59.


ECO could also encourage more exports from the three original members to the CARs. In March 1993, for example, Toyota opened a car assembly joint venture in Pakistan, and a senior executive explained in an interview with AsiaWeek (February 24, 193, 61), “We are mainly looking at Iran, the newly independent republics of Central Asia, and Bangladesh”. An important precondition for Pakistan to participate in Central Asian markets however, is resolution of the Afghanistan civil war which disrupts the only road connections between Pakistan and other ECO members.

Of the CARs’ total trade, 85-90 percent was with other Soviet republics, while for the Canadian provinces the (weighted) average share was 44 percent.

The degree of openness is difficult to quantify. Havrylyshyn and al-Atrash (1998) conclude that the Kyrgyz Republic and Uzbekistan are significantly more closed and Kazakhstan more open than other economies at similar level of development, but this is based on trade/GDP ratios using purchasing power parity GDP. Using GDP at market prices Kazakhstan is more closed than the other two. Given the large exchange rate fluctuations that have occurred for the Turkmen manat and the Tajik rouble, trade/GDP ratios for these countries are difficult to interpret.

It does not involve protecting the manufacturing sector to ensure a base for future economic prosperity. All that does is to create an inefficient industrial sector, which will be difficult to reform later – as Argentina, Australia, and New Zealand have discovered in recent decades. The Alberta model of allocating oil revenue to a heritage fund is a better approach, but the outcome depends crucially on how the fund is used.

In 1989 ninety tons of gold were mined in Uzbekistan, about 30 percent of the USSR’s production, but by 1991 this had fallen to seventy tons. Newmont Mining Corporation of the United States signed an agreement in spring 1992 to treat low-grade gold ores at a mine in Muruntau (four hundred kilometers west of Tashkent), and the European Bank for Reconstruction and Development (EBRD) has authorized funding for the project.

Starting in April 1994, 3,500 million-sized enterprises (those employing at least five hundred but fewer than two thousand workers) were to be sold to the IPFs at auctions held every few weeks until July 1995, at which shares in the funds could be traded. Thirty-eight large industrial enterprises (with two the thousand or more employees) were also due to be sold in 1994. The Economist, April 30, 1994.

Kazakhstan’s 1990 GNP per capita was similar to that of Brazil (the highest in Latin America), higher than that of any African country or any Asian country apart from Japan, the NIEs and Saudi Arabia, but lower than that of almost all European
countries (including Russia). The other four CARs, with GNP per capita between $1.130 and $1.690 were bunched with Peru, Thailand, Tunisia, and Turkey in the international rankings.


21 A small number of joint ventures predate the breakup of the USSR, of which the most important involves a South Korean consumer electronics company in Kyrgyzstan. In 1993 some bigger initiatives were reported, especially involving South Korean firms; Daewoo received authorization from the South Korean government in March to invest $100 million in building a car plant in Uzbekistan, which would be the biggest South Korean investment in the CIS (For Eastern Economic Review, May 20, 1993, 56).

22 The Kyrgyz Republic received the most concession financing per head from the World Bank and IMF, and by 1996 had the second-highest debt/GDP ratio (43 per cent) of any former Soviet republic. Tajikistan's debt/GDP ratio was 84 per cent (mainly war-related concession loans from Russia). Turkmenistan (with a debt/GDP ratio of 32 per cent), Kazakhstan (19 per cent) and Uzbekistan (17 percent) acquired most of their debt on commercial terms (Kapur and van der Mensbrugghe, 1997).

23 At a minimum, even if income disparities were not widening, there was great uncertainty. Such uncertainty about the distribution of costs and benefits of reform may explain the widespread hostility to rapid reforms (so-called shock therapy) even when the old system had been discredited. Fernandez and Rodrik (1991) have argued that such ex ante hostility can be transformed into ex post support if the uncertainty is dispelled: nothing succeeds like success, and initially unpopular reforms in South Korea (early 1960s), Chile (1970s), and Turkey (early 1980s) subsequently popular.

24 In Uzbekistan, government expenditure as a share of GDP increased from 35 percent in 1987-1989 to 46 percent in 1990 and 55 percent in 1991, mainly because of increasing explicit subsidies (accounting for about a quarter of all expenditures by 1992). Meanwhile, government revenue as a share of GDP remained more or less stable at 25-28 percent over the period 1987-1991.

25 Such trade between partially liberalized economies is already apparent across the China-Mongolia-Russia and China-Kazakhstan borders, although the absolute value of this international trade is limited by the state of transport facilities.
Conclusion

Theory and evidence suggest that there is a strong case for industrial policy. The theory that is relevant is not the standard neoliberal version that ignores technological capabilities at the micro level. The usual simplifying assumptions that there are no learning costs in using industrial technologies, and that efficient production can be launched merely in response to "right" prices, do not do justice to a complex reality. They often lead to misleading policy recommendations. The proper consideration of industrial policy has to be based on an appreciation of the market failures in technological learning and deepening. In the presence of market failures that affect this process, active interventions are required to deepen and diversify the industrial structure. Industrialization can proceed without active interventions, but its "quality" is likely to be inferior, and its pace slower, than with well-designed interventions. Similarly, in the process of reform, there remains a significant role for a pro-active government in guiding liberalization and the progress of industrialization once a more open regime is established.

We need to reiterate the main considerations of rational industrial policy. In product markets, the best framework for efficient industrial development is one that provides constant competition to enterprises. Full exposure to world competition has, however, to be tempered by the fact that a new entrant has to incur the costs and risks of gaining technological mastery, when its competitors in more advanced countries have already gone through the learning process. Depending on the extent of the learning costs and the efficiency of the relevant factor markets and supporting institutions, there is a
valid case for selective and variable infant industry protection, and for the gradual and phased exposure of existing activities to import competition.

Since protection reduces the incentive to invest in capability building, it has to be carefully designed, sparingly granted, strictly monitored and offset by measures to force firms to aim for world standards of efficiency. Protection has to be selectively granted to a few activities at a time, because only a few have the capacity to reach competitiveness and intervention resources on the supply side are limited. The most effective offset to the disincentives to capability development arising from protection seems to be strong pressures to enter export markets - a commitment to export disciplines not only the firms but also those who decide and administer the policies. The secret of the success of export orientation lies in this rather than in conforming to static comparative advantage.

Factor markets also need intervention. The markets for human capital, technical support, technology, information, and finance in developing countries generally suffer from a number of deficiencies. A sound industrial promotion strategy must address each of these needs. Moreover, these interventions must be integrated with interventions in the incentive framework, so that activities being promoted are not penalized by the lack of production factors and information. Intervention resources are scarce, and their most effective use calls for selectivity and coherence. This seems so obvious as to sound banal - yet few governments have aimed at such coherence and selectivity. Current adjustments programmes ignore the supply side of capability building in their overwhelming urge to get prices right and reduce interventions.
There are many possible levels and patterns of industrial support. The greater the degree of selectivity exercised, the greater the potential benefits if the strategy works, but the larger also the risk of government failure (and of heavy ensuing economic costs). A few governments have managed to intervene selectively with great success, and have produced industrial growth rates perhaps unmatched in recent economic history. Most have not. This means that government intervention capabilities have to be assessed in drawing up technology development strategies (OED, 1992). It also means that administrative capabilities and incentives themselves have to be developed to the extent possible. There is considerable debate about the capability of governments to undertake selective interventions at all, which takes us beyond the realm of economics into that of political economy. What are evident is that many governments have managed such interventions effectively, and that the costs of non-intervention may be high.

Today, the most pressing policy problem in most developing countries is less the setting up of new industries than of enhancing the competitiveness of existing inefficient and technologically stagnant industries. It must therefore address the removal of an accretion of many irrational and inefficient interventions that many governments have undertaken in the past four decades. The analytical approach proposed here is equally relevant: industrial reform policy must have the same basic elements as industrial development policy. Industrial reform and restructuring have, therefore, to address various determinants of capability development: the incentive framework, the supply of
human capital, the supporting technology infrastructure, finance for technological activity, and access to foreign technologies.

However, they have to differ from conventional industrial policy because they have to take into account the "relearning" costs and time required for existing industries to become efficient to shed the legacy of inherited attitudes, outdated skills and inappropriate technologies. Similarly, account has to be taken of the costs and time needed for the relevant factor markets to be upgraded to meet the needs of international competition. If these factors were taken into account, the design of policy reforms would be very different from what the typical structural adjustment package contains. The reasoning here suggests that an appropriate reform package would be far more gradual and would retain a large role for the government to overcome market failures. It would be phased according to the needs of relearning and factor market upgrading. It would retain the instruments of intervention in trade and technology that are needed to set up new infant industries (and which are among the first casualties of structural adjustment programmes).

Finally, it must be stressed that the tools of industrial policy have to be handled very carefully, or else they can impose large costs of their own. Current thinking has swung very far in the direction of favoring the efficiency of markets over that of governments. There is a need to re-examine the premises of this thinking, not to return to the old strategies of import substitution and irrational interventions, but to set up selective and carefully fashioned instruments that can support market forces.
Since becoming independent, the five Central Asian countries have diversified their trade patterns away from the former Soviet Union. The process has been slow, due to the tight integration of their economies into the Soviet economy before 1992 and the difficulty of redirecting exports given the inherited infrastructure of pipelines, railways and other transport modes. Only by 1996 did the share of trade going outside the CIS exceed half, but this share can be expected to increase as physical links with southern and eastern neighbors and access to Indian and Pacific Ocean ports improve.

The diversification of trade patterns has not been accompanied by regional integration. Despite much talk of united economic zones, freer regional trade or a mini-CIS customs union, implementation has been limited and the impact on trade flows negligible. Likewise, the attempt to promote a regional grouping of all the non-Arab Islamic countries of west and Central Asia has involved more statements of intent than actual regional integration. Within ECO, the summits and other meetings may have contributed to confidence-building and reduced regional tensions (although even that appears to be debatable in light of the ongoing Afghan conflict), but on practical economic matters, such as simplified transit arrangements, progress has been minimal.

Why has regional integration been so limited in Central Asia in the 1990s? The fundamental reason for the limited degree of regional integration is the narrow export base of the regional economies, with overlapping commodity composition. The natural export markets are outside the region. Similarly, given that comparative advantage lies in
a limited range of commodities, the natural suppliers of the broad range of imports reside also outside the region.

Integration into the global economy has its drawbacks. The national economies are exposed to new external shocks; of which the most important are price fluctuations for key export commodities. Events like the East Asian crisis of 1997 also had an echo in Central Asia, especially where Korean firms had been active. At the same time, however, localization spreads risks; the Russian currency crisis of 1998, for example, had a far more limited impact on Central Asia (more for Kazakhstan, and less for the other four countries) than it would have done if the Central Asian countries had pursued a more CIS-oriented strategy since independence.

The conclusion that post-independence trade patterns have not increased regional integration is neither to deny the benefits of some infra-regional trade nor to argue against attempts to liberalize intra-regional trade. There are, for example, obvious potential gains from trading electricity through the Central Asian countries' inherited common grid. Trade facilitation through simplification of border procedures and transit arrangements would be mutually beneficial, as would coordination on regional infrastructure projects. Far more important, however, is multilateral trade liberalization, which allows the Central Asian countries to benefit as much as possible from participation in world markets. The Kyrgyz Republic's accession to the World Trade Organization in July 1998 is likely to be a more significant harbinger of future trade policy developments for the Central Asian countries than the numerous preferential arrangements that have been mooted.
The underdeveloped industrial base continues to be the key problem in Central Asia. Local agricultural produce mainly cotton and mineral resources like gold, silver, chromium etc., will have to be shipped to Russia and other republics of CIS for processing, till such industries develop in Central Asia. Turkmenistan produces about 85 million cubic meters of gas a year, almost all of which is carried by pipeline to Russia and Ukraine.

Another problem is that the indigenous labor force is low skilled, whereas two-thirds of the skilled industrial workers are Slavs. And the exodus of the Russians and Ukrainians from Central Asia is going to adversely affect the industrial sector in the Central Asian states.

Conscious of these pitfalls and in an effort to stabilize and transform their economies, the Central Asian states have intensified the process of privatization of the economy and opening foreign investment. Underdeveloped production structure, disruption in previous economic ties and shortage of hard currency has forced these states to look for alternative sources of supply, markets and remunerative prices for their raw materials. Prices of agricultural produce and natural resources have been revised upwards to ensure higher returns for their exports.

On the other hand Pakistan has been eyeing for establishing a direct overland link via Afghanistan. It was in May 1992, at the ECO summit meeting held in Ashkabad, that the participating countries agreed to establish trans-Asian rail and road network linking Islamabad, Tehran, Kabul, Istanbul, with termini at Karachi, Pasni, Gwadar, etc.
This situation can be reversed with the development and enhancement of the more traditional and natural trading partners vis a vis Afghanistan and the emerging Central Asian markets. There has been a traditionally significant market for some industrial products (cigarettes, textiles, food products, matches, etc.) The geo-political situation in turn has also affected trade with and through Iran. This situation will improve and will eventually open up a vast market for exports from the NWFP in particular and Pakistan in general.

In comparison to the industrial centers of Sind and Punjab, distances have made many industrial activities in N.W.F.P. less viable, because of the high cost of 'importing' raw materials from other provinces (e.g. hides, cotton, chemicals, metals, etc) and shipping finished products to the major markets 'down country'.

This isolation is reinforced by a severe lack of infrastructure. Many areas with natural resources (minerals, agriculture, forests, etc.) are still isolated and cannot attract investments private or even public without prior major infrastructure work on roads, railways, energy distribution, housing, etc. In addition, industrialists perceive the energy situation as difficult. Although home to almost one-third of the nation's energy, energy supply costs remain high and do not offset other dis-advantages. Load shedding is not uncommon. In addition, energy shortage is further compounded by the lack of bulk storage for furnace oil. Finally, logistical support in industrial estates is often not deemed sufficient. Telecommunications are difficult. Support services, if any, are not comparable with what the larger cities can offer. Road and rail facilities are limited. In addition, skills
and markets are insufficient for many industrial activities. There is a dearth of skilled labor. The existing infrastructure for vocational training is not sufficient to provide the required labor force. Many workers must be 'imported' from Punjab, with flattered costs and high turnover. This is partly due to migration of trained people to other urban centers in the country or the Middle East countries. Managerial resources are also scarce. This is due to the fact that entrepreneurship tends to focus on fast-return ventures such as, consumer goods rather than industrial development. Professional management in private sector enterprises is rare. The commitment and professional qualifications of managers in the public sector are open to question. Furthermore, local markets are limited due to population dispersion and low-income levels. This stands in the way of visualizing large economic-scale units for most products. Finally, the difficult geo-political situation has also tended to discourage industrial investment. As already underlined, and in the absence of any counterbalancing measures, the costs on account of the isolation of the Province and limited markets it can offer, acted as the basic obstacles to any new investment.
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277


278


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