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ISLAMIC REPUBLIC OF IRAN

STRATEGY DOCUMENT

TO ENHANCE THE CONTRIBUTION OF AN EFFICIENT AND COMPETITIVE

SMALL AND MEDIUM-SIZED ENTERPRISE SECTOR

TO INDUSTRIAL AND ECONOMIC DEVELOPMENT IN THE ISLAMIC REPUBLIC OF IRAN

February 2003

UNIDO UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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Acknowledgements

This document has been prepared by UNIDO on the basis of substantive contributions from a team of national and international experts comprising Messrs. Fereydoun Azarhoush, Kambeiz Talebi, Morteza Imanirad and Anton Kruft, under the overall guidance of Mr. Sarwar Hobohm, Team Leader of the UNIDO Integrated Programme for the Islamic Republic of Iran.

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References to dollars ($) are to United States dollars, unless otherwise stated.

References to calender years usually refer to the Iranian solar year, which begins on 21 March of the Western calender. The corresponding Western years are given in paren-theses.

The following abbreviations are used in this publication:

AA	Associate of Arts
APO	Asian Productivity Organization
AS	Associate of Science
BA	Bachelor of Arts
BAS	business advisory services
BS	Bachelor of Science
BIC	business incubation centre
BIM	Bank of Industry and Mines
BIN	business information network
BOAB	Bank of Africa-Benin
BOAD	Banque Ouest Africaine de Developpement
BSO	business support organization
CFIS	Centre for Foreign Investment Services (Republic of Korea)
COIS	Centre for Overseas Investment Services (Republic of Korea)
COMFAR	Computer Model for Feasibility Analysis and Reporting
CPI	consumer price index
ECO	Economic Cooperation Organization
EIM	Small Business Research and Consultancy
EIU	Economist Intelligence Unit
EMBA	Executive MBA (Master of Business Administration)
ENSR	European Network for SME Research
EPCI	Export Promotion Centre of Iran
EU	European Union
FDI	foreign direct investment
FMO	Netherlands Development Finance Company
FZ	free zone
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GEM	Global Entrepreneurship Monitor
HRD	human resources development
IBRD	International Bank for Reconstruction and Development
ICT	information and communication technology
IDRO	Industries Development and Renewal Organization
IEC	Industrial Estates Corporation
IFC	International Finance Corporation

IICA	Iranian Institute of Certified Accountants
ILO	International Labour Office
IMF	International Monetary Fund
IMI	Industrial Management Institute
IPA	investment promotion agency
IPR	intellectual property rights
IR	Iranian rial
IRIB	Islamic Republic of Iran Broadcasting (Organization)
IRISI	Institute of Standards and Industrial Research of Iran
ISME	Iran Small & Medium Enterprises (Organization)
ISO	International Standards Organization
ISTT	Isfahan Science and Technology Town
IT	information technology
ITI	income transparency index
ITPO	Investment Technology Promotion Office
JIT	just in time
KFSB	Korea Federation of Small Business
KOTRA	Korea Trade and Investment Promotion Agency
LC	letter of credit
LGF	loan guarantee fund
LPI	labour productivity index
LSEs	large scale enterprises
MA	Master of Arts
MBA	Master of Business Administration
MIS	management information services
MIT	Massachusetts Institute of Technology
MSTQ	metrology, standards, testing and quality
MVA	manufacturing value added
NGO	non-government organization
NIIO	National Iranian Industries Organization
NIMEC	Network of Iranian Management and Engineering Consultants
ODA	official development assistance
ODF	official development finance
OEM	original equipment manufacturer
OECD	Organization for Economic Cooperation and Development
OJT	on-the-job training
PhD	Doctor of Philosophy
PSD	private sector development
PSDC	Penang Skills Development Centre
R&D	research and development
SBI	State Bank of India
SBFC	Small Business Finance Corporation (Pakistan)

SEZ	Special Economic Zone
SIDBI	Small Industries Development Bank of India
SIO	Small Industry Organization
SMBA	Small and Medium Business Administration (Republic of Korea)
SMEDA	Small and Medium Enterprise Development Agency
SMEs	small and medium-sized enterprises (incl. micro-enterprises)
SMIPC	Small and Medium Industry Promotion Corporation (Republic of Korea)
SOEs	state-owned enterprises
SPX	Subcontracting and Partnership Exchange
SRT; SR&T	science, research and technology
TDI	tax declaration index
TFYP	Third Five-Year Plan
TNCs	transnational corporations
TQM	total quality management
TVTO	Technical Vocational Training Organization
UK	United Kingdom of Great Britain and Northern Ireland
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
US, USA	United States (of America)
VAT	value added tax
WEF	World Economic Forum
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

PREFACE

The economy of the Islamic Republic of Iran (hereafter referred to as Iran) is to a very large extent determined by large public and quasi-public enterprises, controlling up to around 80% of the economy. This is especially true with regard to the businesses engaged in exploiting, processing and trading crude oil, petroleum products and natural gas, which provide some 80% of Iran's export earnings and around 40-50% of the government budget.[1] This has created a heavy dependency on this sector of the economy, and its mainly (publicly-owned) large enterprises, in spite of the fact that the great majority of businesses in Iran belong to the category of micro-, small and medium-sized enterprises (SMEs).

Disregarding the firms involved in the trading and service businesses, the number of small- and medium-sized *industrial* SMEs hovers around 345,000 formally registered businesses, of which 96.1% belong to the category of micro-enterprises (with a workforce of 1-9 employees), 3.3% to the category of small enterprises (with 10-49 employees), 0.3% to medium-sized enterprises (with 50-99 employees), and 0.4% to businesses larger than 100 employees.[2] As the present study shows, these industrial SMEs provide approximately 1.3 million jobs, out of a total employed labour force of 15.6 million. The bulk of the difference (14.3 million jobs) is accounted for primarily by wholesale and retail trading businesses, and to a lesser extent by the service sector. Although trading and service activities are important for the successful functioning of the economy, the manufacturing sector and its industrial SMEs are highly important in view of generating both manufacturing value added and exports. The study at hand makes clear that the industrial SME sector has tremendous scope for growth in Iran, and by that token has a great potential for generating new jobs.

The achievement of this potential will, however, require a number of conditions to be fulfilled.

Best practices in all types of economies (developed, developing, transitional) have shown that a flourishing and sustainable industrial SME sector can only be attained when two major elements of the business environment have been put in place. The first of these is an appropriate legal structure for SMEs, which belongs in the domain of the government. The second is a suitable institutional support structure for SMEs, which include business advisory services, information provision, training, financial services, and the like, and falls in a domain

1 EIU Country Profile 2000, p. 20.

2 The data presented here are based on Chapter 7 of the Statistical Yearbook of Iran, 2000. The size-class of enterprises used here is taken from the Statistical Yearbook, although this is not the only class division used in Iran, as shown in Chapter 2. According to information from obtained from SIO, there were 420,000 SMEs at the beginning of the Iranian year 1381 (April 2002).

shared by the government and the private sector. The former will need to concentrate on policy formulation, which should create an enabling environment for business development, whereas the latter will need to develop and strengthen the capacity of enterprises to increase their competitiveness, which will lead to the growth of their businesses, to increased exports of their manufactured products, and to increase employment generation.

Generating employment is an overwhelmingly important issue in Iran. According to data released by the Statistical Centre of Iran, approximately 3m. workers were officially registered as unemployed in 1379 (2000/01). This figure is growing. Each year some 800,000 job seekers enter the labour market, which offers only about 500,000 jobs. Consequently, unemployment is increasing each year by about 300,000 people – comprising women, youth and graduates alike. As has been proven in many developing economies in which UNIDO is active, the SME sector can be instrumental in employment generation, and can help to absorb not only the natural growth of the labour force but also manpower shed from the state owned enterprises (SOEs) as a result of their rationalization or privatization. As this study also shows, the SME sector is regarded as the principal employment generator even in the developed economies.

In this context, increasing the competitiveness of the SME sector becomes a crucial issue. Without a competitive SME sector it will not be possible to accelerate job creation, which is badly needed to reverse the increasing trend of unemployment in the country. Obviously, competitiveness has direct linkages to productivity improvement, total quality management and a host of other issues, which will be dealt with in the report. Competitiveness also leads to a higher rate of manpower utilization; and hence to lower costs of production and higher profits. In addition, it increases the scope for success in export markets, which is another issue of great importance for the Iranian economy.

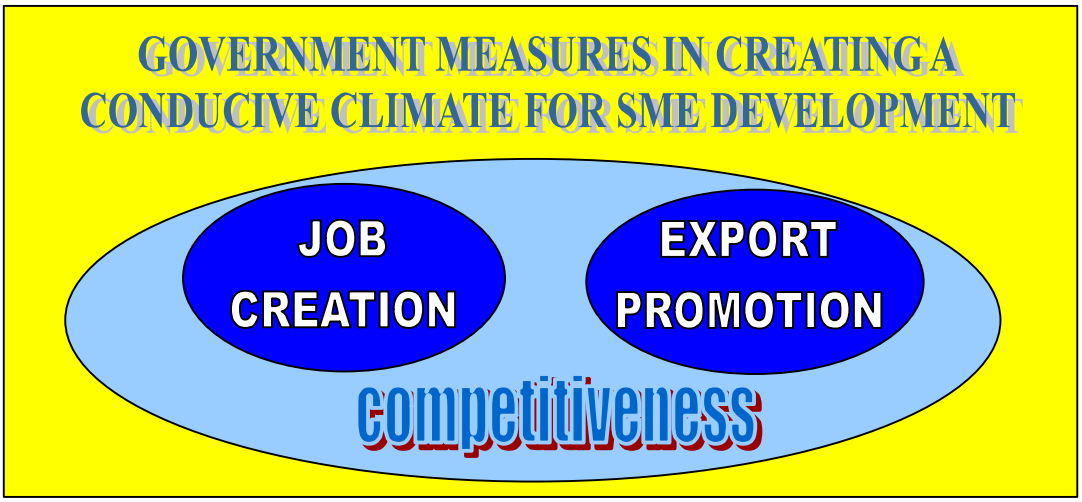
Iran is heavily dependent on the export of oil and gas, which account for up to 82.5% of the country's total exports.[1] Although non-oil exports are increasing, they are doing so at a very modest pace. Clearly, the Government of Iran sees the diversification and increase of non-oil exports as a major issue in strengthening the economy by making it less dependent on oil and gas exports. Secondly, Iran needs to increase its non-oil exports in order to become an active partner in the WTO-led process of globalization. Finally, and equally importantly, the development of new and existing export markets is seen as a powerful tool to promote employment creation. As shown in Figure P.1 overleaf, these three issues – competitiveness, job creation and export promotion – are closely interlinked.

A main input into improving the enabling environment for developing competitiveness, which is a prerequisite for job creation and the promotion of non-oil exports, are government measures to create a conducive macro-economic climate for SMEs. These policy measures may relate to fiscal and financial aspects, to labour laws, to environmental policies and to a variety of legal matters having a direct impact on the creation of enterprises and the improved operations of existing enterprises. Finally, it may be particularly important to refer to the issue of

1 Exports of carpets account for as much as 3.5% of total exports, while fresh and dried fruit account for some 2.6%; Industrial goods, meanwhile, account for 11.4%. See EIU, *Country Forecast*, February 2002, p. 6.

transparency of government regulations. This study has made an attempt to identify major issues in this regard.

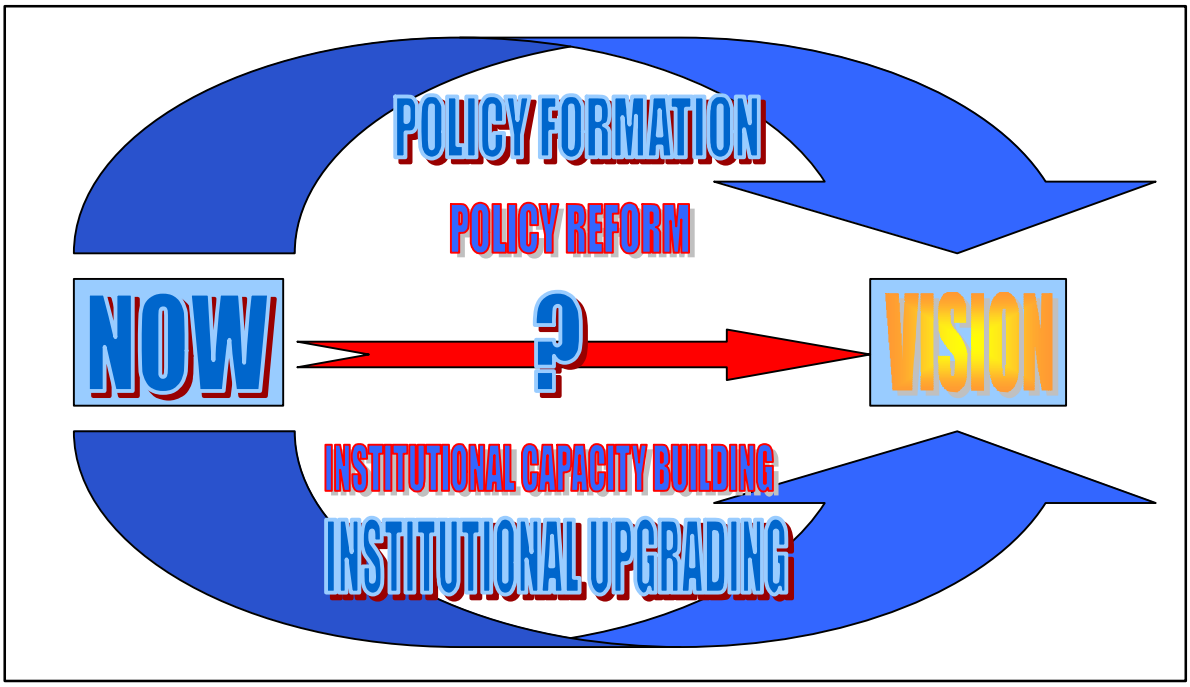
Figure P.1: Interrelation between competitiveness, job creation and exports



However, apart from government measures to create an enabling environment, the SME sector also requires technicals input so as to improve its competitiveness. This is the point at which UNIDO could come in and assist the SME sector by adapting its world-wide experience to the local situation in Iran and assist in the implementation of the policies and programmes decided by the government and private-sector players in the SME sector. The areas in which UNIDO could offer such assistance include the development of SME clusters and networks; the establishment and/or strengthening of appropriate business services (such as consulting, innovation, technology, quality management, training, R&D, etc.), developing international business contacts, and the like. All of these issues will also be discussed in this study.

Figure P.2 shows the methodology that was applied for the study. The study first concentrated on the current situation of SMEs in Iran, the “Now”. Through interviews, workshops, company visits and a study of the relevant documentation, an analysis was made of the macro- and micro-economic environment in the country. In addition, a group of high-level Iranian experts recruited by UNIDO for the preparation of this document assessed the impact that globalization may have on Iranian SMEs. Furthermore, these experts also conducted an analysis of the various business support organizations, private as well as public, currently operating in Iran. Finally, an inventory was made of the impediments currently experienced by SMEs. These issues are covered in Chapters 2-9. With the assistance of an international UNIDO expert, a more conceptual and theoretical analysis of the role and function of SMEs, which also presented a survey of international best practices in the field of SME development, was added to this study in Chapter 1 to supplement the empirical research in Iran.

Figure P.2: Methodology used for the study



The current "Vision" regarding the desired outcome of Iran's SME development efforts was extracted from the Third Socio-Economic and Cultural Development Plan 1379-1383 (2000/01-2004/05) of the Islamic Republic of Iran (TFYP), which was enacted into law on 5 April 2000. The principal objectives regardin SME development are reproduced in Box P.1.

Box P.1: Iran's vision for the development of the industrial SME sector

National goals and strategies

The Third Socio-Economic Development Plan of the Islamic Republic of Iran 1379-1383 (2000/01-2004/5) places very strong emphasis on reforming many of the trans-sectoral areas, all of them directly related to Iran's industrial development priorities, such as the reorganization, privatization and management of state-owned enterprises; regulation of monopolies and promotion of competition in economic activities; employment policies specifically focused on youth and women; taxation-, monetary-, foreign exchange- and environmental policies; the reorganization of the financial market and, finally, the development of science and technology. The Plan's overriding aims are to eradicate poverty, specifically through employment generation; to reduce the country's economic dependence on oil revenues through the promotion of non-oil exports; and to start restructuring the institutional business framework in view of Iran's possible accession to the WTO.

Source: TFYP, 2000-2004, as extracted by the UNIDO Consultant

In order to arrive at that Vision for SME development, two major approaches were identified, i.e. policy formulation and institutional upgrading. These two issues were translated in a set of policy recommendations (the question mark in Figure P.2), which are presented in Chapter 10. Finally, a number of specific project proposals, based on international best practices and UNIDO's own experience in promoting SME development throughout the world, have been presented in Chapter 11. It is important to note in this respect that the recommendations and/or proposals for institutional capacity building presented in Chapters 10 and 11 seek, as far as possible, to make use of the structures already existing in Iran.

This study is based on the needs expressed by the Government of Iran, in particular the Ministry of Industry and Mines. In response, UNIDO designed a comprehensive programme to promote competitive industrial development in Iran which, *inter alia*, included an SME development component. One of the major outputs foreseen in that component was this present study, which is intended to set a baseline and identify the range of measures that need to be taken to strengthening the national SME sector.

To implement this activity, UNIDO contracted and fully financed four SME experts, of which three were national Iranian experts and the fourth was an international expert. The work started in July 2001, and the final version will be submitted to the government in February 2003.

This study required the participation of many SME actors in the country: Entrepreneurs who were interviewed during visits at their premises and by questionnaires; empirical research carried out at enterprise level, sectoral level and government level; as well as cooperation with research institutions, intermediate business support organisations and government ministries and departments. Especially strong support and cooperation was provided by the Ministry of Industry and Mines, and in particular by the Small Industry Organisation (SIO) afilliated to the Ministry. UNIDO takes this opportunity to express its great appreciation to everyone who has contributed to the results of the study, which will follow in the next chapters.

SUMMARY OF FINDINGS AND POLICY RECOMMENDATIONS

Introduction

- For the purpose of this study Iran's national goals and strategies with regard to the development of the SME sector have been taken from the TFYP, which places a strong emphasis on "*reforming many of the trans-sectoral areas, all of them directly related to Iran's industrial development priorities, such as the reorganization, privatization and management of state-owned enterprises; regulation of monopolies and promotion of competition in economic activities; employment policies specifically focused on youth and women; taxation-, monetary-, foreign exchange- and environmental policies; the reorganization of the financial market and, finally, the development of science and technology. The Plan's overriding aims are to eradicate poverty specifically through employment generation, to reduce the country's economic dependence on oil revenues and the promotion of non-oil exports; and to start restructuring the institutional business framework in view of Iran's possible accession to the WTO.*"
- As can be observed in many countries, the SME sector can be a strong pillar of support for regional and economic development, as it provides a means for the mobilization of a country's resources, resulting in the generation of employment and income for the general benefit of regional and national economies. Secondly, it plays an important role in poverty alleviation and assists those who are disadvantaged, such as youth or women, who often subsist on the periphery of societies and are not otherwise able to contribute meaningfully to the economic development of the country. Thirdly, the SME sector can play an important role in absorbing redundant manpower as a consequence of privatization activities carried out by governments. Fourthly, SME development promotes democracy and a civil society; it stimulates entrepreneurs to participate in the economic, political and social system of the country. Finally, the SME sector has proven to be flexible and innovative; in a number of sectors SMEs have considerable comparative advantages over large enterprises, which enables them to respond more quickly and effectively to changing, and increasingly global, trends.

The Macro-economic Environment

- A new era in the history of Iran's policy formulation emerged in 1374 (1996/97), when many economic variables came under the control of the government, the exchange rate was stabilized, inflation was brought under control by the Central Bank through the adoption of a contractionary monetary policy and budget control, and the period of per-capita income decline finally came to an end. The resulting restoration of socio-economic stability has

helped the Iranian economy to go through a transitional stage of development from a relatively closed and controlled economy to a more open market-oriented economy. Inflation went down from 23.2% in 1375 (1996/97) to 12.6% in 1379 (2000/01), although wage increases did not compensate for inflation during this period and the purchasing power of the labour force suffered a decline during this period. In addition, the study has shown that only modest improvements were recorded in terms of income distribution. The rate of GDP growth also slowed down in the latter half of the 1370s but has begun to pick up more recently. A positive development is has been an increase in of productivity of the labour force by about 6% during 1375-79.

- Formally registered unemployment hovers around 16% of the total labour force of 18.5 million, which increased by 530.000 in 1379 (2000/01). The gender distribution of the active labour force reveals a 15.3% share of females in 1379. Though still relatively low, this share is rising rapidly, and amounted to only 12% in 1375 (1996/97).
- The ratio of total tax collected to GDP does not exceed 5-6%, which is very low compared to other countries with similar income levels. Consequently, the government's budget revenues continue to be dominated by oil and gas income.
- Because of its generally closed economy and the preponderence of state-owned enterprises, Iran has not been attracted significant flows of foreign direct investment. The level of FDI has consequently been very low, and amounted to only US$ 1.35 per capita in 1378 (1999/00). This compared with US$ 12 in Turkey, US$ 31 in China, and US$ 68 in Malaysia.
- With regard to privatization, the overall scale of ownership transfer over the past decade has resulted in the building up of a modest budget reserve of US$ 11 bn. for the beneficiary welfare institutions.

Status of SMEs in Iran

- As shown in Chapter 3, 98.4% of all businesses in Iran are micro-enterprises (with a staff of 1-9 employees), whereas the total proportion of small businesses (with 10-49 employees) is only 1.4%. These data highlight an obvious misfit between the large number of micro-enterprises and the number of small and medium sized businesses. It should be noted that the absence of a good number of medium sized business (which, together with large-scale enterprises account for only 0.2% of the total), is negatively affecting Iran's capability to export. From the international perspective, it is usually medium sized businesses (with 50 to 250 employees) that account for a relatively large share of a country's exports, as they are able to avail themselves of the technical expertise, the production and marketing skills, and the access to finance needed to participate in international business.
- In the industrial sector 45.4% of all manpower is employed by businesses with more than 100 employees, and especially by Large-scale enterprises (LSEs) employing more than 250 staff, although they represent only 2.9% of all industrial businesses. By international

standards, the industrial SME sector in Iran consequently has a tremendous potential for growth.

- Starting a business in Iran is a cumbersome activity. A large number of licenced businesses is not operational at present because of a lack of access to finance and the very lengthy bureaucratic procedures and arbitrary measures applied by banks to potential borrowers.
- Of all loans provided over the past 4 years by the Bank of Industry and Mines (BIM) to industrial firms, 33% was allocated to firms in the metal industry, 21% to firms producing chemicals and 19% to firms in the food sector.
- Forward and backward linkages between SMEs and LSEs, in which the former are involved in the co-production and postproduction of goods manufactured by the latter, is scarce, with the exception of the automobile sector, where there is nevertheless still ample scope for a further increase of backward linkages.
- Meaningful information and statistics about the SME sector subdivided by size category, type of workers, age of companies, legal forms, technological and financial standing, production volumes, exports, level of certification, etc., is either absent or incomplete, reducing the scope for a thorough analysis of the sector and the ability to fine tune the policy instruments needed to assist the sector effectively.

The Role of SMEs in Foreign Trade

- Studies by the Ministry of Industry and Mines project a steady increase in the value of industrial and non-industrial non-oil exports to US$ 28.8 bn by 1389 (2010/11), and further to US$ 70.9 bn by 1399 (2020/21). By comparison, the value of crude oil exports in these years is forecast at US$ 31.2 bn and US$ 37.5 bn, respectively. From these totals, the SME sector only is expected to export industrial and non-industrial goods and services worth US$ 4.6 bn and US$ 26.5 bn in these two years. This represents a dramatic increase over the estimated current exports worth US$ 40m. emanating from the SME sector, which represents 1% of expected exports in 1389 and a mere 0.15% of expected exports in 1399.
- To achieve these objectives, specific export policies and policy instruments have to be developed and implemented. The adoption of such measures is critically important given the difficulties faced by industrial and other SMEs at present in their efforts to export, which include:
    - Reliance on hard currency earned through oil exports;
    - Utilization of old machinery and equipment in certain industrial fields;
    - Lack of balance between the country's industrial growth and the world's industrial development;

- Non-utilization of full production capacities in certain industrial fields, and non-completion of many industrial projects;
- Relative inconsistency of Iran's economic and administrative laws, regulations and policies that hinder the development of production and exports;
- Lack of coordination among executive branches for developing industrial and non-oil exports;
- Lack of a properly functioning capital market;
- Lack of an appropriate economic strategy and coherent policies for foreign trade and industrial development;
- Lack of understanding about international markets and economic developments at the international level;
- Fluctuations in Iran's foreign relations.

- In a survey carried out among industrial SMEs engaged in exports, the respondents gave an assessment on the various individual constraints experienced by them, expressed as a percentage of total constraints (100%). The results were as follows: Lack of access to factors of production and raw material markets – 13%; obsolete machinery and equipment – 9%; inadequate foreign marketing capacities – 8%; lack of financial markets – 20%; inconsistency of economic and administrative laws – 27%; other factors such as overall economic performance, exchange rate instability and closed foreign trade policies – 23%.

Impact of globalization and internationalization

- The common thread in all of the discussions and debates on globalization within Iran is the question of the country's readiness for further global integration. Having been rather insulated from the global economy for a relatively long time, the Iranian economy has little experience with global competition. This is giving rise to concerns about the possible implications of a drastic move towards trade liberalization. However, all parties agree, explicitly or by their silence, that the government's decision to apply for membership of the WTO has been timely and expedient. A fairly widely based consensus is now emerging that it is time to act and to move along lines that prepare the economy for more effective global integration, even if the details of such changes remain in dispute. This could lead to the introduction of large numbers of practical new reform projects in the foreseeable future, some of which will be very relevant to the development of SMEs.
- An analysis was made of six critical issues related to the norms that may determine Iran's readiness for globalization, such as competition, transparency, intellectual property rights, evaluation, firm commitment and social responsibility. The scores of ninety Iranian managers from the automotive parts industry and from among MBA students showed that 26% found their businesses weak in applying these norms, 40% found them moderately active, 28% found them sufficiently active and only 6% found them strongly active. The

first three factors (competition, transparency and property rights) had a lower score than the other three. (See Tables 5.8, 5.9 and 5.10).

- In analysing the root causes of the underdevelopment of SMEs, the study found that until very recently government policies were mainly directed towards LSEs. Economic planners and policy makers looked at SMEs as peripheral institutions whose economic contributions are limited to creating low-tech jobs. In addition, there is still a lack of interest in academic circles in studying issues related to SME development. These factors inhibit the creation of an enabling environment for SMEs.
- Based on an OECD analysis of eighteen countries, this study has made an inventory of measures to be taken in Iran in order to create a conducive climate for SME development and growth. These include inter alia: Promoting productivity growth, supporting cluster development for SMEs, setting up science-technology parks, promoting sub-contracting (forwards and backward linkages), developing business networks, encouraging the creation of one stop shopping facilities for emerging and existing SMEs, enhancing the access of the SME sector to relevant information, developing a private venture capital market, and supporting R&D and technology transfer. Proposals covering all of these issues have been included in the recommendations given to the Government of Iranian in order to assist it in designing new and/or strengthen existing measures for SME development.

Current government policies towards SMEs

- The most important goals of the currently TFYP with regard to the industrial sector are: a) upgrading productivity and human resource efficiency; b) upgrading technical and professional know-how and the skill level of the labour force; c) reducing governmental monopolies and promoting competitive economic activities; d) providing facilities to investors in small industries; e) supporting the growth of exports of non-oil products and technical and engineering services; and f) reinforcing the electrical industries by co-ordinating investments. To achieve these goals, the government has designed the following policies and instruments:
  - Reorganizing the training of labour in order to increase its technical and professional levels and promote an increase in productivity and efficiency;
  - Providing the necessary facilities for creating new industrial capacities, especially for SMEs operating in isolated locations with limited raw material resourves and access to intermediate goods, with the objective of promoting employment creation in undeveloped areas;
  - Providing funds to BIM to enable it to set up increased credit lines for industrial SMEs;
  - Allowing tax exemptions in less developed areas in order to create employment; and
  - Modifying customs tariffs, taxes and other dues in order to encourage non-oil exports.

- The government has taken the decision to allocate part of its income from oil exports and other sources to achieve its target of implementing programmes for employment generation and for enhancing export activities of SMEs.
- In realising the general policy for SME development, the industrial sector was faced with many problems such as: a) high foreign currency costs because of the dependence of industrial enterprises on imported capital goods, raw material and essential components; b) difficulties in securing financial sources to provide the foreign currency needed to purchase materials and components; c) the collection of various taxes and duties from industrial enterprise in order to support such social organizations as sporting clubs and sports training colleges, etc.; d) low industrial exports caused by unfavourable regulations and the low quality of the merchandise; e) the low level of innovative activities and insufficient finance for carrying out R&D; f) the continued priority given to government-related industrial enterprises in the allocation of financial and non-financial facilities, and the resulting shortage of these facilities for the private sector. Major actions to overcome these constraints would include:
  - Attracting domestic and foreign investments;
  - Adjusting policies for expanding the share of industrial SMEs in GDP, specifically by including women entrepreneurship;
  - Supporting job-creation efforts by promoting self-employment, entrepreneurial activities and group business activities in rural areas;
  - Developing domestic financial resources to increase investments, and creating more employment by introducing incentives for snall savers and investors;
  - Developing the cooperative sector and encouraging entrepreneurial activities in it by introducing effective and sound support systems; and
  - Simplifying the regulatory framework for investments in the manufacturing sector;
- In addition, a number of other actions have been designed such as:
  - Tax rate reductions;
  - Prohibitions on the levying of any additional taxes or duties, such as municipal corporate taxes;
  - The granting of foreign exchange facilities to the private sector;
  - Increased loans and other financial facilities by simplifying the banking system;
  - Exemptions of governmental levies and duties for investors in under-developed areas;
  - Reduction in the tax rate by more than 30% for firms operating in underdeveloped areas;
  - Industrial restructuring efforts to upgrade the machinery, equipment, financial structure, manpower, management and technology of SMEs;

- Upgrading of skill level of labour employed in the industrial sector;
- Establishment of the SIO to increase industrial employment and support small private sector units in less developed areas.

- A situation analysis was conducted of the formulation and implementation of various government policies, such as trade policies (including incentives in the field of taxation, customs duties, finance, and foreign investment), regional policies, policies in rural areas (including regional, cooperative, social welfare, and agricultural development policies), labour market policies, industrial certification policies, education and training policies, technology policies, and environmental policies. The overall impression given by this analysis was that all of these policies and policy instruments (measures) were very appropriate to the needs of Iran. At the same time, however, this analysis suggested that the institutional structures in the country are insufficiently equipped, both qualitatively and quantitatively, to implement these ambitious policy instruments an actions in an effective and efficient manner. In addition, the analysis showed that there is no structure in place to extract information directly from the business environment, which constrains efforts to correct existing policies and policy instruments or initiate new ones.

The Legal Environment

- A very recent legal act with possibly far reaching positive effects on the SME sector is the establishment in March 2001 of the SIO, which represents a first step towards improving Iran's institutional capacity to develop and promote the sector. The SIO is the only organization authorized to design suitable policies and (incentive) programmes to promote the growth and development of industrial SMEs in both rural and urban areas. Its mandate includes the following major activities:
  - To help industrial SMEs upgrade their productivity and manpower skills, and reduce waste of costly raw material, through a variety of support programmes and incentives;
  - To identify the inadequate facilities, infra-structure, skills, technical know-how and legal issues inhibiting the growth and development of industrial SMEs;
  - To provide a suitable environment for increasing the value of local and overseas investment in the small industry sector, including subcontracting and the establishment of forward and backward linkages between SMEs and LSEs;
  - To study and analyze the effectiveness of the present legal framework, i.e. financial laws, tax laws, training laws, customs laws and trade laws, in its relation to the small industry sector, and to propose a review and revision of the present laws if necessary;
  - To review the manpower training arrangements for SMEs and introduce new training programmes aimed at increasing the level of skills and technical know-how;
  - To minimize the shortage of strategic raw materials and components, and initiate a restructuring of the distribution systems;

- To promote the formation of business associations (known locally as “unions”) and industry houses among entrepreneurs running SMEs;
- To plan new and special IT networks providing SMEs with better access to international information sources, the Internet, intranets and e-commerce;
- To plan incentive programmes and establish new support systems to enable SMEs to gain easier access to sources of finance and credit;
- To study the existing structures of financial and fiscal markets, and propose revised financial and fiscal instruments more favourable to SMEs;
- To develop definitions for various categories of SMEs, including small industrial enterprises, small non-manufacturing enterprise, small agro-based industries enterprises and micro-enterprises.

- Chapter 7 also describes the present status of various laws related to the SME sector, including labour laws, fiscal and financial laws and customs laws. The limited transparency and the sometimes complex nature of these laws often poses a major obstacle for entrepreneurs. The dissemination of the laws to entrepreneurs can also often be improved.

The Business Environment for SMEs

- The concentration of SMEs can take many forms, from a simple co-existence in one industrial estate to more advanced forms of organized “collectivities”, such as science parks and clusters. Concentration in all forms and varieties adds important dimensions to the operating environment of SMEs. In the most simple and static form, found in industrial estates, concentration can contribute to operational efficiency through sharing the costs of logistics and infrastructure. In addition it can also become a source of innovation and productivity through the promotion of social learning. In the more dynamic and sophisticated forms, like clusters, in which a web of internal and external support and learning linkages supplements physical concentration, concentration may become a true source of synergy and collective comparative advantage. Chapter 8 provides an inventory and describes the various forms of SME concentrations in Iran, such as industrial estates; special economic zones; science, research and technology parks; business incubation centres; and industrial clusters. All of these forms of SME concentration exist In one way or another in Iran. In order to make a real impact on the healthy growth of the SME sector, however, many more concentrations of these kinds need to be established, and their quality and performance needs to be improved.
- The public vocational-technical educational system in Iran consists of four programmes. One of these is a two-year package standing halfway between high school and university education. It is offered by a new type of university system more oriented towards practical science-based knowledge, and leads to an Associate of Arts and/or Science degree (AA/AS). Two others programmes are offered by high school level institutions under the

jurisdiction of the Ministry of Education. The fourth is offered by a web of public and private non-degree vocational institutions administered by the Ministry of Labour ministry. A thorough analysis is made of the Technical Vocational Training Organisation (TVTO), which has an impressive number of 456 training centres with 13,000 employees located in 22 provinces, and conducts more than 712 different types of courses.

- The institution building efforts of the Ministries of Labour, Education and Higher Education have been successful in creating of a vast network of vocational schools and training centres. This has led to a considerable expansion of vocational training and a marked increase in the supply of formally trained labour. The quality of the present education and training programs nevertheless still offers some room for improvement, as emphasis has hitherto been put on quantity rather than quality. The established institutional network provides a very good foundation, however, upon which the required quality improvement projects can be built.
- The institutional infrastructure is now more ready than ever to support the technical upgrading of SMEs, but as the new training projects take off, the need for improved quality becomes more acute. To play an effective role in assessing the manpower needs of SMEs, and effectively participating in the remedial policy formulation activities, SIO must develop a better understanding and insight about SMEs as well as keeping abreast of manpower problems and requirements. To this end, periodical and independent studies about the technical competence of SMEs is warranted. The purpose of such studies should not be limited to incremental changes within the existing system, however, but should search for more creative alternatives for generating radical improvements in the quality of the SMEs' labour force, keeping in mind the technological imperatives of a globalized economy.
- As regards entrepreneurial and management training, only one of the institutes examined offered a regular course in entrepreneurship. The single exception is a newly founded graduate school of management at Sharif Technical University. Its curricula includes an elective entrepreneurship concentration area. There seems to be an absolute shortage of entrepreneurship faculty in the country. The management-entrepreneurship education and training centres identified by this study are heavily concentrated in Tehran and include the following categories:
    - A total of 88 schools of management and industrial engineering in the university system, of which 26 schools belong to the public university system, 58 to the Azad Islamic university and the remaining six are independent management schools or centres;
    - A total of 24 non-university centres of general management studies offering non-degree and short-term courses, including nine institutes located in Tehran and 15 in other cities;
    - A group of nine institutes offering quality management courses, all located in Tehran;

- A group of 16 institutes offering courses in information and communication technologies (ICT), also located in Tehran.

- The SMEs views of the services rendered by the management training institutions were found by a sample survey undertaken for this study to be generally positive. The entrepreneurs felt the training centres to be accessible, their programs useful and diverse enough to offer a good choice, and their charges reasonable. In spite of this positive outlook, the fact remains that SMEs are underrepresented in training programs even though their general economic performance measures (e.g., their share in value added) indicates a real need for advanced managerial know-how and skills.

- Quantitative data on the research institutes, covering both public and private (non-profit) firms and organizations, has been made available by periodical surveys of research centres by the Ministry of Science, Research and Technology (SR&T). According to these surveys, there are at present a total of 129 private and 215 public research centres active in the scientific and technological fields and social disciplines throughout the country. Among these, sixty centres are involved in social science research and 102 in research in the engineering and technical fields.

- Founded in 1378 (1999/00) as an NGO, the Network of Iranian Management and Engineering Consultants (NIMEC) is a loose two-tier network of mainly private consultant associations and consulting firms, including freelance consultants. NIMEC members cover a wide variety of disciplines including engineering, informatics, accounting and finance, and management. NIMEC's founding fathers have defined its mission as the promotion and upgrading of consulting practices in Iran. This mission is very much in tune with the present needs of industrial and business organizations in the country.

- The first tier of NIMEC's membership comprises mainly private consulting associations. These associations consist of nine groups that can be divided into the following four functional areas: 1) Management, 2) Engineering, 3) Financial Management, Accounting & Auditing and 4) Information and Communication Technologies. For SMEs, consulting services addressing the specific problems of the sector are very limited. The suitability of these consulting services for SMEs has been affected negatively by the high degree of concentration given by consultants to LSEs. In addition, SMEs are often not able to afford the services of such consultants. Nevertheless, the present study has revealed that SMEs do need the services of professional consultants in a variety of fields, such as penetrating export markets, designing productivity improvements, marketing, drafting business plans, upgrading production techniques, promoting innovation, etc.

- Until recently all banks in Iran were wholly owned by the government and operated within a control-oriented administrative regime. This scene is slowly changing. From the ten existing banks, two are now private banks. In addition three private non-bank credit institutions have been licensed. Alongside the formal banking system, other sources of finance available in the free market, known as "bazaar-e-azad". These sources of finance include some government-owned pension funds organized as private enterprises and governed by

the Commerce Law. The bazaar-e-azad institutions charge much higher interest rates in the order of 35%, which compare with bank rates of 13-25% depending on the source, purpose and maturity terms of the loan in question.

- The current *de facto* banking system in Iran leaves much to be desired in terms of both flexibility and transparency. The TFYP has defined the major dimensions of government's banking reform policies. The changes foreseen include, *inter alia*, a considerable increase in the capitalization of the banks, the modernisation and optimisation of their operating systems, and the licensing of new near-bank credit institutions and private banks, comprising Iranian owned onshore banks and locally and foreign owned offshore banks in the Free Zones. Iran's banking industry may therefore may be at the verge of a challenging transition to a more market-oriented and competitive system. The forthcoming changes that are likely to have particularly important and direct consequences for the management and/or promotion of small businesses include:
  - The issuance of banks loans, including those based on budget-directed facilities, has hitherto been concentrated on public and semi-public LSEs. With the intended changes in the future, a more balanced ratio of small/ large business loans may be expected. As a step in this direction, venture capital provided by the government for small industry loans was increased considerably in the 1380 (2002/03) budget;
  - The real estate collateral that has been extensively used by Iran's banks poses a serious problem for entrepreneurship development. The ongoing debate on the issue has led to ratification of a new law by the Majlis (parliament), according to which the collateral requirement has been relaxed considerably. In theory, this should have made it easier for small business to raise the required capital; in practice, however, the new law has not yet been fully implemented;
  - The foreign exchange market is presently controlled with multiple exchange rates. As an overture towards the further liberalization of the economy and its preparation for WTO membership, reforms leading towards a unification of exchange rates are anticipated;
  - An important change is foreseen in the banking system to revise the mission and strategies of BIM in order to make it more responsive to the financial, advisory and investment needs of SMEs and new entrepreneurs. Currently more than 50% of the bank's resources are allocated to the firms directly owned or controlled by this bank. According to the anticipated changes this bank would be relieved of the managerial responsibility for its current business holdings.
  - A general consensus has emerged among observers of the banking system that the institutional and managerial capacity of the existing banks is both inadequate for them to operate effectively in a more liberalized economy, and insufficiently responsive to the day-to-day needs of the government and business community. The government's dissatisfaction with the performance of the banks has been echoed in campaign for

an improvement in the banks' productivity launched in the recent past by the Minister of Finance.

- Numerous associations, or "unions", of industrial firms – as organized bodies representing their concerns and interests – exist in Iran, and some are very active. Like many other social organizations in the country, however, their structures, functions and behaviour may be quite different from those of similar institutions in the mature market economies. The unions of industrial firms in Iran can broadly be divided into conventional, newly founded and emerging forms of organizations. The conventional forms have a more natural birth and growth process; they emerge organically rather than as planned bodies. By definition, these unions are not financially dependent on, or supported by, the government, and are mainly engaged in the classical lobbying function. At present, some of these unions are very active and quite influential. In addition, there is a new class of unions organized as a two-tier association reminiscent of the idea of centralized democracy. The upper tier, known as "Industry Houses", is composed of the representatives of the lower bodies, which are known as "Associations of Homogenous Industries". The Ministry of Industry and Mines has been instrumental in setting the stage for the formation of these bodies. A host of new functions have been approved for these new unions, since the ministry wishes to delegate some of its industry support services to them in order to relieve itself of some of the day-to-day administrative burden and be able to focus more on fundamental policy issues.

Barriers to SME development

- Chapter 9 provides a thorough analysis of the many barriers faced by SMEs in their struggle for survival, growth and development. These may be summarized as follows:
  - Market barriers:
    - Existence of purchasing monopolies (monopsonies)
    - Stringent nature of contracts SMEs have to conclude with LSEs;
    - Existence of monopolised markets in various sectors;
    - Fluctuations in supply and demand, specifically in the food industry;
    - Government subsidization of state owned companies, resulting in unfair competition;
    - Lack of marketing mechanisms and resulting inability to access national and international distribution channels; and
    - Smaller volume in raw material purchases resulting in higher prices.
  - Financial barriers:
    - Lack of commercial and specialised banks that would lend money to SMEs, and similar loan criteria for all categories of firms;

- Smaller firms have great difficulties in offering collateral for loans;
- Mounting liquidity pressure on SMEs following the adoption of contractionary macro-economic policies by the government;
- Delays in receipt of income from sales, leading to inability of banks to secure loans and liquidity pressure on SMEs, which drives them towards more expensive unofficial markets;
- Absence of joint ventures and lack of government facilities for forging joint ventures; and
- Weak business environment for SMEs.

o Lack of access to various kinds of information, including:

- Marketing information (on domestic and foreign markets, price structures, packaging requirements, etc);
- Information on the financial and technological standing of SMEs to enable investors to select healthy businesses for their investment;
- Technical and scientific information; and
- Information on raw material suppliers and buyers.

o Government policies:

- Inability to create an enabling environment for SMEs;
- Policies that are harmful to SMEs, e.g. subsidies for state-owned firms;
- SMEs often have to refer to various government agencies for a variety of reasons, but often lack the necessary workforce or bureaucratic skills to negotiate effectively with these organizations;
- Although the overall rate of tax collection is not high in Iran, the unequal collection of tax places a burden on firms that report their revenue status transparently and eventually encourages large-scale tax evasion; and
- The administrative hurdles for the collection of duties and the lack of institutions to resolve possible disputes arising from arbitrary decisions.

o Legal barriers

- Complicated registration for entering into the tender business;
- The need for any start-up company to have a Board of Directors;
- The need for start-up companies to have at least two partners;
- Time-consuming registration procedures requiring up to three months to register a business;
- Lack of specialized courts to deal with trade disputes;

- Obsolete trade laws;
- Absence of a meaningful codification system;
- Inappropriate legal position of shareholders/mangers;
- Lack of consistent and comprehensive legal framework for SMEs;
- Lack of differentiation between SMEs and LSEs in tax laws; and
- Rigid and inflexible labour laws.

Policy Recommendations

- National policies and strategies need to be related to the comparative and competitive advantages that a country may have, and to its specific economic needs, such as the need for export promotion and employment generation in the case of Iran: Policies are usually implemented through three types of instruments:
  - *Legal instruments*, comprising laws and legislative acts, e.g. investment incentive laws, labour laws, banking acts, training acts, etc.
  - *Administrative mechanisms*, comprising rules and regulations, such as registration requirements and procedures, export licensing, zoning regulations, etc.
  - *Direct private sector interventions and assistance by the government in input and output markets*, e.g. direct provision of credit, equipment, raw materials; purchase of products of SMEs; venture capital investment; provision of training and advisory services, etc.
- The recommendations made here have taken these three types of instruments into consideration, whilst categorising them in terms of policy reform measures and institutional capacity building measures.
- In the context of policy reform measures, recommendations were made in a number of areas, such as:
  - Legal structure and environment:
    - Laws that affect in general the ability to start and engage in business;
    - Legal and regulatory requirements for starting a new businesses; and
    - Legal and regulatory requirements related to running an existing business.
  - Taxation and fiscal matters
  - Access to credits/finance
    - Setting up of credit lines for SMEs, loan guarantee funds, and venture capital systems; and

        - Making finance available to the many non-operating businesses that already have licenses.
    - Employment
        - General issues related to employment generation; and
        - Specific issues related to youth and women employment promotion.
    - Education and HRD as one of the principal means of increasing competitiveness
    - Technology application and management
- With regard to institutional capacity building measures, recommendations were made in areas such as:
    - At government level
        - Setting up an SME Development Agency as the institutional framework for private sector development;
        - Establishing a Ministrial Council for concerted, coherent and coordinated actions for SME development in the country;
        - Developing an infrastructure of norms-related metrology, standards, testing and quality; and
        - Designing and developing export promotion packages.
    - At private sector level
        - Strengthening clusters and networks in selected sectors;
        - Setting up consulting services;
        - Establishing science and technology centres;
        - Converting experimental Business and Innovation/R&D Technology Transfer Centres into strong supporting units for SMEs;
        - Establishing Business Incubation Centres;
        - Introducing One-Stop-Shop centres providing facilities for entrepreneurs;
        - Improving access for entrepreneurs to relevant and needed information; and
        - Starting an entrepreneurship development programme.
- When developing a road map for implementing the recommendations presented in this section, both the weaknesses and the strengths of the Iranian SME sector and its support organizations should be taken into consideration. This means that current developments and existing organizations and structures should be taken as a starting point for further strengthening and improvement through project activities. The experience gained through international best practices suggests a certain sequence for the successful conduct of project activities:

- Conducting discussions on the results of this study with all main actors in SME development;
- Prioritizing actions to undertake as a consequence of the discussions and the recommendations made, after which:
  - Agreeing on an integrated strategy framework for SME development encompassing all needed projects;
  - Agreeing at government level about the establishment of a Council of Ministers;
  - Agreeing to start the development of an independent SME Development Agency; and
  - Agreeing on the prioritization of the actions to be taken within the SME development component of the UNIDO programme for Iran.
- Selecting and inviting international development agencies to submit technical proposals for project activities to the minister-in-charge of SME development as agreed to according to the prioritisation.

Project Proposals for the UNIDO Country Programme

- This study must also be seen as another important contribution to the Iranian economy, in addition and complementary to the ones already made by UNIDO in assisting the government of Iran, such as the recently completed projects on the delivery of a draft for a New FDI Law in Iran (2002) and a needs assessment for women entrepreneurship (2002), in addition to the "Industrial Sector Survey on the Potential for Non-Oil Manufactured Exports" (1999) and the "Industrial Development Review" (1995). Finally, in the field of international labelling and environmental regulation – two issues again of great importance for this present SME study – UNIDO has been assisting the government of Iran with 53 ongoing projects to the tune of more than US$ 19m. within the framework of the Montreal Protocol. Obviously, UNIDO possesses the necessary background expertise of the country as well as the required national and regional information to be fully qualified to assist the government of Iran effectively in designing and implementing project activities in line with accepted recommendation as made in this study.
- Below follow areas of specific expertise that UNIDO has gained over the years based on a combination of extensive research and experience, and the application of the same in a large number of countries. Three different type of project proposals will be discussed:
  - Technical cooperation to create a suitable business environment – "Getting Industrial Governance Right";
  - Technical cooperation to prepare local SMEs for partnerships – "Getting the Institutional Framework Right"; and
  - Technical cooperation to facilitate matchmaking – "Getting the Linkages Right".

- With regard to the proposals concerning the imperative of getting industrial governance right, UNIDO assistance could be rendered in the following policy support measures:
  - Support for the collection and processing of industrial statistics;
  - The establishment of governance information networks;
  - The preparation and mounting of technology foresight exercises; and
  - More general training and capacity-building activities for policy makers.
- In connection with the need to get the institutional framework right, UNIDO can make available its world-wide experiences in a variety of project activities carried out in many other developing economies. These include:
  - The establishment of Business Information Networks;
  - The design, development, implementation and guidance of SME clusters in various industrial sectors;
  - Developing and implementing an infrastructure of international business norms such as metrology, standards, testing and quality (MSTQ);
  - Setting up Business Advisory Services for SMEs, as well as training and guidance of consultants, specifically in SME related problems;
  - Conducting business training, including technical training and entrepreneurial training;
  - Development of women entrepreneurship, for which UNIDO has already carried out a study in 2001/2002.
- With regard to the need to get industrial linkages right, UNIDO can make available its up-to-date experience and expertise to bring SMEs in the mainstream of international businesses. Important project activities in which UNIDO could contribute effectively to support the Iranian government in its drive to promote exports include:
  - The Business Partnership Programme, in which local SMEs will be trained and brought into contact with international businesses, among them local and foreign Trans National Corporations (TNCs);
  - The Subcontracting and Partnership Exchange (SPX) programmes; and
  - The Investment Promotion Programme, aiming at attracting local and international investments for SMEs.

CHAPTER 1

THE ROLE OF SMEs AND THE INTERNATIONAL EXPERIENCE IN PROMOTING SME DEVELOPMENT

1.1 Introduction

The experience of many countries, both developing and developed, has shown that the SME sector can make a substantial contribution to industrial and economic development for a variety of reasons. First, it supports the mobilization of national resources, resulting in the creation of employment opportunities, the creation of wealth, and consequently the alleviation of poverty. Second, it assists in the mainstreaming of such disadvantaged social groups as youth or women, whose capacity to contribute to the economic development of their countries is often constrained. Third, the SME sector can play an important role when privatisation activities have to be carried out, since SMEs are often able to absorb the resulting redundancies in manpower. Fourth, SME development promotes democracy and a civil society as it stimulates entrepreneurs to participate in the economic, political and social system of the country. Finally, the SME sector has proven to be flexible and innovative; in a number of sectors SMEs have considerable comparative advantages over large enterprises, which enables them to respond more quickly and effectively to changing, and increasingly global, trends.

This chapter will draw on some international experiences with regard to SME development. It will address a number of important topics with reference to best practices in various parts of the world. Furthermore, several country-specific experiences, from the EU, the Republic of Korea and South Africa, will be elaborated upon.

1.2 The Contribution of SMEs to Economic Development

Small and medium-sized enterprises (SMEs), including micro-enterprises, make a significant contribution to economic and industrial development in both developed and developing economies. They form the backbone of the private sector, make up over 90 per cent of enterprises in the world, and account for 50 to 60 per cent of employment. These shares are even higher in the manufacturing sector, and in developing economies, where such enterprises typically account for 90-95%, or more, of all industrial enterprises, 70-75% of industrial employment, and 50-60% of industrial output. For developing economies SMEs often offer the only realistic prospects for increases in employment and value-added. This applies equally to

countries with economies in transition, where large inefficient state-owned enterprises are giving way to much smaller and more efficient private entities.

The high preponderance of SMEs in developing economies principally reflects the fact that they are more suited to the conditions prevailing in these countries than larger enterprises because they tend to be more attuned to the local resource base. In this regard, they display the following strengths in particular:

- *SMEs create jobs.* They play an important role in generating employment at reasonable rates of remuneration, especially for workers with limited skills and women who have few alternative sources of income. They therefore provide an important vehicle for the sustainable achievement of the poverty-reduction objectives at the core of the present development agenda. By typically depending more on local suppliers than large firms, they are also more likely to generate indirect employment opportunities.
- *SMEs promote an efficient allocation of resources.* They tend to have a greater propensity for labour- rather than capital-intensity, which renders them especially appropriate for the typically labour-abundant and capital-scarce economies of developing countries. To the extent that these enterprises operate in "informal" markets, the factor and product prices they face also provide a better reflection of social opportunity costs than the prices faced by large enterprises.
- *SMEs support the building of systemic productive capacities*. They help to absorb productive resources at all levels of the economy and contribute to the establishment of dynamic and resilient economic systems in which small and large firms are interlinked. They also tend to be more widely dispersed geographically than larger enterprises, support the development and diffusion of entrepreneurial spirit and skills, and help to reduce economic disparities between urban and rural areas.
- *SMEs can respond flexibly to changing conditions.* Because of their relatively small size which precludes the emergence of various structural rigidities and overly complicated decision-making processes, SMEs are potentially very well placed to respond rapidly and effectively to changing circumstances. Provided that they can gain access to the relevant information and have the necessary skills, they can rapidly adjust their output and the processes used in its manufacture.

1.3 The Changing Global Environment

1.3.1 Globalization

Globalization can be seen as the pervasive decline in barriers to the global flow of information, ideas, factors (especially capital and skilled labour), technology and goods. It is clear that this process has many dimensions. It is also very complex, since the barriers to global interchange in the various spheres of human activity are changing at a varying pace, and often have

regional dimensions (e.g. integration within Europe is occurring at a more rapid pace than integration between Europe and Africa). One important indicator of globalization – often used to the exclusion of all others – is the growing international integration through trade. As shown by the data in Table 1.1, the ratio of exports to GDP has grown steadily and significantly in most regions since the middle of the 20th century.

Table 1.1: Trade as a proportion of GDP, 1960-1998 (%)

Region	1969	1970	1980	1985	1990	1995	1997	1998
East Asia & Pacific	18.5	23.6	45.1	44.3	52.0	63.5	65.5	74.8
Europe & Central Asia	0.0	0.0	0.0	0.0	46.7	63.5	64.9	70.8
Latin America & Caribbean	21.3	19.7	26.6	26.6	25.9	31.0	32.2	32.4
Middle East & North Africa	0.0	0.0	73.9	56.0	67.1	62.9	60.4	53.0
South Asia	0.0	11.8	20.9	18.8	21.9	28.9	29.1	28.8
Sub-Saharan Africa	50.8	47.3	62.9	54.5	52.8	59.9	60.2	59.3

Source: World Bank, World Development Indicators, various issues

The extent of integration of different economies into global productions markets varies, and is affected by a number of factors (most notably the size of the economy). What is especially striking, and of growing significance for exporters in developing economies, is the growth in export/GDP ratio of low-income countries in recent decades, particularly China and India (see table below).

The process of globalization has brought both benefits and drawbacks. On the positive side, a great many people have gained from the growing openness in factor and product markets, in communications, in cultural exchanges and in travel. A growing proportion of the world's population has experienced significant improvements in living standards in recent years. By 1998 there were 670 million more people living above the absolute "poverty line" than in 1990, i.e. their incomes, measured in 1985 purchasing power parity consumption standards which takes account of living cost in different countries, exceeded US$1 per day. This represents a major advance in human welfare, and a historically unprecedented pace and degree of improvement. East Asia was a major beneficiary, especially after the 1960s, and China and India after 1980. For example, the Chinese economy grew at an annual rate of 10.2% during the 1980s and at 12.8% during the first half of the 1990s. The benefits of this growth also filtered down to a large number of people, with the number of Chinese living in absolute poverty having declined by more than 80 million between 1987 and 1998.

At the same time, however, globalization has also yielded the following drawbacks:[1]

- The inter-country distribution of income has become considerably more unequal;

1 *Integrating SMEs in Global Value Chains; Towards Partnership for Development*, UNIDO, Vienna, 2001, p. 22-25.

- The intra-country distribution of income has deteriorated in almost all countries, except were government transfers have ameliorated the growing divergence in factor incomes;
- The gap between skilled and unskilled labour incomes has grown for much of this period, as has that between senior management and their labour forces.

However, taking into consideration the gains arising from the reduction in global barriers, which have allowed many individual firms and countries to specialize, grow and profit from globalization, the SME sector no longer questions whether to participate in global markets. Rather, the critical question is one of how to do so in a way that provides sustainable income growth. This poses a significant problem for many SMEs, especially in developing economies, since many of them lack the capabilities to participate effectively in global markets.

The SME sectors of many developing economies have therefore embarked on programmes to upgrade the core competences of local enterprises in order to enable them to enter into "global value chains". These global value chains include the full range of activities required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use (see box 1.1).

The upgrading of core competences includes four trajectories that SMEs may adopt in pursuing the objective to increase competitiveness in the global value chain. These comprise process upgrading, product upgrading, functional upgrading and chain upgrading.

Box 1.1: Example of a global value chain

VALUE CHAIN IN THE WOODEN FURNITURE INDUSTRY

This involves the provision of seed inputs, chemicals, equipment and water for the forestry sector. Cut logs pass to the sawmill sector, which gets its primary inputs from the machinery sector. From there, sawn timber moves to the furniture manufacturers who, in turn, obtain inputs from the machinery, adhesives and paint industries, and also draw on design and branding skills from the service sector. Depending on which market is served (domestic or international) the furniture then passes through various intermediary stages (logistics, packaging, etc.) until it reaches the final customer, who after use consigns the furniture for recycling.

1.3.2 Integration of SMEs into global value chains

It is widely recognized, especially in the current environment of increasing economic globalization, that SMEs in developing countries can benefit greatly from being linked into national, regional and global networks of firms and value chains. The establishment of such vertical and horizontal linkages between SMEs themselves, and with larger national and transnational corporations (TNCs), can help SMEs overcome the inherent limitations with regard to economies of scale and scope imposed by their size and frequent isolation. By

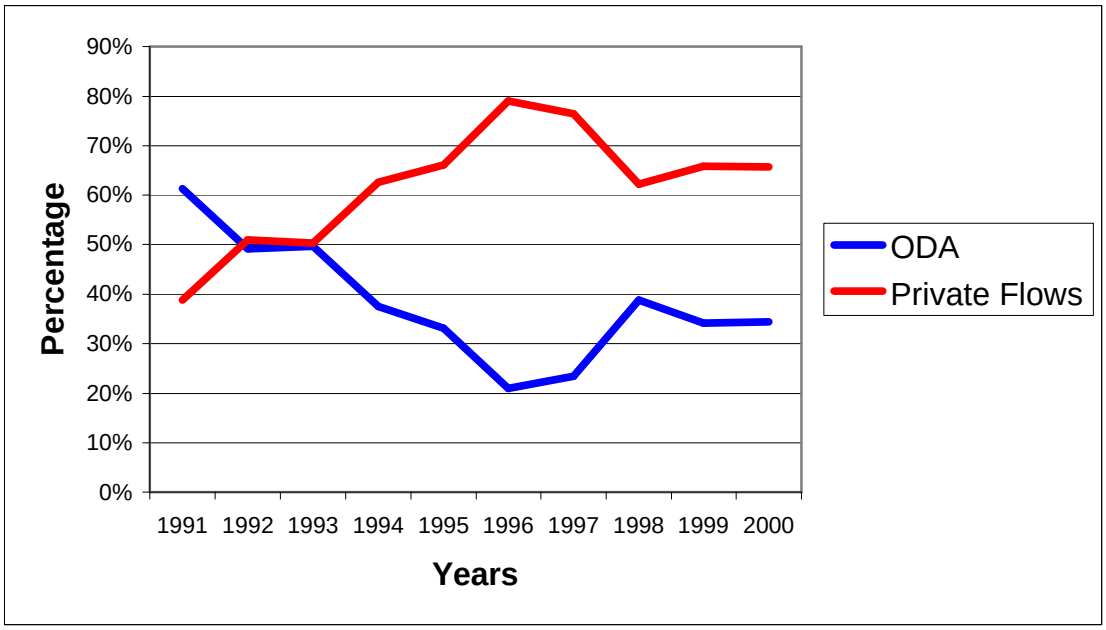
becoming connected into networks and integrated into value chains, SMEs can realize collective efficiencies and gain access to markets, knowledge, information, technology, skills and capital, which can greatly enhance their efficiency and competitiveness.

In this context, linkages with TNCs can be particularly beneficial. They represent one of the most effective ways of promoting the upgrading of SMEs in developing economies by inserting them into the vertically integrated global production networks of TNCs. While the degree and nature of this upgrading depends upon whether the value chains concerned are governed by international buyers or producers, the overall result in both cases is a significant improvement in the product quality, process technology, management efficiency and international competitiveness of the participating SMEs.

Since the 1980s FDI has emerged as one of the most important vehicles for facilitating SME linkages with larger businesses. Recognizing the cost advantages, especially with regard to labour, to be gained by subcontracting their production to SMEs in developing countries, TNCs are increasingly establishing subsidiaries or affiliates in developing economies, to which they are outsourcing their production operations. These subsidiaries, in turn, are used to form linkages with local SME suppliers. These trends are underlined by the empirical data, which show the share of official development finance (ODF) in total capital flows to developing economies amounted to some 62% in 1991, with private capital accounting for the bulk of the remainder. By 1999 these proportions had been reversed, as the share of ODF fell to some 34% while that of private capital flows rose to more than 64%. Significantly, this did not reflect an absolute decline in ODF, which fluctuated only modestly during this period and amounted to US$ 85.9 billion at its end, slightly higher than the US$ 84.5 billion recorded at its onset. Rather, it was caused by a sharp rise in private flows from US$ 53 billion to more than US$ 161 billion. A particularly dramatic increase was recorded in foreign direct investment (FDI), which rose from just below US$ 25 billion in 1991 to slightly less than US$ 132 billion in 1999, when it accounted for more than 53% of total capital flows to developing economies.

Much of this FDI has been concentrated into a relatively small number of countries, however. The latest available data thus show that the ten largest developing-country recipients of FDI accounted for almost 77% of the total volume of these flows in 1998-2000. The volume of FDI flowing into China alone amounted to more than 19% of the total, and the inflows into the two next largest recipients (Hong Kong Special Administrative Region and Brazil) amounted to a further 30%. These data confirm that FDI-led development processes are subject to strong forces of agglomeration, which inevitably have a highly imbalanced impact on global development if left to themselves.

Figure 1.1: Official development assistance flows vs. private flows



Source: *Integrating SMEs in Global Value Chains; Towards Partnership for Development*, UNIDO, Vienna, 2001

To counteract these forces of agglomeration and stimulate a broader spread of FDI to countries and regions that otherwise risk marginalization, deliberate interventions by external catalysts may be required at the policy and institutional levels to overcome the constraints that inhibit a more equitable distribution of FDI flows. These include, inter alia, the lack of:

- A coherent and consistent policy environment;
- An enabling regulatory/legal environment;
- Adequate financial support systems;
- Economies of scale and forms of cooperation (networks, clusters);
- Appropriate forward and backward linkages among industrial SMEs or with LSEs; and
- Institutional support in innovation, product development, R&D, quality control, productivity improvement and entrepreneurial training.

1.3.3 Need for policy and institutional capacity building measures

Measures clearly need to be taken, therefore, to stimulate a broader spread of international business linkages between firms in developed economies and national enterprises, especially SMEs, in the developing economies. However, the achievement of such linkages will depend critically upon the existence of an appropriate business structure in the developing countries concerned.

Within the framework of assisting developing countries in designing SME policies and institutional capacity building measures aimed at enhancing their competitiveness to generated increased exports and jobs, more attention will have to be given to the promotion of two issues in particular. First, foreign investment interest and technology transfer to developing economies will have to be increased; second, efforts will have to be made to strengthen the technical and managerial capacities of SMEs in these countries to respond effectively to the challenges and opportunities posed by the process of globalization. Based on its world-wide experience in these matters, UNIDO has been instrumental in promoting such linkages between foreign firms and domestic SMEs in many countries, and to assist in designing and implementing the measures needed to overcome the constraints inhibiting such linkages. In this connection, the Organization has rendered a wide variety of specific technical cooperation services, which were delivered at the policy, institutional, and enterprise level, as appropriate.

Based on the practical findings of this study and described in the following chapters, an effort has been made in Chapter 11 to prepare an inventory of policy instruments or project activities that would be required to realize the policy objective of the Government of Iran, in accordance with the national goals as expressed in the Third Socio-Economic and Cultural Development Plan.

1.4 Review of International Best Practices for SME Development

1.4.1 Relevance

Without attempting to be comprehensive, this section will present some examples of best practices of SME development in various parts of the world. This will include an analysis of SME promotion in the European Union (EU) and some selected best practices from various Asian countries, as well as business case studies of. Taking into consideration the results of the research carried out for this study, these practices will point to directions that might be of interest for Iran in such areas as:

- Creating or strengthening an appropriate institutional infrastructure to support SME development, which would provide, inter alia:
    - Access to finance;
    - A variety of business development services such as training (technical and entrepreneurial skills), information, technology/innovation, productivity, R&D, certification, MSTQ (metrology, standards, testing and quality), etc.
- Creating and/or strengthening relevant representative organizations to provide a meaningful input into policy formulation and implementation;
- Supporting the development of SME clusters and networks as a mean of stimulating business dynamics (flexibility, innovation, etc.) and of achieving collective efficiencies;

- Practical execution of privatization policy;
- Removing monopolies of state-owned enterprises (SOE);
- Promoting the integration of SMEs into national and global value chains in order to enable them to take full advantage of market opportunities; and
- Promoting special objectives, such as the development of women, youth and graduates' entrepreneurship.

1.4.2 Major SME developments in the European Union (EU)

Rationale

Obviously there is a wide range of SMEs and SME structures in the EU, currently comprising 15 countries with very different levels of economic development and size. Why, therefore, would comparisons with the EU's experience with SME development be relevant for Iran. There are several reasons why such comparisons might be justified. These are:

- The use of EU averages cancels out the specificities of certain countries and economies, which might distort comparisons of the economic and social contribution of SMEs in the EU vis-à-vis other economies;
- Much analysis has been done with regard to SME development in each of the member-states of the EU, which includes the less economically developed Mediterranean economies, such as Greece, Portugal, Spain and the southern part of Italy; these could be studied as part of the EU as a whole or as individual cases when drawing comparisons with Iranian economic realities;
- Many Central European states are preparing for accession to the EU (with Poland, Hungary, Czech Republic, Slovenia and the Baltic States scheduled to accede in the first round, and Romania and Bulgaria in the second round). Since many of these countries have a developing economy and a struggling SME sector, it might be helpful for Iranian officials, researchers and developers to understand the development of the SME sector in these prospective new member-states and benefit from their experiences in raising their SME sector to a higher performance level; and
- The economic integration of the EU and the subsequent positive growth and development of the SME sector, might serve as an example for other countries aiming at economic integration with other countries in their region, or possibly as a preparation for accession to the WTO).

General information

The SME[1] sector is the backbone of the developed economies throughout the world. In the European Union (which has approximately 300 million inhabitants), it represents 99.8% of all businesses, which implies an average of 52 enterprises per 1,000 inhabitants. It employs 66% of all labour (in the Mediterranean countries of the EU even up to 80%), and in general is creating more jobs than large enterprises, which are struggling for higher productivity, and hence employing relatively less labour because of globalisation. The SMEs' share of exports is 11% on average, although in countries like Luxembourg, Sweden, Finland and Ireland it amounts to as much as 40%, 34%, 26% and 25%, respectively. In terms of direct and indirect taxes and social contributions, it provides 44% of the Gross Domestic Product in the EU.[2] The share of "value added" generated by SMEs in the EU economy is approximately 70%, and the share of gross operating profit as high as 77%, while the corresponding figures for the large enterprise sector amount to 30% and 23% respectively.[3]

How did the strong development of the SME sector in the West take place? Modern business theories developed during the first part of the 20th century had little effect on SME development, since the economic growth of industrial nations of the world appeared to be driven by large industrial firms, whereas small firms were being driven to failure by the economies of scale obtained by large firms. Entrepreneurship seemed to be a dead or dying phenomenon. This pessimistic view was held by no less a proponent than Schumpeter, who argued in his 1942 book *Capitalism, Socialism and Democracy* that entrepreneurship did not survive in the face of the ever larger industrial firms that monopolised innovation through well funded and organized research and development laboratories. This belief continued to flourish after World War II (1939-1945), since simple observations of industrial activity in the 1940s through the 1970s showed industrial firms growing ever larger, even to such an extent that John Kenneth Galbraith proposed in 1967 that capitalist society would evolve into three groups, i.e. big business, big governments and big labour unions. Galbraith's 'New Industrial State' was in fact devoid of entrepreneurs.[4]

Nonetheless, evidence began to emerge that new firm formation and growth was an increasingly important part of overall activity and growth. In 1979, David Birch of the Massachusetts Institute of Technology (MIT) published statistics showing that between 1969 and 1976, entrepreneurs of small firms created more than 81% of the net new jobs in the US economy. Subsequent research of the US Small Business Association revealed that

1 SMEs in the EU are defined as non-primary enterprises employing less than 250 employees. They are sub-divided into "micro" (0-9 employees), "small" (10-49 employees) and "medium"-sized enterprises (50-249 employees); in addition their turnover should be less than € 40m. with a balance sheet total of less than € 27m.; finally they should be economic independent, i.e. more than 50% privately owned.

2 EIM Small Business Research and Consultancy, *Dutch SMEs in European Perspective*, September 1999.

3 These figures relate to SMEs with less than 500 employees; see *The Dutch SME sector: an international comparison*, EIM, 1996, pp. 8-9.

4 Galbraith, J. K., *The New Industrial State*, New York, 1967, in Bruce A. Kirchoff, *The Dynamics of Ambitious Entrepreneurship* in EIM publication; *Entrepreneurship in the Netherlands: Ambitious entrepreneurs: the driving force for the next millennium*, Zoetermeer, 1999, p. 4.

entrepreneurs of small firms produced a disproportionate share of the net new jobs between 1976 and 1988. The same pattern could be observed in Western Europe, where flexible and innovative companies and entrepreneurs also played a leading role in the transition from a managerial to a more entrepreneurial economy. Obviously this caused renewed research in the phenomenon of SME development and entrepreneurship in Europe by many professional research and small business organisations, (partly) financed by governments. The latter adopted the results and translated these into policies and policy instruments for its implementation. When in the early 1980s unemployment rose in many of the European economies, the interest in SME development and self-employment (through micro businesses) intensified. Many sectoral studies were undertaken during that period and a vision for SME-based economic growth was developed. In addition, evaluations were carried out to assess the quality of the policies and policy instruments implemented, on the basis of which new and/or adapted policies and instruments were proposed.

This heralded the start of a continuing process of improvements in the enabling environment for SME growth and development through policy design, the creation of policy instruments, the implementation of these instruments, the monitoring and evaluation of the results of these measures and then back to the reformulation of policies, etc. An example of the results of these measures is found in Annex 1, where an overview is given of all policies and policy measures of each of the member states of the EU. All of this has led to the results described below.

Detailed information and developments

The EU encompasses more than 19 million private enterprises in the non-primary sector. Together, these enterprises create an added value of some € 6,800 bn in the EU economy, and provide work for some 133.2 million citizens. A closer look reveals the diversity in the enterprises that make up the private sector. Apart from their size, they differ e.g. with regard to the sector they operate in, the ownership structure and their contribution to total value added. There are large differences when it comes to their degree of globalisation.

Table 1.2: Main indicators of non-primary EU enterprises, 1998

Category	Micro	Small	Medium	SMEs	Large	Total
Number of enterprises ('000)	18,040	1,130	160	19,330	38	19,370
Employment ('000)	38,360	21,320	14,870	74,550	38,680	113,230
Value added (€ per worker	30,000	50,000	95,000	45,000	90,000	60,000

Source: The European Observatory for SMEs 2000, by KPMG, EIM and ENSR

According to the most recent annual report of the European Observatory for SMEs for 2000, 99.8% of the companies in the EU non-primary business sector are SMEs. They account for 65% of employment in this sector, and for half of the total value added of large companies with more than 250 employees.

Comparing the employment by size class in three selected developed economies, we see interesting differences between the EU, USA and Japan, as shown in Table 1.3.

Table 1.3: Employment share by size class in the non-primary private sector in 1996, (%)

Category	Micro	Small	Medium	SMEs	Large	Workers per enterprise
EU	34	19	13	66	34	6
USA	11	19	12	42	58	19
Japan	N/a	n/a	n/a	33	67	10

Source: EIM/ENSR, Observatory SME, 2000

As compared to Japan and the USA, the EU has a far higher concentration of SMEs (even double that of Japan). Within the EU the Mediterranean countries have the highest density of micro businesses (0-9 employees).

Table 1.4: Number of non-primary EU enterprises by sector and size class ('000)

Sectors	SMEs		LSEs	Total
Extraction	45	0%	1	46
Manufacturing	2,135	11%	18	2,153
Construction	2,695	14%	2	2,697
Wholesale trade	1,445	7%	2	1,447
Retail distribution	3,990	21%	3	3,993
Transport & communication	1,035	5%	2	1,037
Producer services	4,035	21%	8	4,043
Personal services	3,950	20%	3	3,953
Total	**19,330**	100%	**38**	**19,368**

Source: Adapted from the European Observatory for SMEs 2000, by KPMG, EIM and ENSR

Of the total non-primary SME-sector, 25% is active as SMEs in industrial activities (manufacturing and construction); 28% in trade and 46% in services. The latter figure is important, as it highlights the emphasis placed by developed economies on the development of support structures for industrial and other SMEs alike,such as chambers of commerce and industry, business associations, research institutes (including innovation and productivity centres, etc.), consulting services, financial institutions, quality control, export promotion

organisations, logistics, ICT, and the like. Obviously, these intermediate support structures for SMEs are imperative for a healthy development and growth of the business sector, and empirical research has confirmed the strong correlation between an appropriately established and well-performing high-quality intermediate support structure on the one hand, and the economic strength of the enterprises on the other hand.

Table 1.5 shows employment figures. The SMEs' share of total employment is 34%, whereas the employment share of trading sector is 24% and that of the service industry 42%. Again this underscores the importance of the service sector for both industrial and trading enterprises in increasing their competitiveness. In addition, it provides a large number of jobs and has an immediate effect on the performance of the SME sector as a whole.

Table 1.5: Employment of non-primary EU enterprises by sector and class size ('000)

Sectors	SMEs	LSEs	Total
Extraction	400	1,290	1,690
Manufacturing	16,390	13,260	29,650
Construction	9,000	1,160	10,160
Wholesale trade	6,130	1,430	7,560
Retail distribution	11,500	4,370	15,870
Transport & communication	4,010	4,540	8,550
Producer services	12,310	8,440	20,750
Personal services	14,820	4,180	19,000
Total	**74,550**	**38,680**	**113,230**

Source: The European Observatory for SMEs 2000, by KPMG, EIM and ENSR

Turnover and exports

Table 1.6 presents the development of turnover in EU non-primary enterprises over a period of 12 years, between 1988 and 2000. On average, real turnover growth amounted to 2.2% annually. It appears that turnover growth is positively related to enterprise size, since it amounted to 2.3% per annum in LSEs while SMEs experienced a yearly real turnover growth of 2.1%. Looking at the various sales categories, however, a more nuanced picture emerges. As regards domestic sales, SMEs show the same growth rate as LSEs. Consequently, the better performance of LSEs is mainly the result of their large share in the fastest growing sales category – i.e. exports – in total sales.

Table 1.6: Average annual growth in real turnover by demand category in the EU, 1988-2000 (%)

Categories	Micro	Small	Medium	SMEs	LSEs	Total
Domestic sales	1.8	1.7	1.5	1.7	1.5	1.6
• Consumption goods	1.3	1.0	0.6	1.0	0.5	0.8
• Investment goods	1.8	1.3	0.9	1.3	0.6	1.1
• Intermediate goods	2.2	2.2	2.2	2.2	2.2	2.2
Exports	4.9	5.2	5.4	5.3	5.3	5.3
Total	**2.0**	**2.1**	**2.1**	**2.1**	**2.3**	**2.2**

Source: The European Observatory for SMEs 2000, by KPMG, EIM and ENSR

Internationalization

Exports. In 1998 the EU enterprises exported goods with a total value of Euro 1.967bn. These exports accounted for 16% of the total EU business turnover. This figure varies from 6% in micro enterprises to 22% in enterprises with 250 employees or more. These data show that the involvement of SMEs in export is an important contribution to the economy as a whole.

Table 1.7: Averages share of exports in turnover by enterprise size, 1998 (%)

Class size	%
SMEs	**11**
• Micro	6
• Small	13
• Medium-sized	16
Large enterprises	22
All enterprises	**16**

Source: The European Observatory for SMEs 2000, by KPMG, EIM and ENSR

A particularly interesting feature is the strength of medium sized businesses with 50-249 employees, which represented only 0.8% of all businesses and accounted for an impressive average of 16% of export of turnover in their size class. In some advanced member-states this figure even rose to 25%. These businesses are found in equal proportions in all sectors and are equally spread over all age categories. This indicates that niche markets penetrated by both young and older companies are found in all sectors. Entrepreneurial skills are shown to play a crucial role in their success. These businesses have strong market orientations and respond flexibly to change. They distinguish themselves from competitors through quality and product range. They continually improve their production process and adjust their production ranges, and also have a clear business strategy. They are innovative, perform a relatively large amount of R&D and have high export rates.

This feature of medium-sized enterprises has not remained unnoticed. Indonesia, with more than 200 million inhabitants and a large oil and gas industry has adopted a project to enlarge

the class of medium-sized enterprises in the non-oil production sectors, in order to stimulate exports, as is shown in the box below.

Box 1.2: Exports by medium-sized businesses

In their efforts to increase the export of non-oil products, Indonesia is now in the process of developing a strong class of medium-sized industrial enterprises. In research carried out prior to the introduction of this policy, it appeared that 93.5% of Indonesian enterprises were micro businesses employing 0-9 workers, whereas the number of businesses employing 10-99 workers only represented 5.5% of the total. By contrast, that percentage appears to be nearly four times higher in some of the economically advanced member –states of the EU, where 20.4% of all businesses have 10-99 workers. Hence Indonesia's efforts are presently directed towards developing medium-sized companies, with 50-249 employees, specifically focusing on export markets. It is seeking to achieve this aim by creating an enabling legal, regulatory, economic and financial environment and developing an appropriate institutional infrastructure to support and promote SME development to stimulate smaller SMEs to grow into larger sized exporting enterprises.

Source: EIM, Zoetermeer; research carried out in 1997 and 1998 for the Netherlands Ministry of Economic Affairs

International Business Contacts. Another measure of the internationalization of business is the number of cross border contacts. Over the past 25 years, 27% of SMEs of all size categories were able to record an increase in their international business contacts. Of the largest SMEs, with 20 to 249 employees, 57% were able to intensify their international business contacts. Yet even 19% of the smallest companies, comprising enterprises without employees experienced a substantial increase in these cross border relationships. In manufacturing and construction, 27% of SMEs have more international business contacts than 5 years ago, whilst in trade, this holds for 23% and in services for 24% of SMEs.

Foreign Direct Investment. The level and destination of FDI, defined in this context as cross-border investments aimed at acquiring a lasting interest in enterprises abroad, is a third measure for examining the degree of internationalization of markets. In 1999 the EU's FDI accounts grew very strongly. At close to € 500 bn., total outflows rose in that year by more than 40%. Direct investments into the EU also grew considerably by 27%, reaching almost € 300 bn. Approximately half of the outward FDI consisted of intra-EU FDI flows, whereas one year earlier this was only 38%. In other words, by 1999, half of the FDI by EU firms was made in another member state.

Table 1.8: Origin of inward FDI and destination of outward FDI in EU (€ mn)

Region	Inward FDI into the EU				Outward FDI from the EU			
	1998		1999		1998		1999	
EU	100,704	46%	203,824	68%	132,743	38%	240,037	49%
USA	59,737	27%	68,354	23%	128,676	37%	160,850	33%
Japan	1,592	1%	2,613	1%	571	0%	3,206	1%
Canada	889	0%	2,337	1%	3,849	1%	777	0%
Other	54,661	25%	22,609	85	80,850	23%	85,390	17%
Total	**217,583**	100%	**299,737**	100%	**346,689**	100%	**490,260**	100%

Source: Eurostat, Statistics in focus, 28/2000, Theme 2, Eurostat, Luxembourg, 2000

Value added and employment

Table 1.9 shows the continouous increase in value added and employment that small companies contributed to the economies of the member states of the EU in 1993-2000.

Table 1.9: Sources of annual growth in value added and employment, 1993-2000 (%)

	Real value added	Employment increase
	Average annual change in percentages	
SMEs	2.5	0.4
• Micro	2.3	0.4
• Small	2.5	0.3
• Medium	2.7	0.3
LSEs	3.0	0.2
All enterprises	**2.7**	**0.3**

Source: Adapted from EIM/ENSR SME Observatory 2000

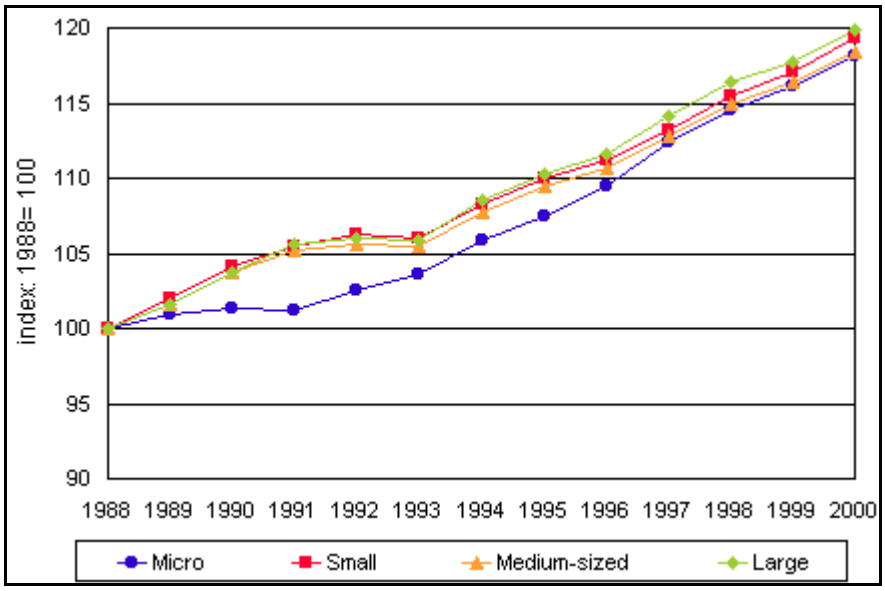
The figures show a continuous growth in value added averaging 2.7% annually between 1993 and 2000. While large enterprises made a larger contribution to value added of 3% annually, SMEs nevertheless performed impressively with an average annual growth of 2.5%. The medium-sized enterprises with 50-249 employees performed particularly well, with a growth of 2.7% per annum.

The contribution of SMEs to employment generation is even more impressive. Over the past 7 years all enterprises together contributed 0.3% per year, which with a workforce of more than 100 million means an increase of approximately 300,000 jobs annually; this again adds up to an approximate number of 2,100,000 jobs over the 7-year reporting period. Of that total of jobs created, the share of LSEs amounted to approximately 840,000, whereas the share of SMEs share was almost 1.3 million. Indeed, SMEs outperformed LSEs as regards the generation of employment, which is why the SME sector has been called the “job motor” of the EU and other developed economies.

Growth in enterprises

As is shown in Figure 1.2, growth in all enterprises (SMEs and LSEs) over the 12-year period from 1988 to 2000 has been approximately 20% across the board. This growth roughly coincides with the growth in jobs as explained in the previous section. However, although the growth of LSEs was even stronger than SMEs, their capacity to generate jobs was far less than that of the SMEs. This can be explained by the process over the years of making the LSEs more competitive, inter alia through privatization, with the purpose of increasing productivity and in this context making staff redundant. The reduction in staff from LSEs was apparently absorbed by the growth of SMEs, however.

Figure 1.2: Growth in the number of enterprises in the EU, 1988-2000



Source: Estimated by EIM Small Business Research and Consultancy, adapted from Eurostat/DG Enterprise: Enterprises in Europe, Sixth Report. Also based on European Economy, Supplement A, June 1999, and OECD: Economic Outlook, No. 65, June 1999.

Behind the dramatic growth of enterprises over the past decade, quite a dynamic fabric of trial and error can be observed. In 1995, for example, almost 2 million new enterprises started business. On the other hand, over 1.5 million enterprises ceased to exist. So on balance, due to entry and exit, the number of enterprises increased by approximately 1%. These dynamics, entry and exit, amount to about 10% of the total stock of enterprises. This dynamic is partly due to entrepreneurship, and partly to government support in creating an enabling environment for starting entrepreneurs. An important issue in this respect has been the “deregulation” of the business environment, coupled with the highest possible transparency in legal matters, as well as the mobilization of finance from both the public and private sectors.

Future developments

Table 1.10 presents an EU-agreed scenario for the economic development of the Union in 2000-2005. This is based partly on extrapolation, taking into account the results of the previous periods, and partly on "guestimates" of expected future developments, which might affect the performance of businesses. The table shows the targets for the entire business community, including both public and private enterprises, and SMEs as well as LSEs.

Table 1.10: Macro-economic growth scenario for the EU, 2000-2005 (average annual % change)

Categories	1988-1993	1993-2000	2000-2005
Real growth of:			
• Private consumption	1.7	2.2	2.3
• Government consumption	1.4	1.1	1.6
• Investment in housing	1.2	2.2	2.2
• Investment, others	-0.1	5.1	3.2
• Exports	5.3	6.6	5.9
• Imports	3.8	6.5	5.8
• GDP	1.5	2.4	2.4
Labour market			
• Labour productivity	1.8	1.9	1.6
• Employment	-0.3	0.6	0.7
• Unemployment rate EU	10.5	9.1	8.3
Deflator			
• Labour cost per employee	6.3	3.3	3.2
• Price of imports	1.9	1.1	1.3
• Consumer price index	4.5	2.2	1.7

Source: EIM Small Business Research and Consultancy, Zoetermeer, The Netherlands

The following table, Table 1.11, shows a "translation" of some of these targets for SMEs. Given the importance of internationalization/globalization, the SME authorities in the EU have made an analysis on exports of SMEs in relation to the total turnover figures for each class of SMEs.

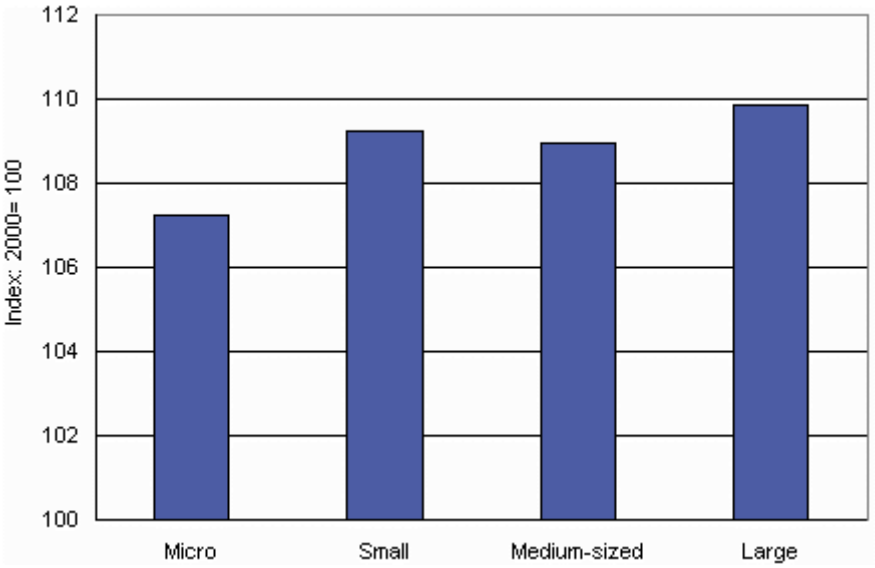
Table 1.11: Real turnover growth scenario results for the EU, 2000-2005 (average annual % change)

Categories	Micro	Small	Medium	SMEs	LSEs	Total
Domestic turnover	2.3	2.2	2.1	2.2	2.0	2.1
Exports	5.5	5.8	6.8	6.2	6.3	6.3
Total turnover	2.5	2.8	2.9	2.7	3.1	2.9
Impact of exports on total turnover						
• Direct	0.4	0.8	1.1	0.7	1.4	1.0
• Indirect	1.1	1.2	1.3	1.2	1.3	1.2
• Total	1.5	2.0	2.4	1.9	2.7	2.3

Source: EIM Small Business Research and Consultancy

The expected growth in the number of enterprises is presented in Figure 1.3

Figure 1.3: Growth scenario for number of enterprises in the EU, 2005



Source: EIM Small Business Research and Consultancy.

From Figure 1.2 it follows that the number of enterprises is projected to increase by almost 8 % between 2000 and 2005 in the scenario. The growth of the number of micro enterprises will be relatively limited, which might be explained by the fact that a number of existing micro enterprises are expected to experience such employment growth that they will move to the next class of SME, i.e. “small”. This is consistent with the growth of the number of small enterprises being more than average.

A summary of the detailed policy aims and tools of each member state of the EU regarding a.) the business environment, b.) the financial environment, internationalisation and information services and c.) R&D, labour and training, and entrepreneurship development is given in Annex 1.

1.4.3 Major SME developments in the Republic of Korea

General information

In the Republic of Korea, SMEs are defined as companies with fewer than 300 persons and assets of less than 80 billion won (€ 60 million).

Table 1.12: Republic of Korea definition of SMEs

Industry	Small Scale Enterprise	Medium scale enterprise
• Mining, Manufacturing, Transport	> 50 employees	51 to 300 employees
• Construction	> 30 employees	31 to 200 employees
• Commerce and other services	> 10 employees	11 to 20 employees

Source: Korea Federation of Small and Medium Business, March 2002

As of 1996, there were 2.64 million SMEs in the Republic of Korea, which accounted for more than 98% of enterprises and 78% of employment. Of these, nearly 100,000 were in the manufacturing sector, representing 74% of total value added and 42% of total exports. The overwhelming majority of industrial SMEs employ 5-10 workers. About half of the industrial SMEs are in heavy, chemical and petrochemical industries, the other half in light industries, and about 2% are venture capital firms. Within the manufacturing sector, more than half of the SMEs have subcontracting relationships with large, diversified conglomerates or "chaebols".[1]

Although the Republic of Korea has received considerable attention for the dominant role conglomerates play in the economy, it is also recognized as a leader in SME support. Starting in the 1970s, and especially in the 1980s, the government of the Republic of Korea adopted policies to support SME development in an effort to counter the weight of the chaebols and achieve a more balanced industrial structure. To that end it created a number of institutions and mechanisms to support SMEs through finance, technology acquisition and upgrading, as well as export promotion. In the 1970s, government policy focused on export promotion and on providing broad-based technical support to enterprises. During the 1980s, emphasis shifted to upgrading manufacturing technologies and assistance became more industry-specific. As competition became more technology-driven in the 1990s, much emphasis was placed on technological innovation, automation, computerization and increased productivity. Today, the

1 Small and Medium Enterprise in Korea: A Status Report, Private Sector Development Department of the Small Enterprise Unit (together with IBRD), 1998/1999.

Republic of Korea has an extensive network of financial and technical support to SMEs that is considered highly effective, particularly in the areas of technological development and export promotion. Since the onset of the financial crisis in 1998, however, the severity of the constraints confronting most SMEs has been such that even this support structure has been inadequate in meeting the immediate needs of enterprises.

Establishment of the Small and Medium Business Administration (SMBA)

After very impressive economic developments in the 1970s and 1980s,[1] Korean SMEs went through harder times in the early 1990s for two main reasons:

- The cost of wages was rising steadily, causing exports to become less competitive;
- the open-market policy of the government brought in many products from abroad that competed with locally manufactured products.

Large-sized companies did not suffer from these developments. On the contrary, the general economic situation of the country kept on improving. Nonetheless, this led to a situation in which the contribution of SMEs to the GDP declined, whereas that of the larger enterprises increased, resulting in a "bipolarising" effect.[2]

After fierce lobbying by the SME sector for increased support, the government decided to establish the Small and Medium Business Administration (SMBA) in 1996, with the main tasks of:

- Extending systematic and coordinated support to the SMEs, with the implementation of three policy instruments in particular: SME financing, manpower replenishment, and technology development for smaller firms; and
- Designing SME promotion policies.

The organization consists of a headquarters with eleven regional offices. It also manages another organization, the National Institute of Technology and Quality. In total the SMBA employs 942 staff (1997).

The headquarters organization has two main divisions, which complement and strengthen each other:

- A division on general aspects of SME operations; and
- A division on addressing the specific needs of each industrial sector.

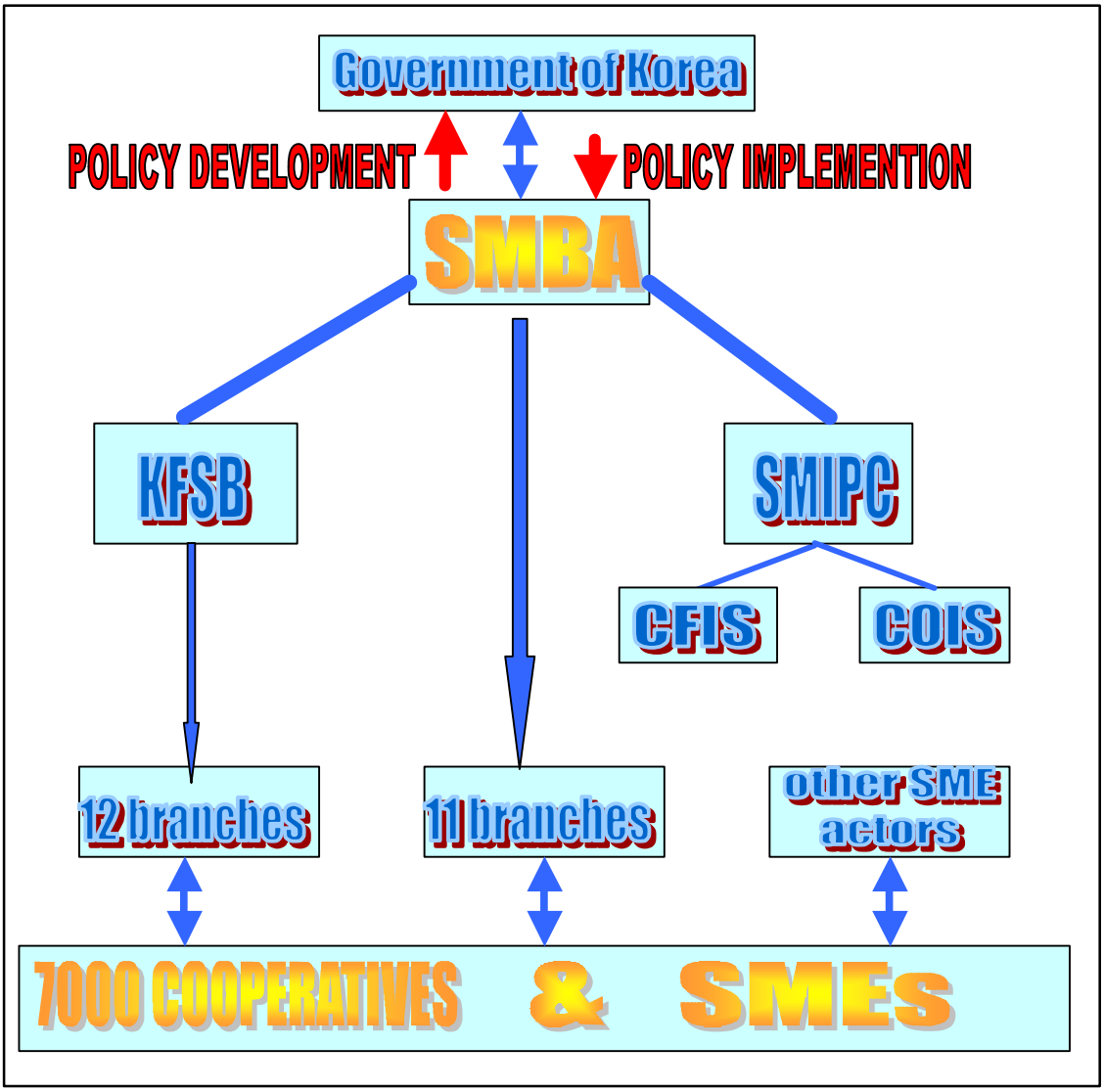
The eleven regional offices carry out the regional policy by implementing the approved policy instruments, as well as providing information to the head-office and proposing new and/or adapted policy measures for submission.

1 At the end of the 1980s, the weight of the SMEs had increased to 98.9% of the whole manufacturing sector, 68.9% in terms of the number of employees, 50.3% in terms of value added and 47.5% in terms of their share of national production (Korea Trade & Investment, published by KOTRA (Korea Trade-Investment Promotion Agency), Seoul, March/April 1996.

2 Yoon-Shik Lee; Small an Medium Business Administration in Korea, Presentation to NAP, Romania, January 1997, p. 2.

The other main organizations that the SMBA works with comprise the Korean Federation of Small Businesses (KFSB), founded in 1962, and the Small and Medium Industrial Promotion Corporation (SMIPC), which was founded in 1979. The latter organisation also manages two other organizations, the Centre for Foreign Investment Services (CFIS) and the Centre for Overseas Investment Services (COIS). Next to these organizations, the SMBA also cooperates with other public and private organizations, such as consulting firms, research and training organizations, innovation centres, etc. Figure 1.4 presents a simplified outline for the institutional support framework for SMEs in the Republic of Korea.

Figure 1.4: Simplified outline of development institutions for SMEs in the Republic of Korea



Government policies and strategies for SME Developments

Government policies for SME development are focused on three objectives, i.e.:

- Fostering self-reliance of SMEs and increasing their competitiveness;
- Meeting the challenges of globalization and localization;
- Facing the new economic climate resulting from the WTO-based trading system.

In order to achieve these objectives, the following four strategies have been developed:

- Enhancing the competitiveness of SMEs through:
    - *Automation and Informalization*: Productivity increases can be achieved by applying conventional methods such as cost reduction, mass production, standardization, simplification, and specialization. An additional means of doing so is by computerizing the production operations and improving the computerized flow of relevant business information. The SMBA provides low interest loans for SMEs wishing to increase automation of production and to build up information databanks (informalization). In addition training courses to enterprises are offered as well.
    - *Technology and quality innovation*: Financial support is provided for SMEs in developing new materials and products. In addition, technological extension services have been developed to make available 700 expert technicians to SMEs, and a joint R&D programme has been established in which universities and private research institutions participate. A number of other specific programmes, such as the "Technology Credit Guarantee Fund" and a "Quality Renovation Programme" have also been set up.
- Entrepreneurship development through:
    - *Support to "start-ups":* Through the Start-up Promotion Act of 1986, the government of Korea has provided the legislative foundation for SMEs to secure the necessary financing through venture capital companies. Furthermore the government is easing the regulations for SMEs to obtain land and finance, and has also started to introduce tax incentives to stimulate entrepreneurs to start new businesses. Finally, a number of "Start-up Incubation Centres" have also been established to support and guide new entrants.
    - *Finance*: Specific programmes have been developed to enable SMEs to obtain low interest loans through guarantee certificates issued by the Credit Guarantee Fund or the Technology Credit Guarantee Fund.
    - *Human Resources*: The SMBA operates various educational programmes, such as the "Management Innovation Education Programme" for managers and the "Technical Innovation Education Programme" for technicians.

- *Market access*: Public organizations have to submit annual plans of the products and facilities they intend to purchase through the "Public Tender System for SMEs", which allows associations or clusters of SMEs to make bids for these official procurement programmes.
- *Management development*: An "SME Consulting Centre" presents solutions for various problems faced by SMEs through custom-designed consulting services.

- Promoting cooperation among enterprises through:
  - *Cooperative relationship between SMEs and LSEs*: The SMBA encourages LSEs to organize voluntary task forces to assist SMEs in becoming suppliers of part of their production. In addition, LSEs play a part in transforming SMEs into global players by promoting them through their overseas branches.
  - *Cooperative relationship among SMEs:* The SMBA's "Cooperative Programme" brings together a number of SMEs engaged in similar or related business for the common use of industrial complexes, facilities or technologies. Cooperation in purchasing raw materials and ensuring markets strengthens the competitiveness of the SMEs considerably, as it also includes design and distribution; it also stimulates the development of new products and new technologies. SMBA makes training services available to SMEs engaged in such type of clusters.
- Internationalization and export development through:
  - Export promotion: The greatest difficulty encountered by SMEs is the lack of market information and international trading expertise. SMBA helps SMEs to gain export expertise by offering relevant training and by mediating consultations between SMEs and overseas buyers. Moreover, SMBA assists SMEs in gaining a stronger footing in overseas markets by supplying information on various international exhibitions and by encouraging SMEs to participate in these fairs.
  - Joint ventures: The SMBA promotes overseas investments and the establishment of technological joint ventures through its "Small and Medium Industrial Promotion Corporation".

1.4.4 Major SME developments in South Africa

General information

In 1995 the government of South Africa decided to develop a strategy up to the year 2005 to promote high and sustainable levels of economic development, in which SMEs would play an important role in spite of the dominant position of LSEs in the economy. The broader vision was to move towards a growth path of increased investment, enhanced productivity and expanding employment opportunities, and all of this within a framework of increasing general competitiveness.

While the better-organised LSE-sector should be able to move towards the envisaged growth path with relatively limited support and prodding from government, the transformation of the SME-sector required and justified concerted policies of wider scope as well as the deliberate creation of an enabling environment. In this process of transformation the government would act as a facilitator and not as an implementer. In fact the SME support programme would be implemented by institutions that most closely reflected the entrepreneurship and risk characteristics of the SMEs themselves. These institutions would be NGOs, private consultancies, partnerships and larger companies.

South Africa has approximately 800.000 SMEs, absorbing about 25% of the labour force of 15 million people. This is in addition to about 3.5 million people involved in some or other type of survivalist enterprise activities. The country distinguishes between the following sub-divisions of SMEs:

- *Survivalist enterprise*s are activities by people unable to find a paid job in an economic sector of their choice. Income generated from these activities usually falls far short of even a minimum income standard, with little capital invested, virtually no skills training in the particular field and only limited opportunities for growth into a viable business.
- *Micro enterprises* are very small businesses, often involving the owner, some family members, and at the most one or two paid employees. They generally lack “formality” in terms of business licences, value added tax registration, formal business premises, operating permits and accounting procedures. Most of them have a limited capital base, and their operators have only rudimentary technical or business skills. However, many micro enterprises advance to become viable small businesses.
- *Small enterprises* constitute the bulk of the established businesses, with the numbers employed ranging between 5 and 50. These enterprises are usually owner managed. They are likely to operate from business or industrial premises, be tax-registered and meet other formal registration requirements.
- *Medium-sized enterprises* constitute a category difficult to demarcate vis-à-vis the small and big business categories. They are still viewed as being basically owner/manager controlled, although the shareholding or community control base could be more complex. The employment of 200 and capital assets (excluding property) of about R5 million are often seen as the upper limit.

It follows from these distinctions, and it is a fundamental principle of the government's SME policy, that the problems of each of these four categories need a somewhat different policy stance.

Government policy and strategies

The primary objective of the national policy framework is to *create an enabling environment for small enterprises.* Such a national framework was complemented with programmes developed and implemented at regional and local level. Policies were tuned with national and regional as

well as sectoral developments, taking into account differences between sectors like manufacturing, tourism or construction, as well as differences between categories of SMEs. To that end three acts were formulated: a) the National Small Business Act, b) the Transaction and Procurement Act and c) the Small Business Finance Act. In addition the regulatory framework was assessed, leading to appropriate and transparent regulations.

In addition to this basic objective five more specific objectives were introduced, i.e.:

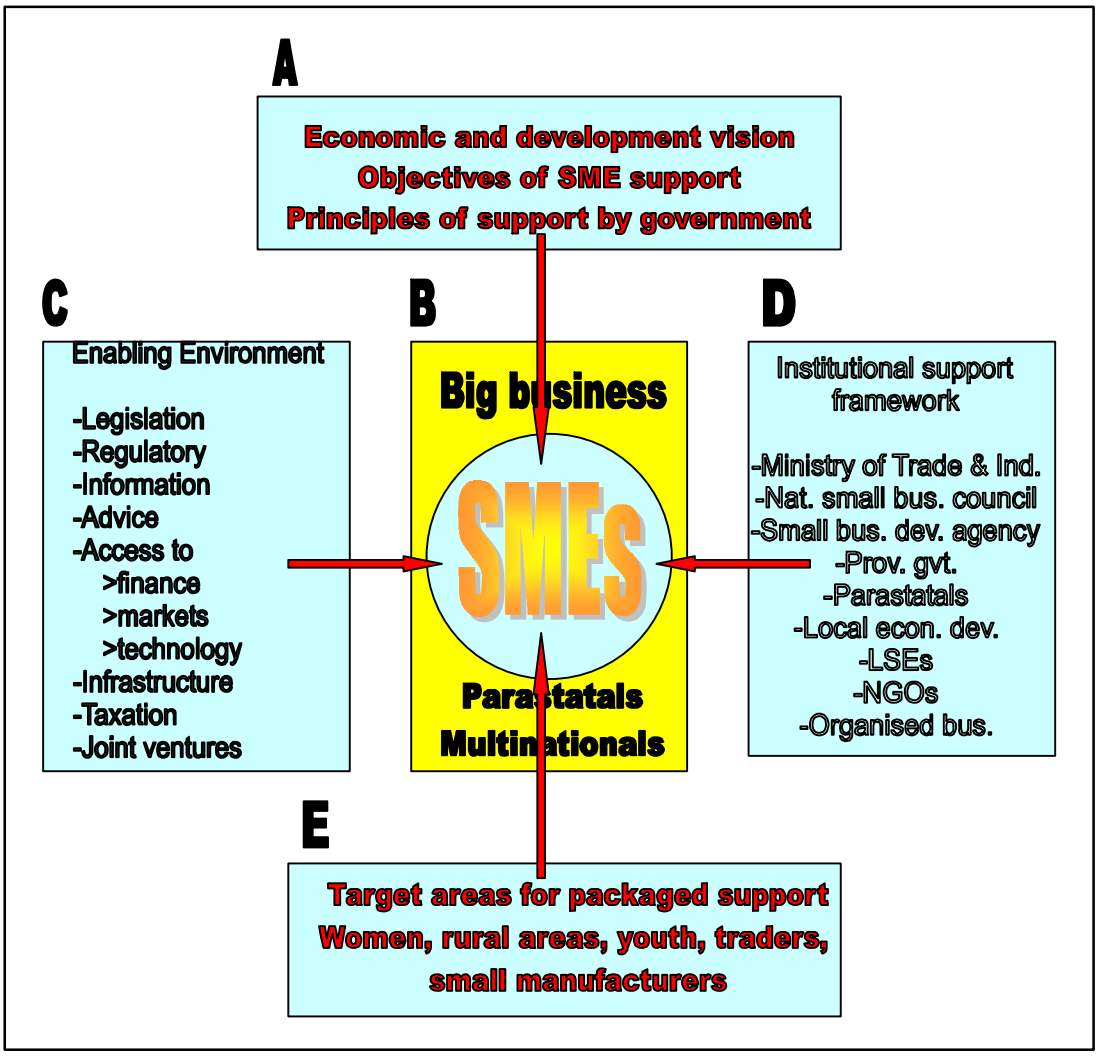
- *Facilitating greater equalization of income, wealth and economic opportunities*: This relates to a strengthening of the labour absorption process in the micro enterprise and survivalist segments and the redressing of discrimination with respect to women.
- *Creating long term jobs*: Upgrading the skill level of SME-operators, strengthening the use of appropriate, modern technologies and boosting the capacity to create long term jobs.
- *Stimulating economic growth* by addressing obstacles that prevent SMEs from contributing to overall growth. To that end an Annual Small Business Report was introduced, providing regular information to policy makers with regard to the results of implemented policies and policy instruments so as to allow adaptations, if required.
- *Strengthening cohesion between small companies*. It is essential that fragmented small enterprises within sectors, industries, sub-regions or other localities be helped to network more effectively in order to jointly address development obstacles, take up opportunities and build collective efficiencies.
- *Level the playing fields between bigger and small businesses*. Market opportunities, regulations and competitive structures have always distinctly favoured the LSEs and enterprises in urban areas; the support strategy is intended to rectify this imbalance. At the same time it aims at the greatest possible cooperation and interaction of these segments of the economy (forward and backward linkages, procurement).

Over and above these objectives, the national strategy also aims to enhance the capacity of the SME sector to comply with the demands facing South Africa's modernising export economy and the challenge of increasing international competition arising from the process of globalization.

An integrated view

Figure 1.4 illustrates the integration of policies and strategies for SME development. Guided by the overall vision of growth and development promotion (**A**), the small enterprises operating within the economy thus far dominated by big business, parastatals and multinationals (**B**) should gradually face an improved business environment (**C**) through policy and the impact of various support agencies (**D**). While general support, like better access to finance, training, marketing, etc. would benefit all SMEs, it was the central part of government's policy that, as far as practically feasible and financially possible, specific target areas (**E**) should be supported on the basis of tailor-made support packages.

Figure 1.4: Integration policy and policy instruments for South African SMEs



The following key principles underlie the implementation of the government's SME policy and strategies:

- The strategy was based on a joint vision for large, medium and small businesses in South Africa. This encompassed: a) awareness building among SME actors through workshops, conferences and seminars, b) needs identification and implementation planning, c) resource identification, d) strengthening the business and entrepreneurial culture and e) training of support-agency staff.
- All segments of the small business sector – survivalist, micro, small and medium-sized enterprises – were given attention.
- The business efficiency and competitiveness of the whole enterprise sector had to be developed with due recognition of social, financial and other compliance standards relevant to an internationally competitive economy.

- Attention was given to the development of an integrated support strategy for both the supply and demand side of SME activities.
- Special emphasis was given to marginal or disadvantaged groups in society.
- The scarcity of public funds demanded careful prioritization of support programmes and skilful matching of different resources.
- Support policies were focused on specific sectors and targeted with strict controls over the allocation of funds and full recognition of the market orientation of the South African economy.
- The institutional framework for small business support was restructured in order to reflect the evolving institutional diversity, the provincial thrust of policy implementation, and effective bottom-up and top-down cooperation and coordination.
- Ultimate responsibility for the entire national strategy was given to the Department of Trade and Industry.
- The private enterprise sector, cooperatives, NGOs, business associations and foreign assistance programmes had a critical role to play in the formulation and operationalization of the integrated small business strategy.

From the onset of 1995 it was clear that all these policies and strategies, institutions and systems could not be developed overnight. Therefore a ten-year horizon was set to reach all target groups through systematic programmes, subdivided into short term actions covering 1995/1996, medium term actions covering 1997-2000 and longer term actions from 2000 to 2005.

1.5 Selected "Best Practice" Issues

This section will show real life examples of "best practices" as collected from various member states of the European Union, and from a number of Asian and African countries.

Institutional Infrastructure for SME development

An appropriate institutional infrastructure, covering trade and services as well as industrial enterprises is imperative for the development and growth of the SME sector. For that purpose, Multi-Agency Networks are sometimes established, with the aim of:

- Strengthening and/or creating business support organisations such as consulting agencies, training centres, and centres for productivity improvement, innovation and the application of new technologies;
- Making arrangements with banks concerning the provision of (micro) loans for SMEs;
- Setting up business incubation centres, assisting in the promotion of networking among SMEs;
- Providing a lobbying function for the SME sector towards the government; and

- Providing inputs to the government with regard to policy matters related to SME development.

Box 1.3: Small and Medium Enterprise Development Agencies (SMEDAs) in the Russian Federation

In 1994 a start was made in establishing Small and Medium Enterprises Development Agencies (SMEDAs) with two pilot projects, one in Moscow and the other in St Petersburg. The two agencies started to develop support services for SMEs within their organizations, and were also instrumental in stimulating the emergence of private sector support organizations for SME development. Their own services to the business community encompassed SME consulting services, entrepreneurship training, assisting in the design of business plans for planned extensions of the businesses or to obtain loans from banks, in which the agencies also provided intermediate services. Furthermore, the agencies carried out market research and provided services in establishing joint-ventures with foreign businesses.

Over the years, the results of this pilot project were used in establishing many more of these centres and at by the end of 2001 no less than 53 of these SMEDAs had been established throughout the Russian Federation, providing services to the SME business community. In the meantime they have erected an umbrella organization known as the Russian Agency for SME Development, which is coordinating a variety of inputs for the SMEDAs, such as training for its members in consulting practices, ICT, and other business support technologies. (See the web-site: www.sioranet.ru)

Source: EIM/KCbv., 2002

These Multi-Agency Networks usually take the form a independent public/private bodies, partly financed by the government and partly by the donor community (albeit for a limited period). A rough rule-of-thumb figure for the cash flow of these agencies in their early years is that 50% of the core funding comes from the (local) government and other agencies, whereas 50% is earned income, of which 25% comprises fees for services provided to local enterprises, and 25% for contract work for information services, research, extension, etc. for outside businesses and agencies. In our experience, no such agency – in whatever economy – will ever be able to cover all of its costs when executing all the tasks indicated. Even in developed market economies there is continued government participation in both the type of agencies described here and in relevant NGOs, so as to provide and optimal stimulus to business development.

Another best practice in the area of institutional support for SME development is the initiative taken in capacity building for SMEs through the Penang Skills Development Centre (PSDC) in Malaysia, which was founded in 1989. It is also a public/private organization, and includes among its stakeholders national and local governments as well as many of the national and transnational firms operating in Penang. Its mission is to promote shared learning, in order to reduce cost and facilitate more interaction, for the manufacturing and services sectors. Its

services are demand driven, being determined by the needs of the business sector. In 2000 it had 85 corporate members and ran 522 management, technical and vocational training courses.

Box 1.4: Penang Skills Development Centre (PSDC), Malaysia

The PSDC represents a partnership between the Federal Government of Malaysia and the State Government of Penang (which provide political will, facilities and financial and fiscal support), the industrial sector (which offers leadership of the initiative, know how and technical resources, membership fees and other support), and academia (which provides consultancy, training and research). Its Chief Executive Officers are selected from major firms, most of which are in the electronics and engineering branches. A large number of transnational corporations (TNCs) with a presence in Malaysia have joined the initiative. In addition, some countries give bilateral support.

Apart from increasing skill levels in SMEs, PSDC also looks at possibilities for career advancement in major TNCs. In addition, PSDC has working groups for total production management, senior-level HRD issues and best practices in global supplier development programmes. By the end of September 2000, over 60,000 people had taken part in over 3,000 courses. As industrial HRD requirements have increased over the years and Malaysian industries have continued to move up the value chain, PSDC is adapting its training courses and will soon be offering, among others, an MA course in engineering as well as courses on software simulation and e-learning for management skills. Some of these courses are provided in partnership with other institutions, such as the University of Warwick in the UK.

In March 2000, PSDC launched the Global Supplier Programme for Malaysian companies, together with a number of global companies and the Government. The philosophy behind this programme is that the more capable a country's SMEs are, the more likely it is that TNCs will initiate a partnership with them. In the programme, SMEs are adopted by TNCs, who transfer technologies and skills and monitor SME progress. By the end of October 2000, eight TNCs and nine SMEs in the electronics industry had declared their intention to participate in the programme. Over time, PSDC plans to launch the programme in other parts of Malaysia as well. In addition, it plans to study foreign examples to provide benchmarks for local industries and to create training programmes for domestic design and development capabilities.

Source: UNIDO, *Integrating SMEs in the Global Value Chains; Towards Partnership for Development*, Vienna, 2001

Networking for SMEs – Development of SME clusters and networks

Individually, SMEs are often unable to capture market opportunities that require large production quantities, homogeneous standards, and regular supply. By the same token they experience difficulties in achieving economies of scale in the purchase of inputs, such as equipment, raw materials, finance, consulting services, etc. Small size also constitutes a significant hindrance to the internalization of functions such as training, market intelligence,

logistics and technology innovation – all of which are at the very core of firm dynamism. Furthermore, small scale can also prevent the achievement of specialized and effective internal division of labour, which fosters cumulative improvements in productive capabilities and innovation. Finally, because of their low profit margins, small-scale entrepreneurs in developing economies are often locked in their routine and unable to introduce innovative improvements to their products and processes, or to look beyond the boundaries of their firms to capture new market opportunities.

Box 1.5: India goes clustering

The small-scale industrial sector is a crucial component of the Indian economy with over 3 million enterprises employing 18 million workers, representing 70% of the industrial labour force, and accounting for 35% of the country's industrial exports. Within the sector, SME clusters are very well represented, with more than 350 industrial clusters and some 2,000 artisanal ones having been identified. With the Indian economy undergoing profound liberalization since 1991 and in light of the signature of the WTO agreement, SME support policies are being comprehensively revamped.

One of the first steps in this process was the preparation of the 1997 report by the high-level Abid Hussain Committee, which viewed "…clusters as the centrepiece of a future strategy of promotion of small and medium scale enterprises. Such clusters can lower transaction costs, help realise informational economies and lower the costs of credit surveillance."

In collaboration with UNIDO, the Ministry of Small Scale Industries organized a national workshop on "Evolving a Cluster Development Programme" in Mysore in November 1998. The objective of the workshop was to compare different experiences in the field of cluster development, namely the one of UNIDO, of the Small Industries Development Bank of India (SIDBI), and of the State Bank of India (SBI).

Over the next three years, many more institutions have joined the national Cluster Development Programme. The Ministry of Small Scale Industries has revamped its UPTECH programme to give it a broader mandate while the Ministry of Textiles launched its own cluster development programme in 2001. Moreover, the state governments of Andhra Pradesh, Madhya Pradesh, Karnataka, Rajasthan, Tamil Nadu, Gujarat, and Chattisgarh have also adopted cluster development strategies within the framework of their industrial policies. Finally, several SME support agencies beyond SIDBI and SBI, such as the Department for Science and Technology and the Textile Committee, have launched their own cluster development initiatives that build upon the UNIDO cluster development methodology.

Dozens of SME clusters in India and several hundreds of enterprises are presently being assisted in areas like quality upgrading, marketing, technology, finance, and human resource management through an approach that is based upon SME networking, private public partnerships and a re-building of social capital.

Source: Russo, Fabio, Michele Clara and Mukesh Gulati, *Cluster Development and Promotion of Business Development Services (BDS): UNIDO's experiences in India*, Technical Working Paper No 6., PSD Technical Working Papers Series, UNIDO, Vienna, 2000.

SME clusters, defined as geographical concentrations of small businesses producing and selling a range of related or complementary products, which are consequently faced with common challenges and opportunities, exist in many countries, both developed and developing. These clusters can give rise to external economies, such as the emergence of specialized suppliers of raw materials and components and the growth of a pool of sector specific skills, and favour the emergence of specialized services in technical, administrative and financial matters. Similarly, such clusters can also provide a favourable ground for the development of networks between public and private institutions tosupport local economic development and promote collective learning and innovation through implicit and explicit coordination. Through the effective use of the external economies of scale and joint efforts to address common challenges offered by such clusters and networks, SMEs can achieve collective efficiency and conquer markets beyond their individual reach

An example of how the public sector can support the networking of SMEs is given in Box 7 below. Such support programmes can be of great interest to government ministries, as they provide opportunities for an efficient and effective delivery of support programs to SMEs operating in related and interlinked sectors and in a high degree of geographical proximity with one another. As a result, the impact of such support programmes is usually quite high.

Box 1.6: Networking among SMEs in Spain in the development of electronic communications systems

The "SME Initiative" was a multi-sector programme for SMEs implemented in 1997-1999 under the auspices of the General Directorate for SME policy in collaboration with the autonomous communities. Its aims were to foster association and co-operation networks among SMEs, to develop electronic communication networks, to promote innovative design, and to foster access to credit by way of such financial instruments as guarantee funds and participatory loans, and to create a network of intermediate bodies for service to innovation.

Source: EIM/ENSR

Financial support programmes

When asked to describe his main problem, an entrepreneur will almost certainly reply: "Shortage of finance". He may, in fact, have a serious cash flow problem so that he has difficulties in paying his employees or financing the purchase of materials. Although there are many other non-financial problems faced by the entrepreneur, there is no doubt that lack of access to formal finance is a major constraint crippling the ability of a business to operate effectively, to maintain or replace machinery, to purchase materials and services most economically and to modernize or expand the business. When starting a new business, most small enterprises, often beginning as micro businesses, are unable to obtain loans, or any form of financing from formal institutions. They start their business by investing their own savings and/or using funds obtained from relatives or friends. This might be supplemented by loans from informal lenders or by credit from suppliers.

Box 1.7: A new generation of African banks

In Benin, financial sector reform in the early 1990s led to the establishment of new private banks, majority-owned by domestic private investors. The Bank of Africa-Benin (BOAB), reported to be largely the brainchild of one entrepreneur, has become the largest commercial bank in the country since it started its operation in 1990. The Bank focuses on providing modern banking services to households and firms. Partners include Proparco (a subsidiary of the Caisse Francaise de Developpement, the Netherlands Development Finance Company FMO, the Banque Ouest Africaine de Développement (BOAD), and the International Finance Corporation (IFC). Its loans and investments increased from 3% of total assets in 1990 to 52% in 1995. BOAB is currently focusing on developing its medium- to long term refinancing. It established branch offices and diversified by creating the country's first leasing company and by becoming shareholder in the country's first private life insurance company. The bank participates in the financial restructuring and expansion of larger scale enterprises and participates in credit programs focused in SME and micro enterprises.

Source: Van Oyen, Leny and Jacob Levitsky, *Financing of Private Enterprise Development in Africa*, Technical Working Paper No 4., PSD Technical Working Papers Series, UNIDO, Vienna, 1999

Several developing countries have therefore created SME finance institutions such as the Grameen Bank in Bangladesh, the Small Industries Development Bank of India (SIDBI) in India and the Small Business Finance Corporation (SBFC) in Pakistan, which has recently been restructured and renamed the SME Bank. Similarly, a new generation of banks for SME development has emerged in various African countries. SME financing also remains an important issue in developed economies, with public attention being focused in particular on loans for business start-ups, where banks usually run high risks. In order to cope with this problem and with the issue of collateral, various programmes have been developed to support such start-ups, either through regular loans or through venture capital.

Box 1.8: The "Pienlaina" micro loan programme in Finland

The 'Pienlaina' micro loan programme was launched in 1996 under the management of Finnvera Plc. It is a facilitated rate loan scheme for existing SMEs and start-ups that have difficulty accessing normal funding channels, and it is aimed specifically at businesses with less than 5 employees in the industry and service sectors. Expenditure for each new job has been €3,350-5,050, with an employment impact of 1.2 new employees per micro loan project.

Source: ENSR/EIM, Observatory 2000

Technology development and innovation

Internationalization and globalization have put enormous pressure on both developed and developing economies with regard to the competitiveness of their economies vis-à-vis other countries. Comparative advantages are being identified and in a number of cases technology is a decisive factor in achieving competitiveness. Therefore, governments all over the world have

invested in research and development (R&D) in order to enhance their technology and innovativeness, or to keep abreast of competing countries in terms of their technological standing. The processes of globalization and liberalization will result in the marginalization of economies that do not promote technology development, and thus remain primarily agriculturally oriented. Economies, both developed and developing, that claim to manufacture and produce for global and regional markets, will have to invest in technology development and its principal determinants, education, R&D and innovation.

Box 1.9: Technology development and R&D in Spain

The Ministry of Industry and Energy has introduced a special programme to promote technology development and R&D as an instrument for supporting business development. This programme consists of three sub-programmes covering the promotion of technological innovation in industry, quality and safety, and energy R&D. Among other activities, this programme provides grants and loans to support the development of technological infrastructure for joint use, innovative networks, technology dissemination, and vocational training in SMEs.

Source: ENSR/EIM, Observatory 2000

Innovation and technology development does not come by itself. Since many SMEs are struggling to survive because of their relatively low margins, lack of access to credit and the often complex regulatory framework that they operate in, their activities are often focused on short-term results. Clearly, this is not a suitable climate for the promotion of innovation and technology development at the entrepreneurial level. Therefore, awareness and technology dissemination programmes have to be developed for entrepreneurs in order to inform them about the needs for technology development in their own enterprises or clusters of enterprises to enable them to cope with international competition.

Box 1.10: Dissemination of technological innovation in Italy

A programme for the dissemination of technological innovation among SMEs has been introduced in Italy. It is co-ordinated and managed by the Istituto G. Tagliacarne and fostered by the union of chamers of commerce, industry and agriculture (Unioncamere) and the Ministry of University, Scientific and Technology Research. Through the network of the chambers of commerce in Southern Italy, the institute conducts an organic complex of action in training, information and technical assistance to promote innovative behaviour among SMEs (especially in the agro-food sector) and to strengthen qualified organizations, such as universities and centres of innovation transfer in the area.

In the two phases conducted since1990 and the third phase now in progress, more than 2,000 SMEs have been helped to implement initiatives to develop technological and market innovation; and 3,000 enterprises have taken part in seminars and training courses on innovation in the production process and product quality. The programme's total budget cost is €23.2 million.

Source: ENSR/EIM, Observatory 2000

CHAPTER 2

THE MACRO ECONOMIC ENVIRONMENT IN IRAN[1]

2.1 Introduction

In this chapter the macroeconomic environment of Iran will be reviewed with reference to ten principal macroeconomic variables over a five-year time period. Since the macroeconomic environment affects all economic activities regardless of the size of the enterprise concerned, this discussion will help to understand the degree to which the challenges faced by Iranian SMEs are rooted in the prevailing macroeconomic conditions, or related exclusively to their size and position in the economy.

2.2 Economic Growth

A new era in the history of Iran's policy formulation emerged in 1374 (1996/97), when many economic variables came under the control of the government, the exchange rate was stabilized, inflation was controlled through the adoption of contractionary monetary and fiscal policies. The resulting restoration of socio-economic stability has helped the Iranian economy to go through a transitional stage of development from a relatively closed and controlled economy to a more open market-oriented economy. Table 2.1 shows both GDP at constant 1369 (1990/91) market prices, and its growth rate from 1374 (1995/96) to 1378 (1999/00).

Table 2.1: GDP at constant 1369 (1990/91) market prices (Rials bn)

Year:	**1374**	**1375**	**1376**	**1377**	**1378**	**1379***	**1380****	**1381****
	1995/96	**1996/97**	**1997/98**	**1998/99**	**1999/00**	**2000/01**	**2001/02**	**2002/03**
GDP	42,207.8	44,712.3	45,927	47,630	49,085	52,064	54,664	58,620
Growth rate	-	5.93	2.72	3.71	3.05	6.07	4.99	7.24

Source: Central Bank of the Islamic Republic of Iran. *Preliminary; **Forecasts of Macroeconomic Bureau, Management and Planning Organization.

Despite the fact that Iran's economic growth in recent years can be partly attributed to non-oil export activities and domestic industrial production, oil production and exports still dominate the economy. The growth of the Iranian economy will consequently remain vulnerable to shifts

1 The data in this section are given in Iranian years, which begin on March 21 of the corresponding year of the Gregorian calendar.

in oil prices, which are currently projected to average $20-25/b for the foreseeable future. The rate of GDP growth slowed in real terms between 1375 (1996/97) and 1379 (2000/01), but was estimated to have picked up again to 6.07% in 1379 (2000/01). Due to the economic stabilization, introduction of economic reforms and reduction of inflation, the productivity of the labour force in Iran has also increased. As shown in Table 2.2, the productivity of labour rose from Rials 1,090 per worker in 1373 (1994/95), to Rials 1,155 in 1377 (1998/99), which represents a 6% increase in 4 years. Most of the increase in productivity is due to the improvement of macroeconomic and political environment that began with the deregulation and liberalization policies after 1375 (1996/97).

Table 2.2: Labour productivity, 1373-1377 (1994/95-1998/99)

Year	1373 (1994/95)	1374 (1995/96)	1375 (1996/97)	1376 (1997/98)	1377 (1998/99)
In Rials p. worker	1,090	1,115	1,125	1,154	1,155

Source: Management and Planning Organization, Islamic Republic of Iran, *Bulletin of Socio-Economic Statistics*, 2001, p. 27.

2.3 Inflation

Recently published data shows that the annual rate of inflation in the first half of 1379 (2000/01) was 12.6%. This is the lowest inflation rate that Iran has experienced during the past five years. Sustained price control, greater efforts to control liquidity growth and an increase in foreign exchange revenues are thought to be behind this decline in the rate of inflation. Recent forecasts suggest that a new inflationary period may begin in 1381 (2002/03), as a result of the expected abolition of the fixed exchange rate used for the importation of strategic goods in that year. With the exchange rate then being determined by market forces, it is expected to move from its prevailing level of US$1=Rials 1,750 to as high as US$1=Rials 7,900.

Table 2.3: Inflation and liquidity growth rate, 1375-1379 (1996/97-2000/01)

Topic	1375 1996/97	1376 1997/98	1377 1998/99	1378 1999/00	1379* 2000/01
Inflation	23.2	17.3	18.1	20.1	12.6
Liquidity growth rate	37	15.2	19.4	20.1	29.3

Source: Management and Planning Organization and Central Bank of Iran. *Preliminary

Table 2.4: Price indices (1376, 1997/98=100)

Year	1375 1996/97	1376 1997/98	1377 1998/99	1378 1999/00	1379* 2000/01
Wholesale Price Index	91.02	100	116.74	145	166.32
Consumer Price Index	85.2	100	118.1	141.8	159.7
Producer Price Index	86.51	100	118.74	145.89	169.65

Source: Central Bank of Islamic Republic of Iran. *Preliminary

2.4 Public Finance

In 1378 (1999/00), the total general expenditure of the government, amounting to Rials 93242,9 bn, was predominantly financed by oil and gas revenue (47.4%) and by taxes (26.8%); with the remaining 25.8% being financed by other sources of revenues. This composition is not expected to change much in the foreseeable future. Tax reform has been a hot issue in parliament for the past decade. The ratio of total tax collected by the government to GDP did not exceed 5-6%, which is very low compared to countries with the same income level. Consequently, the budget revenues continue to be dominated by oil and gas income.

Table 2.5: Government general revenue & expenditure at current prices, 1374-1378 (1995/96-1999/00)

(Rials bn)

Year	1374 1995/96	1375 1996/97	1376 1997/98	1377 1998/9	1378 1999/00
Total Earmarked Revenue	3,581.4	4,780	5,941	8,931	11,574
Total General Revenue	41,851	57,343	65,074	64,359	94,572
Oil & Gas	29,431	38,153	36,447	28,190	44,4886
Tax	7,313	12,560	17,345	18,687	25,831
Other	5,106	6,630	11,282	17,482	24,253
Total General Expenditure:	41,962	57,878	65,438	70,970	93,243
Current Exp.	28,790	37,804	44,967	53,546	68,219
Develop. Exp.	13,173	20,074	20,471	17,425	25,024
Deficits	-112	-535	-653	-6,611	-640
Source of Deficit financing	270	535	635	7,115	640
Domestic Borrowing	0	0	0	6,636	0
Returns from previous years	270	535	653	479	640

Sources: Annual budget laws

2.5 Investment

2.5.1 Domestic investment

The ratio of gross investment to GDP at constant market prices hardly reaches a modest 16%, which is insufficient to generate a healthy rate of economic growth. As shown in table 2.6, the private sector represents the major source of domestic investment. Total gross investment increased from Rials 6414,3 bn in 1375 (1996/97) to Rials 9392,8 bn in 1379 (2000/01). While the growth of private sector investment is satisfactory**,** the general trend of investment in Iran is uneven**.** Two major factors explaining the inconsistent trend are: a) the existence of an unfavourable business environment and b) a sharp decrease in national savings during recent

years. Apart from a general improvement in the national business environment, the government also aims to encourage foreign direct investment (FDI) in the hydrocarbon and other sectors in order to stimulate economic growth. However, the level of FDI in industries other than oil and gas has not proved sufficient to affect any significant growth.

Table 2.6: Gross investment at constant prices, 1375-1379 (1996/97-2000/01)

(Rials bn)

Topic	1375 1996/97	1376 1997/98	1377 1998/99	1378 1999/00	1379 2000/01[1]
Gross Capital Formation	10,864.5	11,641.2	12,173.9	12,738.9	13,807.7
Private Investment	6,414.3	7,456.2	8,514.2	5,555.5	9,392.8
Government Investment	4,450.2	4,155.0	3,659.7	4,183.4	4,414.9

Source: Central Bank of Islamic Republic of Iran.

Note: 1. Preliminary

2.5.2 Foreign direct investment (FDI)

Because of its closed and strongly state-controlled economy, Iran has not been able to attract significant foreign direct investments. In 1378 (1999/00), FDI amounted to a very modest US$ 1.35 per capita, which compares with US$ 12 in Turkey, US$ 31 in China, and US$ 68 in Malaysia. Within the government, there are still many divergent views and approaches towards FDI.

The share of FDI in gross capital formation has indeed been very low, as is indicated in the *World Development Indicators 2001* published by the World Bank. This shows the share in Iran to amount to only 0.42%, whereas the UK scores 34.4%, China 10.5%, Malaysia 8.8%, Pakistan 6.0% and Turkey 1.81%. Table 2.7 shows FDI inflows into different economic sectors of Iran for a period of five years. FDI has been mainly concentrated in fabricated and metal products, textiles and mining and quarrying. The total value of FDI during 1376-1380 (1996/97-2000/01) fell short of US$ 2 bn.

The distribution of FDI by source is shown in table 2.8. Europe and Canada have been the main investors in Iran. From Europe, Italy with US$ 371.82 m. and France with US$123.14 m. are the biggest investors in Iran during the past five years.

Table 2.7: Foreign direct investment by sector, 1375-1379 (1996/97-2000/01)[1]
(US$ '000)

Economic sector	1996/97	1997/98	1998/99	1999/00	2000/01	Total
	1375	1376	1377	1378	1379	
Manufacture of food products and beverages	4,400	-	19,071		-	23,471
Manufacture of textiles	69,999	60,000	2,910	5,111	1,000	139,020
Wood and products of wood and paper	-	-	-		-	-
Chemicals and chemical products	1,227	14,529	6,167	7,384	-	29,307
Motor vehicles and related industries	333	-	2,576	12,000	-	14,909
Manufacture of non-metallic	5,962	665	-	35,442	-	42,069
Petroleum – repair	-	-	200		-	200
Manufacture of fabricated and metal products	90,936	57,371	10,715	338,088	4,447	501,557
Surface treatments	4,553	-	-	-	-	4,553
Manufacture of electronics	-	13,230	3,200	-	1,700	18,130
Medical and precision and optical instruments	-	3,004	-	-	-	3,004
Household equipment and apparatus	-	-	1,500	600	-	2,100
Mining and quarrying	-	-	-	1,016,800	112,142	1,128,942
Grand Total	**177,410**	**148,799**	**46,339**	**1,415,425**	**119,289**	**1,907,262**

Source: Organization for Technical and Economic Assistance, Ministry of Finance and Economic Affairs
Note: 1. Excluding FDI in free economic zones and buy-back contracts

Table 2.8: Distribution of FDI by source, 1375-1379 (1996/97-2000/01)[1]

Europe	US$ m.	Asia	US$ m.	Rest of the world	US$ m.
Italy	371.8	Malaysia	37.6	Barbados	0.6
France	123.1	Turkey	8.8	Zimbabwe	0.3
Luxembourg	81.8	U.A.E	7.4	Canada	1,023.8
Belgium	79.5	Republic of Korea	5.1		
Ireland	62.0	Taiwan	3.6		
Switzerland	38.5	Afghanistan	2.3		
England	24.7	China	1.5		
Germany	8.2	Azerbaijan	0.8		
Denmark	5.9	India	0.52		
Spain	4.2				
Netherlands	3.6				
Sweden	2.9				
Slovenia	0.5				
Austria	0.3				
Russia	0.2				
Total Europe	**807.1**	**Total Asia**	**67.6**	**Rest of the world**	**1,024.7**

Source: Organization for Technical and Economic Assistance, Ministry of Finance and Economic Affairs
Note: 1. Excluding FDI in free economic zones and buy-back contracts.

2.6 Wage and Labour Market

A comparison of the wage index and the consumer price index (CPI) for the past five years is presented in Table 2.9. This shows that the ratio of the wage index to the CPI has decreased from 0.99 in 1375 (1996/97) to 0.89 in 1379 (2000/01). This implies that wage increases did not compensate for inflation, and that the purchasing power of the labour force consequently declined during this period. Furthermore, as shown in table 2.10, very limited improvements can also be observed in income distribution during this period.

Table 2.9: Wage and price developments, 1375-1379 (1996/97-2000/01)

Topic	1375	1376	1377	1378	1379*
	1996/97	1997/98	1998/99	1999/00	2000/01*
(1) Consumer Price Index	85.2	100	118.1	141.8	159.7
(2) Wage Index (Dwelling)	84.5	100	113.3	128.5	142.3
(3) Ratio (2) / (1)	0.99	1	0.96	0.91	0.89

Source: Central Bank of Iran

Table 2.10: Income distribution, 1374-1378 (1995/96-1999/00)

Category	1374	1375	1376	1377	1378
	1995/96	1996/97	1997/98	1998/9	1999/00
Gini coefficient: total	0.427	0.43	0.422	0.43	0.42
• Urban	0.402	0.404	0.39	0.39	0.4
• Rural	0.437	0.42	0.42	0.44	0.43
Top 10% to bottom 10%: total	20.537	20.219	18.93	21.19	19.37
• Urban	15.005	15.049	13.9	14.2	14.31
• Rural	23.523	19.925	19.22	23.03	20.33
Richest fifth to poorest fifth:total	10.2	10.212	9.7	10.51	9.91
• Urban	8.187	8.323	7.77	7.86	7.94
• Rural	11.338	10.016	9.67	11.1	10.23
Poverty line (Cons.2000-Rials)					
• Urban	820,150	842,838	840,513	881,600	854,410
• Rural	542,923	511,091	519,186	520,057	560,594
Population below poverty line %					
• Urban	18.85	19.36	17.74	18.72	18.29
• Rural	23.41	21.95	21.31	21.76	22.65
Welfare Index	83.20	86.85	86.60	81.39	87.83

Source: Statistical Centre of Iran

A detailed breakdown of the labour force statistics by education, gender, economic sector and institution in 1375-1379 is presented in table 2.11.

Table 2.11: Labour force distribution by education, gender, sector and institution, 1375-1379 (1996/97-2000/01)

Category	1375	1376	1377	1378	1379
	1996/97	1997/98	1998/99	1999/00	2000/01*
Total Labour Force	16,027	16,723	17,375	18,020	18,559
Total Employed	14,572	14,725	14,811	14,177	15,576
Employed by education:					
• with university qualification	1,403	1,455	1,541	1,666	1,713
• without university qualific.	13,169	13,270	13,270	13,511	13,863
Employed by gender:					
• Female	1,765	1,887	2,004	2,178	2,378
• Male	12,807	12,838	12,807	12,999	13,198
Employed by economic sector:					
• Agriculture	3,357	3,354	3,374	3,392	3,408
• Industry	4,473	4,433	4,271	4,399	4,598
• Services	6,742	6,938	7,166	7,386	7,570
Employed by institution:					
• Private Sector	9,794	N.A.	N.A.	N.A.	N.A.
• Public Sector	4,258	N.A.	N.A.	N.A.	N.A.
• Cooperatives and others	520	N.A.	N.A.	N.A.	N.A.

Source: Statistical Centre of Iran

A comparison of the data in tables 2.10 and 2.11 yields the following conclusions:

- In 1379 (2000/01), total labour force in Iran reached 18.5 million, 530,000 more than in the previous year. Total employment in that year was 15.5 million. The percentage of formally registered unemployment hovers around 16% of the labour force.
- As shown in Table 2.10, only 11% of the total employed workforce has received higher education; the remaining 89% is without a university degree.
- The gender distribution of the total employed workforce force shows that the share of females rose from only 12% in 1375 (1996/97) to 15.3% in 1379 (2000/01). The participation of women in economic activities consequently increased during the five-year period by almost one third.
- The distribution of the total employed labour force across economic sectors shows that the share of the service sector has increased from 46.2% to 48.8% between 1375 (1996/97) and 1379 (2000/01). The industrial sector draws 29.6% of the employed labour force, while agriculture accounts for 21.6%.

2.7 Foreign Trade

One of the most important policies adopted by the government over the past two years involved the stabilization and unification of the exchange rate. The introduction of the floating exchange rate in 1378-79 (1999/00-2000/01) served to stabilize the exchange rate, which in turn helped to stimulate non-oil exports. As shown in Table 2.12, non-oil exports increased from US$ 3.2 bn in 1375 (1996/97) to US$ 4.12 bn in 1379, and were expected to increase to US$ 7.18 bn by 1381 (2002/03). As explained in Section 2.2, a unified exchange rate will remain an important goal of the Central Bank of Iran, despite fears of the possible inflationary impact of such a unification policy.

Table 2.12: Current account balance, 1375-1381 (1996/97-2002/03)

Year	1375 1996/97	1376 1997/98*	1377 1998/99	1378 1999/00	1379* 2000/01	1380* 2001/02	1381** 2002/03
Trade Balance	7,402	4,258	-1,168	7,597	13,138	1,024	1,321
Exports	22,391	18,381	13,118	21,030	28,345	18,266	19,731
Oil Export	19,271	15,471	9,933	17,089	24,226	12,319	12,543
Non-oil Export	3,120	2,910	3,185	3,941	4,119	5,947	7,188
Imports	14,989	14,123	14,286	13, 433	15,207	17,242	18,410
Services	-2,633	-2,438	-1,469	-1,533	-1,114	-2,418	-2,555
Receipts	1,348	1,658	2,023	1,369	1,787	1,234	1,348
Payments	3,981	4,096	3,492	2,929	2,901	3,652	3,903
Transfers	463	393	497	525	621	0	0
Government	-8	-7	-3	17	82	-	-
Private	471	400	500	508	539	-	-
Curr. Acc. Bal.	5,232	2,213	-2,140	6,589	12,645	-1,394	-1,234

Source: Central Bank of Iran

Notes: * Preliminary

** Projection

2.8 Privatization

The topic of privatization (i.e. the transfer of ownership from the government to the private sector) was raised in Provision 23 of the First Socio-economic and Cultural Development Plan initiated in 1368 (1989/90). The policy's implementation was foreseen in further resolutions adopted by the Cabinet in 1370 and 1371 (1991/92 and 1992/93), and was followed by the publication of a list of almost 400 government-owned firms earmarked for privatization. The objective was to raise the efficiency of these firms while decreasing governmental involvement in economic activities, in order both to stimulate the economy and optimize the utilization of national resources.

In subsequent years, several other measures have been introduced to promote the divestment of state ownership in industry, including:

- The Law on the Transfer of Government Shares to the Disabled and Workers;
- The Law of the Islamic Consultative Assembly (Parliament) of 1372 (1994/95);
- Provision 53 of the National Budget Laws of 1375 and 1377 (1998/99 and 1999/00); and
- Paragraph F of Annex 2 to the Budget Law of 1379 (2000/01).

These policy measures have all provided the background for facilitating the privatization process in the years prior to the introduction of the TFYP in April 2000, albeit not in a consistent manner,

According to statistics released by the Privatization Organization, the value of government shares transferred to the private sector in 1370-79 (1991/92-2000/01) amounted to Rials 7.8328 bn. An evaluation of these statistics reveals that ownership transfer on the basis of Provision 35 of the National Budget Laws recorded particularly strong growth in 1377-79, when it accounted for 58% of all ownership transfers. In overall terms, however, the sale of state assets during 1370-79 has fallen well short of the targets stipulated in the First to Third Socio-economic and Cultural Development Plans, with only a modest budgetary reserve of US$ 11 bn. having been built up for the beneficiary welfare institutions during this period. The principal foci of these privatisation efforts were the Iran Development and Renovation Organization and the Iran National Industries Organization affiliated to the Ministry of Industry, and the Financial Institute of Industrial Units' Ownership Transfer affiliated to the Ministry of Economic Affairs.

It bears mention, however, that a number of state-owned organizations have succeeded in transferring shares through the Tehran Stock Exchange. A case in point is the Ministry of Oil, which transferred shares in the Petrochemical Industries National Company. Nonetheless, exact statistics regarding the total value of these shares have not been published. According to Provision 10 of the National Budget Law of 1378 (1999/00), the government’s shareholding in state-owned firms is to be transferred in the coming years to their main shareholders, namely the Social Welfare Organization and the National Retirement Fund to cover its debts to these institutions.

With the adoption of the TFYP, which concentrates on the organizational aspects and ownership transfer of state-owned firms, it is widely anticipated that the privatization process will gain momentum. The Plan contains many important aspects, such as the definition of the scope and methods of the transfer of ownership, the creation of independent institutions for ownership transfer, transfer through instalments, insurance schemes for the transfer of state-owned firms in case of unintended mistakes, adjudication bodies, and the creation of a high council of ownership transfer. There are, however, several shortcomings that deserve attention as well. For example, the creation of specialized holding companies is a topic that has not been sufficiently clarified and there is consequently no consensus on how they should operate. This is delaying the launch of such organizations. In addition, the issue of the firms' tax debts incurred prior to the transfer of ownership needs attention.

The Privatisation Organization itself was created through a change in the constitution of Financial Institute of Industrial Units' Ownership Transfer, and has been commissioned to carry out the government's divestments operationally. Article 15 of the TFYP, together with its relevant provisions (e.g. Provision 15) have defined pricing mechanisms, issues related to the offer of shares by instalment, and the allocation of priorities. Other provisions have also been, or are being, formulated and ratified. Thus, the legal structure to speed up the process of privatisation is largely in place, with the remaining gaps being rapidly filled.

2.9 Information and Communication Technology (ICT)

Research carried out at the Industrial Management Institute[1] in Tehran has sought to measure and rank the growth and potential of information technology (IT) of different countries. To achieve this objective, the study used two separate indices: the first measured the growth status of IT, while the second measured the IT potential. The variables employed for developing these indices are presented in Table 2.13.

Table 2.13: Variables indicating IT growth and potential

IT Growth	IT Potential
1. Telephone line per 100 persons	1. Spending on R&D as percent of GDP
2. Computers per 1,000 persons	2. Power supply per population
3. Internet hosts per million inhabitants	3. Tertiary education enrolment
4. International telephone calls – minute per inhabitant	4. Demand for telephone lines – percent satisfied
5. Fax machines – 1,000	5. Capacity of telephone lines
6. Cell phones per 100 persons	6. Telecommunications staff
7. Cost of international call per minute	7. Investment in telecommunications
8. Average cost of local calls	
9. Telephone line capacity used	
10. Investment in telecommunications	
11. Telecommunications revenue as percent of GDP	

Source: Industrial Management Institute, Tehran

The results of this analysis are presented in Table 2.14. Out of the eleven variables in the "IT growth" index, Iran scores unfavourably in cell phones, internet hosts, and fax machines. But in the cost of international calls and investment in telecommunications, Iran is ranked in the middle of the table. In the "IT potential" index, Iran scores higher than the average in investment in telecommunication and lower in he six other variables.

1 Imanirad, Morteza and Bakkak Ghotbi, *Position of IT Growtrh and IT Potential in Iran*, Industrial Management Institute, 1379, Tehran.

Table 2.14: Growth and potential of IT in selected countries, 1377 (1998/99)

	IT Growth Score	Ranking	IT potential	Ranking
Denmark	0.58	1	0.65	6
Sweden	0.6	2	0.47	1
Hong Kong	0.63	3	0.8	12
Switzerland	0.65	4	0.54	4
Canada	0.69	5	0.49	3
U.S.A	0.71	6	0.59	5
Ireland	0.76	7	0.73	8
Italy	0.79	8	0.68	7
Austria	0.81	9	0.49	2
Iran	**0.89**	**10**	**0.83**	**16**
Chile	0.95	11	0.78	11
Argentina	0.96	12	0.74	9
Hungary	0.96	13	0.77	10
Colombia	0.98	14	0.83	15
South Africa	0.99	15	0.82	14
Turkey	0.99	16	0.86	19
Venezuela	1.02	17	0.81	13
Philippines	1.03	18	0.98	20
Thailand	1.05	19	0.85	17
China	1.08	20	0.85	18

Source: Industrial Management Institute

2.10 Physical Infrastructure

The level and sophistication of physical infrastructure in Iran has been evaluated and measured by comparing international averages. For this purpose, 28 variables were selected (15 variables were collected by questionnaires and the rest by gathering hard data). The result of this exercise shows that Iran stands at 53rd place among the 54 countries selected. Countries like Hong Kong and South Africa have positive coefficients, meaning that the infrastructure environment in these countries is relatively good. On the other hand, countries like Taiwan, Malaysia, and Korea have neutral physical infrastructure standing in the middle of the list. Iran, India, Russia and some other countries have negative score for physical infrastructure, which means a comparative disadvantage for the business communities in these countries as compared to other surrounding countries.

A comparison of some of the main infrastructure-related variables between Iran and six other countries with a similar development level and other structural similarities is provided in Table 2.15, to provide a clearer picture of the competitive position of Iran.

Table 2.15: Infrastructure indicators for Iran and selected countries, 1376 (1997/98)

	Kilometres of road per 1 million inhabitants	Telecommunications Staff (1,000 persons)	Cost of local flights (US$ per kilometre)
Iran	**2,629**	**46.56**	**0.29**
Taiwan	922	35.00	0.24
Malaysia	4,565	27.53	0.10
Vietnam	1,235	75.00	0.22
Turkey	6,088	73.81	0.30
Korea	1,831	66.59	0.41
Egypt	-	51.75	0.43

Source : World Economic Forum – Global Competitiveness Report, 1999.

CHAPTER 3

STATUS OF SMEs IN IRAN

3.1 Introduction

The majority of manufacturing enterprises in Iran are in the SME sector, of which approximately 75% are small businesses. More than 63% of total manpower in the industrial sector is employed by SMEs, and the share of SMEs in value-added amounts to approximately 30%. This chapter will assess the present status of SMEs in Iran with regard to their role in income generation and employment creation. The progress of entrepreneurship development will be analyzed, as will the level of technology and the financial standing of these SMEs, which constitute the two key factors in determining their productivity levels. Finally, an analysis will be made of the SME sector based on available statistics.

3.2 Definitions of SMEs

There is little unanimity regarding the definition of SMEs in Iran. Various ministries, institutions and organizations connected to SMEs in one way or another have their own criteria to describe, categorize or define SMEs.

As defined by the Ministry of Industry and Mines and the Ministry of Agricultural Jihad, SMEs are (rural) industrial and service enterprises with less than 50 employees, whereas the Ministry of Cooperatives alternately uses the criteria of either the Ministry of Industry and Mines, or of the Statistical Office of Iran in defining SMEs. The latter, according to the Iranian Statistical Yearbook for 1378 (1999/00), categorizes businesses into four classes, i.e. businesses with 1-9 employees, 10 to 49 employees, 50 to 99 employees, and more than 100 workers. Although this categorization bears some resemblance to the definitions used by the EU, the Statistical Office of Iran only considers businesses with less than 10 employees to be SMEs; all others are regarded as “Large Manufacturing Establishments”. Similarly the Central Bank of Iran only defines establishments with less than 10 workers as SMEs.

By contrast, SMEs in the EU are defined as non-primary enterprises employing less than 250 employees. They are sub-divided into:

- Micro enterprises (0-9 employees)
- Small enterprises (10-49 employees); and
- Medium-sized enterprises (50-249 employees).

In addition, their turnover should be less than € 40m. with a balance sheet total of less than € 27m.; finally they should be economic independent, i.e. more than 50% privately owned.

3.3 Statistical Overview of SMEs in Iran

This section provides a series of tables and graphs indicating the current state of SMEs in Iran with regard to various important variables.

As shown in Table 3.1, 98.4% of all businesses are micro enterprises with 1-9 employees, whereas the total of small businesses with 10-49 employees amounts to only 1.42%. Obviously, there is an imbalance between the large number of micro enterprises and the marginal number of small and medium sized businesses. It may be noted that the absence of a reasonable number of medium-sized enterprises, which amounting to only 0.1% of the total number of enterprises, is negatively affecting Iran's ability to produce for the export market. From an international perspective it has come to be recognized that medium sized businesses, with 50-250 employees, typically account for a relatively large share of a country's exports, as they are more readily able to avail themselves of the technical expertise, manpower, marketing skills and financial resources to participate in international business.

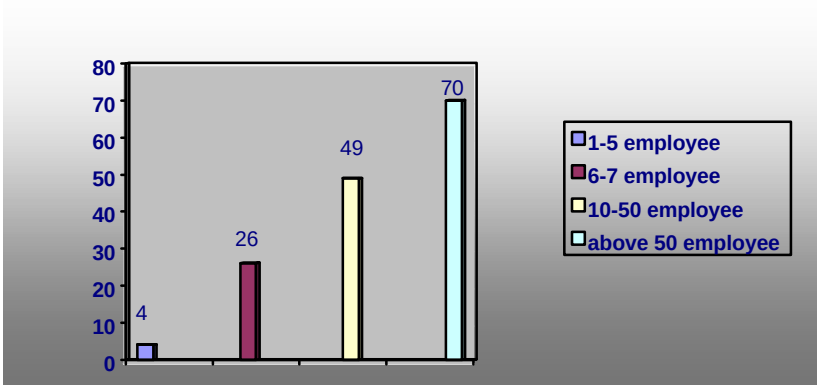
Table 3.1: Number of enterprises by size category and sector

Business Sector	1-5 employees	6-9 employees	10-49 employees	50-99 employees	<100 employees
Services	878.774	5.631	3.478	231	150
Manufacturing	334.630*	17.125	13.236	1055	1207
Mining	454	355	413	NA	NA
Totals	**1.213.858**	**23.111**	**17.127**	**1.286**	**1.357**
Percent of total	**96.6%**	**1.8%**	**1.4%**	**0.1%**	**0.1%**

Source: Statistical Yearbook of Iran 1375 (1996/1997)
Note: * Manufacturing enterprises with 1-5 employees are mostly artisanal firms, like tailors, bakers, repair shops, plumbers, hairdressers, etc.

Figure 3.1, however, shows considerable differences in productivity rates per size category for Iranian enterprises. The larger companies, although very small in number, have a relatively high productivity, because their high production levels allow then to benefit from economies of scale. It is also for this reason that these businesses are able to compete far more effectively in international markets. However, as explained above, their number is far too small for them to be able to make a significant contribution to exports.

Figure 3.1: Comparison of productivity rates between SMEs and LSEs



Source: Calculated for this study by the National Consultants, Messrs. Fereydoun Azarhoush, Kambeiz Talebi, and Morteza Imanirad.

As shown Table 3.2, 45.4% of all manpower in the industrial sector is employed in businesses with more than 100 employees, and in particular by LSEs, which represent only 2.9% of all industrial enterprises. By international standards, these data suggest that the industrial SME sector has a tremendous potential for growth in Iran.

Table 3.2: Number and percentage of industrial firms and their employees by size category

Category	1-5 employees*	6-9 employees	10-49 employees	50-99 employees	> 100 employees
Number of firms	16.753*	12.418	22.318	2.022	1.584
Percentage	30.4%	22.5%	40.5%	3.7%	2.9%
Number of employees	62.778	89.572	423.630	133.315	588.944
Percentage	4.8%	6.9%	32.6%	10.3%	45.4%

Source: Statistical Yearbook of Iran 1375 (1996/1997)
Note: * The data in this column refer only to manufacturing firms and exclude artisanal enterprises.

Table 3.3. presents data on the physical growth of firms. This refers to enterprises that have started the physical construction of their premises but are not yet in business. The percentage figure indicates the firms' stage of preparation; e.g. whether they are under construction or waiting for machines to be installed. This reflects the relatively long time lags involved in obtaining the required licences and being able to commence business operations. The reasons for these lags include:

- The very lengthy process of allocating loans to entrepreneurs;
- The unwillingness of banks managers to allocate the full amount of the agreed loan, which leaves the entrepreneur with a lack of finance and prevents him/her from buying the required equipment or finalising the construction of the premises;

- The shortage of foreign currency to purchase imported machinery, equipment and raw-materials; and
- The lack of knowledge of entrepreneurs regarding the feasibility of their business plans and the prevailing market conditions.

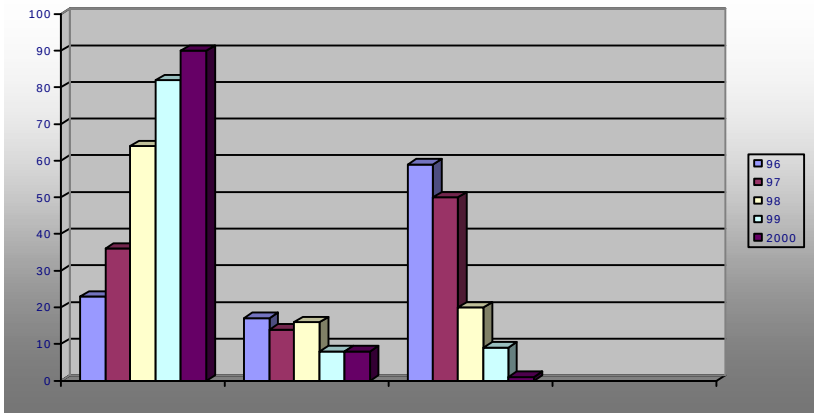
Table 3.3: Total number of new small industrial firms

	Industrial License Obtained	Firms Establishmen Certificate Obtained	Physical Growth 20%	Physical Growth 40% and Above	Physically Active Smal Industrial Enterprises
No of firms (1-5)	1,735	97	375	272	16,753
No of employees	7,206	421	1,586	1,144	62,778
No of firms (6-9)	5,155	145	1,124	714	12,418
No of employees	36,518	1,062	8,590	5,443	89,572
No of firms (10-49)	27,930	592	6,936	4,224	22,318
No of employees	566,450	11,556	148,061	88,179	423,630

Source: Small Industry Organization, Tehran.

Of the entrepreneurs who had received their licences in 1996, 20% had still not yet started their business by the end of 2000; while of those who had obtained their licences in 1997, 43.5% had not yet started operations by the end of 2000. The percentages of firms that had not yet become operational by the end of 2000 and obtained their licences in 1998, 1999 and 2000 was 63%, 82% and 90% respectively. The "potential firms" mentioned in Figure 3.2 are firms that have developed their business activities but are in the process of obtaining their quality standards certificates for exporting their goods and/or waiting for the disbursement of loans for technology- and capacity improvement or expansion.

Figure 3.2: SME start-ups and delays in becoming operational, 1375-1379 (1996/97-2000/01)



Data on the added value and productivity per class of enterprises is presented in Table 3.4. These show that micro and small enterprises with up to 49 employees had a share of 34% of total value added, whereas the share of medium-sized and large enterprises, which accounted for only 0.6% of all industrial enterprises, amounted to 66%.

Table 3.4: Characteristics of industrial SMEs by size category

Business category	% Share of value added	Productivity*	Businesses		Employees	
			%	Number	%	Number
Small firms (1-5 employees)	17.3	24.5	91.6	334,630	41.8	762,204
Small firms (6-9 employees)	5	41	4.8	17,406	7.3	123,171
Small firms (10-49 employees)	11.7	57	3	10,985	12	201,727
Medium and large firms (<50 employees)	66	100	0.6	2,263	38.9	651,342
Total	100	59	100	365,281	100	1,678,464

Note: The level of productivity of manpower is indexed against the productivity of firms having more than 50 employees (100).

Table 3.5 provides information about various trade and repair services, subdivided by rural and urban areas in Iran. As might be expected, urban business predominates, accounting for 79% of retail and repair services and 91% for wholesale trade. A subdivision of these figures per province and sector is given in Annex 2.

Table 3.5: Establishments engaged in trade and repair services by urban/rural areas, 1373 (1994/1995)

Category	Retail sales and repair services of personal and household goods			Wholesale and Commission trade		
	Rural	Urban	Total	Rural	Urban	Total
Total country, all sub-sectors	194.541	723.702	918.243	5.377	56.072	61.449

Source: Small Industries Organization

3.4 Birthrates and Bankruptcies

According to the industrial policy of 1372 (1993/94), industrial licenses can be obtained by anyone who has a business plan. As indicated above, however, the lack of supportive programmes and infrastructure facilities have resulted in a low growth and slow progress of business start-ups and a high percentage of bankruptcies.

In order to determine the rate of survival and deaths of small businesses the following analysis was made. In 1375 (1996/97) more than 10,260 nascent entrepreneurs received their business

licenses. However, 3,039 (or more than 30%) of the nascent entrepreneurs turned in their licences without having made use of them in December of that year. By 1379 (2000/01), only 4000 nascent entrepreneurs were still in possession of their licenses, although only about 10% of these nascent entrepreneurs had actually commenced their business activities by that date. A similar development was also found for license holders who received their licences in 1376 (1997/98). However, from 1377 (1998/99) onwards the start of business activities and the rate of survival began to improve

Figure 3.3: Survival rates of firms licensed in 1996

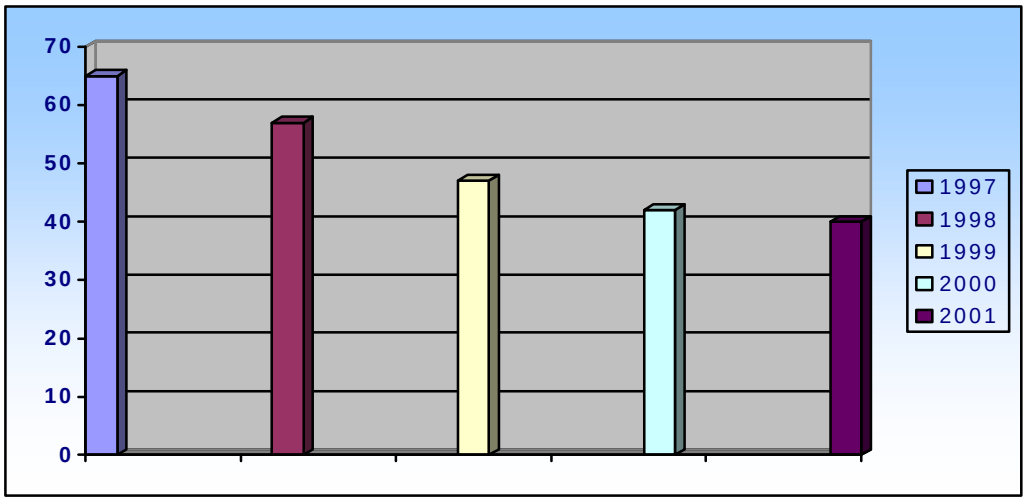


Figure 3.4: Survival rates of firms licensed in 1997

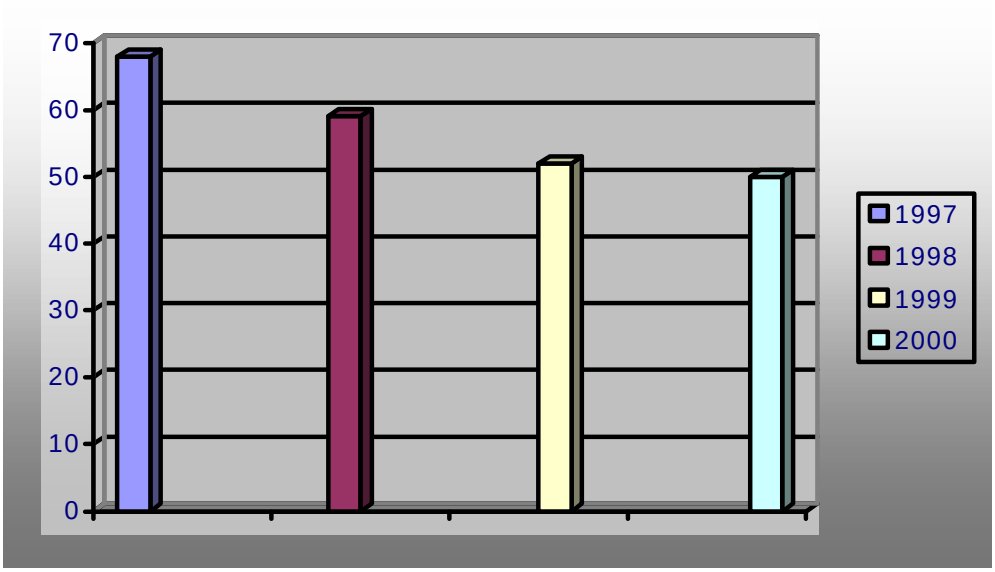


Figure 3.5: Survival rates of firms licensed in 1998

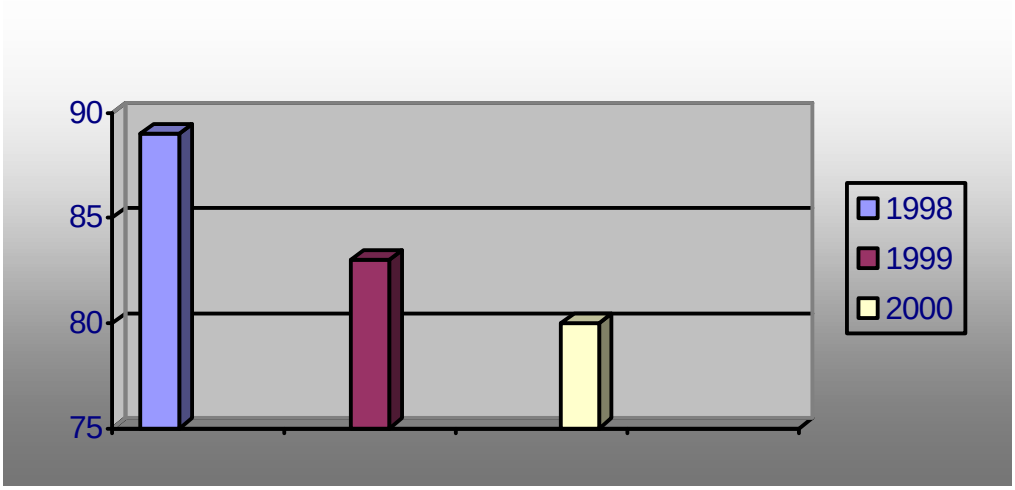
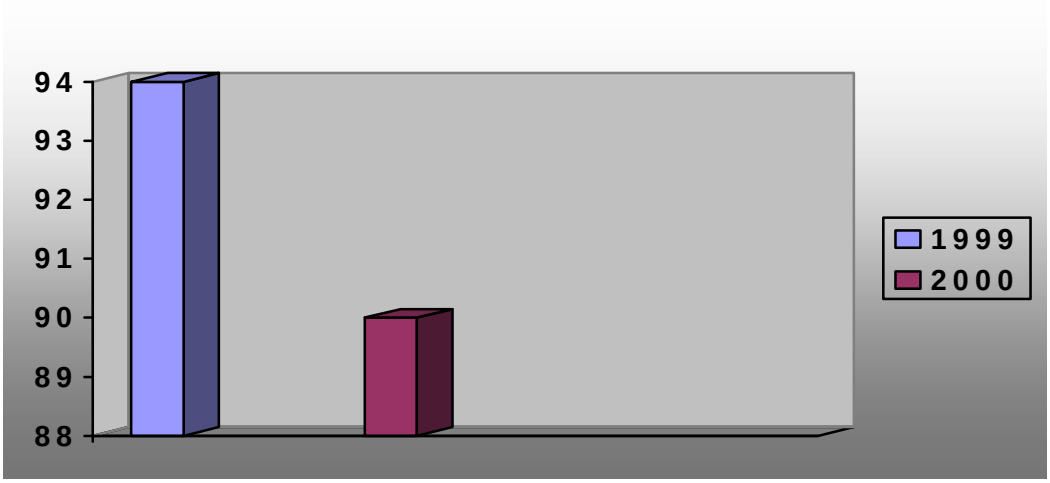


Figure 3.6: Survival rates of firms licensed in 1999



3.5 Financial Standing of SMEs

3.5.1 Lending schemes

The Bank of Industry and Mines, which is the major financial agency for SMEs, provides the only reliable information regarding the financial standing of such firms. An analysis of the allocation of the loans, other financial facilities and business services provided by this bank suggested that these services were provided primarily to enterprises with a good market and growing sales. The bank's loan allocations for industrial SMEs in 1376-1379 (1997/98-2000/01), disaggregated by sector, are shown in Table 3.6 below.

Table 3.6: Sectoral distribution of loans allocated to industrial SMEs by Bank of Industry and Mines, 1376-1379 (1997/98-2000/01)

(Rials m.)

Year	Food	Textiles and Leather	Chemicals	Furniture, Paper, Wood	Non-Metallic Minerals	Metals	Electrical and Electronic	Services and Non-Mfg.
1376	4,641	6,323	7,572	2,708	4,979	12,675	1,074	1,259
1997/98	11%	15%	18%	7%	12%	31%	3%	3%
1377	4,896	3,221	10,540	858	4,696	10,692	1,700	300
1998/99	13%	9%	28%	2%	13%	29%	4%	1%
1378	17,757	7,559	23,171	5,061	3,271	40,282	1,304	5,205
1999/00	17%	7%	22%	5%	3%	39%	1%	5%
1379	30,597	8,253	24,447	4,984	10,937	35,707	2,070	7,310
2000/01	24%	6%	20%	4%	9%	29%	2%	6%
Total	**57,864**	**25,356**	**65,730**	**13,611**	**23,882**	**99,356**	**6,148**	**14,074**
	19%	**8%**	**21%**	**4%**	**8%**	**33%**	**2%**	**5%**

Source: Bank of Industry and Mines

The data in Table 3.6 show that the volume of loans offered by the Bank of Industry and Mines to SMEs has increased continuously since 1375 (1996/97). Most of the loans went to the metalworking industries (33%), with the chemicals (21%) and food (19%) industries also receiving substantial shares. Importantly, moreover, 67% of the loans provided by the Bank of Industry and Mines went to small industrial enterprises (employing 10 to 49 workers), while a further 23% went to micro enterprises, as shown in Table 3.7. Medium sized businesses only received 10% of the total volume. As it is the bank's policy to provide loans to profitable companies with a good market share, it follows that small sized businesses appear to be more profitable than medium sized companies.

Table 3.7: Allocation of loans by Bank of Industry and Mines to industrial SMEs by size of firm, 1376-1379 (1997/98-2000/01)

Year	1-5 Workers	6-9 Workers	10-49 Workers	< 50 Workers
1376 (1997/98)	6.5%	13.5%	66%	20%
1377 (1998/99	8%	12%	67%	13%
1378 (1999/00)	6%	12%	67%	15%
1379 (2000/01)	7%	16%	67%	10%

Source: Department of Small Industries; Ministry of Industry and Mines

Apart from the Bank of Industry and Mines, Industrial SMEs have access to several additional sources of finance, such as family and relatives, moneylenders, the Islamic Development

Bank, foreign financial agencies, large enterprises (e.g. through sub-contracting agreements) and own savings.

3.5.2 Profitability

In the period immediately following the war with Iraq, between 1370 and 1374 (1991/92-1995/96), Iran experienced a rapid growth in demand for various products and goods, which provided good growth opportunities for entrepreneurs. However, the large-scale industrial enterprises faced a shortage of capital for rebuilding their plant and machinery, which had been badly damaged during the war. Consequently, a significant share of production was taken over by SMES, even though allocations of loans to small industrial projects were also limited. In addition, there was a shortage of foreign currency, which constrained the profitability of SMEs by preventing them from purchasing highly needed productive equipment.

The profitability of SMEs was also affected by their low quality standards, as the market was not prepared to accept products of low quality. Instead consumers continued to buy imported products, the more so as the government did not have a programme on technology development.

More recent data on the profitability of industrial SMEs in selected sectors from 1374 to 1378 (1995/96-1999/00) are given in Table 3.8, with Table 3.9 providing corresponding data for micro- and small enterprises. These statistics show that the profitability of the micro- and small industrial enterprises is much lower than that of the SME sector as a whole, which includes the medium-sized enterprises. The average profitability of the micro- and small enterprises for the whole period has been calculated at 7.5%.

Table 3.8: Profitability percentages (before taxation) of industrial SMEs in selected sectors, 1374-1378 (1995/96-1999/00)

Year	Code 31	Code 32	Code 33	Code 34	Code 35	Code 36	Code 37	Code 38	Code 39
1374 (1995/96)	22.2%	23.1%	4.9%	2.2%	5.3%	11.8%	1.3%	28%	1.2%
1375 (1996/97)	20.3%	24.1%	4.2%	2.3%	6.2%	11.8%	1.4%	28.2%	1.3%
1376 (1997/98)	19.8%	24.5%	4.1%	1.9%	5.9%	12.2%	1.2%	28.9%	1.5%
1377 (1998/99)	15.9%	25.8%	6.5%	2.9%	2.9%	8.4%	1.8%	34.3%	1.6%
1378 (1999/00)	20.9%	24.5%	6.1%	1.6%	3.4%	8.5%	1.8%	31.8%	1.4%

Note: The product codes are defined as follows: Code 31 – Food and beverages; Code 32 – Textiles and garments; Code 33 – Wood and wood products; Code 34 – Paper and publishing materials; Code 35 – Chemical industries and plastics; Code 36 – Non-metallic minerals ; Code 37 – Basic metal industries; Code 38 – Machinery and tools; Code 39 – Electronics and computers.

Table 3.9: Profitability percentages (before taxation) of industrial micro- and small enterprises in selected sectors, 1374-1378 (1995/96-1999/00)

Year	Code 31	Code 32	Code 33	Code 34	Code 35	Code 36	Code 37	Code 38	Code 39
1374 - 1378 (1995/96 – 1999/00)	6%	9.1%	13.4%	-3.2%	-3.8%	-8.4%	17.3%	11%	9.9%

Note: For an explanation of the codes see Table 3.7.

3.6 Forward and Backward Linkages of Large-scale Enterprises (LSEs) with Industrial SMEs

3.6.1 Backward linkages

The evolution of backward linkages between LSEs and industrial SMEs is a relatively recent phenomenon. After the war with Iraq, the automobile industry faced a huge demand, but car manufacturers were not able to increase their production capacity to meet this demand due to a lack of working capital and other financial and technical problems. This prompted the automotive industry to begin to outsource some of its production to industrial SMEs in 1372 (1993/94). One of the bigger automotive companies, Iran-Khodro, started sub-contracting business to some 75 small- and 25 medium scale industrial enterprises. Since then there has been a steady increase in the outsourcing of component production to SMEs. The main reasons for this development may be summarized as follows:

- The growth of demand was much faster than the growth of the car manufacturers' production capacities;
- The shortage of foreign currency was a major constraint preventing car manufacturers from purchasing car parts from abroad, and they therefore had to switch over to local production;
- The use of two-thirds of the existing production capacity for the manufacture of components, which could be manufactured elsewhere, constituted a major bottleneck for the large car manufacturing enterprises seeking to increase their output was the.

In this connection, it is important to note that the current production of the large state-owned car manufacturing enterprises amounts to some 300,000 units per year. This compares with a target of 450,000 for the year 1384 (2005/06) set in the Industrial Policy for Automotive Industries. Considering that there are currently 602 SMEs involved in making 78% of all components for 175,000 cars only, the scope for the further expansion of the role of SMEs in this sector remains considerable.

Table 3.10: Outsourcing of components from LSEs to SMEs, 1374-1378 (1995/96-1999/00)

LSE	1374 1995/96	1375 1996/97	1376 1997/98	1377 1998/99	1378 1999/00
Iran-Khodro	11%	21%	36%	42%	78%
SAIPA Auto mfc	NA	9-10%	15%	32%	40%
Pars-Khoudro	**5%**	10%	22%	30%	34%
Khaver Desel	NA	9%	14%	24%	32%

Table 3.11: Number of SMEs engaged as subcontractors in the automobile Industry, 1374-1378 (1995/96-1999/00)

Category	1374 1995/96	1375 1996/97	1376 1997/98	1377 1998/99	1378 1999/00
SMES	95	175	305	480	602

A survey undertaken by the "Industries Development and Renewal Organisation" (IDRO) revealed that approximately 2,000 industrial SMEs in Iran had a sufficient potential and capacity to become successfully involved as suppliers for LSEs in the automotive industry. This is consistent with the intended 50% increase in the production of cars from current levels by 1384 (2005/06), which will require considerable extra production capacity to be made available by industrial SMEs in the intervening period. Extensive support for the increased development of sub-contracting and outsourcing practices between LSEs and SMEs will be provided by the newly established "Small Industry Organization" (SIO), although the effectiveness of these services may be constrained by a lack of complementary programmes and the inadequacies of the legal structure.

Backward linkages between LSEs and industrial SMEs are also found in some other sectors of industry, as shown in Tables 3.12 and 3.13 below.

Table 3.12: Number of subcontracting activities between LSEs and SMEs in the automotive and electronics industries, 1369-79 (1990/91-2000/01)

Industries	1369 1990/91	1374 1995/96	1379 2000/01
Automobile Industries	325	850	1420
Electronics (SHIRAZ Electronic Industries)	14	32	75

Table 3.13: Percent share of SME subcontractors in the manufacturing of components for selected industries, 1374-79 (1995/96-2000/01)

Industries	1374 1995/96	1379 2000/01
Heavy Industries	13	32
Truck Industries	23	69
Railway Industries	10	30
Machinery Industries	25	64 to 88
Oil and Petrochemical Industries	Less than 5	10
Home Appliance Industries	22	42
Others	10	25

3.6.2 Forward linkages

Forward linkages between LSEs and industrial SMEs are not as well developed as backward linkages. Most of the forward linkages are related to industrial food processing and the metal, textile and wood (furniture) industries. Such forward linkages take essentially two forms: The distribution of goods manufactured by LSEs and the repair and maintenance of the LSEs' plant and equipment. It is thus estimated that there are more than 450 medium sized food-Industry enterprises in Iran that have developed forward linkages with SMEs, and a similar number of LSEs which have established links with SMEs for activities related to product distribution and plant maintenance.

3.7 Environmental Issues

The Third Five Year Plan (2000-2004) devotes a full chapter to the issue of environmental policies and states explicitly that all manufacturing units are obliged to take measures to conform their technical specifications with the environmental criteria set by the government on the basis of standards established by the World Health Organization (WHO). Expenditure for improvements to reduce the extent of pollution is in principle fully tax deductible. During the Third Plan, specific action will be taken to reduce pollution levels in the cities of Tehran, Mashad, Tabriz, Ahwaz, Arak Shiraz and Isfahan. Fines imposed by local environmental offices on manufacturing enterprises for not complying with the standards will be used for environmental rehabilitation programmes.

The TFYP also provides for the relocation of some industries from urban to other areas. To that end, industrial product units have been categorised in three different levels: A, B and C. Each level indicates where selected manufacturing enterprises can be located. A-level industrial units must be located at a distance of at least 3 kilometres from the nearby city; B-level industrial units should be located 5 kilommetres form the city, whereas C-level industries at a distance of at least 10 kilometres.

In addition, some industries which generate a very high level of pollution, such as the leather industry, will have to be located in special industrial estates where the environmental impact can be controlled more effectively. Furthermore, there are also specific requirements for setting up new businesses in or near Tehran, Isfahan and Arak. Since 1375 (1996/97) all newly established manufacturing firms must be located at a distance of 12O kilometres from Tehran and 50 kilometres from Isfahan and Arak.

3.8 Technology Levels

Data restrictions prevent an accurate assessment of the technology levels of industrial SMEs in Iran. For the purposes of this study, available data on the share of investment in machinery and tools by small industrial enterprises have been used as a proxy for the share of investment in technology development. These data, presented in Table 3.14, may serve as an indication of the technological standing of Iranian SMEs

Table 3.14: Investment in machinery and equipment by small industrial enterprises as a share of total investment

Year	Code 31	Code 32	Code 33	Code 34	Code 35	Code 36	Code 37	Code 38	Code 39	Total
1373 (1994/95)	47%	65%	46%	70%	50%	42%	51%	53%	52%	53%
1374 (1995/96)	44%	60%	39%	65%	48%	38%	57%	48%	44%	48%
1375 (1996/97)	40%	62%	31%	70%	50%	48%	70%	45%	35%	48%
1376 (1997/98)	40%	10%	60%	70%	32%	53%	10%	40%	22%	46%
1377 (1998/99)	38%	10%	30%	90%	43%	50%	10%	50%	30%	52%

Note: The product codes are defined as follows: Code 31 – Food and beverages; Code 32 – Textiles and garments; Code 33 – Wood and wood products; Code 34 – Paper and publishing materials; Code 35 – Chemical industries and plastics; Code 36 – Non-metallic minerals ; Code 37 – Basic metal industries; Code 38 – Machinery and tools; Code 39 – Electronics and computers.

In conclusion, it may be noted that almost 50% of all investment is allocated to the purchase of new equipment, particularly in the machinery and tools (code 38) and electronics/computers (code 39) industries. These are also the sectors that are most profitable vis-à-vis other sectors. The main obstacles to technology development are:

- A shortage of funds;
- The very lengthy process for allocation of loans;
- The high cost of imported technology (i.e. machinery and tools, know-how and R&D facilities);
- The low profitability of industrial SMEs in Iran, which restrains investment in technology modernization;
- Lack of knowledge of entrepreneurs regarding the importance of technology Improvement on productivity and profitability;

- The absence of any particular programme or policy regarding technology upgrading in industrial SMEs, with the exception of ISO programmes.

CHAPTER 4

THE ROLE OF INDUSTRIAL SMEs IN FOREIGN TRADE

4.1 Introduction

This chapter discusses the role of industrial SMEs in the foreign trade of Iran. It begins by presenting an estimation of the non-oil exports of Iran, based on which then develops projections for the future growth of non-oil exports according to three different scenarios. This chapter also presents guesstimates of the share of SMEs in non-oil exports, the sources and destinations of Iran's non-oil exports, and the roles and functions of various export promotion institutions.

4.2 Dynamics of Foreign Trade by Industrial SMEs

According to a recent study conducted by the Ministry of Industries on the role of industrial SMEs in Iran's exports,[1] the country's total exports of goods and services could exceed US $108 bn. by the year 1399 (2020/21), with the share of the industrial sector in these exports of goods and services amounting to more than $56 bn, or some 52%. For this projection to materialize, it will be necessary to implement a number of measures to open Iran's economy and promote exports. In the absence of such measures, the outcomes could be very different, as indicated in Table 4.1.

The same study has also assessed the specific role of SMEs in Iran's export prospects. The assessment was based on a number of assumptions and also took into consideration the export experiences of industrial SMEs of a number of selected developing and emerging economies such as Taiwan Province of China, India, Republic of Korea, Malaysia, Indonesia and Bangladesh. The estimates of the contribution of industrial SMEs to Iran's export growth derived from these calculations are presented in Table 4.2.

1 Imanirad, M., *The role of Small and Medium Industries in Iran's Exports*, Ministry of Industry, Department of SMI, 1376.

Table 4.1: Alternative scenarios for the growth of non-oil exports, 1389-1399 (2010/11-2020/21)

US$ million

Type of economy	1389 (2010/11)	1399 (2020/21
Exports of crude oil	31,200	37,500
Non-oil exports – *closed economy*		
Industrial	6,911	19,962
Non-industrial	8,447	19,692
Non-oil exports – *moderate policy*		
Industrial	11,718	38,611
Non-industrial	13,214	16,548
Non-oil exports – *open policy*		
Industrial	15,243	56,746
Non-industrial	13,518	14,187

Source : Imanirad, Morteza, *The Role of Small and Medium Industries in Iran's Exports*, Ministry of Industry, Department of SMI, 1376, p. 272.

Table 4.2: Alternative scenarios for the contribution of industrial SMEs to the growth of Iran's non-oil exports, 1389-1399 (2010/11-2020/21),
US$ million

Type of economy	1389 (2010/11)	1399 (2020/21
Export of crude oil	31,200.0	37,500.0
Export of industrial SMEs – *closed economy*		
Miniumum	166.2	1,699.0
Maximum	278.1	2,831.0
Export of industrial SMEs – *moderate policy*		
Minimuml	1,028.0	5,691.0
Maximum	1,714.0	9,485.0
Export of industrial SMEs – *open policy*		
Minimum	1,736.0	9,929.0
Maximum	2,894.0	16,549.0

Source : Imanirad, Morteza, *The Role of Small and Medium Industries in Iran's Exports*, Ministry of Industry, Department of SMI , 1376, p. 272.

The achievement of the high-growth projections will require the formulation and implementation of specific export policies, and the development of specific policy instruments, for industrial SMEs. The introduction of such measures is imperative in view of the difficulties faced by industrial SMEs in their endeavours to export, which include:

- Reliance on hard currency earned through oil exports.
- Utilization of old machinery and equipment in certain industrial fields.

- Lack of balance between the country's industrial growth and the world's industrial development.
- Non-utilization of full production capacities in certain industrial fields and non-completion of many industrial projects.
- Relative inconsistency of Iran's economic and administrative laws, regulations and policies, and the prevalence of laws and regulations that hinder the growth of production and exports.
- Lack of coordination among executive branches for developing industrial and non-oil exports.
- Lack of a well-developed capital market.
- Lack of an appropriate economic strategy and existence of unspecified policies for foreign trade and industrial development.
- Lack of understanding about international markets and economic developments at the international level.
- Fluctuations facing the country's foreign relations.

An assessment of the constraints experienced by two groups of SME exporters, expressed as a percentage of total constraints (100%), was revealed in a recent survey. The results are presented in Table 4.3.

Table 4.3: Principal Constraints faced by SME Exporters

Constraint	Impact of Constraint (%)
Lack of access to factor of production and raw material markets	12.78
Old machinery and equipment	9,40
Lack of foreign marketing support	7.90
Lack of financial markets	19.92
Instability of economic and administrative laws	26.69
Other factors such as overall economic performance, exchange rate instability, and closed foreign policies	23.31
Sum of all constraints	**100.00**

Taking into consideration the experiences of other developing and emerging economies, as well as Iran’s potential as calculated above, the country should indeed make a serious effort in establishing the required policies and policy instruments for industrial SMEs to boost their exports of non-oil products. This will lead to increased employment, public welfare, and international participation in the world markets. It has to be stressed, however, that the

achievement of the potential growth in non-oil exports will require strenuous efforts and full cooperation between public sector institutions, such as ministries and other government agencies, and private sector bodies, such as business associations, banks, research institutions, consultants and the entrepreneurs themselves.

4.3 Exports of Industrial Goods by SMEs

4.3.1 General

During 1368-1372 (1989/90-1993/94), Iran exported $1,286 million worth of industrial goods, which constituted some 11% of Iran's total non-oil exports valued at $11,719 million. In 1373 (1994/95), the country's industrial exports amounted to more than $890 million, which constituted 18.4% of the total non-oil exported goods valued at $4,825 million. In 1374 (1995/96), due to the introduction of new foreign exchange policies, the amount of non-oil exports decreased to $3,166 million, with the value of industrial exports also falling to $759 million. However, the share of industrial exports in the country's total non-oil exports increased by 23.5%.

In 1375 (1996/97), Iran's industrial exports recorded a growth of 54%, and increased to $1,170 million, while the share of industrial exports in total non-oil exports also increased from 23.5% to 35%. As a result, the country's total revenues from non-oil exports rose to $3,210 million in that year. After a renewed decrease in 1376 (1997/98), the value of Iran's exports started to increase again after 1377 (1998/99), and reached $3,724 million in 1378 (1999/00).

The reliance of the Iranian economy on oil revenues has been reduced during 1370-74 (1991/92-1995/96). As indicated in table (4.4), the ratio of non-oil exports to total exports increased dramatically during this period from 8.79% to 28.98%. However, exports of non-oil products stagnated in 1374-1378 (1995/96-1999/00), as is shown in Table 4.4.

Table 4.4: Oil and non-oil exports, 1370-1378 (1991/921999/00) (Rials bn)

Year	Total Exports	Oil Exports	Non-oil Exports	Ratio of Non-oil Exports to Total Exports	Ratio of Oil Exports to Total Exports
1370 (1991/92)	2,204	2,026	178	8.79	91.21
1374 (1995/96)	25,320	19,631	5,689	28.98	71.02
1375 (1996/97)	29,373	23,938	5,435	22.70	77.30
1376 (1997/98)	29,400	24,354	5,047	20.72	79.28
1377 (1998/99)	30,181	24,893	5,288	21.24	78.76
1378 (1999/00)	28,102	22,202	5,900	26.57	73.43

Source : Export Promotion Centre of Iran

Table 4.5 shows the breakdown of non-oil exports based on 20 categories of customs classification. A look at the export figures in the table reveals that only five items – vegetable products, mineral products, chemical products, textiles and base metals – account for 76% of Iran's non-oil exports. Out of US$912 million of textile export, carpet is the main article.

Looking at the growth of non-oil export as a dynamic indicator of the export sector, the following categories have had an acceptable performance in 1375-1379 (1996/97-2000/01). All figures are the average of four annual growth rates.

- Animal or vegetable fats 200.54%
- Mineral products 27.73%
- Machinery and mechanical appliances 32.29%
- Vehicles and transportation equipment 38.26%
- Works of art 78.16%

Other categories had a growth rate of 4-15% during the period in question.

Table 4.5: Non-oil exports by category, 1376-1379 (1996/97-2000/01)

Cat	1375 (1996/97)		1376 (1997/98)		1377 (1998/99)		1378 (1999/2000)		1379 (2000/01)	
	Volume	US$ '000	Volume	US$ '000	Volume	US$ '000	Volume	US$ '000	Volume	US$ '000
1	20,364	65,356	17,184	57,113	21,806	58,870	42,686	71,376	65,355	77,554
2	884,344	701,759	950,715	376,517	1,249,944	663,060	1,120,721	598,559	960,995	591,550
3	3,442	1,890	17,835	12,889	15,223	8,856	21,128	5,117	34,946	20,147
4	339,831	252,103	330,217	259,715	244,242	190,406	280,591	198,990	342,205	183,341
5	3,071,786	244,210	3,892,013	326,970	9,323,221	586,641	12,580,996	671,709	8,426,177	558,287
6	1,560,454	269,875	1,982,837	314,097	2,205,564	267,405	1,603,343	212,166	2,010,272	353,354
7	166,156	114,326	156,135	102,123	212,961	118,616	181,754	111,648	190,420	151,674
8	22,541	101,022	24,139	102,937	16,573	55,032	25,268	56,784	30,270	81,989
9	10,302	4,136	11,455	3,081	11,900	3,470	12,811	5,935	17,746	6,421
10	3,618	5,417	3,661	4,600	4,009	3,964	6,144	4,489	12,842	7,169
11	91,365	886,381	80,550	827,692	57,743	677,667	78,868	856,838	94,705	912,525
12	20,237	62,071	22,640	62,205	20,814	47,595	29,618	43,220	39,918	67,479
13	260,388	39,525	235,238	47,962	261,208	44,943	294,884	53,515	387,259	76,803
14	5	102	4	156	4	291	127	6,287	36	2,680
15	549,267	268,909	915,664	289,987	769,662	196,085	1,233,534	347,372	1,602,061	448,773
16	11,452	29,445	12,624	28,154	13,634	31,359	15,736	35,388	24,268	74,067
17	7,929	21,009	14,366	26,365	17,206	34,570	21,652	53,770	20,669	75,765
18	566	3,176	976	4,268	608	2,712	827	4,461	629	2,799
19	16,284	32,603	21,979	28,688	12,313	20,201	13,973	19,685	14,971	31,463
20	29	106	23	71	43	97	59	111	109	438
Tot.	**7,040,360**	**3,103,421**	**8,690,255**	**2,875,590**	**14,458,678**	**3,011,840**	**17,564,720**	**3,357,420**	**14,275,853**	**3,724,278**

Note: The product codes are defined as follows: Code 1 – Animal products; Code 32 – Vegetable products; Code 3 – Animal or vegetable fats and oils and other cleavage products, prepared edible fats, animal or vegetables waxes; Code 4 – Prepared foodstuffs, beverages, spirits and vinegar, tobacco and manufactured tobacco substitutes; Code 5 – Mineral products; Code 6 – Products of the chemical or allied industries; Code 7 – Plastics and articles thereof, rubber and articles thereof; Code 8 – Raw hides and skins, leather, furs and articles thereof, saddlery and harnesses, travel goods, handbags and similar containers, articles of animal gut (other than silk-worm gut); Code 9 – Wood and articles of wood, wood charcoal, cork and articles of cork, manufactures of straw or other plating materials, basket-ware and wickerwork; Code 10 – Pulp of wood or other fibrous cellulose material, waste and scrap of paper or paperboard, paper and paperboard and articles thereof; Code 11 – Textiles and textile articles; Code 12 – Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; Code 13 – Articles of stone, plaster, cement, asbestos, mica or similar materials, ceramic products, glass and glassware; Code 14 – Natural or cultured pearls, precious or semi-precious stones, precious metals and articles thereof, imitation jewellery, coins; Code 15 – Base metals and articles thereof; Code 16 – Machinery and mechanical appliances, electrical equipment and parts thereof, sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles; Code 17 - Vehicles, aircraft, vessels and associated transport equipment; Code 18 – Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus, clocks and watches, musical instruments, parts and accessories thereof; Code 19 – Miscellaneous manufactured articles; Code 20 – Works of art, collectors` pieces and antiques.

The destination of non-oil export of Iran is shown in Table 4.6. The United Arab Emirates lead the rankings as the major trade partner of Iran with imports of US $444m. Germany and Azerbaijan are in second and third place respectively. The total exports to the top five countries amounts to US $1,409m., which represents 26.6% of total non-oil exports.

Table 4.6: Importing Countries of Non-oil Products from Iran

Nr.	Market	Metric tons	Export in 1000 US$
1	United Arab Emirates	1,664,552	444,352
2	Germany	102,099	354,332
3	Azerbaijan	895,761	248,848
4	Italy	200,913	191,443
5	China	1,272,900	169,976
6	Turkey	382,139	165,529
7	India	1,015,974	152,524
8	Japan	472,373	126,728
9	Iraq	252,433	101,562
10	Ukraine	451,946	99,114
11	USA	4,781	98,693
12	Saudi Arabia	357,912	88,263
13	Turkmenistan	230,442	87,217
14	Uzbekistan	122,594	81,418
15	Kuwait	1,818,739	74,306
16	Korea Rep.	524,358	73,515
17	Russian Federation	119,352	68,495
18	Pakistan	195,545	64,586
19	Thailand	360,462	53,417
20	Spain	92,211	52,741
21	Taiwan	282,634	52,423
22	Armenia	126,819	50,148
23	Hong Kong	38,022	49,249
24	France	25,632	44,761
25	Belgium	130,797	44,501
26	Singapore	300,964	43,127
27	Afghanistan	149,328	41,188
28	Switzerland	1,874	38,702
29	Syria	23,040	38,524
30	Rest of America	37,987	56,630
31	Rest of Europe	662,817	178,757
32	Rest of Asia	1,425,827	234,198
33	Rest of Africa	517,856	75,392
34	Pacific	11,290	12,806
		14,272,373	**3,757,465**

An aggregated form of Table 4.6 by continent is presented in Table 4.7. This shows Asia to be the largest market for Iran's non-oil exports, with 62% of exports, and Europe to be the second largest market with 31.4%. Africa and the Americas account for only a small share of Iran's exports. A calculation of the growth rate shows that Iran's exports have increased in all markets except the Pacific and Europe during 1374-1378 (1995/96-1999/2000). With the lifting of the US ban on imports of Iranian carpets and pistachios, the total export to the Americas increased by 85.7%, from IR127 bn IR236 bn, in one year from 1377-1378 (1998/99-1999/2000).

Table 4.7: Exports by continent, 1370-1378 (1991/92-1999/2000), Rials bn.

Continent	1370	1374	1375	1376	1377	1378	% growth in 1
	1991/9	1995/96	1996/97	1997/9	1998/99	1999/200	1378
Asia	68,284	2,823,068	2,999,002	2,846,582	3,275,292	3,678,836	30.31
Africa	1,039	78,483	46,565	65,892	68,143	107,869	37.44
America	2,453	120,218	93,867	135,597	127,311	236,436	96.67
Europe	105,819	2,636,541	2,266,200	1,981,415	1,802,729	1,854,861	- 29.65
Paciific	383,000	28,637	19,129	17,179	14,888	22,224	- 22.39

Source: Management and Planing Organization, Statistical Center of Iran, Statistical Yearbook, 1379.

4.3.2 Exports of Industrial SMEs

Unfortunately there is no data available on the export of industrial SMEs in Iran. The newly established Small Industry Organization (SIO) has not yet been in place long enough to have collected any significant data on exports of industrial SMEs, while the three other organizations involved in export-related activities – the Ministry of Commerce, Chamber of Commerce, Industry and Mines, and the Export Promotion Centre of Iran – do not collect export data with reference to the size of exporters and importers.

In the absence of any published statistics on the export performance of industrial SMEs in Iran, additional researchwas undertaken for this study to derive more or less reliable estimates of the exports of major categories of industrial SMEs.[1] As indicated in Table 4.8, this research revealed that SMEs accounted for some 6.2% of the total industrial exports of US $2,836 bn in 1379 (2000/01).

1 First, customs classifications were analysed and from these the total industrial exports was subtracted. Using the database of project IMI-100, the exports of 200 large-scale companies were deducted. That difference (remaining large scale companies and industrial SMEs) was then analysed according to the number of businesses, employees, sales and production.

Table 4.8: Industrial exports by size of enterprise, 1379 (2000/01) (US$ m)

Size Category of Export Producers	US$ '000
Total industrial export	US $2,836.2
Exports of carpets	US $686.3
Large-scale companies export	US $1,449.2
(200 top companies ranked by Industrial Management Institute-IMI100)	
Export of remaining large companies and SMIEs	US $700.7
Export of remaining large scale companies	US $542.4
Export of small and medium scale industries	US $176.3
Share of SME export from total industrial export	6.2%
Share of SME export from total non-oil export	4.7%

Source: Own research

The major fields in which industrial SMEs are producing for export are shown in Table 4.9.

Table 4.9: Guesstimates on industrial SME exports by industrial sector, 1379 (2000/01) (US$ m)

Industrial sector	US$ '000
Manufacture of made-up textiles	20,497
Tanning and dressing of leather	9,269
Manufacture of luggage, handbags and related products	731
Sawmilling, planking of wood	1,423
Small wood products, such as tool cases, ornaments, etc.	1,726
Manufacture of containers and boxes of paper and board	1,588
Manufacture of food products, including macaroni	31,343
Canning and preserving of fruits and vegetables	12,113
Manufacture of non-metallic mineral products	21,225
Cutting, shaping and finishing of stone	11,716
Manufacture of furniture and fixtures	14,220
Canning, preserving and processing of fish and similar foods	11,020
Total of main items	136,873
Remaining exports of industrial SMEs	39,427

Source: Own research.

The estimates presented above suggest that labour intensive products, such as textiles, food products, and products derived from the processing of wood and stone, account for the bulk of export products produced by industrial SMEs in Iran. This notwithstanding, industrial SMEs operating in other sectors also contribute to Iran's non-oil exports by supplying raw materials, spare parts and general inputs for large-scale exporters. These include the cement industry, the base-metals industry, and manufacturers of machinery and metal products, household articles and electrical products, and vehicles and transportation equipment. Unfortunately, no information is available regarding the indirect exports of small industries.

4.4 The Role and Function of Export Promotion Institutions

4.4.1 Export Promotion Centre of Iran (EPCI)

The Export Promotion Centre of Iran (EPCI) was established in 1345 (1966/67) with the principal objective of providing support for, and offering marketing and publicity services to, the country's export enterprises in global markets, and to help establish closer links between Iranian exporters and foreign importers.

As a non-profit organization, the main functions of EPCI are:

- Research and development related to markets an products;
- Export training to entrepreneurs;
- Providing trade information;
- Marketing and publicity;
- Helping to establish international links;
- Provision of export services;
- Review and revision of trade regulations;
- Encouraging enterprises to contribute to the promotion of exports;
- Stimulating the expansion of production and trade associations; and
- Coordinating national export policies in the industrial, mining, agricultural, and services sub-sectors.

EPCI has three divisions, each headed by a vice-president, and one department for carrying out the activities mentioned above. These are:

- The Division of Research and Information;
- The Division of Export Services and Marketing;
- The Division of Administrative and Financial Affairs;
- The Department of Public Relations and International Affairs.

The main day-to-day activities of these sections can be summarized as follows:

- Preparing short- and long-term quantitative export targets for different national plans;
- Recommending market oriented export policies;
- Following up and coordinating export policies and policy instruments;
- Assisting in the establishment of various governmental and non-governmental funds to support export activities;
- Supporting the formation of export associations to coordinate the export activities of individual firms;
- Providing economic and legal support for industries, and removing constraints impeding the growth of industrial exports;
- Identifying bottlenecks in the banking, customs, insurance, standardization, and transportation systems, and helping to minimize those problems;
- Providing such incentives as subsidies and special rewards for certain export commodities;
- Providing prompt information on changes in regulations, and on the provision of new facilities, new incentives and market evaluations for manufacturing exporting companies; and
- Publicizing investment opportunities and trade potentials for foreign businesses and providing information and facilities to contact domestic and foreign partners.

Although EPCI is heavily involved in the promotion of exports by the private sector, it does not have a department devoted specifically assisting industrial SMEs in their export endeavours. All policies, subsidies, and other support measures offered by EPCI are provided equally to all firms, and since large enterprises have better administrative capabilities and bureaucratic connections than SMEs, most of the support and export subsidies are in fact absorbed by large scale companies.

4.4.2 The Chamber of Commerce, Industry and Mines

According to the first article of "the Law of the Islamic Republic of Iran Chamber of Commerce, Industries and Mines" approved on 6 March 1991, the Chamber's mission is "to facilitate and lay the foundations for the growth and expansion of the country's economy; and to exchange ideas with managers of industrial, mineral, agricultural, and commercial enterprises."

The headquarter of the Chamber of Commerce is located in Tehran and each province has a legally established Provincial Chamber, which is financially and administratively independent. At least 50 members are needed for a Provincial Chamber to be established. The main administrative activity of each Provincial Chamber of Commerce is the issuance of

membership cards for members, which gives them legal permission to engage in import and export activities.

The functions of the Chamber of Commerce, Industries and Mines, based on the law of the Chamber of Commerce and subsequent amendments of 6 December 1994, may be summarized as follows:

- Promoting coordination and cooperation among business managers and entrepreneurs in carrying out economic, financial and legal regulations of the country;
- Rendering consultative opinions to government institutions and officials on various issues related to industrial, agricultural and commercial business activities;
- Arranging specialized exhibitions inside and outside the country to facilitate international and local business relations of Iranian managers;
- Encouraging and promoting domestic investments in production, especially in the area of goods produced for export;
- Upgrading the competitive advantage of Iranian companies in the world market;
- Surveying foreign markets for Iranian exporters in order to facilitate their exports, and encouraging Iranian exporters to participate in international trade fairs;
- Compiling and processing economic statistics, and making the information available for the use of exporters;
- Setting up associations of importers and exporters and syndicates of producers engaged in various mineral processing, industrial, commercial and agricultural activities.

Based on articles 6 and 7 of the law of the Chamber of Commerce, the management structure of the organisation comprises a Supreme Supervisory Council, a Board of Delegates, and a Board of Directors. The provincial chambers, meanwhile, only have a Board of Directors and a Board of Delegates.

The main tasks of Supreme Supervisory Council are to design policies, approve procedural regulations, consider recommendations and deal with complaints.

The Board of Delegates and the Board of Directors are mainly responsible for approving, examining and appropriating the annual budget of the Chamber, and reviewing and confirming the recommendations and reports of the Chamber's commission.

Like the Export Promotion Centre of Iran, the Chamber has no specific division for SMEs. Hence, all of the Chamber's facilities and services, such as its export promotion policies, participation in foreign fairs and supplying educational courses are provided equally to businesses of all sizes. Therefore large companies with strong ties again have a greater opportunity to take advantage of the facilities offered.

CHAPTER 5

THE IMPACT OF GLOBALIZATION ON SME DEVELOPMENT

5.1 Introduction

This chapter assesses the likely impacts of globalization on SMEs in Iran. It first looks at the extent to which the Iranian economy has, in practice, been globalized. It then presents a summary analysis of the ongoing debates on the issues surrounding Iran's membership of the WTO, a move that is regarded as a fundamental step towards the further globalization of the Iranian economy. In the third part, it examines some of the salient and ubiquitous global business norms and unwritten rules, and seeks to determine the extent to which those norms have been internalized by Iranian SMEs.

In part four references will be made to some of the threats and opportunities for SMEs, arising from further globalization of the economy, by looking at the past and present government policies on small-scale industries and the consequences for the intellectual environment of SMEs. The chapter concludes by presenting some broad policy recommendations for a micro-economic and social environment that will enable Iranian SMEs to better meet the challenges of globalization.

5.2 The Globalization of the Iranian Economy and SMEs

Economic Openness: The essence of globalization is an increase in the levels of interdependence among economies, "polities", cultures, etc. As such, globalization is not a new phenomenon. There exists a tradition of international interactions and exchanges. For centuries, the Silk Road connected the cultural and business centres of Europe with the ancient civilizations of Asia. The contemporary trend fits into history. What is new, and a source of concern for some countries, is the present scope and magnitude of globalization manifested in the unprecedented permeability of national borders and the speed at which the process is intensified. The information and communication technology (ICT) revolution has exerted and continues to exert a determining influence in propelling this development.

Despite some pioneering attempts[1], a universally accepted, all encompassing measure of globalization has not yet been developed. In its absence, this study presents only some clues about the globalisation of the Iranian economy, by using partial indices showing the degree of

1 See, for example, *Measuring Globalisation: The A. T. Kearney/Foreign Policy Magazine Globalization Index*, Foreign Policy, Issue 122, Jan/Feb 2001.

openness of the Iranian economy. The indices of this kind that this study has looked at include the "Openness of Economies" index included in the annual *World Competitiveness Report*,[1] the "Degree of Economic Freedom" in the annual *Economic Freedom of the World* report co-published by the Fraser Institute[2] and, finally, the Heritage Foundation's *Index of Economic Freedom*[3]. In addition, comparative figures on FDI for Iran and a group of neighbouring countries are provided to supplement the findings.

This *Openness of Economies* index is a comparative measure of international trade liberalization and internal economic stability of countries used by World Economic Forum (WEF) for preparing the annual "Global Competitiveness Report". Iran is not included in the countries covered by this index, but using the methodology of the WEF, the Industrial Management Institute of Iran (IMI) has developed a comparable figure that ranks Iran in 51st place among the 54 countries for which the 1999/2000 index was originally calculated.[4]

Table 5.1 compares the openness indices for a selected group of developing and emerging markets.

Table 5.1: Openness indices for selected developed and developing economies

Country/Region	Index	Country	Index	Country	Index
Hong Kong	+1.8	Turkey	0.00	Columbia	-0.74
Netherlands	+1.03	Egypt	-0.33	Brazil	-0.79
Singapore	+0.99	Indonesia	-0.37	**Iran**	**-1.30**
U S	+0.62	Jordan	-0.54	China	-1.39
Taiwan	+0.33	Philippines	-0.60	Zimbabwe	-1.82
Argentina	+0.20	Vietnam	-0.71	India	-2.64

Source: WEF, *The Global Competitiveness Report 2000*, reworked by IMI to include Iran

Two other indices of economic openness published by the Fraser Institute and Heritage Foundation apply similar approaches, and point in the same directions. Both indices have Iran in their lists. The Fraser Institute, using a scale of 1-10, puts Iran at 102 out of 123 countries listed, whereas in the Heritage Foundation's scale Iran stands at 151 out of 156. Both of these indices give a historical picture of the openness of the Iranian economy.

Table 5.2 gives a 30-year trend based on the Fraser Institute's index. Table 5.3 is drawn from historical country data compiled by the Heritage Foundation.

1 *World Competitiveness Report*. http://www.weforum.org.

2 The Fraser Institute: *Economic Freedom of the World: 2001 Annual Report*. Chapter one. www.fraserinstitute.ca.

3 The Heritage Foundation, *Index of Economic Freedom* 2002, www.heritage.org.

4 Industrial Management Institute of Iran, *Measurement and evaluation of Iran's standing in the World Competitiveness ranking of World Economic Forum*, IMI Project Report, 2000.

Table 5.2: Historical rating of the freedom of the Iranian economy by the Fraser Institute

Score	1970	1975	1980	1985	1990	1995	1999
Points	6.3	6.2	3.4	3.4.	4.2	4.3	4.7
Rank	31 of 57	22 of 83	98 of 107	99 of 111	90 of 115	105 of 122	102 of 123

Source: The Fraser Institute

Table 5.3: Ratings of the economic openness of Middle-Eastern and North African countries compiled by the Heritage Foundation

Countries	1995 Scores	2001 Scores	2002 Openness Rank
Algeria	3.50	3.10	79
Bahrain	1.80	2.00	15
Egypt	3.45	3.55	121
Iran	**4.65**	**4.55**	**151**
Iraq	4.90	5.00	155
Israel	3.00	2.65	43
Jordan	2.95	2.70	45
Kuwait	2.50	2.75	53
Lebanon	3.05	3.15	88
Libya	4.85	4.75	153
Morocco	2.85	3.05	76
Oman	2.90	2.90	60
Qatar	N/A	2.95	70
Saudi Arabia	2.80	3.00	72
Syria	4.00	4.10	145
Tunisia	2.70	2.85	58
Yemen	3.85	3.75	134

Source : The Heritage Foundation, 2002 Index of Economic Freedom, www.heritage.org
Note: Higher scores indicate lower ranks

The three global openness indices presented in Tables 5.1, 5.2 and 5.3 underscore the relative insulation of the Iranian economy, as compared with neighbouring countries.

***Foreign Direct Investment (FDI)**:* FDI is an additional indication of the level of globalization, as it generally entails long-term transfer of knowledge, technology and managerial skills. In some cases it may stimulate free moves of manpower across borders too. In addition, in cases where FDI is made in one country with the objective of serving the surrounding economic regions, it usually leads to a series of new international transactions, due to new initiatives resulting in exports. Because of these positive economic effects, most developing economies

are keen to compare levels of FDI with other economies, in order to assess their economic attractiveness.

The level of FDI for Iran is manifestly lower than the neighbouring countries as shown in Tables 5.4 to 5.6.

Table 5.4: FDI inflows in selected developing countries (US$ m)

Years	1994	1995	1996	1997	1998
Malaysia	4,342	4,178	5,078	5,106	NA
Egypt	1,285	735	612	723	1,007
Turkey	559	772	612	554	573
Thailand	873	1,182	1,405	3,356	6,811
Pakistan	360	439	1,106	712	602

Source: The World Bank.

Table 5.5: FDI inflows in Iran (US$ m)

1376 (1997/98)	1377 (1998/99)	1378 (1999/00)	1379 (2000/01)	1380: (2001/02)
177	149	43	1,415	119 (6 months)

Source: Table 2.7

Table 5.6: FDI per capita and its share in national investment, 1999 (US$)

Countries	FDI Per Capita	Share of FDI in National Investment
Malaysia	68.4	25.8
China	31	NA
Turkey	12	1.9
Pakistan	3.9	NA
India	2.7	2.6
Egypt	NA	5.8
Iran	**1.35**	**0.1**

Source: The World Bank

***Other Indices**:* In addition to FDI, portfolio investments play a significant role in the dynamics of economic globalization. There is no record comparing inflows of portfolio investments into Iran with other countries since such investment is not legal for foreign investors in Iran. Nevertheless to indicate the importance of portfolio investments for the developing economies, the available figures for the same group of developing countries are presented in Table 5.7.

Table 5.7: Inflows of portfolio investment into selected developing countries, 1994-98, (US$ m)

.Year	1994	1995	1996	1997	1998
Malaysia	1,245	2,440	2,062	2,503	-314
Egypt	0	0	0	0	0
Turkey	459	627	1,578	1,975	-535
Thailand	3,805	2,123	3,774	1,726	-632
Pakistan	195	0	150	375	0

Source: The World Bank

Technology transfer: Transfer of technology, in theory, is one of the important indicators of globalization, but this index does not have much practical value for our purposes as accessible data are partial and piecemeal. Technology can be transferred in several different ways, like FDI, the import and export of goods and services, cross-border labour mobility, and technology licencing. Moreover, these channels are not mutually exclusive. FDI, for example may involve licencing and labour mobility as well. Because of these overlaps comparative partial figures could be misleading. Therefore, they are not included in this study.

In conclusion, measured by the composite economic openness indices and single factors such as FDI, as compared with other developing economies, it is safe to state that the Iranian economy as a whole is insulated from the rest of the world to a considerable degree.

A word of caution on the openness indices is warranted, however. A relatively high openness index, in general, implies a greater experience with free trade. Countries with more exposure to global competitive forces may be more comfortable to expand their global business. For insulated economies like Iran, however, trade liberalization may involve some painful shocks and adjustments.

For economically advanced countries it may be assumed that high levels of openness are inherently associated with the competitiveness of the economy. Because the more an economy becomes competitive, the more it will be outward looking and seeking new markets. Since market access is a two-way stream, such a country will have to open up its internal market to external competitors as well. Therefore countries with high indices more or less automatically keep on increasing their level of globalization.

Beyond these general observations, however, openness indices could mean different things for different economies. For an oil producing country like Iran, mainly depending on this single

source of income, a high openness index could imply an inward globalization that is not necessarily an indication of the economy's competitive capability. On this basis the openness index of each country should be put into its proper context and be construed together with other economic capabilities and characteristics of that country so as to give a better picture of its readiness for a global presence.

5.3 The Prevailing Concerns about Iran's Membership in the WTO

Most of the discussions about the positive or adverse effects of globalisation for SMEs in Iran revolve around the issue of WTO membership, for which a formal application has already been submitted. Indeed, membership of WTO is one of the most important challenges Iran has to face in the near future, as it may require politically unpopular economic structural adjustments.[1] The issue has not triggered a truly heated discussion at the national level, however. Rather, the dialogue on the subject, as this study has found, has been largely limited within a relatively closed circle of academic observers, politicians and concerned practitioners. Furthermore, the economic consequences of globalization, and of joining the WTO, have rarely been the subject of in-depth independent empirical studies. In particular, there is an absolute dearth of research about the likely impacts of WTO membership on Iran's industrial SMEs. The following pages therefore present a summary analysis of the developments in the prevailing attitudes, thoughts and theories about Iran's membership in WTO as advanced by the concerned groups mentioned above. These views contain, to some extent, intuitive and speculative thinking, although they may have appeared in academic and professional journals.[2]

The earliest discussions about the globalization of the Iranian economy began immediately after the eight-year war with Iraq, around 1987/88. Obsessed by the country's struggle for independence and sovereignty, most of the statements about GATT had a political rather than an economic overtone. The country was, indeed, fearsome of losing its independence by foreign economic intervention through global institutions like the GATT.

More recent thoughts and statements have focused to a greater extent on economic issues. Accepting the inevitability of WTO membership, discussions no longer revolve around the membership itself, but on how and when to join in order to take full advantage of the membership and reduce the risks as far as possible. This represents a major shift compared to the post-war era. Sensing that there will be enough time for the required adjustments to be made, the government has already taken the decision to join the WTO, although the theoretical disputes have not been resolved as yet.[3]

1 A most frequently cited example of such adjustments is the discontinuation of subsidies and its subsequent effects on the consumer price index.

2 This section is based on an extensive review of WTO membership related materials published in Iran during the past 15 years. The review was carried out for this report.

3 Iran has already submitted a formal application for WTO membership.

The opponents, who are by now only a minority, maintain that Iran's local products have suffered chronically from poor quality and high production costs. The country's industrial production is still undergoing a learning process under government protection. In these circumstances, an open door policy would be tantamount to an economic disaster. Stated in simple terms, their view is that Iran is not yet ready for integration into the world economy.[1]

The advocates of an outright entry into the WTO, who also represent only a minority, look at WTO membership as an opportunity that must be seized irrespective of the price that may need to be paid. They maintain that in the beginning the membership will have to be accepted as a necessary evil, but in time the economy will harvest the fruits of integration. The main point advanced by this group is that the prerequisites for membership like competitive product quality and costs are not attainable in the absence of global integration. In other words, they believe that quality and cost-effectiveness will have to be imposed on the country by competitive pressures. However, the question arises whether the Iranian business community has the strengths to cope with these pressures.[2]

Advocates of a conditional move, who represent a moderate and majority group among the three factions, regard WTO membership as inevitable, even as a *fait accompli*. They are more concerned about the timing and conditions of membership rather than the issue itself. Although they agree on the basic issue of membership, there are some differences even among themselves with regard to the procedures.[3]

The academic group recommends an incremental membership, to begin with an observer role. This would expose the local industry to some competitive pressure, but at the same time would give ample time for adjustments.[4]

The ministerial staff group thinks of joining a regional free market to exercise the game prior to WTO entry. In their view, this can be achieved through the reorganization of the existing region Economic Cooperation Organization (ECO). They believe that this microcosm of global integration would expose Iran's industries to moderate and bearable pressures, with ample time to adjust.[5]

The politicians are among the most cautious groups of conditional advocates. A good number of politicians seriously believe that a bold move could be too destructive to both the industrial and agricultural sectors. Hence, they propose a self-imposed moratorium to buy time and

1 An example of opponents view can be found in Raees-dana, F., *Food Security and Judicial Security of GATT*, Sonboleh, No. 63.

2 An example of the advocates' view can be found in Rafati, M. *Iran's Place in World Trade: An Analysis of the Likely Consequences of Iran's Membership in GATT*, Payam-e-Darya, No. 33, May 1995.

3 The aggregate views of this group are consistent with the provisions of the Third National Economic Plan as approved by the Majlis (parliament).

4 See, for example, Behkish, M. A., *A Review of the Consequences of Iran's WTO Membership on the Tyre Industry,* Research project sponsored by the Tire Industry Association, 2000.

5 See, for example, Amini, A. H., *International Trade Liberalisation: From Thoughts to Action*, Part two, Bulletin of the Chamber of Commerce, No. 5, 1994.

prepared the country for meeting the conditions of membership. With Iran's membership application still under consideration by the WTO, this moratorium is already in effect. The real challenge is to make the most effective use of the interim period to prepare Iran for membership.

The forced moratorium for WTO membership has served to promote a convergence of the opposing views. There are many influential authorities who welcome the deferment of WTO membership, since considerable time is still needed to remove the internal barriers to active global participation.[1] Not only will painstaking and painful economic measures need to be taken in advance of WTO membership, but some politically difficult changes and choices will also have to be made. There may be a need for either an amendment to, or renewed interpretations of, the constitution. In any event, some of the banking, foreign trade and insurance laws will have to be changed, which will require extensive lobbying. For example, a bill on the promotion of FDI was shuttled between the Majlis (parliament) and the Council of Guardians, a body overseeing the constitutionality of the laws, for many months before it was finally adopted.[2] Hence, the delay in the acceptance of Iran's application may be a blessing in disguise. All parties now agree that the country has to make the best use of the time available to become more prepared for the inevitable membership. As a result, recent discourses have become more practical. There is now a thirst for "know how" to prepare the country for WTO membership rather than for "know why" to do so.[3] This consolidated position has important implications for SMEs.

The emerging views calling for remedial action have striking similarity with the general direction and orientation of the Third National Economic Development Plan. Many of the provisions of this plan call for the type of reforms needed for a greater global integration of the economy, as echoed by the economic reformists. Examples are reforms in public enterprises, privatization, encouraging competition through a reduction of monopolies, bank reforms, and tariffication of non-tariff barriers, to name a few. In practice however, these reforms have turned out to be far more cumbersome than anticipated.[4]

The common thread in all of the discussions and debates is therefore the question of Iran's readiness for further global integration. Having been rather insulated from the global economic scene for a long time, the Iranian economy has little experience with global competition. As such there is enough reason to be concerned about the risks of a drastic move towards trade

1 See, for example, Kashani, Movvahed, A., *A General Evaluation of Iran's Manufacturing Industry after WTO Membership*, Internal report for the Ministry of Industry, 1999.

2 The subject is well documented in the Iranian newspapers published around Jan-March 2002. See, for example, the Nourooz daily of 20. 12. 1380 (11 March 2002).

3 This reflects the prevailing government position as stipulated in the Third Plan, although the pragmatic approach to WTO membership has a longer history than the Third Plan document. See, for example, *Membership of WTO Requires a Trade System and Policy based on Comparative Advantages*, Etteleat Daily Newspaper, 18.11.1372.

4 In general the Third Development Plan aims at creating a more competitive business environment. The anticipated measures in this direction include the privatization of state enterprises, restructuring of state monopolies and promotion of competition in economic activities. However, few practical steps toward these policies have so far been taken because of a variety of political, economic and social constraints.

liberalization. However, all parties agree, explicitly or by their silence, that the government's decision to apply for membership has been timely and expedient. A fairly widely based consensus is emerging that the time has come to act in this connection, and to prepare the economy for more effective global integration. This could require the implementation of a large number of new reform projects, some which will be very relevant to the development of SMEs.[1]

The emerging consensus on the need for economic reform has important implications for the SME community and government policies for SME development. An example of such a policy issue is the urgent need for the promotion of competition and cooperation among SMEs. As the experiences of advanced economies suggests, a truly sustainable advantage in the global market can only be achieved through a quest for performance excellence rather than dependence on "comparative advantage" in the traditional sense. In other words what matters most for global competition are innovation and productivity, qualities that can be enhanced only through competition. But creating a competitive, yet cooperative environment is a true challenge, as it requires a set of measures, which are generally new to the Iranian business scene.

Another policy issue is the optimum allocation of scarce resources among SMEs. This will require the grouping of SMEs on the basis of the intensity of global competition in particular industries and of the actual and potential competitive advantages of Iranian SMEs in each area. It could be assumed that the support services needed by different SME groups would vary in some respects. This divergent approach could serve as a basis for the formulation of new SME development policies, the evaluation of present policies and the design of future action plans for each group.

5.4 The Integration of Iranian SMEs into Global Business Practices and Norms

The underlying assumption of this section is that practicing business in today's global environment requires the observance of certain more or less globally accepted rules and norms of good business practice. The importance of these norms does not stem from their moral strengths, but from the fact that they reduce risks of business exchanges and thereby minimize business transaction costs.[2] Furthermore, some of these norms are important for the internal

[1] The SIO has already defined twenty sets of such reform projects, as presented in an internal document of the agency entitled *Revision of Laws and Support Services Required for Small Industries*. Another SIO document, *Titles of Small Industry Research Projects*, lists 16 areas for research on the implications of Iran's WTO membership for the country's SMEs.

[2] Business norms and values, although they may be inspired by fundamental human values, are basically instruments that are employed when needed for business success (e.g. norms governing customer relationships in a competitive environment), and discarded when no longer are required. Business norms in general aim at a smooth business relationship with clients, suppliers, the government and the public at large. For an example of the nature of business norms and values, see the "core value" statements in Thompson and Strickland III, *Strategic Management Concept and Cases,* Eighth edition, Irwin Publishing Co., Chicago, 1995.

management of enterprises, and are thus essential for achieving organizational objectives. Once they are institutionalised they become a source of self-sustaining effort for organizational change and improvement. Among the many contemporary business norms, this study has found the following to be of paramount importance.

Competition: The main threat of globalization for developing economies, and in particular for their SMEs, derives from the increased competition with the world market, for which a country may technically not yet be ready. Iran may be a good case in point. Many of the Iranian industrial enterprises, notably SMEs, may not possess the technological and financial strength and managerial capabilities needed to compete globally in an effective way. But competition, as some students of culture have found, may be also a matter of spirit, beliefs or, more generally, a mental model. Competitive spirit is rooted to some extent in a society's psychohistory and is reflected in language, arts, literature and other cultural symbols. Geert Hofstede, a Dutch scholar of cultural studies has developed a four-dimensional model, which determines a culture by its constituent parts. These dimensions are; 'masculinity' verses 'femininity', 'uncertainty avoidance' versus risk taking, power distance, and finally individualism verses collectivism[1]. In as far as competition is concerned, we speculate that cultures with a high score on "masculinity" cherish competition and struggle for material wealth. Similarly, cultures with a relatively low "uncertainty avoidance", meaning a high tolerance for ambiguity, are less fearful of business risks. These cultural traits may have some consequences for competitive capabilities of an organization or a nation in general.

Transparency: Business transparency can be observed in the amount, precision and clarity of the external reports of business enterprises. Among these criteria, tax statements and factual product information are of pivotal importance as they reflect the firm's accountability to the society from which it draws the required resources. In Chapter 9 the results of an investigation into the taxpaying behaviour of smaller industrial firms located in Tehran and a small sample survey of product information has been reported. Most of the firms studied demonstrated tax-avoidance. This behaviour is self-defeating in a global competitive environment, as it deprives the enterprises of an opportunity to reveal their true strengths and the potential to exploit them for marketing purposes. As regards to dissemination of product information to customers, however, the situation seems to be better.

Intellectual Property Rights: This is one of the most compelling conditions for admission into the WTO. An important step towards the implementation of this requirement has recently been taken in Iran through the parliament's approval of Iran's membership of the World Intellectual Property Organization (WIPO). Consequently, the stage is now set for the legal protection of ideas and inventions. The issue requires more than legal measures, however. The institution of property rights should be infused with social values to become an indispensable part of business ethics. It is only through a strong belief in property rights that business will be self-induced to invest in innovation and productivity, for meeting the challenges of global

1 Hofstede, G., *Culture's Consequences: International Differences jn Work-related Values*, Sage publications, New York, 1984.

competition. In this way the initial additional costs of future business improvements and advances will be offset by assurances of property rights.

Evaluation and self-assessment: Competition, no matter how well planned and implemented, generally entails a degree of trial and error. In cultures where evaluation of experience has become a norm, trial and error becomes a source of learning. Over time organizations and societies who demonstrate this ability will successfully turn to "learning and knowledge creating organizations and societies". Like the issue of competition, learning from experience also has a normative overtone that makes it a cultural issue. As witnessed by frequent cases of business failure, people do not learn from these experiences by the help of learning theories and techniques only. They must be able to reflect on experiences, i.e. to be culturally prepared for internal reflection.

Firm Commitments: Globalization allows business enterprises to source factors of production from other parts of the world – places that could be far apart. This is a feature of economic globalization in which developing economies have invested their hopes. But globalized operations more than anything else must be cost effective. In fact, cost effectiveness is the very *raison d'être* of global sourcing. With increasing time-bound competition, timely delivery of commitments has become an important side of business cost-effectiveness. Hence, the success of techniques like "just in time" (JIT) depends on the firm commitment of all parties joining in a global operation for the timely delivery of their goods. As much as techniques like JIT can contribute to reduction of unnecessary inventory costs, they can become a source of business failure if one of the links in the supply chain fails to meet its commitments.

Social Responsibility: A simple approach to the definition of social responsibility is to say that business enterprises should behave as "good citizens" wherever they are located and doing business. With the advent of globalization and multi-domestic business operations, "good citizenship" has assumed a global meaning. Today business enterprises are required to observe not only the law, but also the norms of the lands in which they operate rather than their own national laws and norms only. Social responsibility has many dimensions, which include the protection of environment. This has attracted more universal public attention than any other issue. In many advanced economies, care for the environment has indeed become the practical epitome of the norm of good citizenship for business enterprises. While the ongoing economic expediencies of bread and butter have often overshadowed the priority of environmental protection in developing countries, industries seeking to establish a foothold in foreign markets must take this issue into account, as it will become an increasingly decisive factor in international business practices. It will not only involve a normative re-education per se, but also require timely investment in cleaner technologies as well.

The above arguments were made the subject of an open and honest dialogue in three separate focus groups established especially for this study. The subject groups included two groups of elite entrepreneurs (29 and 38 members each) drawn from the automotive parts manufacturing industry, and a smaller group of managers of industrial SMEs participating in an IMI Executive MBA course. In the research sessions, the members of these focus groups were asked to

assess the collective attitudes and behaviour of the organization in which they held senior management positions in the foregoing six areas, on a scale of 1 to 4. The views of the three groups are summarized in Tables 5.8-5.10.

Table 5.8: Results of self-assessment, automotive group 1

Norms and Rules	Rating Scale			
	1: Weak	2: Moderate	3: Adequate	4: Strong
Competition	9	11	9	0
Transparency	12	12	2	0
Intellectual Property Rights	15	8	4	2
Evaluation	7	11	9	0
Firm Commitments	4	12	10	3
Social Responsibility	6	9	8	5

Source: Industrial Management Institute, Tehran

Table 5.9: Results of self-assessment, automotive group 2

Norms and Rules	Rating Scale			
	1: Weak	2: Moderate	3: Adequate	4: Strong
Competition	6	25	5	2
Transparency	16	10	10	2
Intellectual Property Rights	15	11	8	4
Evaluation	9	15	11	3
Firm Commitments	5	16	12	5
Social Responsibility	9	11	15	3

Source: Industrial Management Institute, Tehren

Table 5.10: Results of self-assessment, EMBA course participants

Norms and Rules	Rating Scale			
	1: Weak	2: Moderate	3: Adequate	4: Strong
Competition	2	10	6	0
Transparency	5	9	4	0
Intellectual Property Rights	5	10	2	0
Evaluation	4	5	9	0
Firm Commitments	2	5	10	0
Social Responsibility	2	9	6	0

Source: Industrial Management Institute, Tehran

The overall ratings of the three groups indicate low degrees of internalization of the foregoing set of norms. However, the pattern is not homogenous for all six norms. The first three factors

have lower rates than the second set of three. This implies that the respondents believe the norms of evaluation, commitment and social responsibility to be more accepted than the norms of competition, transparency and IPR.

It is noteworthy that the patterns of responses from the three groups show striking similarities. These findings are both logically and intuitively plausible[1]. Global business norms, as observed above, are the product of historical processes of growing interdependence of economic organizations, both internally and internationally. As such it may be expected that countries depending on international business will be among the first to grasp and internalize these norms. Business norms, like other social norms, are generally enforced through informal processes of socialization, but in this age of accelerated global integration formal measures such as the legalization of norms and normative-re-education should be also employed to expedite the process. Of course, governments can and should take a major responsibility in this area, as discussed in the final section of this chapter.[2]

5.5 Opportunities and Threats Arising from Globalization

5.5.1 The New Markets and Fierce Competition

Any discussion of the opportunities and threats for Iranian SMIEs arising from a globalization of the country's economy basically entails the two issues of market enlargement and the potential increase in the intensity of competition.

Through Iran's membership of the WTO, it is expected that, incrementally and under certain conditions, the world market will open up to Iranian SMEs with lower tariffs and the dismantling of other restrictions such as quotas. Consequently, domestic entrepreneurs enjoying competitive advantages will be able to enter and exploit the new markets. The enlargement of the market will allow higher investments in productivity and innovation, as the costs will be borne by larger client groups. Hence, while the per capita costs of product upgrading and improvement will not increase, the product quality will improve. This self-reinforcing spiral of “success to the successful” will become a self-sustaining source of competitive advantage.

At the same time, the progressive reduction of internal tariffs and the removal of non-tariff barriers and import quotas will expose Iranian SMEs to intensive regional and global competitive pressures at home and abroad. New foreign entrants into the domestic market, particularly those coming from developed economies, generally possess state of the art technology and an elevated position in the experience curve. These are advantages that will not be easy, or in some instances even possible, to offset by cheaper labour or raw materials.

1 They are plausible because of being in tune with other findings of this study about competition, transparency and intellectual property rights as described in Chapter 8.

2 One of the major recommendations of this study is for the government to take an active role in shaping a conducive business environment. Since the normative and intellectual issues are an important constituent part of such an environment, the use of public education and mass media communication are two effective approaches for socialization and norm setting.

In the course of the struggle for survival, therefore, local SMEs will be gradually differentiated into several distinct risk and opportunity groups, depending on their competitive standings.

Those SMEs that wish to benefit from the enlargement of the market will have to take new managerial and organizational initiatives to become more oriented to regional and global operations. Here, the role of supporting institutions will become crucial. Indeed, competing with the world on price, quality standards, timely delivery of product and after market services, will be the greatest challenge faced by SMEs that have thus far enjoyed a relatively non-competitive market at home. For success in the new world market needs entrepreneurial talents and extra-ordinary management skills more than anything else.

If that is the scenario to be expected in the near future, then it becomes legitimate to ask which groups of Iranian SMEs will have the chance of becoming the fittest in the new struggle for survival? The answer certainly depends not only on the global situation that will emerge beyond the control of national players, but also on the conditions and options that national public- and private-sector decision-makers can help to create, in the course of time, by adopting and implementing suitable policies. Several options can be identified in this context, each of which will be suitable for certain categories of enterprises depending upon their capabilities and their environmental contingencies.

Some SMEs may have to join the large competitive domestic and foreign firms who wish to outsource part of their local operations at lower costs and less involvements with problematic domestic issues. This is possibly the safest route to adopt, and is open to those small firms that can exploit their low overhead costs and organizational flexibility along with cheaper local labour, to curb the production costs. There is already a wealth of experience with regard to this option in the South East Asian countries, from which Iranian SMEs can benefit.

Another group, inherently smaller in number, consists of entrepreneurs able to take advantage of venture funds and the enlarged market to go it alone. Among this group a smaller number of firms will become fast growing tigers that will leap forward rather than growing step by step. In the new economy what counts as success is big steps rather than big size. In the success and, not infrequently, failure stories of such tigers are embedded hundreds of lessons waiting to be reflected upon and learned from.

A third group of more fortunate SMEs that are part of established industrial clusters and networks at home or abroad may already have the comparative advantage of group synergy derived from the unique competition-cooperation environment of clusters, along with the complementarities, institutional linkages and support systems that give them a competitive edge, even against formidable Western or Japanese rivals. The comparative advantages of this group lie in their unique form of communal organization, a more sophisticated and effective leverage than geographic agglomeration per se.[1]

There will remains a large group of isolated firms, some of whom will be truly at risk unless they confine themselves to isolated niches in the local market with no threatening rival around.

1 Porter, Michael E., *Clusters and the New Economics of Competition*, Harvard Business Review, Nov.-Dec. 1998.

The path of survival and prosperity in a globalized economy, as two Harvard scholars have noted, is neither singular nor smooth. There have been cases of rapid growth, but also boom and bust cycles. Furthermore, the globalized economies have generally been multi-speed economies, divided by technological dynamics.[1]

5.5.2 The threats of globalization to Iranian SMEs

It is likely that in the short term the threats to Iran's industrial SMEs arising from the inevitable moves towards a further globalization of the Iranian economy may out-weigh the likely benefits of market enlargement. The most significant of these threats include:

The low share of industrial SMEs in Iran's non-oil exports

As indicated in chapter 2, this share amounts to approximately US $180 m. This is less than 5% of Iran's total non-oil exports; a thin cut of a tiny cake. This low share and the negligible total amount of exports reflect a host of internal and external problems surrounding the globalization of industrial SMEs, some of which are not amenable to easy and short-term solutions.

Because of the negligible contribution of SMEs to the country's industrial exports, none of the export authorities questioned could give an estimate of the number of small firms involved in exports. Indeed, the Export Promotion Centre does not produce any statistics that would indicate the number of industrial SMEs among Iran's exporting enterprises. Even the number of SMEs in the small population of 49 exemplary exporters in 2001 is not known.[2]

Productivity of industrial SMEs in Iran

Sustained competitive advantage is geared to productivity, quality and innovation. A thorough evaluation of the industrial SMEs of Iran with respect to these vital factors is prevented by the scarcity of available information. Nevertheless, even a brief look at the data that is available is very revealing.

In general, the productivity figures of industrial SMEs in Iran are much lower than the corresponding figures for other developing countries. Recent figures spanning a five-year period indicate only a small improvement of 1.2% per annum in labour productivity, as shown in Table 5.11. A longer-term analysis reported by the Asian Productivity Organization (APO) shows even lower annual improvements, as indicated in Table 5.12.

1 Sachs, J. D., and Warner, A. M., *Globalisation and International Competitiveness: Some Broad Lessons of the Past Decade,* Center for International Development at Harvard University, http://www.cid.harvard.edu/cidspecialreports/gcr_2000.htm.

2 *Acquaintance With Exemplary Exporters of The Islamic Republic of Iran, Selected in Year 2001,* Export promotion Centre of Iran.

Table 5.11: Five-year trend of Labour Productivity Index (LPI) in Iran

Year	1374 (1995/96)	1375 (1996/97)	1376 (1997/98)	1377 (1998/99)	1378 (19992000)
Rials per Worker	1,090	1,115	1,125	1,154	1,155

Source: Iran Management and Planning Organization, Bulletin of Socio-economic Statistics, 1380 (2001/02)

Table 5.12: Ten-year changes in Labour Productivity Index (LPI) in selected Asian countries, 1986-1995

Country	Iran	China	India	Malaysia	Republic of Korea	Pakistan	Japan
Ratio of 1995:1986 LPI	106.49	165.79	144.59	142	183.61	177.84	131.19

Source: Asian Productivity Organization

These two tables together indicate an improvement of about 13% in labour productivity over 15 years, i.e. less than 1% per year. Aggravating the situation is the low level of labour productivity, measured by per capita value added in constant prices. The figure for Iran is far below those for such emerging markets as Malaysia and the Republic of Korea.

Quality Issues

On the issue of quality also, the situation leaves much to be desired. Although there are unfortunately no comparative quality indices to compare the position of Iran vis-avis other countries, the following information can provide some clues about the quality status of Iranian products:

- The fact that most the local products, especially in the garment industry, use foreign labels attests to the fact that the public image of the quality of local products is not positive. The abundance of foreign goods in the Iranian market and the booming businesses of the shopping centres in the Free Economic Zones are other indicators of the low level of public trust in domestic products.
- Many local products do not meet national standards, even though these standards do not necessarily have worldwide acceptance. In 2001 the Institute of Standards and Industrial Research of Iran (IRISI) had to relax some national standards to issue export licenses.[1]
- The majority of quality certificates obtained by different industries are limited to basic certificates like ISO 9000. Holders of internationally credible product-specific quality certificates constitute a small minority.[2]

1 IRISI, *Performance Report of 1379 (2000/01)*, p. 38.

2 Ibid.

- While quality has been one of the prime concerns of many developing countries in the past decade, no effective quality campaign has been launched in Iran. At present many countries, have national quality awards based on sophisticated assessment mechanisms.[1] These mechanisms help the industrial enterprises to carry periodical self-assessments and correct their course. Despite some sporadic efforts in this direction, Iran's experience in this field remains limited.

Portraits of the best

To provide a better understanding of the competitive position of Iranian SMEs, this study has generated new information about SMEs in the automotive component industry through a focus group approach. These groups were selected from vendors who had been rated highly by their OEMs and could be regarded as elite entrepreneurs among Iran's SMEs. In addition, compared with the overall population of SMEs, these firms had a larger percentage of industrial exports. As such they had demonstrated the highest degrees of excellence among Iranian SMEs.

The information collected indicates the following:[2]

- A large majority of firms were engaged with production of items needing relatively simple technologies.
- About 10% of firms were exporting at least 10% of their products. An additional 10% of firms were learning to enter the foreign markets through symbolic levels of exports (less than 10% of total production).
- Most firms did not have any of the important quality certificates required for doing business in a global market. They had either no certification at all, or had only been certified for ISO 9000-2 standards. Few firms had international, or for that matter national, standards related to the automotive industry.
- At least 50% of the firms had more than 60% of the market share of their products.
- Only 25% of the firms had experienced competition from foreign vendors in the domestic market.
- About 75% of firms had provided access to the internet for selected groups of the employees, but few employees had home access to the internet. Furthermore, the use of the internet was limited to e-mail.

In sum, the portrait of these two elite SME groups reveals that even at their highest level of performance excellence, only a small minority of Iranian SMEs possess the qualities needed for entering into the global market.

1 For a review of national quality award schemes in the advanced industrial countries, see the research on on such schemes undertaken by the Department of Industrial and Systems Engineering of the University of Singapore in 1998. Such awards, however, are now becoming a common feature of export promotion policies, even in developing countries. An example is given by Sri Lanka, which launched a Malcolm Baldridge-type national quality awards programme in 1995. For details see http://www.naresa.ac.lk/slsi/National%20Quality% 20Awards.html.

2 Tables containing this information are presented in Appendix I of this chapter.

5.6 Some of the Root Causes for the Relative Underdevelopment of SMEs

Absence of supportive government policies

Before moving to the broad policy issues governing SMEs and the support systems required by them, a brief analysis addressing some of the fundamental causes of their shortcomings is in order. Such an analysis will help to set the stage for a long-term approach to SME policy and the institutional arrangements for supporting and monitoring the development of SMEs in Iran.

In recent years many countries have recognized the importance SMEs in the overall national economic and social development processes. There has been a progressive trend toward the investment of financial and intellectual capital to exploit the potential of SMEs, both in the advanced economies and in the newly industrialized world. One of the consequences of such investments has been the growing interest of large industrial companies in the use of small firms, through sub-contracting arrangements, for shaping more flexible and less expensive supply chains.

In Iran, however, government policy toward SMEs until very recently was marked by a lack of awareness of their potential contribution for national economic development. Economic planners and policy makers in Iran have traditionally looked at SMEs in general, and industrial SMEs in particular, as peripheral institutions whose economic contributions are limited to creating low- tech jobs. This is indicated by the following observations:

- The birth rate of small firms in the country has historically not been a matter of great concern for the government, as underlined by the absence of credible statistics on the birth and death of these firms.[1]
- There is no institutional arrangement for monitoring entrepreneurship development activities. It is noteworthy that advanced economies, recognizing the innovative potential of small firms, have established effective monitoring systems to inform their policy decisions on entrepreneurship issues. The Global Entrepreneurship Monitor (GEM), which produces an annual report, is a good example of the importance attached to the economic role of smaller ventures.[2]
- The development of private sector venture capital, a financial instrument for channelling resources to entrepreneurial talents and helping them to put their ideas into action, has not drawn much attention in Iranian industrial policy circles. At present the main source of capital available to entrepreneurs are budget-directed facilities. This channel has serious limitations as regards effective entrepreneurship development, particularly for helping small entrepreneurial ventures.[3]

[1] The survival statistics for industrial SMEs reported in Chapter 3 have been generated especially for this report.

[2] See GEM Reports, 1999 to 2002.

[3] See the section on banking and venture capital in Chapter 8.

- None of the planning documents produced in the past twenty years give appropriate weight to SMEs and entrepreneurship development. No policy provisions could be found in those documents for the establishment of SME-specific support institutions provide training, consulting, networking, incubation and research services.
- One of the most important signs, and at the same time grave consequences, of the inattention to SMEs and their entrepreneurship potentials is the absence of specific intellectual support systems for small industries. Such support institutions are particularly thin on the ground in SME concentrations outside Tehran. Even in Tehran, where most of the general management training, consulting and research institutes are located, SMEs are heavily under-represented among the clients of these institutions.[1]
- Except for one recent PhD graduate who wrote a dissertation on "intrapreneurship" and has now joined the academic community, there is no trained faculty in this vital area.
- None of the educational programs offered by universities at present, except for a new package to be offered as part of an MBA course, include small business management or entrepreneurship in their curriculum.[2]
- Except for a recent effort in Isfahan that will be discussed in Chapter 8, no practical initiative has been taken with regard to the promotion of collective activities like industrial clusters and tech-parks that could serve as bedrocks of entrepreneurship, particularly among the talented youth.[3]

All in all, industrial SMEs in Iran have not developed to their full potential because of the lack of attention and support that they have received. This study has found that the problem is basically rooted in the prevalence of an implicit industrial development paradigm in Iran, according to which the road to national economic development goes through large-scale projects, mostly leading to large-scale public enterprises. The weakness of this paradigm is increasingly being recognized, inter alia by the president of Iran Chamber of Commerce, Industry and Mines, who has spoken out against Iran's traditional over-reliance on large-scale industrial undertakings, mostly at the expense of the investment needed to boost the potential economic contributions of smaller firms. To put an effective policy for development SMEs in place, however, the old industrial paradigm has to be replaced with a more balanced approach.

The situation is now fortunately changing. For the first time during the half century of economic development planning in the country, a government agency has recently been established – the Small Industries Organisation (SIO) of the Ministry of Industry and Mines – with the proper administrative rank and authority to act effectively as a focal organization for policy

1 See the sections on training, research and consulting in Chapter 8.

2 This refers to the newly instituted entrepreneurship package included in the MBA programme of Sharif University; see Chapter 8.

3 This refers to the Ghadir Park in Isfahan; see the section on science and technology parks (STPs) in Chapter 8.

development and reforms in this area.[1] At present the agency's most immediate and pressing mandate is to make an effective contribution to the government's job creation crusade. This short-term assignment is understandable in view of the present high unemployment rates, particularly among the country's youth, but the agency's authorities are well versed with fresh ideas and do realize the importance of a multidimensional SME development policy. They are cognizant of the fact that their long-term mission goes far beyond job creation alone, and that they should help to create a business environment to assure the self-sustaining improvement of the competence of Iranian SMEs to enable them to integrate themselves into the global economy.[2]

Academic disinterest

Another root of the underdevelopment of Iranian SMEs can be traced to the lack of interest of Iranian universities and other research centres in issues related to small business and entrepreneurship. Academia, in modern world, is one of the most influential sources of new ideas. Academic research in the advanced economies informs public and business policies and inspires corrective actions. To the extent that academic interests and findings in an area of human endeavour could influence the directions taken by public and private organizations in that area, academic disinterest in any field of inquiry could also adversely affect the potential growth and development of that field. In this age of knowledge economy, therefore, the directions of academic research could have far reaching consequences for the performance of national economies. The study of SMEs and entrepreneurship in Iranian universities is a case in point. While the number of published academic materials throughout the world in the field of entrepreneurship alone has now exceeded some 35,000 titles, the corresponding figure for Iran does not exceed few dozen.[3]

To explore the extent of the academic attention to SMEs and entrepreneurship issues, an extensive search was made of the academic and professional literature published in Iran during the past five years.[4] This literature consisted of academic and professional journals, scientific periodicals and theses prepared by students of business administration and industrial engineering schools at BA and MA levels. The results of these surveys are summarized in Annex 3.

These results indicate a very low academic interest in the following three areas, which are vital for SMEs preparing to meet the challenges of globalization:

- Entrepreneurship and small business studies;
- International business norms and culture; and

1 The SIO was founded on 1. 8. 1380 (29 March 2001) according to Cabinet Approval No.H/24410/T.

2 The information presented here is based on extensive interviews with the Director and departmental managers of the SIO.

3 Entrepreneurship Bibliography.

4 For details see Annex 3.B.

- International business in general.

While the existing articles are of relatively high quality, most of them were of a general and/or theoretical nature, and rarely addressed practical SME-specific issues.

Conclusion

Iranian SMEs are relatively unprepared to compete in the global market. This relative underdevelopment can be ascribed to a wide range of macro- and micro-economic and socio-cultural conditions. Among these, two sets of interrelated factors are particularly important. The first is the traditional priority given to large-scale projects and enterprises, and the resulting neglect of SMEs. The second is the academic community's disinterest in SME-specific issues. These two factors are in fact interrelated, since most SME studies in other countries are encouraged and financed by government, and in turn government policies toward SMEs are informed by these studies. This policy and research interdependence makes a learning loop from which a logically incremental approach to SME policy evaluation and improvement will emerge. This learning loop has been absent In Iran in the past, or at least has not been functioning very well. Intensive organized efforts and fresh looks are needed to mobilize the country's academia and put a fair share of their expertise at the services of SMEs. This may require an effective campaign to change the remnants of the obsolete economic paradigms both at the government level and in the academic spheres. This puts a heavy bourdon on the newly founded SIO, which may find that a concerted institution-building effort may be among its first priorities.

5.7 Towards a Business Environment Conducive for Globalization

Objective assessment of needs

Because of historical neglect of SMEs in Iran, there is now a sense of urgency for the launch of SME support systems, particularly where these SMEs have a potential for creating jobs or generating exports. This can be observed in the priorities presently given to the financing of SME start-ups and growth, and in the assistance given to export promotion. This urgency should not, however, overshadow the long-term needs of SMEs that might be different in nature. Parallel to the short-term projects, a more careful examination of the long-term requirements of SMEs is also warranted. Based on this assessment, the support needs of SMEs may be classified into general and specific sub-categories, each addressing particular sub-groups. This exercise would help to optimize the allocation of resources and the cost of the support systems. It is noteworthy that, at present, there is a rather acute shortage of expert manpower required for the expansion of SME support facilities. Hence the available resources should be used wisely.

Benchmarking

Learning from the experience of other societies is an effective way of reducing the lead-time for launching reform projects. In times of urgency there is an inbuilt tendency to imitate rather than to invent. In transferring the experience of other societies, however, the prevailing socio-economic differences between the source and host societies must be taken into consideration to the extent possible. Of course, this social ecology approach is not always feasible due to the scarcity of cross-cultural policy studies. Alternatively, a joint local-expatriate panel of experts could be employed as a source of advice.

Benchmarking, as has been observed in Iran, is also an effective tool for changing the prevailing mental models of economic development planners and policy makers. By using examples of successful national SME development policies and practices of other countries, policy makers will be more convinced about the chance of success with the recommended systems. The international experiences of expatriates serving the SME development strategy project could be of great help here.

Theoretical framework

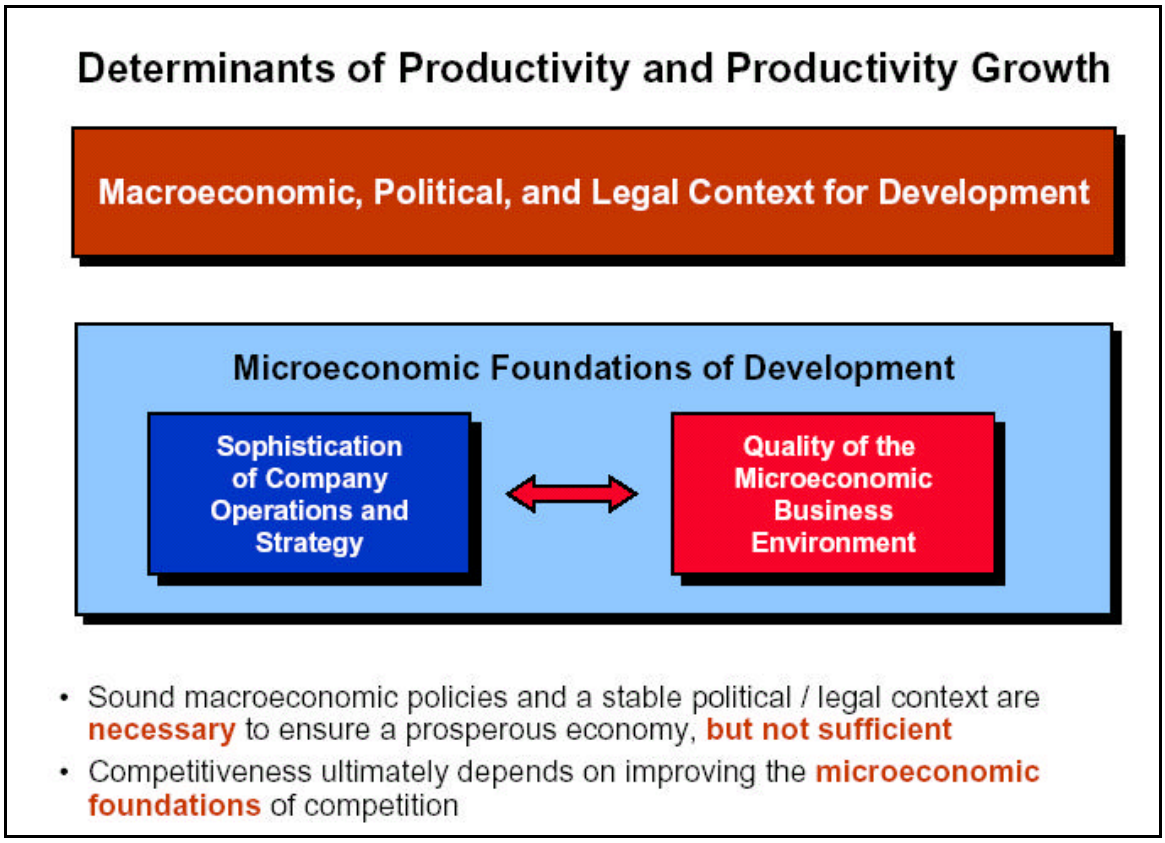
An inventory of government support measures in 18 OECD countries to help SMEs meet the challenges of globalization might serve as a useful guide to the type of assistance generally needed by SMEs in a global competitive environment. This inventory is not exhaustive, of course, as there are valuable experiences to be gleaned from other countries as well. Furthermore, the needs of SMEs in Iran are far more numerous than those of their counterparts in the OECD countries. Nonetheless, the OECD inventory could serve as a broad guideline for the formulation and evaluation of SME policies in Iran. This inventory consists of four support areas, including one fostering the micro-business environment at home. These areas are as follows:

- Business environment
- Finance for SME development
- Capability improvement of specific field of expertise
- Access to production factors and markets

The OECD empirical model is very much in tune with Michael Porter's national economic development model in his treatise on the competitive advantage of nations. According to Porter two sets of macro- and micro-economic factors interact in a dynamic way to shape a nation's economy. Governments should assume an active role in shaping both the macro- and the micro-level conditions. At the macro-level, the government's role is to create a stable economic, political, and legal environment facilitating business activities. At the micro-level, the government should become more involved with the specifics in shaping the immediate environment of business. This environment includes factors helping business operation in a competitive, yet cooperative, setting. A crucial element in maintaining this environment, according to Porter, is the presence of business collectives such as clusters and networks that

simultaneously promote both competition and cooperation between firms. Porter's model is presented in Figure 5.1.

Figure 5.1: Porter's model of productivity and productivity growth



Source: M. Porter

The operational efficiency and strategic direction of individual firms, as Figure 5.1 implies, also forms part of the microeconomic conditions. But Porter does not emphasize a formal role for government at this sub-level. In practice, however, governments in even the most liberal economies, including the US, have assumed a supportive posture for SMEs at this sub-level too. Evidently, in a government-led economy such as Iran the role of government in all aspects of economic development, including individual assistance to SMEs, should have a much a wider scope.

Micro-business environment for SMEs

An important and subtle dimension of the OECD model is the architecture of a conducive micro-economic business environment. In the past, the role of government in Iran with regard to SME development has been limited to the provision of some sporadic piecemeal support to individual firms. With the establishment of SIO, the government's support to SMEs has been

expanded, intensified and to some extent regularized. It appears, however, that an effective intervention in the socio-economic business environment is not yet included in the SME support policy agenda.

In the long run, a conducive business environment enhances the productivity of SMEs by fostering competition between them. It is only by practicing competition at home that SMEs may become prepared to compete globally. At the same time a competitive environment contributes to a better allocation of support system resources to individual firms. In a competitive business environment, firms who are more receptive to competition will benefit more from communal support systems such as complementary institutions. Competition may therefore be considered as an effective resource allocation mechanism too.

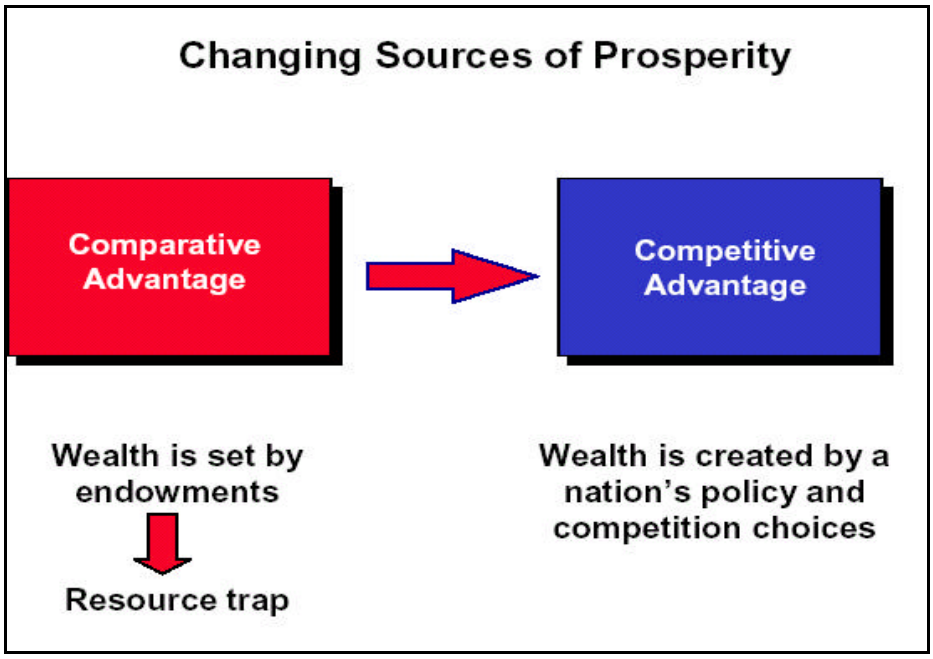
A conducive business environment must also enhance cooperation between individual firms and between SMEs and support institutions. The essence of inter-firm cooperation is the creation of synergies. Cooperation between individual firms can take many forms: cost sharing, resource sharing, knowledge sharing (benchmarking), functional networking (e.g. participation in an export consortium), joint ventures, etc., to name just a few. Another dimension of a conducive business environment is the existence of effective linkages between business firms and complementary support institutions, such as knowledge and innovation centres. Such centres can play a dual role in helping the small firms. On the one hand they can extend their direct assistance to individual firms where needed, but on the other they can also help the community of their client firms indirectly by acting as a non-threatening knowledge sharing medium. It may be seen, therefore, that a competitive-cooperative business environment may, in some respects, be far more helpful to SMEs than some government provided individual direct assistance.

In line with the above, the prime objective of government intervention and assistance to SMEs should be to enhance their productivity. As Porter has rightly observed, the true path to sustainable advantage for surviving and prospering in the global market is “competitive” rather “comparative” advantage. The distinction between these two concepts is illustrated in Figure 15.2.

The need for government intervention in the micro-economic and social environment of business does not, however, preclude the widely accepted practice of direct assistance to individual SMEs. These two levels of support systems should be viewed as complementary rather than as replacement alternatives.

This section has laid a heavy emphasis on the long-term communal measures encouraging productivity through a blend of competition and inter-firm cooperation because there seems to be a historical policy gap in this area in Iran. The following measures represent some important and typical government interventions in the business environment for SMEs that are in tune with the promotion of SME globalization.

Figure 5.2: Porter's view on comparative and competitive advantages



Source: M. Porter

Cluster development

Priority should be given to the promotion of networking and cluster development, particularly where there is a potential to raise domestic enterprises to internationally competitive levels. This approach will offer many advantages to SMEs. There is unfortunately an absolute scarcity of written materials about clustering and networking in the economic development literature published in Iran. The idea may therefore be new to some, whereas others may have a narrow interpretation of the nature and importance of these institutions to the process of SME development. Clustering is a form of communal organization that could serve as the bedrock of entrepreneurship, innovation and productivity, a set of qualities much needed by SMEs planning to participate in the global markets. Porter, the renowned "cluster economist", defines clusters as follows:

"*Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure. Clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs. Finally, many clusters include governmental and other institutions-such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations-that provide specialized training, education, information, research, and technical support*".[1]

1 Porter, Michael E., *Clusters and the New Economics of Competition*, Harvard Business Review, Nov.-Dec. 1998.

Numerous international studies of cluster development have pointed to the synergistic economic effects of this particular formation. There are successful examples in the EU, the Americas and the Pacific countries, where small groups of SMEs, in some cases together with large firms, have collectively been able to seize segments of the global market much larger than the sum of their individual potentials calls for. Although many of the existing economic clusters throughout the world have evolved over time, the ongoing cluster development efforts around the world have produced convincing evidence that clusters may be planned too. Cluster development in Iran should begin with a search for the industries that look to be more promising - where raw materials are locally available and technologies are not too complex or changing too rapidly. Furthermore, cluster development efforts should look for organic paths towards the strengthening of forward and backward linkages in industrial value chains, irrespective of the enterprise size, since effective clusters may in fact be constellations of large-medium and small enterprises.

Science-technology parks

Among other types of integrative collectives, “Science–Tech parks” and “business incubators” seem to be very relevant to the present SME development needs in Iran. The importance of these institutions is to attract young entrepreneurial talents from the university graduate community for producing a new generation of internationally oriented entrepreneurs. The organization and management of many of the present SMEs are too traditional to be receptive to the changes required by the new economic environment. There is a need for the infusion of fresh blood into SMEs, and institutions like science-tech parks and incubators could serve this purpose. In addition, these quasi-clusters are particularly necessary to establish and foster linkages between SMEs and centres of research and training. These parks could attract more knowledge-intensive industries that require relatively low capital expenditures.

Subcontracting

Partnerships between SMEs and large local or multinational firms through sustained subcontracting arrangements are emerging as increasingly important business relationships with a strong potential to support the development of SMEs. In many cases such arrangements have led to a win-win situation for both parties. Instead of expanding their businesses, large firms can use the services of SMEs to enhance their operational efficiencies at lower cost, while small companies benefit from a secure market and innovative technology inputs. Some Iranian SMEs, especially in the automotive components industries, have already had some successful experiences with this system, which can serve as a model to be adapted for other industries. It must be borne in mind, however, that business subcontracting, also known as outsourcing, has a limit defined by the transaction costs of free contracts. The experience of advanced economies, supported by convincing theoretical evidence, shows that a sound legal and cultural business infrastructure is essential for keeping the transaction costs to an acceptable level.

Business networks

The need for business networks has already been recognized by the SIO, which is investing in the development of such networks. A simple form of networking is through the joint use of trading firms for marketing and export purposes. This is the form of network-building that the SIO is currently pursuing. A more advanced type of network-building that suits uncertain environments is an inter-organizational matrix by which small firms can pool their resources to enable them to undertake large projects.

One-stop shopping

A major step in creating an SME-friendly environment is the creation of "one-stop-shops" for various support systems, including licensing. This is a relatively inexpensive service with far-reaching positive effects. It is particularly well-suited for effectively assisting new business entrants.

Access to information

An essential step towards enhancing the competitiveness of SMEs to international levels is the development of ICT facilities to secure the timely access of these SMEs to important sources of information. The provision of ITC support covers a relatively wide range of activities, from government investment in cyber-highways via the creation of national and international business data banks to helping small firms to establish a web-site. A corporate web-site may help small firms reach international markets through E-business. Universal information dissemination would also contribute to business transparency, a quality much needed for enhancing the image of Iranian small business communities, both at home and abroad. In addition, the wide dissemination of information through modern ICT facilities could encourage competition as well as inter-firm cooperation. Public investment in ITC and associated business information access policy is therefore an important micro-economic support measure for the development of industrial SMEs.

Private venture capital

Venture capital markets play a pivotal role in the commercialization of technological innovation. Among the various sources of venture capital, private funds are the most effective in terms of promoting entrepreneurship development, as the experience of the USA suggests. Private investors play multiple roles in the process of business creation and expansion: as candid evaluators of investment plans, as links to market niches, and in many instances as mentors and sources of inspiration for young entrepreneurs. Private investors also contribute to the development of a competitive business environment through the merit-based allocation of their scarce resources.

To the extent the present study could determine, the private venture capital market in any form – investment banking, corporate venture capital or individual investors, for that matter – remains relatively weak in Iran. Under these circumstances, the only viable source of finance

for new ventures is public funding through budget-directed loans. While the present status of venture funds in Iran can be explained and understood by looking at the macro- and micro-economic social, legal, and political conditions, there is a need to promote the private venture capital market. The government's active support in pursuit of this objective is absolutely vital since it has so far been the ultimate source of domestic and foreign capital.

R & D and technology transfers

For SMEs planning to globalize, access to state-of-the-art technology, through R&D and technology transfer, is of paramount importance, yet problematic due to the prohibitive costs involved. With the membership of Iran in WIPO, this problem will become even more acute. In countries where exports are viewed as an important source of national income, governments take an active role in helping small firms to meet their R&D and or licencing costs. Investments in R&D contribute, inter alia, to a competitive business environment by accelerating the process of "creative destruction" underlying entrepreneurial ventures. Examples of government interventions in the technology environment faced by SMEs include national investment in research and development followed by the dissemination of technological information, direct research subsidies to individual firms, or grants to inter-firm joint projects.

CHAPTER 6

GOVERNMENT POLICY TOWARDS SMEs

6.1 Introduction

In most countries manufacturing and non-manufacturing SMEs are supported by a number of specific policies and programmes. There are various policies that can have an impact on SMEs, such as industrial policy, labour policy, financial and fiscal policy, trade policy, education and training programmes, and technology policy. This chapter will deal with these policies and programmes as they are implemented in Iran. The main objective is to make an inventory of these policies and programmes, and to identify any unfavourable effects their application may have on SME development in Iran. The resulting insights into the prevailing situation will facilitate the formulation of appropriate and practical recommendations for improvement.

6.2 Policy Objectives and Strategies for SME Development

The policy objectives of the Government of Iran with regard to the development of the industrial sector and industrial SMEs, and the strategies to be adopted to achieve these objectives, can be derived from the national goals and policies set in the Economic, Social and Cultural Development Plans adopted during the past two decades. These are summarized below.

The First Economic, Social and Cultural Development Plans, 1361-1371 (1982/83-1992/93)

The most important industrial development goals of this First Five-Year Plan (FFYP) were:

- Increasing per capita production;
- Developing non-oil exports;
- Expanding productive employment;
- Securing minimum levels of basic needs; and
- Restructuring the manufacturing capacity destroyed during the war.

The measures adopted by the Government to achieve these goals were:

- Encouraging private sector investment in export-oriented industries;
- Transferring public industries to the private sector;

- Selecting appropriate technology with minimum foreign exchange costs and without relying on international monopolies; and
- Improving the structure of industrial production through a continuous increase in the production of capital goods and increased reliance on internal resources.

Support to SMEs in general, and to labour-intensive industrial SMEs in particular, was specifically mentioned in the Plan. In addition, mention was made of the need to establish and develop specific industrial activities, especially in rural areas, by strengthening production capabilities and increasing competitiveness.

The Second Economic, Social and Cultural Development Plan 1373-1377 (1995/96-1998/99)

The industrial development goals and instruments of the FFYP were broadly retained in this Second Five-Year Plan (SFYP). In addition to these broad goals, the SFYP called for special attention to be paid to the development of industrial SMEs, e.g. by making financial facilities available in support of rural and handicraft industries.[1]

The Third Economic, Social and Cultural Development Plan 1378-1382 (1999/00-2003/04)

The most important goals of the current TFYP with regard to the industrial sector are:

- Upgrading productivity and the efficiency of human resources;
- Upgrading technical and professional know-how, and the skill-level of the labour force;
- Reducing governmental monopolies and promoting competitive economic activities;
- Providing facilities to investors of small industries; and
- Promoting non-oil exports and exports of technical and engineering services;
- Reinforcing electrical industries by co-ordinating investments.

To achieve these goals, the Government has adopted the following policies:

- Reorganising the training of labour in order to increase technical and professional competencies and thereby achieve increased levels of productivity and efficiency;
- Providing facilities for new industrial SMEs, especially in isolated locations lacking raw materials and intermediate goods, with the objective of creating employment in underdeveloped areas;
- Providing funds to the Bank of Industry and Mines for setting up credit lines for industrial SMEs;
- Allowing tax exemptions in less developed areas in order to create employment; and
- Revision of customs tariffs, taxes and other dues in order to encourage non-oil exports.

1 Plan and Budget Organisation, *Second Economic, Social and Cultural Development Plan*, Clause 80, pp. 355-98.

The government also decided to allocate part of its oil revenues and other incomes to achieve its target on promoting job-creation, and to provide sound financial and non-financial facilities for implementing programmes for employment generation and enhancing the export activities of SMEs.

6.3 Industrial policy

During recent years, the industrial sector has been faced with many problems as identified below:

- High foreign currency costs because of the dependence of industrial enterprises on imports of capital goods, raw material and essential components;
- Difficulties in securing financial resources to provide the foreign currency needed for the purchase of raw materials and components;
- The Government's policy of levying various taxes and duties from industrial enterprises in order to support social organizations, such as sports clubs and training colleges, etc.;
- Low industrial exports caused by various restrictive regulations and the inadequate quality of the merchandise;
- Low levels of innovative activities and insufficient finance for carrying out R&D; and
- The continued priority given to public-sector industrial enterprises for financial and non-financial facilities, and the consequent shortage of these facilities for the private sector.

According to the TFYP, the government's industrial policies to address these problems are as follows:

- Attracting domestic and foreign investments;
- Adjusting policies for expanding the share of industrial SMEs in GDP, inter alia by promoting women entrepreneurship;
- Supporting all forms of employment-generating activities, including self-employment, entrepreneurial activities and group business activities in rural areas;
- Developing domestic financial resources to increase investments by introducing savings incentives and promoting small investments;
- Developing the cooperative sector and encouraging entrepreneurial activities in it by introducing effective and sound support systems; and
- Simplifying the regulatory framework for investments in the manufacturing sector;

In addition, the following measures have been taken:

- The maximum tax rates have been reduced from 40% to 60% in all business sectors, including manufacturing, services, trade, etc.;

- A new tax policy has been presented to parliament by the Ministry of Finance, which prohibits government organizations and agencies from levying any additional taxes or duties, such as municipal corporate taxes, on the manufacturing sector;
- Foreign exchange facilities have been granted to the private sector;
- The access of the private sector to loans and other financial facilities has been increased through a simplification of the banking system;
- Investors in under-developed areas have been exempted from various official levies and duties, and been offered a partial reimbursement of the cost of electricity and water for industrial, agricultural and mining use for the first five years of a company's operation;
- The tax rate applied to firms in underdeveloped areas has been reduced by more than 30% as compared to other areas;
- Publicly owned industries have been restructured on the basis of detailed plans for modifying machinery and equipment, and for achieving overall improvements of the financial structure, manpower, management and technology;
- Facilities have been granted for upgrading the skill level of labour employed in industrial sector; and
- The "Small Industries Organization" has been established to support small units in the private sector in less developed areas and increase industrial employment.

6.4 Trade Policies Affecting SMEs

The prevailing trade policies are related to all industrial sectors, irrespective the size of the businesses. The manner in which they affect SMEs is described below.

Tax incentives

Tax incentives are part of a set of direct tax regulations, which are implemented to encourage industrial investment, restructuring and the development of the export potential of existing industrial SMEs.

Customs incentives

Customs incentives include provisions for special customs facilities in order to protect domestic manufacturing industries against imports and to create incentives to export industrial goods. The support is rendered by setting appropriate duties or duty exemptions, and in that way to try to enable domestically produced industrial goods to compete with imported products in the domestic market. Some of the industry-related customs incentives offered by the Government include:

- Imports of machinery undertaken with the approval of the Ministry of Industry and Mines are exempt from customs duties and commercial profit duties;
- All manufacturing enterprise, both LSEs and SMEs, which may need to import raw materials, machines, components, engineering instruments, etc. for enhancing their export activities are exempted from any import duties and taxes on these goods.

Financial incentives

In order to reduce investment risks in the industrial sector, and simultaneously to reduce manufacturing costs and enhance the financial standing of industrial SMEs, the following financial incentives have been put in place:

- A lowering of interest rates for the industrial sector as against to the service sector;
- Special discounts on credit facilities and the provision of specific assurances for investments in preferential industrial fields; and
- The granting of special financial facilities to increase the capacity of export-oriented industries.

Foreign investment incentives

The aim of attracting foreign investments is to establish innovative production units, generate employment, upgrade the technical and scientific capacities of the labour force, upgrade the quality of industrial products, and access export markets. This will stimulate the growth of national income and reconstruction of the country.

The main government incentives provided in this connection include:

- Foreign investment in industrial sectors is granted the same benefits regarding tax exemptions and other financial incentives as provided to local investors; and
- The adoption of new foreign direct investment (FDI) rules, which were approved by Parliament in 1380 (November 2001), and subsequently ratified by the Supreme Guardian Council.

6.5 State Policies Towards SMEs.

The history of state policies towards SMEs can be categorised into three periods.

1. The growth of various industrial sectors in the country between 1329 and 1349 (1950/51 to 1970/71) was limited to petroleum and assembling industries. The state policies were mainly focused on these two sectors. The large industries were mostly engaged in the assembly of imported capital goods (i.e. cars and heavy industries). However, the rate of investment in the privately-owned small-scale industrial sector increased rapidly as well.
2. From 1349 (1970/71) onwards, the small-scale industrial sector developed very fast and in 1352 (1973/74) the government set up an organisation to support SMEs. That organisation

worked towards improving the provision of financial support services for SMEs, which included tax exemptions, and took actions as to promote the upgrading of the technological skills of the labour force.

3. In 1359 (1980/81), the Ministry of Industry was split into two separate ministries, i.e. the Ministry of Industry and the Ministry of Heavy Industry, with the consequence that all organizations intended to support SMEs were liquidated in 1365 (1986/87). However, the emergence of a number of critical problems, such as the high rate of unemployment, the decreasing of rate of private investment in industry, and the slow growth of rural and less developed zones prompted the Government to approve the establishment of an SME support organization called the Small Industry Organisation (SIO) in 1379 (March 2001). The SIO is charged with carrying out the following activities:

    - Encouraging and supporting small industries in order to stimulate increased levels of employment, improve manufacturing methods, reduce waste, protect the environment and upgrade staff skills;
    - Understanding, surveying and taking appropriate actions on issues of concern and gaps in regulations regarding the establishment and development of small industries;
    - Promoting non-public sector investment in the SME sector by providing incentives and a better business environment;
    - Carrying out studies with the purpose of improving partnership communication among SMEs and between SMEs and LSEs, as well as to co-ordinate the commercial activities of these sectors;
    - Designing programmes for entrepreneurship development in small industries; and
    - Planning and supporting small industrial units to receive adequate credits and facilities from the banking sector.

Finally, the TFYP also stipulates that financial facilities and incentives should be developed so as to encourage and promote private sector investments for the purpose of job creation.

6.6 State Policies Towards Rural Areas

Overview

The state policies towards rural areas articulated in the Third Plan can be summarized as follows:

- Providing financial facilities for the social, economic and cultural development of the rural areas from such sources as the Rural Development Fund for Development Activities (*Article No. 133)*;

- Providing the coordination of sound development programmes, focused on rural industry and service activities, as well as providing financial support for the implementation of these programmes in rural areas (*Article No. 137y*); and
- Encouraging private and public investments in rural and less developed areas by providing financial and non-financial facilities for private investors (*Article No. 137x:)*

Regional policy

A major element of government policy in recent years has been the decentralization and delegation of planning and regional decision-making. Article No. 70 of the TFYP stipulates that a Planning and Development Council will be established in each province by the President or Governor-General, who will approve, direct and coordinate its activities in accordance with the government's macro-economic policies. The Council's main task will be to attract private and cooperative investors for investments in development projects

The cooperative sector

Small and medium cooperative enterprises play a vital role in economic and social activities. The total number of employees in SMEs with cooperative ownership amounts to some 63,000 (equivalent to about 11% of the total labour force). State governments in each province are empowered to allocate some financial and non-financial facilities to develop and expand cooperative SMEs in rural and less developed areas. Considerable emphasis is given to promoting such SMEs, which are granted low interest loans, training facilities and marketing assistance.

The Labour and Social Welfare Administration

One of the tasks of this institution is to provide employment facilities for the unemployed, and in particular the unemployed youth. In this connection, it carries out the following activities:

- Providing a range of technical services for training and skill upgrading;
- Granting various financial facilities, including interest free loans for occupational opportunities (up to IR 30,000,000, or US $4,750;
- Protecting and creating employment opportunities; and
- Providing specific services in technical-, financial-, and investment-related fields.

Ministry of Agricultural Jihad

The main executive agency responsible for development and reconstruction programmes in the rural areas is the Ministry of Agricultural Jihad, which has been mandated to create employment opportunities in the manufacturing sector in rural areas and provide special facilities for the development of industrial and non-industrial business activities that generate employment in rural and less developed areas. Specific activities in this connection include:

- Identifying comparative advantages, and on the basis of these to support selected rural industries (e.g. agro-processing and handicrafts), giving priority to those that create employment for women and youths;
- Providing facilities and infrastructure for existing industrial estates in rural areas and supporting the establishment of new industrial estates in accordance with the prevailing rules and regulations, and subject to the approval of their feasibility studies;
- Supporting and promoting the creation and development of rural manufacturing cooperatives, as well as providing formal and informal professional training in villages; and
- Systematizing the rural handicraft and carpet industries, in order to improve manufacturing and marketing methods (for both domestic and foreign markets) and to attract private sector participation.

The Ministry is also mandated to carrying out activities related to export promotion in two specific fields:

1. *Creating Free Trade Zones:* The Government has authorized the Ministry of Agricultural Jihad to establish free trade zones in order to promote the export of manufactured products and the development of employment opportunities. In this connection the Government provides a variety of financial and non-financial incentives for the expansion of small manufacturing and non-manufacturing enterprises, such as tax exemptions for 15 years, low interest rates on loans, and concessional rates for water and power supplies. Examples of these incentives include:
    - Real and legal persons engaged in various economic activities are exempted from income and property tax over a 15 years period; and
    - Goods produced in free trade zones using domestic raw materials are exempted from custom duties.
2. *Creating specific Economic Zones:* These are protective special zones (i.e. strategic ports) established under clause 25j of the Second Economic, Social and Cultural Development Plan. The aim of establishing these areas is to support domestic industrial production and the development of non-oil exports, and to narrow the gaps between regional economies. Some of the incentives offered to investors in these economic zones include:
    - Exports of manufactured products permitted without any customs formalities;
    - Imports of necessary components and goods permitted with reduced customs formalities; and

Goods produced in these zones are not subject to pricing standards.

6.7 Labour Market Policy

After the trading sector, the industrial sector has largest share of employment with some 4.8m employees, or 29.4% of the total employed labour force. More than 94% of all manufacturing enterprises are small enterprises with a maximum of 49 employees. Given the importance of both the large number of employees and the large number of SMEs, the government's intention is to strengthen further the SME sector as the generator of jobs. The most relevant directives in this regard include:

- The Second Development Plan provides for the government to offer special incentives to support the expansion of small manufacturing workshops and SMEs as a source of increase employment opportunities;
- The Second Development Plan also provides for the government to offer financial and non-financial facilities and assistance in fields like training, marketing and reconstruction for producers of handicrafts, small workshops, and rural SMEs in rural and less developed areas.
- The Third Development Plan provides for the government to give discounts on wage tax rates, insurance premiums and other social levies to firms employing new job applicants through the Employment Service Centres of the Ministry of Labour and Social Affairs in order to encourage existing firms to employ new workers.
- The Third Development Plan provides for the government to offer a variety of incentives for creating employment in less developed areas. These include exemptions of direct tax and duties for firms who have invested in these areas and the payment by the government of a approximately 30% of the interest costs of loans allocated to such firms from a special budget formed to provide subsidies to small industrial enterprises throughout Iran and to medium-sized industrial enterprises in less developed areas.

The major centres and organizations responsible for creating employment opportunities in Iran are the Ministry of Labour and Social Affairs and the Ministry of Cooperatives. Their respective roles in this field are described below.

Ministry of Labour and Social Affairs

Article No. 119 of the Labour Law stipulates that the Ministry is required to create employment services centres throughout the country. The tasks of these centres are:

- To identify employment possibilities and undertake the subsequent planning of employment opportunities;
- To register and introduce unskilled unemployed youth to training centres; and
- To introduce unemployed youths to the manufacturing, industrial, agricultural and services centres.

In addition, article No.1-7 stipulates that the Ministry, in order to create and sustain continuous employment, will be charged with upgrading labour skills and therefore will procure training facilities. In this regard, article 108 mentions that it has to establish eight vocational training centres across the country, providing:

- Basic training centres to train labour and unskilled job seekers;
- Specialized training and skill upgrading in high-technology fields, engineering and entrepreneurship; and
- Training of trainers.

The ministry is empowered to issue licences for the private sector to establish non-government training institutes to upgrade labour skills.

Ministry of Cooperatives

The ministry's strategies in the field of labour employment are as follows:

- Promoting and encouraging people to form cooperative enterprises as a means of promoting employment generation; and
- Providing facilities for those who have sufficient knowledge but lack the financial means to set up an enterprise.

6.8 Industrial Certification Regulations and Control Policies

The following regulations have to be followed to start an industrial SME:

- A one-page “Establishment Declaration" providing basic information about the proposed enterprise must be submitted to provincial office of the Office of Industry & Mines for the issuance of a license, which is usually granted within one day;
- Any new industrial firm must be located at a distance of at least 120 kilometres from Tehran and 50 kilometres from Isfahan. Firms operating in industrial estates are excluded from these conditions;
- Manufacturing firms are not allowed to produce any alcoholic drinks;
- The Ministry of Industry & Mines introduces an annual list of strategic industrial products; if newly established firms start to produce one of the listed products, they may benefit from tax exemptions for 4-8 years from date of commencement of production;
- New manufacturing activities inside an industrial estate do not require any other permission from any other agency, including environmental agencies and government ministries;

- The actual construction of the factory building of an SME within an industrial estate is undertaken by the management of the industrial estate; the costs of land and building have to be paid in instalments by the applicant/entrepreneur;
- Industrial firms located in industrial estates are excluded from any municipality tax or duty;
- Infrastructure facilities (like telecommunications, water- and power supply, and road and rail transportation, are provided by authorities of the industrial estates at discounted rates; and
- Within six months after the start up of the company, the entrepreneur is allowed to apply for a so-called “exploitation license”; the issuance of which is subject to a certification that the production lines of applicant firm(s) observe all standards in such fields as quality and environmental safety.

6.9 Education and Training Policy

One of the principal objectives of state policy is to upgrade skills and technical know-how through technical training, which can be sub-divided into its formal and informal components.

- *Formal training* refers to training leading to the award of a certificate, and includes professional technical training at the intermediate level or diploma course.
- *Informal training* comprises a variety of short term training courses made available by both government-owned and non-governmental training institutes – applicants joining these courses are usually sent by private or public manufacturing enterprises, with most of the training fees being paid for by the government.

Specific features of the education and training policy in Iran:

- *The Technical Vocational Training Organisation (TVTO)* is the only organization which conducts a variety of vocational and professional training programmes according to ILO standards. At present there are 335 branches of this organisation in the country providing about 332 courses. The training period at the VTSO is regarded as working experience, and trained staff members having a TVTO certificate usually get more salary than those who do not have the certificate.
- *Private Training Institutions:* There are 5110 private training institutes in Iran to train labour and engineers for private industrial enterprises.
- *Research*: The research cell of TVTO analyzes the needs of the industrial sectors regarding the level of skills and know-how of the labour force, and recommends modifications to existing training courses in order to reduce the gaps between the supply and demand for skilled labour by industrial enterprises.

- *Industrial Estates Training Programmes:* Training cells have been developed in many of the industrial zones and estates to provide training facilities for the staff of SMEs operating there.

Despite these efforts, there is a lack of sufficient training institutes delivering special training programmes for SME staff. Large industries, which do not have training cells inside their own complexes, do not have problems in financing the training of their manpower by private training institutes.

The productivity of labour in LSEs is higher then in SMEs. In order to improve this situation, the Small Industry Organisation has generated several training programmes like OJT (on job training), entrepreneurial training, quality upgrading training, and vocational training for the SME sector. There will be no charges to the SMEs, as all training costs will be paid from the national budget.

6.10 Technology Policy

Technology strategies for industrial development should be given high priority in developing economies, in order to strengthen national productivity and enhance professional technical capabilities. These strategies should consider vertical and horizontal integration among various industrial sectors, including the industry-related agricultural and service sectors. Increased local technology inputs will obviously help to optimise the performance of domestic manufacturing industries and reduce their dependence to foreign technology. By the same token, it will help to expand know-how and R&D activities among manufacturing SMEs within the country.

In Iran, the upgrading of the technological level and capabilities of manufacturing industries in all sectors has been the focus of the government's attention in recent years, as shown below.

Technology-related policies in the First Economic Development Plan

The policies adopted by the government to promote technology in the FFYDP included:

- Selecting appropriate technology with minimum dependence on foreign suppliers;
- Setting quality standards of manufactured goods;
- Upgrading industrial and engineering research capacities and technology capabilities;
- Attracting and developing new technologies, and importing industrial technologies in accordance with the prevailing industrial policies; and
- Creating and developing appropriate industries in rural areas, and strengthening the manufacturing capabilities and competitiveness of small industries.

Technology-related policies in the Second Economic Development Plan

These policies were supplemented by the following measures during the SFYP:

- Providing increased financial and credit facilities for research activities by the industrial sector;
- Designing a national technology strategy related to the economic conditions of the country;
- Enhancing research links between the industrial sector and educational establishments; and
- Simplifying the transfer of technology and know-how in order to help upgrade the technology level of the industrial sector.

Technology-related policies in the TFYP

The following additional measures were introduced in the TFYP:

- Creating quality control systems to improve the quality of products through cooperation between research centres, industrial standards centres and other related institutions;
- Assisting in the establishment of R&D units in large and medium-sized factories, as well as the establishment of R&D centres for specific Industries;
- Stimulating dynamic and continuous communications and linkages between scientific organs, industrial centres, state manufacturing units, and related organs to attain higher levels of technology;
- Creating a competitive environment for manufacturing and mining activities; and
- Creating the necessary conditions to develop technology innovation and practical innovative activities in manufacturing enterprises.

6.11 Policies Related to Industrial Pollution

Most manufacturing enterprises in Iran, including both LSEs and SMEs, are not located in suitable areas. Many manufacturing units have been established very close to urban areas. In addition, almost all SMEs are located inside city boundaries, with more than 26% of all manufacturing enterprises located near or within the city of Tehran. In fact, all big cities like Tehran, Isfahan, Arak, Mashhad, Tabriz and Ahwaz are experiencing problems of industrial pollution. The most polluting industries are generally run by LSEs. Among SMEs, the major polluting industries are the casting, chemical, plastics and non-metallic mineral (constrauction materials) industries. In recent years a number of protective measures have been issued to control the pollution more effectively. The Third Development Plan intends to take action on a variety of issues in conformity with the aims of Article 104-C, which states that “to reduce environmental polluting agents, specifically polluting the country’s natural and water resources,

the manufacturing units are obliged to take measures to conform their technical specifications with the environmental criteria, and to reduce the extent of pollution". These actions include:

- The imposition of fines on units that do not take action to prevent environmental pollution;
- The setting of general limits or permitted ranges of pollutants released by industrial and mineral enterprises by environmental organizations. These organizations have classified industrial activity into 10 categories, which will determine where they will be located:
    - Food industries;
    - Textile industries;
    - Leather industries;
    - Cellulose industries;
    - Material industries;
    - Non metallic mineral industries;
    - Chemical industries;
    - Pharmaceutical industries;
    - Electricity generating industries; and
    - Agricultural industries.

The granting of exploitation licenses for businesses will be subject to these considerations as well as the requirements of locating specific businesses. To that end the following business classification system has been put in place:

- *Group a:* This group industries is allowed to locate in approved industrial or commercial areas;
- *Group b:* This group of industries is allowed to locate in cities with environmental restrictions, provided that they are at a distance of 200 meters of residential areas and/or educational and therapeutic centres, and up to 100 meters distance from army and police centres and rivers;
- *Group c:* This group of industries is permitted to locate on industrial areas within city limits, provided that they observe a distance of 500 meters from residential areas and educational of medical centres;
- *Group d:* This group of industries is allowed to locate outside the cities provided that they observe the required distance from important population centres;
- *Group e:* This group will be located after an inspection by the environmental protection organ.

CHAPTER 7

THE LEGAL ENVIRONMENT GOVERNING SMEs

7.1 Introduction

The existence of a suitable enabling environment is of critical importance for the development of SMEs. Such an environment is created mainly by governments, be they national, provincial or municipal. A dominant element in creating such an enabling environment is a comprehensive and transparent legal structure. This chapter will provide an analysis of the present legal environment governing SMEs in Iran.

7.2 Legal Acts Relevant to SMEs

7.2.1 The Small Industry Organization (SIO)

The Ministry of Industry and Mines proposed the establishment, with effect from 1379 (21 March 2001) of a support organization for SME development called the "Small Industry Organization" (SIO), which received Cabinet approval within a month. The mission of this new support agency for SMEs can be deduced from its constitution, which is summarized below.

- The Small Industry Organization (SIO) is the only authorized organization to form suitable policies and programmes to promote the growth and development of small industrial enterprises in rural and urban areas *(Act No. 1);*
- The head office of the above mentioned organisation will be in Tehran, and its branch offices will be located in each provincial centre (*Act No.2);*
- The definition of small industrial enterprises, small non-manufacturing enterprises, small agro-based industry enterprises and micro enterprises (trade and guild), will be jointly defined by the Ministries of Industry and Mines, Commerce, and Agriculture (*Act No.3*);
- The SIO will promote and adopt incentive programmes and regulations favouring the development and growth of SMEs (*Act No.4);*
- The policies and other measures formulated by the SIO will serve to promote the development of small industrial enterprises (*Act No.5);*

- The SIO will help industrial SMEs to increase productivity, upgrade manpower skills and reduce wastage of costly raw materials through a variety of supportive programmes and incentives (*Act No.5-I);*
- The SIO will identify the lack of facilities and infrastructure, and the shortages of skills, technical know-how and legal acts constraining the growth and development of SMEs (*Act No.5-2);*
- The SIO should provide a suitable environment for increasing the value of local and overseas investment in the small industry sector (*Act No. 5-3)*;
- The SIO should support the promotion and expansion of sub-contracting and other linkages between SMEs and LSEs (*Act No.5-4);*
- The SIO should study the effectiveness of present legal acts – i.e. financial laws, tax laws, training laws, customs laws and trade laws – with regard to the small industry sector, and in case of unfavourable effects, the SIO must propose changes or amendments to existing laws in favour of the small industry sector *(Act No.5-S);*
- The SIO must redesign existing incentive and entrepreneurship development programmes, and prepare new ones in favour of the fast growth of a new generation of entrepreneurs (*Act No.5-6);*
- The SIO must review the existing manpower training programmes for SMEs and introduce new ones to increase the level of skills know-how (*Act No. 5-7);*
- The SIO should take measures to minimize shortages of strategic raw materials and components, promote new supply arrangements, and stimulate the adoption of new distribution systems (*Act No.5-8);*
- The SIO should promote the formation of associations and industrial houses by entrepreneurs in charge of SME *(Act No.5-9);*
- The SIO should plan new and special IT networks to facilitate better access to international information, the internet, and e-commerce by entrepreneurs of SMEs (*Act No.5-10);*
- The SIO should plan incentive programmes and set up new supportive system for SME entrepreneurs to access financial and credit sources easily (*Act No. 5-11);*
- The SIO should study the existing structures of the financial and fiscal markets, and should propose adapted fiscal and financial instruments in favour of SMEs; (*Act No.5-12).*

7.3 Labour Laws

There are few acts or articles in the labour law that are directly related to SMEs. These include:

- All staff of factories and firms in the manufacturing, agro-processing and service industries must abide by the Labour laws (*Act No.1);*

- If any employee is punished by any courts in the case of any crime committed, the employer has to reserve his/her job until he/she has completed his/her sentence and is allowed to return to his/her job (*Act No. 17);*
- The employment contract between an employer and an employee cannot be cancelled by either party on his/her own – both parties must agree to a premature dissolution of the contract, although the employee may resign from his/her job after giving one months' notice (*Act No.35);*
- The wage or salary of half time workers will be determined by the employer (*Act No.39);*
- Employment of youths below 15 years of age is illegal *(Act No.79);*
- The employment of youths aged between 15 and 18 years must be subject to a medical check-up and the issuing of a health certificate for the employee (*Act No.80);*
- Firms in any sector may be exempted from certain provisions of the labour law by order of the Supreme Labour Commission (*Act No.191);*
- The level of a wage or salary has to be mentioned in the employment contract; firms with less than ten workers may negotiate their pay structure with the labour commission, but it cannot be lower than the minimum rate set by the labour commission at end of each February (*Act No. 192);*

In firms with less than 10 employees the payment of additional salaries or bonuses for any staff member is left to the discretion of the employers. A new act (No. 193) stipulates that all firms with less than five employees are excluded from all acts and notes of the labour law until the end of 1384 (March 2006). In addition, the government will pay the insurance costs for the first five employees of a small firm.

7.4 Tax Law

There is no separate tax law for SMEs in Iran, although some regulations are relevant to SMEs. These include:

- Tax holidays for a period of up to ten years from the commencement of production are offered for any manufacturing activities undertaken by firms under co-operative or private ownership, including SMEs, in rural or less developed areas (*Act No.1);*
- The tax facilities provided for manufacturing enterprises in rural areas are also offered to industrial enterprises producing strategic products (*Act No.2);*
- All SMEs have to fill their tax books recording their exact turnover according to the instructions given by of the Ministry of Economy, and to submit these books to their nearest tax office (*Act No.100);*
- At the end of February of each year the SMEs have to file their tax returns recording their firms' business activities, including:

- Total purchases;
- Turnover and income;
- Total production capacity;
- Total duties or other local taxes paid; and
- Any other expenditure.

- The penalty for providing false information is a surcharge of 10% over the amount of taxes payable (*Act No.95).*

SMEs are liable to pay several taxes and/or duties, including excise duty, payroll tax, raw material purchase tax, value added tax (VAT), income tax, capital gains tax, movable and immovable properties tax, import tax and some other duties to be paid to the municipality. In total there are 75 different types of taxes or duties, which even the micro businesses have to pay. The Ministry of Economy has recently proposal to reduce the number of these taxes to 25 for all types of manufacturing firms of any scale or size.

7.5 Other Financial Laws

Some of the rules and regulations governing the banking sector are recognized as financial laws, which may be relevant for SMEs. However, there is a big gap between the real financial needs of SMEs and what is made available to them. Generally, the financial laws are focused on LSEs in general and government-owned industries in particular, and operate in their favour. High rates of interest charged on loans (officially 15% but unofficially 30%), collateral issues and many other barriers restrict the access of SMEs to loans, which in turn leads to low rates of productivity growth and technology development, low production quality, and low levels of employment generation in the SMEs.

New proposals

Presently, there are several proposals under discussion for establishing a loan guarantee scheme, making guarantee funds available, and removing collateral requirements in favour of facilitating loans and other financial instruments to existing or potential SMEs. Another proposal includes the setting up of a foreign currency fund, which will provide foreign loans to entrepreneurs who need foreign currency to purchase imported raw materials or equipment. The interest rate of this particular loan would be approximately 18%, and the repayment schedule about 3-5 years. The Small Industry Organisation (SIO) has also recently approved a proposal to initiate the development of a special guarantee scheme for sub-contracting activities between SMEs and LSEs.

Current laws

Important issues arising from the present financial laws affecting SMEs include:

- To start any new business, the entrepreneur or owner-manager applying for financial support has to provide 40% of the total working capital needed for the establishment (*Act No.1*);
- The applicants shall have the right to apply loans from authorised banks for up to 60% of the total estimated working capital (*Act No.2*);
- The banks may provide and allocate loans for various purposes, e.g. working capital or purchases of raw materials, machinery, tools and other technical equipment (*Act No.3);*
- The banks can cover the cost of goods purchased by entrepreneurs of SMEs under hire-purchase schemes with repayment periods of 1-3 years (*Act No.50*);
- The banks can purchase items like raw materials, machines, tools and other equipment required by the applicants (entrepreneurs), and then resell it to them at an implicit interest rate of about 25% (*Act No.52*);
- The banks can enter into partnerships with entrepreneurs and invest directly in their firms (*Act No.56);* and
- The banks can allocate loans to the applicants in the form of a main contactor and sub-contactor agreement, in which the bank is the main-contactor and the applicant is the sub-contactor (*Act No.67).*

Special low interest loan act

SMEs in urban and rural areas can use "low interest loans". The main office of the banks in each province will consider the applicants' application forms, including a business plan, and make the loan available after verifying the request. The Banks are empowered on behalf of the government to provide the same facilities to entrepreneurs who have created new jobs in areas with unemployment problems.

Charitable Loans

Charitable loans carrying very low interest rates are another financial facility available to SMEs with a co-operative ownership structure for purchasing raw materials. Under certain conditions, such charitable resources can even be allocated to SMEs with a private ownership structure. The allocation of such loans is subject to the following conditions:

- Increasing production capacity with a view to reducing the country’s dependence on imports;
- Avoiding the bankruptcy of SMEs and rehabilitating sick SMEs;
- Promoting and developing SMEs in rural areas and less developed towns; and
- Providing financial facilities to SMEs where there is no alternative source.

The interest rate for such loans is 8.5% and the repayment period is 2-3 years, with a grace period of one year offered from the date of the disbursement of the loan)

Direct investment by banks in the manufacturing sector

After the submission of a feasibility study and the subsequent agreement by the Bank, a loan can be provided for up to 60% of the applicant's expected manufacturing costs. Research has revealed that such loans, which may be regarded as a form of direct investment in the manufacturing company, are most often granted to large enterprises, particularly in the automotive industry, which makes profits of up to 26% before taxes (declining to approximately 12% after taxes). Likewise, banks can provide loans of up to 60% of the total plant cost after approving the feasibility studies of the proposed manufacturing plants.

7.6 Customs Laws

As with other laws, there are no specific customs laws for SMEs, although some incentives and exemptions of customs duties offered generally to business enterprises are relevant for SMEs as well.

- All export-oriented industrial enterprises, both LSEs and SMEs, may import high-tech machinery, high-quality raw materials and other special components not available in the country. These industrial enterprises may be eligible for several duty discounts and tax exemptions if their demands or needs are certified by the Ministry of Industry and Mines, Ministry of Commerce or Ministry of Agricultural Jihad (*Act No. 39)*;
- Industrial enterprises that are not export-oriented can qualify for discounts of two-thirds of the duties they have paid on imports of machinery, raw materials or other inputs if they shift from producing for the local market to production for foreign markets (*Act No. 14)*;
- Manufacturing units and enterprises which produce components or other inputs for exporting companies, or undertake some assembly tasks for such companies (e.g. through backward linkages) are regarded as exporters and thus qualify for several tax exemptions and duty discounts;
- All manufacturing enterprises can import high-tech machines that are not available in Iran without paying any custom duties and taxes subject to certification by senior experts of the Ministry of Industry and Mines;
- All export-oriented manufacturing enterprises in Free Zones (FZs) unless they are specifically exempted from customs duties or taxes (*New Act No. 5)*; and
- There is a full exemption of import duties for all manufacturing enterprises that have to use imported raw materials for producing essential and strategic products needed for public use (*Act No. 6)*.

CHAPTER 8

THE BUSINESS ENVIRONMENT FOR SMEs

8.1 Introduction

The study and analysis of the business environment is a crucial part of any strategic planning process, since this presents both threats and opportunities for business. The business environment of SMEs may be conceived of as the sum of the conditions faced by SMEs that have an impact on their goals and performances, but lie beyond their control. These conditions are generally the result of actions taken by other players, such as creditors, suppliers, competitors, governments, trade unions and others. In other words, today's business environment is basically institutional.

This is to a large extent true for the business environment of SMEs in Iran as well. This chapter therefore addresses some of these institutional elements. Although these elements may, in theory, be innumerable, their coverage in this chapter has been limited for practical purposes only to those which have a particularly serious impact on small firms in Iran. The aspects of the business environment for SMEs covered in this chapter include the geographical concentration of SMEs, the availability of training, research and consulting institutions, the banking network, SME representative organizations, and institutions fostering transparency and accountability.

8.2 Concentrations of SMEs

Concentration of SMEs can take many forms, from a simple co-existence in one industrial estate to more advanced forms of organized "collectivities", such as science parks and clusters. Concentration in all forms and varieties adds important dimensions to the operating environment of SMEs. In the most simple and static form, found in industrial estates, concentration can contribute to operational efficiency through a sharing of the costs of logistics and infrastructure, issues of particular importance in the developing economies. To a degree, it can also become a source of innovation and productivity through promotion of social learning. In its more dynamic and sophisticated forms, like industrial clusters, in which a web of internal and external support and learning linkages supplements physical concentration, concentration may become a true source of synergy and collective comparative advantage.[1] This section

1 The idea is rooted in "agglomeration economy ". In recent years Professor Michael Porter of Harvard University has been one of the most vocal advocates of the role of geographical concentration and its effect on fostering both synergy and

presents the result of preliminary research on SME concentrations in Iran. The structure of the presentation follows the relative prevalence of the patterns found.

8.2.1 Industrial estates

The concept of the industrial estate as a vehicle of economic and urban development has long attracted the attention of national and regional planners in Iran. The first industrial district projects were launched about a half a century ago. But the massive expansion of estates is a recent development.[1] The creation of industrial estates in Iran has not followed a single pattern and purpose. In the case of large cities the concern for environmental protection and the scarcity of land within close proximity of urban centres has been a prime concern. Estates located in the vicinity of smaller cities or in rural areas have been founded mostly with the intention of providing equitable distribution of resources for local development, rather than to overcome scarcity of land or for environmental reasons.[2] Measured by the physical progress of estate development projects, as shown in Tables 8.1 and 8.2, the industrial estate development policy in Iran can be considered relatively successful.

Table 8.1: Selected statistics on industrial estates, August 2001

Indicators	Numbers
Estates approved by government	302
Active estates	240
Contracts concluded for allocation of premises	21,811
Operating industrial enterprises	6,005
Number of industrial jobs created	130,042

Source: Iran Industrial Estates Corporation

Table 8.2: Composition of industrial firms located in industrial estates, February 2002

Industry	No. of Enterprises	Industry	No. of Enterprises
Metalworking	1,561	Electronic and Electric	230
Chemical	1,506	Cellulose	342
Food	1,139	Services	131
Textile	689	Others	77
Non-metallic minerals	695	**Total no. of Firms**	**6,667**
		Total no. of Employees	**139,747**

Source: Iran Industrial Estates Corporation

competition. His views are elaborated in: Porter, M., *On Competition*, A Harvard Business Review Book, 1996 (especially Chapter 7).

1 Iran Industrial Estates Corporation (IEC) website: www.iraniec.com Aug. 2001 update. For laws and regulations concerning the mission of the IEC, see IEC, *Industrial Estate Corporation: law and regulations*, Spring 1379 (2000).

2 M. Ghani-zadeh et al., *Evaluation of the Role of Industrial Estates for Job Creation, Optimum Location and Establishment of Industry during the First and Second Development Plans*, EMB thesis, Industrial Management Institute, 1376 (1997). See also IEC, *IEC: An Activity Guide*, Esfand, 1379 (March 2000).

Initially, the industrial estates (then known as industrial districts) were conceptually regarded as an instrument for the concentration of small industries (generally small workshops). Although the facilities were later opened to all industrial firms irrespective of their size, small and medium-sized firms remained predominant. Unpublished data obtained from the Industrial Estates Corporation indicate that about 90% of firms located in the estates are small firms employing less than 50 staff.[1]

Industrial companies opting for a site in the industrial estates can benefit from a comprehensive series of support services ranging from the granting of permits to the provision of basic infrastructure and utility services.[2]

The existing estates are mainly of the "composite type", housing a wide variety of unrelated industries, although there is a small number of "functional" estates allocated to single or related industries. The "charmshahrs" established for the leather industry, one of which is located near Tehran, are good examples of such specialized estates. In the absence of technical and managerial support networks, however, the full potential of concentration has not yet been exploited in Iran. The positive impacts of concentration on the performance of state-located enterprises is not yet known, partly because of the newness of the experience. In theory the geographical proximity of firms should have enabled and encouraged them to benefit from resource sharing and other collective efforts in areas of mutual concern and interest. In practice, however, such achievements have been isolated incidences.

It is evident that the creation of industrial estates has not contributed to the emergence of any industrial clusters – a competitive-cooperative collective structure with a high level of social capital – that that could have been a particularly beneficial outcome of such concentration. The emergence of such clusters may been inhibited by the composite nature of the estates, which are sometimes also said to have been established at unfavourable locations too far away from urban business centres.

The estate authorities have proved willing to learn from experience, however, and there is a growing tendency toward the partial involvement of the private sector in the development of new industrial estates. This could result in the establishment of smaller estates closer to urban centres. New projects are also underway to establish functional estates as the basis for the development of industrial clusters and/or science- technology park institutions. A short account of these initiatives will be presented in the sections dealing with clusters and techno-parks below.[3]

1 Iran IEC Plan and Project Bureau, 1380 (2001).

2 Iran IEC Website: op cit.

3 The information presented was collected through interviews with the Iran IEC and authorities responsible for the promotion of industrial SMEs.

8.2.2 Special economic zones

The terms Free Zone (FZ) and Special Economic Zone (SEZ) refer to those locations in Iran that have been designated for the practice of free market principles. The Free Zones Act approved in 1372 (September 1993) declared the offshore islands of Kish and Qeshm, and the Port of Chabahar, to be FZ areas. In a later move, the idea of free zones was expanded and modified to the concept of SEZs, of which there are currently 20 in various parts of the country.[1] The creation of FZs and SEZs has been viewed, inter alia, as an overture to WTO membership and a first step towards the seemingly inevitable integration into the global economy.

The FZs and SEZs are managed according to special laws and by-laws that exempt them from many business restrictions applicable elsewhere in Iran. Subject to certain conditions and time limits, firms operating in the zones can import and export their required materials, services and outputs free of any restrictions and without paying custom duties. Following a recent decision, foreign banks will now be allowed to open their branches in these zones as well.[2]

At the outset, it was stipulated that these zones would mainly become centres for export-oriented industries, would attract considerable foreign investment, and act as an effective medium for technology transfer. In practice, however, some of these aspirations have not been realized to the levels expected, particularly in the case of the FZs. Instead, many of these zones have become import and foreign goods shopping centres for the country's consumers. Some, however, have been relatively successful in carrying out their planned functions and have, in fact, attracted a number of industrial firms, especially industrial SMEs. For example, 35 of the 42 industrial firms active in the Sirjan SEZ are medium-sized companies. Similarly, all of the 30 industrial companies founded thus far in the Chabahar FZ are small companies.

About one third of industrial firms located in the Sirjan SEZ reportedly have true exports, i.e. to foreign destinations, attesting that, given a suitable infrastructure and a free hand, Iranian small firms seem to be able to integrate into the global economy.[3] This ratio is far greater than the ratio for small firms operating elsewhere in Iran.[4] The situation in the free zones, however, is entirely different. Although firms located in those zones are legally required to export an agreed part of their products, it is estimated that in practice most of their output is imported into Iran either privately by individual visitors to the zones or through formal commercial import

1 For a relatively comprehensive review of the FZs, see the website of the *High Council of Iran Free Trade-Industrial Zones*, http://www.iftiz.org.ir.

2 Ibid., Laws and Regulations, *Executive Guideline for the Monetary and Banking Operation* adopted since 3 September 2000.

3 The information presented here is based on interviews with FZ consultants and managers of industrial enterprises located in SEZs.

4 The ratio for mainland is about 5%. Look at Foreign Trade section of the present report.

procedures. Functionally, therefore, the products of these FZ firms are import-substitutes rather than true exports.[1]

8.2.3 Science, Research and Technology (SRT) Parks

The concept of SRT parks resembles that of the industrial estates insofar as it provides for the concentration of enterprises in one locality to benefit from a common infrastructure and secured services, although the purpose of the SRT park goes far beyond physical concentration per se. Instead, the SRT institution aims at creating an environment in which businesses can develop specific knowledge and technology exchanges through close interactions with each other and with centres of knowledge creation such as universities and R&D centres. In some instances SRT parks form international alliances to optimize their knowledge management practices and to exploit overseas business opportunities.

Some pioneering efforts to launch SRT parks in Iran date back to the early 1370s (1990s), which have so far resulted in the establishment of only one such park.[2] A recently renewed interest in SRT parks and clusters has given rise to a small number of new initiatives.[3] One science and research park has begun to be established in Isfahan, and three other projects are in the feasibility phase. The concept of SRT parks as employed in these projects also entails some elements of sub-contracting and industrial clustering.[4]

Isfahan hosts two of the leading state universities – one technical and other general – and hence provides an excellent location for cooperation between universities and innovative and technology-driven industrial SMEs. The Isfahan research park is located on a 640-hectare plot next to the technical university and, upon completion, will consist of a research and a housing complex.[5] Conceptually, the park should provide a scientific and entrepreneurial support system to encourage the start-up and development of research- and innovation-led, knowledge-intensive, and hopefully fast-growing enterprises. The research complex is equipped with the required hardware and software tools, and has the facilities to provide the necessary institutional support services and linkages for the incubation and full-scale operation of research-intensive firms. The housing complex will serve as a centre for science and technology museums in addition to its basic residential function. The business firms already located in the park are generally small. Although it is too early to judge the size composition of

1 Sirjan SEZ is reported to be more export oriented than other zones. This study could not locate any published research on the export performance of FZs and SEZs.

2 The pioneering efforts for the creation of SRT parks were made by National Iranian Industries Organization (NIIO), but no progress was made beyond the preparation of some feasibility studies. For an example of these efforts, see *A Preliminary Project for Technology Park of NIIO* presented by Research and Engineering Co. of Iran, 1374 (1995).

3 See http://www.irantechpark.org/, the website of Iran IEC for technology parks and clusters.

4 Iran technology parks website, op cit. See also Iran IEC and Tabriz Research Centre, Scientific and Industrial Research Organisation of Iran, *Report of Feasibility Study for an Automotive Parts High-tech Park*.

5 See http://www.istt.org/. See also ISTT, *Isfahan Science and Technology Town (ISTT): Missions and Policies*, 1378 (1999).

the future tenants of the park at this stage, preliminary indications suggest most of them will be high-tech industrial SMEs and firms providing support and consultancy services in such areas as R&D, engineering and training.[1]

The other park projects are in the initial stages. These projects include an information technology park in Tehran, a food and bio-engineering industry park in Mashhad, and an automotive manufacturing park in the city of Tabriz. The selection of these industries for the park projects initiative may be seen as exemplifying the views of Iran's industrial development planners regarding the potential competitive advantages of the country in these three industries.

8.2.3 Business Incubation Centres (BICs)

The BIC concept is fairly new in terms of entrepreneurship development in Iran, but has undergone considerable evolution within its short life span, with observers being able to recognize the emergence second and third generations of BICs.

The basic idea behind the BICs is to nurture small entrepreneurial ventures at the very early stages, and thereby to help increase their survival and growth rates. The original concept calls in particular for the provision of an integrated and on-the-spot business support system in a managed workplace. It is generally expected that the experienced management teams available in a BIC will serve as an all-encompassing source of advice to their infant and vulnerable clients, who are inexperienced but potentially talented entrepreneurs. A 1997 study by UNIDO estimates that there were some 500 BICs in the developing and emerging economies, out of a total worldwide BIC population of 2000, with an annual growth rate of 20%.[2]

The second generation of BICs has transcended the wall of the original managed workplace and begun to extend outreach services, combined with a prolonged mentoring through pre- and post-incubation care. The idea is appealing to technology-based small firms in developing countries who feel more vulnerable in a world of ever-increasing uncertainties and technological advancement and complexities. The third generation, known as "international enterprise centres", brings together all required support services for the development of knowledge-based businesses, not only through a single workplace and a management team, but through virtual and actual linkages with other important support institutions such as technology research centres, universities, financial institutions, venture capital sources and potential local and international partners. This latter generation could be conceived of as the interface of BICs and STR parks, which they resemble in many ways.

1 Ibid.

2 Lalkaka, R., *Lessons from international experince for the promotion of business incubation systems in emerging economies,* UNIDO, November 1997.

The pioneering attempts at introducing BICs in Iran also date back to the early 1370s (1990s). Except for the Isfahan STR park discussed above, however, a survey conducted for the present document could not locate any ongoing or new BIC project.[1] The Isfahan STR park project includes two business incubation centres. One of these, the Ghadir Research Incubator, has already become operational and has been accepting tenants since the beginning of 1380 (2002/03). In early 2003 the incubator was reported to be hosting 34 companies, all drawn from private sector applicants. They included 25 engineering companies, 4 management firms, and 5 firms engaged in science, agro-processing and R&D.

As the first institution of its kind, the Ghadir BIC project deserves systematic attention and observation by SME development authorities and observers in Iran. In addition to the basic objectives of high-tech entrepreneurship development, this project could serve as a subject for reflective learning. Some important aspects of this project, which should be closely watched as a worthwhile experiment, include the following:

- To expedite the process of business development, Ghadir has included a "pre-incubation" period of 6-12 months. During this period close management assistance and supervision is provided, and most of the support services are rendered free of charge.
- To create a true microcosm of the real business environment, it is intended that most of the incubation services will be rendered by private service organisations on a fee-for-service basis.
- It is also intended to mobilize and develop the required technical support network for these incubators by tapping the existing, but scattered, potential of the local resources through a network of researchers and research institutions.
- Incubator applicants are required to incorporate their undertakings and be registered as legal entities. This is a very important measure, as it will pave the way for an orderly approach to the government's entrepreneurship support policies, and represents a right step toward global integration.
- A basic mission set for Isfahan BICs is the promotion of high-tech entrepreneurship among the young and talented university graduates. In pursuit of this objective the BIC management has defined the task of finding venture capital sources as one of their prime concern and functions.

The BIC initiatives are generally in tune with the need to change the existing entrepreneurship conditions in the country. At present, there is a high, and rising, rate of unemployment among university graduates as the pace of job creation for this group has not kept up with the annual increases in their numbers. Aggravating the problem is the risk-aversive culture of Iranian graduates, as indicated by their low participation rate in small business ventures. The job seeking priorities and preferences of Iranian graduates have traditionally been towards salaried

1 The idea is gradually finding currency in the SIO and Iran IEC, however. The latter institution is pursuing the concept more forcefully. See http://www.irantechpark.org.

positions in large and secure firms, preferably well paying semi-public enterprises. This culture of government dependence runs counter to the imperatives of living in a world of global economic integration and competition, however. The planners of the Isfahan BIC seem to have been well aware of this behaviour, and have designed a tailor-made BIC model with a step-by-step procedure of entrepreneurship encouragement among talented youth. Though limited in scale, this initiative deserves to be watched closely as a rare case of social experimentation in Iran. It will be interesting to see how successful it will be in changing the job seeking habits of the graduates and in developing the entrepreneurial talents in the country.

8.2.5 Industrial clusters

Despite the role of business clusters, both for development of national economies and enhancing the productivity of SMEs, clustering has not drawn much attention from economic planners in Iran until very recently. In the few locally published papers on SMEs, only passing references, if any, could be found to clusters as an entrepreneurial environment and support mechanism conducive to SME development. Over the past year or two, however, the issue has come to be considered more actively by the SIO and the Iran IEC, both of which have begun to demonstrate an increasing interest to the institutional advantages of SME clusters. Iran IEC has added a vice president in charge of clusters and STR parks, and has launched a specific website to promote the idea. Similarly, SIO has begun to seek assistance from international cluster experts and has discussed with UNIDO officials the possibilities of joint efforts to help SME clusters in Iran attain their full potential. Despite these preliminary steps, the concept remains relatively new to industrial planners in Iran.[1]

8.3 Training Institutions and Programmes

8.3.1 Public vocational education and training programmes

The public vocational-technical education system in Iran below the traditional university (BA/BS degree) level consists of four programmes. One of these is a two-year package standing halfway between high school and university education. It is offered by a new type of university system more oriented towards practical, but science-based, knowledge, and leads to an Associate of Arts and/or Science (AA/AS) degree. Two others are high school level programmes under the jurisdiction of the Ministry of Education. The fourth is offered by a network of public and private non-degree vocational institutions administered by the Ministry of Labour.

1 This is highlighted by the scarcity of published materials on clusters in Iran. Iran IEC has initiated the translation of a few books on the subject, but except for a short unpublished paper, nothing is available for circulation as yet. See www.irantechpark.org.

8.3.2 Vocational and technical education at the AA/AS level

Technical education has a long and varied history in Iran. This form of education used to be offered by technology institutes affiliated to the Ministry of Education. That mission has now been transferred to the university system. As a result, the programme has been considerably expanded, and recent data show a steady and impressive increase in the number of AA students in technical areas. Small industry observers should welcome this trend, since the present education and skill composition of industry in general and industrial SMEs in particular indicates a gap in the middle of the industrial manpower pyramid, as shown in Tables 8.3 and 8.4.

Table 8.3: Skill composition of direct labour of industrial enterprises with more than ten employees (excluding unskilled)

Categories	Skilled labour	Technicians	Engineers	Total labour
SMEs				
Direct labour	58,100	4,580	4,300	197,900
Industry				
Direct labour	293,735	33,759	28,126	882,200

Source: Statistical Office of Iran, *Iran Statistical Yearbook1999, Report on all Industrial Enterprises with Ten and More Employees 1378 (1999/2000)* and *Report on all Industrial Enterprises with 10-49 Employees 1376 (1997/98)*.

Table 8.4: Education composition of SMEs and all industrial manpower (excluding unskilled)

Categories	HS diploma	AA	BA	MA	PhD
SMEs (10-49)					
All employees	34,047	4,655	7,830	811	219
SMEs (10-49)					
Direct labour	20,013	2,932	3,826	360	102
Industry					
All employees	194,296	28,990	50,549	4,773	1,496
Industry					
Direct labour	121,090	20,193	24,812	1,939	712
Total	**369,446**	**56,770**	**87,017**	**7,883**	**2,529**

Source: Statistical Office of Iran, *Iran Statistical Yearbook1999, Report on all Industrial Enterprises with Ten and More Employees 1378 (1999/2000)* and *Report on all Industrial Enterprises with 10-49 Employees 1376 (1997/98)*.

The low AA/BA ratios in the labour force of SMEs and industry are striking. They indicate a shortage of qualified AA technicians. This shortage has long been subject of debate in Iranian manpower planning circles.

The main source of technical know-how for SMEs in Iran, particularly for the more traditional firms, has historically been trial and error with personal experience and "learning by watching". With the increasing spread of new and more sophisticated technologies, however, there is now a need for technicians whose skills are based more on science and training than experience. These technicians should have a good grasp of scientific basics and be able to effectively communicate with professional engineers and assist them with the practical aspects of sophisticated engineering jobs. It is expected that the new practice-oriented university system would address this need.

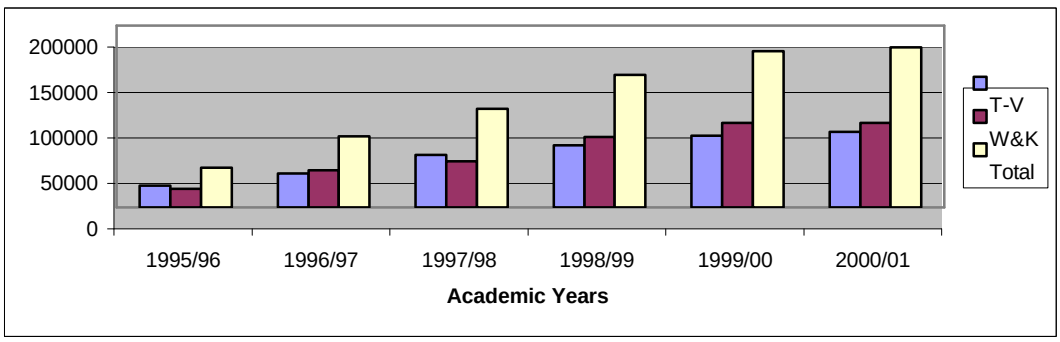
Information about the quality of AA graduates is scarce, but it is likely that the accelerated growth in quantities may have left little time and other resources for qualitative improvements. There is a need to evaluate the role of AA technical training programmes in enhancing the performance of industrial SMEs.

8.3.3 Vocational and technical education by the Ministry of Education

The Ministry of Education runs two vocational programmes carried out through two different institutions, technical-vocational schools known as Honarestans and "work and knowledge" (Kar va Danesh) schools. Honarestans have a longer history, dating back to the early years of the modernization of the Iranian school system some 70 years ago. The Kar va Danesh schools have been established very recently. Both schools offer high-school diplomas. Their difference, however, lies in the balance of general-technical education and the job market they are aiming at. Honarestan education is more production-line oriented, aiming at the supply of readily employable technicians for manufacturing firms. Kar va Danesh schools offer a blend of general education and technical packages, suited for the job market in the service industries.

Both of these schools suffer from a chronic shortage of qualified instructors and other educational resources as well as physical facilities. Because of these shortages they have not been able to attract talented students, in spite of their economic importance. Apart from the quality of education, the number of their graduates will certainly be inadequate if the development of industrial SMEs takes off on a massive scale. Data for the annual number of graduates from these schools are presented in Figure 8.1.

Figure 8.1: Number of graduates from vocational schools, 1995/96-2000/01



Source: *Statistical Yearbook of Iran 2000*

Based on the following figures:

- The share of SMEs in total industrial employment currently amounts to 44.3%,[1]
- The total annual number of graduates amounts to 82,831 for Honarestans and 93,246 for Kar va Danesh schools,[2] and
- The number of SMEs amount to approximately 55,000.[3]

The proportion of graduates from these schools obtaining employment in SMEs, on a per-capita per-annum basis, to 0.67 persons from Honarestans and 0.75 persons from Kar va Danesh schools, respectively. In other words, should the graduates of these two schools seek employment only in industrial enterprises, there will be only two Honarestan graduates available for three SMEs. The corresponding figure for Kar va Danesh schools will be three graduates for four enterprises. These ratios might be lower for enterprises located in regions with a lower concentration of these schools, as they are not evenly distributed throughout the country.

The overall five-year trend of high school technical graduates indicated by the above statistics is quantitatively positive, but there is cause for concern that a drastic increase in numbers may be coupled with a drop in the quality performance of the schools. The quality of technical education at this level too, should be subject to continuous monitoring and scrutiny by the developers of SMEs.

8.3.4 Vocational-technical training programs of the Ministry of Labour

The Ministry of Labour offers a wide variety of vocational programs through an elaborate network of public centres and certified private institutions. In addition, mobile teams and training workshops established in the vicinity of factories take the training courses to factories, construction sites, garrisons and prisons. A large-scale organization known as the Technical-Vocational Training Organization (TVTO) is charged with the responsibility of rendering all public services free of charge and supervising the activities of the affiliated and certified private institutions.

TVTO has been very successful in expanding the coverage of vocational training, particularly reaching out the lower end of the working population, which has historically been deprived of vocational training services. In the past four years all of TVTO's self-reported performance indices demonstrate considerable quantitative increases. More impressively; their index of per-capita per-annum vocational training hours for the "eligible working population" has jumped from 9.1 in 1376 (1997/98) to 35.9 in 1379 (2000/01) with a forecast of 60 hours for 1383 (2004/05). The growing threat of unemployment has given an important impetus for this accelerated growth.

1 See Chapter 3 for SME employment statistics. The figure quoted includes about 4000 unregistered firms.

2 *Statistical Yearbook of Iran 2000*.

3 See Chapter 3 forSME statistics.

TVTO's mission has been primarily focused on the provision of artisanal training and helping to promote self-employment and the supply of skilled manual labour through "learning-by-doing" workshops. Recently, however, this mission has been revised to cover the entire range of short-term non-degree vocational training. In addition, dependence of some local firms on skilled foreign workers in some specific shortage areas has led TVTO to open up its services to the higher end of the vocational job market too.

Box 8.1: Statistical Summary of TVTO

- *Headquarters staff of approximately 13,000 employees; plus 22 provincial branches.*
- *Permanent public training centres at 456 locations.*
- *Certified affiliated private training institutions with 7,416 centres.*
- *Some 118 ongoing expansion projects under construction.*
- *Three websites in Tehran, Mashad and Fars*
- *1.8m trainees in 1379 (2000/01)*
- *More than 712 types of training courses:*
- *37 expansion projects completed in 1379 (2000/01)*
- *239 first-grade workshops held in 1379 (2000/01)*

Source: Iran TVTO, *Performance Report 1379 (2000/01)*. See also www.irantvto.com.

The magnitude, variety and levels of courses and clients catered for by TVTO makes it extremely difficult to pass a considered judgment about the effectiveness of the TVTO courses in developing the capabilities of industrial SMEs. A useful quality index of these courses could be the employment rate of their graduates. This index is not available, but reportedly only a small proportion of registered job seekers (13%) hold TVTO skill certificates, implying a low unemployment rate among them.[1] For some of the longer-term courses an employment rate of up to 98% has been reported for TVOT graduates. This is clearly an impressive figure at a time of high unemployment in the country.

In conclusion, the institution building efforts of the Ministries of Labour, Education and Higher Education have certainly been successful in creating a vast network of vocational schools and training centres. This has led to a considerable expansion of vocational training and a marked increase in the numbers of formally trained workers. While the quality of the existing education and training programmes may leave much to be desired, the established institutional network may nevertheless be regarded as an asset as it provides a foundation upon which the required quality improvement projects could be built.

1 TVTO, op. cit.

All in all, it may be concluded that the general and technical educational infrastructure of Iran is more ready than ever to support the technical upgrading of the country's SMEs. As the new training projects take off, however, the need for quality improvements will become more acute. To play an effective role in assessing the manpower needs of SMEs, and effectively participating in the remedial policy formulation activities, the SIO must develop a better understanding and insight about SMEs and keep abreast of their manpower problems and requirements. To achieve this objective, as emphasized earlier, periodical and independent studies of the technical competence of SMEs would be warranted. The purpose of such studies should not be limited to propose incremental changes within the existing system, but to search for more creative alternatives for radical improvements in the quality of pool of labour available to SMEs, keeping in mind the technological imperatives of a globalized economy.

8.3.5 Management and entrepreneurship training centres and programmes

The authors of this study could not locate any SME specific management or entrepreneurship development centre or programme in Iran. There are, however, a number of organizations that, to varying degrees, partially serve the management training needs of SMEs.

This section gives a broad overview of these organizations. The list of institutions collected for this study is neither exhaustive nor subject-specific, as there are many overlaps. A good number of these institutions, including university centres, are concurrently involved with all aspects of management studies, including training, research and consulting. The pioneering Industrial Management Institute is an example. In many instances it was therefore difficult to draw a functional demarcation line between them.

Except in a single case, none of the institutes examined offer any particular regular course in entrepreneurship. The single exception is a newly founded graduate school of management at Sharif Technical University, which includes in its curriculum an elective entrepreneurship concentration area. The package has not been offered as yet, however, as there seems to be an absolute shortage of entrepreneurship faculty in the country.

The management–entrepreneurship education and training centres identified by this study include the following categories:

- A total of 88 schools of management and industrial engineering in the university system, of which 26 schools belong to the public university system, 58 schools are affiliated to Azad Islamic University, and six are independent management schools and or centres. Almost all of these centres offer degree-equivalent courses, in addition to formal degree programmes. Some of these schools also offer short-term in-service courses.
- A total of 24 non-university centres of general management studies offering non-degree and short-term courses, including 9 institutes located in Tehran and 15 in other cities.
- A group of 9 institutes offering quality management courses, all located in Tehran.

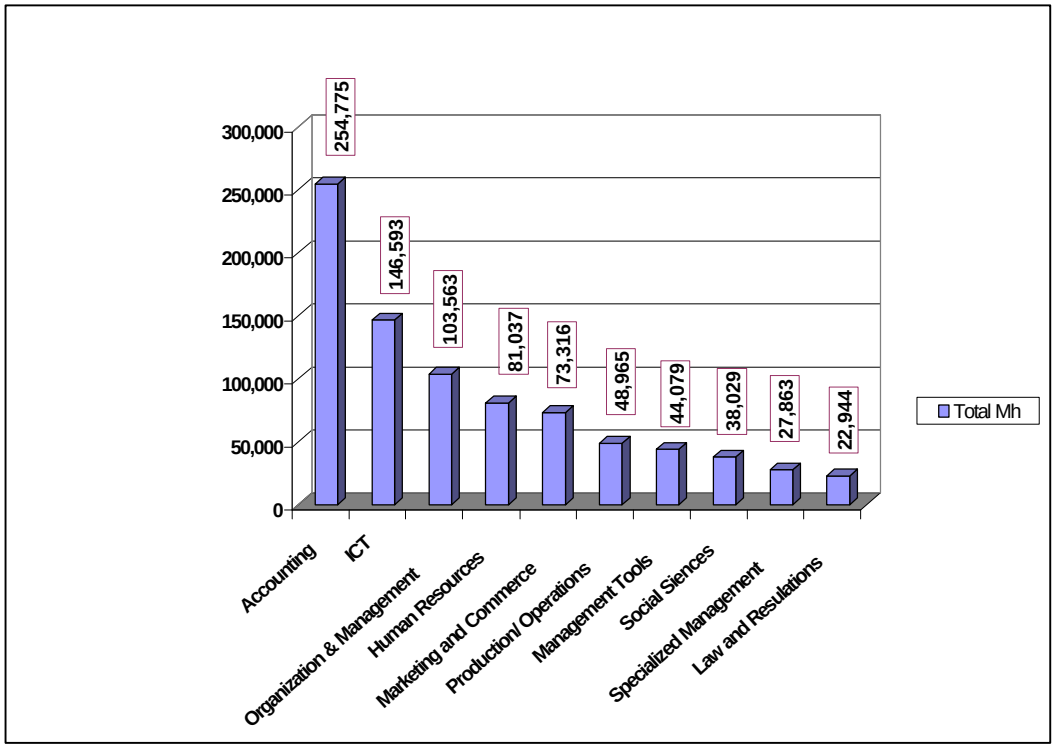
- A group of 16 institutes offering information and communication technologies (ICT), also located in Tehran.

8.3.6 Effectiveness of management training for SMEs

Apart from a few research reports, consisting mainly of theses prepared by BA/MA students on the quality of the present management training services in the country, the authors were unable to locate any credible study about effectiveness of such training for SMEs. The effectiveness of the existing, non-differentiated, management training partly used by SMEs can be viewed in terms of the availability, affordability and suitability of the services provided. To search for some measures of these effectiveness criteria, this study examined the reactions of a sample group of SME managers and staff participating in the training programs of the Industrial Management Institute (IMI) of Iran. The purpose of this study was not a performance evaluation of IMI. The choice of the sample from the clients of IMI was guided by the following facts and considerations.

- IMI is the largest institute of its kind in the country; with an annual volume of 700,000 man-hours of training activities. Each week around 1,000 staff members of industrial enterprises, including SME managers and staff, attend IMI programmes.
- IMI does not offer any SME-specific courses, but it has a uniquely flexible approach to management training allowing SMEs to benefit from the courses as well. It is in fact a “supermarket of management training courses” that can satisfy a wide spectrum of diverse management training needs. Figure 8.2, derived from a direct survey, indicates the range of IMI’s training activities.
- IMI also has affiliated training centres or representatives in seven provincial capitals with high concentrations of SMEs.

Figure 8.2: Areas of IMI training activities and number of man-hours of training provided annually in each area



Source: Direct Survey

Two sample surveys of course participants were conducted in which two questionnaires were applied to: a) learn about the composition of the participants and b) to seek their views on the effectiveness of management training and consulting services that they have experienced, either at IMI or at another institution in Iran. In addition to these surveys a comprehensive statistical analysis was performed to find about the subject, type and magnitude of IMI training activities.[1]

The following text presents a summary of both surveys and includes some of the salient findings relevant to the objectives of the present study. A statistical overview of the findings is provided in Table 8.5.

1 The survey carried out using a sample of some 700 IMI clients attending training courses in 1380 (2001/02). Supplementary data were collected from IMI's roster of client firms.

Table 8.5: Share of representatives of SMEs in IMI training programmes

Sources	Small Firms	Medium Sized	Large Firms	Job-Seekers
Week-long (Large Sample)	21%	24%	39%	16%
Large Sample (Job-seekers Excluded)	25%	28.6%	46.4%	Not accounted for
Small Sample	22%	30%	47%	Not accounted for
IMI Training Client Roster	25%	35%	40%	Not accounted for
Industrial Firms	43%	56%		Not accounted for

Source: Direct Survey

The findings show that as we move from smaller to larger firms the extent to which they use the management training services available in Tehran becomes progressively less. This finding is consistent with the participation rate of firms in such courses as indicated by IMI client roster.

The findings also indicate that there are no meaningful differences between the respondents' reactions to issues of availability, cost and content suitability of the courses. Respondents generally shared an overall positive view of management training and consulting services in the country. This is an interesting finding that merits close attention. It suggests that with some new institution building efforts and the mobilization of additional resources, the existing institutes could be fruitfully employed for the benefit of enhancing the productivity of SMEs.

In conclusion, the sample surveys revealed that the views of the SMEs with regard to the services rendered by the management training institutions were generally positive. They feel that the training centres are accessible, their programmes useful and diverse enough to choose from, and the charges not unbearable. In spite of this positive outlook, the fact remains that SMEs are underrepresented in training programmes even though many of their economic performance measure (e.g., their value added share) indicate a real need for advanced managerial know-how and skills. Although the sample may not be fully representative, the indication is clear and it merits an in-depth study by the SME authorities.

8.3.7 Entrepreneurship development activities

The concept of entrepreneurship as an approach to business venturing and or national economic development has only recently found some currency in Iran. Attention began to be paid to the concept in government circles in the mid-1990s, when IMI initiated two research projects on the subject. One of these projects introduced the role of entrepreneurship in national economic development through a comparative study of national efforts to promote the development of small industries and entrepreneurship. The other project demonstrated the

importance of intra-preneurship for the survival and prosperity of industrial firms. These projects, and additional publicity through IMI's management journal *Tadbir* have provided the impetus for the manifestly growth of interest in the concept by other centres. Nonetheless, no systematic effort has been made as yet by the government for a countrywide promotion of entrepreneurship. The present status of entrepreneurship education, training and research in Iran can best be described as piecemeal and sporadic, as shown below:

- *Sharif Technology University MBA Entrepreneurship Concentration Area.* This university has made the first move to include entrepreneurship education in Iranian universities. The affiliated Sharif School of Management has also undertaken a number of entrepreneurship research projects for the Ministry of Industry and has mobilized a group of young researchers among its MBA students for this purpose. The immediate problem of this university and other centres that wish to follow suit is the development of research and teaching skills in this new area.[1] There is a severe shortage of qualified faculty and other local research staff. It is noteworthy to know that this shortage is worldwide, which is an important point to be considered when taking remedial action.
- *Sharif Technology University Rounaghi Business Plan Award.* Sharif University has also introduced an annual best business plan award for students.[2]
- *Ministry of Industry entrepreneurship thesis and dissertation awards.* Two financial awards had been announced for theses and dissertations focused on small business and entrepreneurship. These awards proved to be not very attractive, however, and the project has practically come to an end.[3]
- *IMI entrepreneurship research projects.*[4] Following its pioneering moves to introduce entrepreneurship studies to Iran, IMI has continued its efforts to promote this subject by encouraging EMBA students to write their theses on the subject. By mid-2002, four entrepreneurship-focused theses had been prepared. The students who wrote these theses are now part of a small nucleus group of researchers at Amirkabir university undertaking similar projects.
- *Amirkabir Technology University entrepreneurship education research projects.* This university is also engaged in some research in entrepreneurship education and training, sponsored by the SIO. They have been able to establish a small group of researchers, some of whom are IMI graduates[5]
- *Industrial Development and Renovation Organization (IDRO) entrepreneurship initiatives.* IDRO is a state-owned industrial conglomerate that controls most of the

1 See Sharif University website, in particular the pages of the entrepreneurship faculty.

2 Ibid.

3 Interview with the manager of the SIO Training and Entrepreneurship Division.

4 IMI EMBA Office

5 Interview with the manager of the SIO Training and Entrepreneurship Division.

heavy industries of the country except the oil industry. IDRO's mission has been recently revised and expanded to cover the implementation of an ambitious national industrial renovation plan. In this new mission, promotion of entrepreneurship in industry has found a particular place. An IDRO provided fund and organization is now assigned for this purpose[1]

- *Ministry of Science and Technology entrepreneurship education activities.* Pursuant to the provisions of the third five-year national economic plan, which started in March 2000, a budget has been allocated to promote entrepreneurship in the state-run universities. A group of thirteen schools have already been engaged with the issue, but at present only three universities other than Sharif and Amirkabir, located in the cities of Mashad, Isfahan and Shiraz, have become actively involved.[2]

8.4 SME-focused Research Institutes and Programmes

8.4.1 Overview

Quantitative data on research institutes in Iran, covering both public and private (non-profit) firms and organizations, is available through periodical surveys of active research centres carried out by the Ministry of Science, Research and Technology (SR&T). These surveys indicate that there are 129 private and 215 public active research centres covering various scientific, technological and social disciplines throughout the country. Of these, 60 are concerned with the social sciences, and 102 undertake research in the engineering and technical fields. Table 8.6 presents an overview of these centres.

Table 8.6: Number of public and private research institutes and firms in Iran

Research Fields	Public	Private	Public and Private	Share of Total
Medical	26	11	37	10.7%
Social Sciences	57	3	60	17.4%
Engineering-Technical	26	76	102	29.6%
Agriculture	50	2	52	15%
Basic Sciences	9	0	9	2.6%
Interdisciplinary Fields	47	37	84	24.4%
Total	**215 (62.5%)**	**129 (37.5%)**	**344 (100%)**	**100%**

Source: Mehrabi, M., *Research Institutes of the Country,* Volumes 1 & 2, Ministry of SR&T, State Centre for Research, 1379 (2000/01).

1 IDRO mission statement.

2 Interview with members of the Committee for the Promotion of Entrepreneurship Education and Research in Universities.

The statistics presented above suggest that the participation rate of the private and public sectors in national research activities are in the range of one-third and two-thirds, respectively. These data somewhat misleading, however, since about 95% of the research funds in the country are used by the public sector. Therefore, the 129 private research firms have access to only 5% of the total nationally available research funds. Consequently, the private firms are generally small, and in many instances micro-sized. A comparison of the number of senior and assistant researchers in the technical-engineering institutes operated by both sectors is particularly revealing in this context. Table 8.7 shows the result of a head count of personnel in two samples of ten companies each drawn from the two sectors.

Table 8.7: Composition of research staff in ten selected engineering and technical research institutes in the public and private sectors

Public Sector	**Full time**	**Part time**
Senior Researchers	104	44
Research Assistants	326	45
Private Sector	**Full time**	**Part time**
Senior Researchers	16	41
Research Assistants	12	27

Source: Derived from data provided by Mehrabi, M., *Research Institutes of the Country,* Volumes 1 & 2*,* Ministry of SR&T, State Centre for Research, 1379 (2000/01).

Other notable findings about the status of industrial research institutes include the following:

- Public research institutes are mostly affiliated to universities or to ministries. The clients of these institutes are generally also in the public sector.[1]
- The main source of part-time research staff of both groups are university faculties. This is an important consideration for calculating the total available manpower for research jobs.[2]
- Another source of research staff for private sector firms is the R&D staff of large public enterprises.
- The small number of researchers engaged in social science research and the absence of management research institutes in the private sector are worth noting. This indicates

1 The present tax system may be one of the most important factors in channelling research projects to universities, as they are exempted from paying tax on occasional incomes. There are other reasons as well, but a comprehensive discussion of the subject is beyond the scope of this report.

2 This observation is reinforced by the high ratio of part-time researchers.

that social science research has not yet been defined as a true business domain to be undertaken by private research firms in Iran.[1]

- The surveys conducted by the Ministry of SR&T show that most of the private research firms are engaged in training and consulting, and in some cases with production as well.
- The extensive use of part-time research staff is quite legitimate in the face of the prevailing shortages of qualified researchers. However, taking full advantage of the part-time researchers requires advanced forms of networking and virtual organization. These arts are still relatively underdeveloped in Iran.
- Research reports prepared for the public sector are generally not published. As a consequence they do not become subject to scrutiny by the professional and academic communities. This practice adversely affects the quality of the research findings, and considerably reduces the payout on the investments undertaken. By the time research reports become available, most of the information presented has become obsolete.[2]
- The surveys conducted by the Ministry of SR&T show that there is no research institute of any kind, nor a network of individual researchers for that matter, dealing with issues related to SMEs and/or entrepreneurship. This indicates an urgent institution-building need which must be addressed by the SIO.

8.4.2 SIO sponsored research projects.

Research activities on small industry have mainly been carried out as ad hoc projects sponsored by the Ministry of Industry and Mines. These projects have generally been assigned through subcontracting arrangements to universities, individual faculty members or freelance researchers, on the basis of their availability, interests and other considerations.

The history of such research activities is very short. It runs from 1372 to 1375 (1993/94 to 1996/97) only. This was a period in which the idea of having an SME-focused section in the ministry was being cultivated. In this three-year period, a total of 79 small enterprise projects were undertaken. Table 8.8 shows the focus of these projects and their changes over time. Most of the earlier projects are clustered around the two major themes of SME productivity or the capabilities and potentials of SMEs in a particular industry. These research topics were established prior to the foundation of the SIO, however, and the more recent ones are more diverse and cover a range of new topics. The most notable of these include entrepreneurship education, youth internship in SMEs, production line bottlenecks, strengthening of SME-support institutions, and subcontracting.[3] This change in research priorities is very meaningful.

1 The same is true for management vis-a-vis engineering consulting firms, as shown in the following discussion of the consulting networks.

2 A good example is given by the research projects for industrial SMEs discussed below, the reports of which have never been published and/or circulated among interested parties.

3 The information is drawn from internal SIO documents and interviews with SIO staff.

Table 8.8: Research projects on industrial SMEs sponsored by the Ministry of Industry and Mines.

Year	Productivity Related	Potential Assessment	Other	Total
1372 (1993/94)	15	0	8	23
1373 (1994/95	22	11	2	35
1374 (1995/96)	10	11	0	21
Ongoing	1	0	24	25

Source: SIO

The approach to SME research adopted so far in Iran can best be described as piecemeal and fragmented. However, in discussions with the management of the SIO it was learned that efforts would henceforth be made to make SME-related research activities more cohesive. Each of the five senior director-generals of the SIO has prepared elaborate research plans for their sections, and drafted corresponding projects for outsourcing to external research institutes. The new projects cover the topics listed below, which correspond to the division of duties within the SIO.

- Strategic and operational planning;
- Quality and productivity;
- Management information and communication;
- Financial support;
- Human resource-development; and
- Collective SME development (e.g. cluster and network development).

The present organizational form of SIO research is highly centralized, with each individual researcher only having contact with an administrative authority at the centre. This arrangement is sub-optimal in many respects, especially with regard to knowledge sharing, quality assurance and research staff development. There appears to be no intention on the part of the SIO to review the institutional arrangement for its research activities, however, as the Organization is primarily concerned with the maintenance of a lean administrative structure in order to avoid bureaucratic expansion as much as possible.[1] While this is a very reasonable approach for guiding future institution-building efforts in support of industrial SMEs, the anticipated expansion of research projects will necessitate a more effective coordination mechanism. Functions such as the definition of projects and their priorities, the recruitment of qualified research sub-contractors, the monitoring of progress, the evaluation of reports and the

1 Interview with senior staff of the SIO, including its director.

integration of outcomes into a cohesive body of knowledge that could inform policy decisions, are too important and sensitive to be left to chance.

8.5 Consulting Networks

Consulting services represent one of the exceptional cases in which a relatively good body of quantitative data is available, thanks to the recently developed Network of Iranian Management and Engineering Consultants (NIMEC). The following section gives a short account of NIMEC and its constituent associations, followed by a discussion of the effectiveness of the existing consulting services for SMEs in Iran.[1]

8.5.1 Network of Iranian Management and Engineering Consultants

Founded in 1378 (1999/00) as an NGO, NIMEC is a loosely coupled two-tier network of consultant associations and consulting firms, including freelance consultants. NIMEC members cover a wide variety of disciplines including engineering, informatics, accounting and finance and, finally, management. NIMEC's founding fathers have defined its mission as promoting and upgrading the consulting profession in Iran. This mission is very much in tune with the present needs of industrial and business organizations in the country, since the Iranian consulting industry falls well short of the state of art.

Private consulting associations form the core of NIMEC's membership. These associations constitute the first tier of NIMEC's membership, and comprise nine groups that can be divided into the following four functional areas:

- Management;
- Engineering;
- Financial Management, Accounting and Auditing; and
- Information and Communication Technologies.

Table 8.9 presents a list of the consulting associations making up the first tier NIMEC members. The second tier is made up of the constituent consulting firms and individual consultants. Some of these firms and individual consultants are also involved in engineering and organizational research. However, the membership of NIMEC does not include research firms at present. Among members of the consulting profession in Iran, two groups are required to be individually certified by their professional bodies or a government authority. They are accountants-auditors and job evaluation consultants. For others there is no mandatory certification procedure.

1 The information presented in this section is drawn partly from the NIMEC website and NIMEC brochures.

Table 8.9: List of NIMEC member associations

Consulting Groups and Associations	Number of Member Firms (F) and/or Persons (P)	Areas of Activities
Iranian Management Consultants Association	37 F 80 P	General consulting, Training
Iran Management Association	812 P	General consulting, Training
Iran Association of Management Sciences	54 P	General consulting, Training
Association for Quality and Sustainable Development	43 P	Macro-level consulting
Association of Quality Development and Improvement of Iran Industries	97 F	Consulting in quality standards and productivity
Association of Iran Informatics Companies	362 F	Software, hardware and MIS
Iran Association of Job Evaluation & Classification Consultants	105 P	Organizational structure, HRD and job evaluation
Iranian Institute of Certified Accountants (IICA)	1432 P	Financial and management audit
Association of Firms in Audit, Financial and Accounting Services	35 F	Audit, financial accounting and MIS design services
Society of Iranian Engineering Consultants	423 F 1200 P	General and specialized engineering consulting

Source: Network of Iranian Management & Engineering Consultants (NIMEC)

8.5.2 Effectiveness of consulting services for SMEs

Unlike the quantitative data, information about the quality of consulting services in Iran is very scarce. With the exception of three "panel of expert" round table discussion in the Tadbir magazine published by the IMI,[1] no systematic study on the effectiveness of consulting services has been publicly reported. The information used for the following analysis has therefore been generated especially for this study through round table discussions with two new panels of experts in Tadbir, two sample surveys of IMI client firms, and a series of discussions with individual consultants through a nominal group approach. The information gained through these measures covers such issues as the availability, suitability and affordability (cost) of consulting services for SMES. The conclusions reached are discussed in the following subsections.

Availability

The issue of availability covers two main questions. The first refers to the physical existence, or otherwise, of SME-focused consulting services. The second refers to the degree of access that SMEs have to the existing services, irrespective of their suitability. The answer to the first question is largely negative in the case of Iran. Some of the consulting firms, like job evaluation

1 Tadbir Magazine Nos. 98, Azar 1378 (1999);115, Shahrivar1380 (September 2001); and 116, Mehr 1380 (October 2001).

consultants, may serve small firms too, but our research reveals that there are no SME specific consulting services in the country.

The answer to the second question is also negative. Tehran is the hub of consulting services for the entire country, with a large majority of consulting firms being based in the city and undertaking assignments both inside and outside it. The NIMEC database, which is still incomplete, has partially documented this known fact. A survey of the roster of members of the Iran Management Consultant Association, appearing in the NIMEC website, shows that from 37 member firms only five are located in the provincial centres outside Tehran.[1] Another recent survey about the availability of management consultants in five provincial centres, reproduced in Table 8.10, presents a similar picture.

Table 8.10: Number of bank branches, management consulting firms and training firms in six provincial centres

Category	Tehran	Isfahan	Azarbayjan	Khuzestan	Fars	Khorasan
Bank branches	2,841	1,213	706	916	965	1,441
Management consulting firms	32	4	1	1	3	n.a.
Share (%) of industrial SMEs	29.9	12.9	8.7	2.8	4.2	5

Source: Direct research based on survey conducted by provincial representatives of IMI.

It is worth noting that with one exception the provincial consulting firms are all IMI affiliates. In fact, the scarcity of local consulting firms in the industrial centres outside Tehran and the compelling pressure on IMI resources led to an initiative to establish provincial branches through affiliation arrangements with local entrepreneurs. The impact of this scarcity is felt more by SMEs than by large firms, since small firms operate mainly in local niches and are generally insulated from the consulting market in Tehran. Besides, they cannot independently afford the consultant fees and the extra cost of calling consultants from Tehran.

Suitability

Another important dimension of of the consulting services related to industrial SMEs is the issue of suitability – i.e. the fit between the needs of the SMEs in question and the available services. The prevailing management-, and to some degree engineering-, consulting paradigm in Iran has been shaped by the national industrial development planning approach. For years the underlying premise of the industrial planning in Iran has been development through large-scale, publicly financed "national" projects; in most cases leading to the creation of public enterprises. Attesting to this fact is the large number of such enterprises among the large-scale

1 NIMEC website : www.nimec.net, and NIMEC brochures; Discussions with NIMEC officials.

companies in the country. Today some 65% of corporate tax and 50% of total tax revenue is generated by public enterprises.[1] It is against this background that the engineering and management consulting services in the country have been born and have developed.

Affordability

Another important issue relates to the costs involved in obtaining the present services. While the fees presently charged by the consulting firms are by no means enough for the investment expenses required to keep their services professionally robust, their charges can still not be afforded by SMEs in many cases. Complaints about high consulting fees are not uncommon even among large firms.[2] The results of our survey indicate, however, that for the sample firms suitability rather than costs is the determining issue in using consulting services.[3]

With the advent of new private entrepreneurial ventures in recent years, the scene is changing gradually, but surely. The increasing influx of managers of industrial SMEs to management training courses and the demand they are exerting for effective problem-oriented services is heralding a new era in the management consulting, training and research businesses. On the consulting side, local management software developers and/or distributors have been influential in bringing about useful changes. Before administrative software could be mass-produced and bundled in relatively inexpensive packages, most of the industrial enterprises in Iran, and especially the country's SMEs, could not gain access to digital operation-information systems. The scene is changing now, however, and there is a trend towards the increasing use of software by small firms, even though it may be limited to such basic applications like accounting, billing and other operational transactions. This change has given an impetus to the emergence of new management consulting and training firms who look at SMEs as their potential markets. While the magnitude of this change is not known the trend is visible.[4]

8.6 The Banking Network and Venture Capital Sources for Industrial SMEs

8.6.1 The banking system

Until recently, banks in Iran were owned entirely by the government and operated within a control-oriented administrative regime. This scene is slowly changing, however. From the ten

1 Interview with the Chief Tax Officer of the Ministry of Finance. Also press interview with the Chief Tax Officer in Nowrooz daily newspaper, 7. 7. 1380 (29 September 2001).

2 Interview with Iranian consultants.

3 Consulting fees vary according to task in question, depending on the level of expertise required from the consultants, but are not adjusted according to the size or financial strength of the client enterprise. Consulting projects demanded by SMEs are generally routine and repetitive, thus relatively inexpensive: on average Rls. 80,000-100,000 (US $10.00-12.50) per man-hour. A typical ISO project for a medium size firm may require about 300 man-hours, costing US $3,000-3,750.

4 This trend has not been documented yet. IMI training authorities confirmed the change in the client composition in some of their programmes, including those that are more attractive to entrepreneurs.

existing banks listed below, two are now private banks. In addition three private non-bank credit institutions have been licensed.

Alongside the formal banking system, free market sources of finance known as the “bazaar-e-azad” are very active. These include some government owned pension funds, which are organized as private enterprises governed by the Commerce Law.[1] The bazaar-e-azad suppliers charge much higher rates, which are in the order of 35% as compared to bank rates ranging from 13-25%, depending on source, purpose and maturity terms of the loan in question.

8.6.2 Commercial and sector-specialized banks

The commercial banking system in Iran consists of five state-owned banks and one private bank owned by the Social Security Organization Investment Fund. The commercial banks provide an extensive network covering every corner of the country, which has expanded considerably over the past five years. In one of the more traditional banks the increase in the number of operating branches has been supplemented by a number of qualitative improvements, including the re-composition of the workforce through massive recruitment of university graduates. The commercial banks in Iran are listed in Box 8.2.

Box 8.2: Commercial Banks in Iran

1	*Bank Melli*
2	*Bank Saderat*
3	*Bank Tejarat*
4	*Bank Mellat*
5	*Bank Sepah*
6	*Bank Refah (Private)*

The banking system in Iran also includes four specialized sector-specific banks, which use their credits for special developmental purposes. These banks, all of which are state-owned, include:

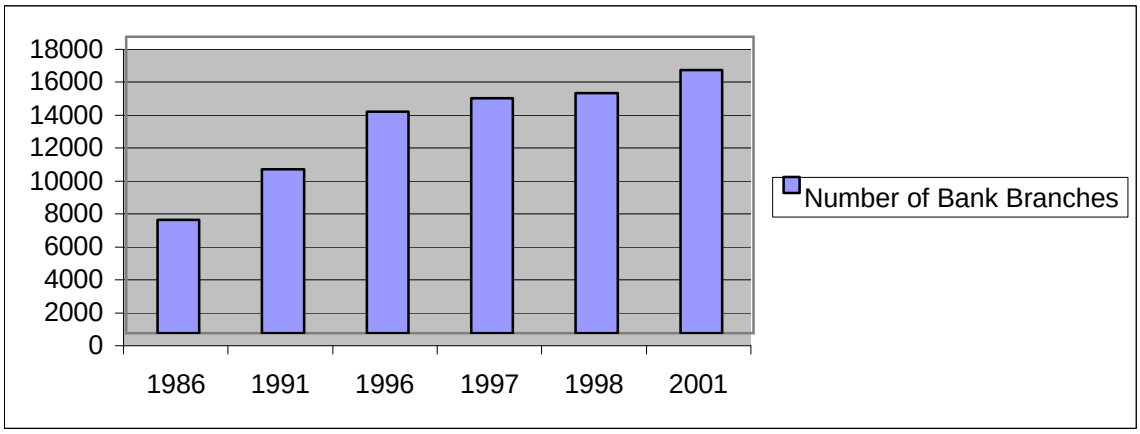
- Bank Sanat va Maadan (Bank of Industry and Mines, BIM), which is known as the main source of credit for SMEs.
- Bank Towseae Saderat (Export Promotion Bank). This bank is the main source for export credits.

1 An example is the Islamic Republic of Iran Broadcasting Organisation (IRIB) pension fund.

- Bank Maskan (Housing Bank). This bank is the main source for financing of housing projects.
- Bank Keshavarzi (Agriculture Bank). This bank is the main source of financing for agricultural projects.

Figure 8.3 illustrates the ongoing trend of the expansion of the Iranian banking network. Table 8.11 shows the number of bank branches in the provinces with heavier industrial enterprise concentration and more active business centres. It should be noted that there is not much consistency between the number of bank branches and SMEs. In fact, the concentration of SMEs does not seem to be a determining factor in the expansion of bank branches in the country.

Figure 8.3: Countrywide Increases in the Number of Commercial Bank Branches, 1986-2001



Source: Kharazmi Management Institute of Bank Saderat Iran

Table 8.11: Provincial distribution of commercial and specialized banks

Provinces	Bank Meli	Bank Saderat	Bank Tejarat	Bank Mellat	Bank Sepah	Specialized Banks	Total	SIEs Nos.
Tehran	631	618	477	421	299	395	2,841	15,285
Khorasan	274	288	171	329	142	337	1,541	2,596
Isfahan	227	249	141	164	147	285	1,213	6,626
Fars	194	193	112	156	80	230	965	2,185
Khuzestan	172	263	128	92	69	192	916	1,452
E. Azerbeijan	142	131	74	93	92	174	706	4,447
Mazandaran	126	143	82	101	56	180	687	2,564
Gilan	128	135	76	79	52	148	618	2,101
W. Azerbeijan	93	58	81	105	52	120	509	933

Source: Kharazmi Management Institute of Bank Saderat Iran.

8.6.3 Private banks and near-banks

Although private banks are new to the post-revolution banking system of Iran, the institution of private banking is not new to the country. The first bank founded in Iran over a century ago was a private foreign owned bank. The government has recently inaugurated the new era of private banking in the country by changing the status of a state-owned bank (Bank Refah) to a private bank, and licensing two private banks. Three near-bank credit institutions have also been established, one of which focuses specifically on entrepreneurs. These private banks and near-banks are listed in Box 8.3 below:

Box 8.3: Private banks and near-banks

Banks:
- *Refah*
- *Parsian*
- *Eghtesad Novin*

Near-banks:
- *Bonyad*
- *Towsee Sakhteman*
- *Kar Afarinan*

8.6.4 Bank of Industry and Mines (BIM)

Among the sector-specific banks, the Bank of Industry and Mines requires specific attention as it is the main provider of funds for SME start-up and expansion projects.

The Bank's present mission is to encourage and promote investment in the establishment and expansion of industrial, mining and high-tech enterprises and their support services through loans and joint ventures. It is a development and investment bank, which is managed as a profit-maximizing commercial enterprise. The bank's clients consist of two groups: Firms owned and or controlled by the bank, and public or private firms. In both cases the majority of client firms are industrial SMEs. However, the scope of the bank's activities is not limited to small firms only.

BIM is an exception among Iran's banks in that all of its operations are concentrated in Tehran, as it does not run any provincial or other type of outreach branches. It serves distance customers through a network of 15 provincial representative offices, which act more as liaison offices. To satisfy the increasing needs of industrial firms located outside Tehran, the Bank now intends to open provincial branches.

Despite its broad mission BIM is generally known as a small industry bank, even though its performance with regard to the promotion of small business is not very impressive. A bird' eye look at the Bank's financing activities reveals the following:[1]

- *Number of Loans*: In the past 21 years, i.e. between the years 1358 and 1379 (1979/80-2000/01), it has approved (but not necessarily disbursed) 1,814 loans for large-scale enterprises and 3,730 loans for small firms. The actual number of loans granted during the Bank's 45-year history is 2,250. In addition it has created 291 manufacturing and mining enterprises through direct or joint investments.
- *Loan Ceilings* are formally up to two-thirds of the total amount of investment needed, but in practice it generally does not exceed half of that amount.
- *Profit (Interest) Rates* on most of loans to industrial SME smount to 17%. This is a relatively low rate as compared to regular commercial loans, which run at 25%.
- *Minimum Value of Collaterals*: Generally 150% the amount of the approved loan.

8.6.5 Other sources of venture capital for SMEs

Currently, the main sources of venture capital for SMEs at affordable rates are budget- directed funds channelled through Bank of Industry and Mines and other banks. Other sources include the Presidential special high-tech venture fund, IDRO's venture fund, bank loans other than budget-directed ones, private banks, investment companies, free market venture capital and finally love money. None of these sources, however, are of much help to SMEs. The Presidential Fund, which seems to have been short-lived, was meant for and limited to high-tech ventures.[2] Commercial loans of state or private banks and near banks are too costly to be financially affordable for SMEs. Even the subsidized rate of the Bank of Industry and Mines seems to be too high for many potential entrepreneurs. The available information on the birth rate of small firms in Iran does not permit a meaningful comparison of the Iranian situation with

1 Ibid

2 This source of funds may no longer be available as the associated website could not be located anymore.

the rest of the world. Nevertheless the actual increase in the number of small firms with 10-49 employees between the two industrial census of 1375 and 1377 (1996 and 1998) is to some extent revealing. During these two years there has been a total growth of 831 in the population of these firms (from 10938 to 11759), implying a 4% annual increase. Taking into account the annual number of new job seekers in Iran (some 800,000) we feel that this rate is rather low as it implies annual addition of some 8000 new industrial jobs in this category of firms.[1] This seemingly low birth rate, inter alia, points to the unfavourable conditions for investment, among which the cost of capital could be a prime factor. Love-money (money from family members or charitable individual loans) has traditionally been a viable source of micro-loans for some businesses ventures, but no measure is available to define the extent to which this source is used today. It is, however, safe to assume that in economies inflicted with a high inflation rate this source will be less and less readily available.[2]

8.6.6 Planned and ongoing reforms and challenges of the banking system

Critics often allude to the present inefficiencies in the banking system due to the government's ownership of the banks. The new finance minister is looking to ways and means to end or minimize the state ownership of banks.[3] This is possibly the biggest challenge the ministry has to face in the bank reform plan. Another source of complaints regarding the banking system refers to lack of flexibility and transparency of the system. The Iranian banking system is guided by Islamic finance principles. The 1362 (1983) law on interest-free banking provides fourteen allowable Islamic financial instruments for meeting loan applications**.** It is noteworthy that Islamic financial system allows considerable flexibility in financing arrangements. It also requires more detailed financial disclosure than non-Islamic systems as the system has a participatory nature, requiring client awareness of the banks' risks, losses and gains. However, the current *de facto* banking system in Iran leaves much to be desired in terms of both flexibility and transparency. (A complete list of these instruments is presented in Annex 4.)

The TFYP, ratified in 1379 (2001) has defined the major dimensions of the government's banking reform policies. The changes foreseen include, inter alia, a considerable increase in the capitalization of the banks, the modernization and optimization of the banks' operating systems, further licensing of near-bank credit institutions, and the licensing of onshore (Iranian

1 The two sets of data have been reported in the years 1376 and 1378 (1997/98 and 1999/2000) respectively by the Statistical Centre of Iran: *Industrial Census Project of 1376: the census results of industrial workshops with 10-49 employees* and *Industrial Census Project of 1376: the census results of industrial workshops with more than 10 employees*. The average number of employees of these firms is 18 according to the 1376 data.

2 The high rate of interest implies high inflation. These two rates are certainly associated if not alike. In the circumstances, an interest-free love money loan with a term of 2-3 years means a gross loss of purchasing power of repaid money.

3 Privatization of state-owned banks is among the declared policies of Mr. Mazaheri, the Minister of Finance. An example of his policy statements can be found in his address to bank authorities at the introduction ceremony of the new Managing Director of Bank Saderat. In this address he noted, inter alia, that "there seems to be no need for state-owned banks except the Central Bank", as quoted in Abrar Economic Daily, 20 Aban 1380 (11 November 2001).

owned) and offshore private banks in the Free Zones (including foreign owned banks, of which one has already been licensed in the Kish Free Zone).

Iran's banking industry may therefore be at the verge of a challenging transition to a more market-oriented and competitive system. Since a comprehensive review of the needed and intended banking reforms is beyond the scope and purpose of this study, the following text will refer only to those changes that have important and direct consequences for the management and/or promotion of small businesses:

- Bank loans, including the budget-directed facilities, continue to be given primarily to the large, mainly public and semi-public, enterprises. With the intended changes in future, a more balanced distribution of business loans between small and large firms may be expected. As a step in this direction, the government has significantly increased the funds earmarked for small industry loans in the 1380 (2001/02) budget. Most of the newly allocated funds that have been put at disposal of the SIO are set aside for job creating venture loan projects.[1]
- The real estate collateral that has hitherto been extensively used by Iran's banks poses a serious problem for entrepreneurship development. The ongoing debate on the issue has led to the ratification of a new law by the Majlis, as a result of which the collateral requirement has been considerably relaxed. In theory this should have made it easier for small business to raise the required capital. In practice, however, except for certain small loans financed through and guaranteed by the SIO, the new law has not been fully implemented.[2]
- An important change foreseen in the banking system is to revise the mission, and hence the strategies, of the BIM to make it more responsive to the financial, advisory and investment needs of SMEs and new entrepreneurs. Currently, more than 50% of the bank's resources are used for the business firms directly owned or controlled by it. According to the anticipated changes, BIM would be relieved of its managerial responsibility for its current business holdings. Instead, it would focus on fulfilling its new mission. The road to these reforms may not be as smooth as policy makers envisage, however, as progress towards the revision of the bank's charter has been very slow.[3]
- There is now more or less a general consensus among the observers of the banking system that the institutional and managerial capacity of the existing banks is not only

1 Information provided by the manager of the HRD and Entrepreneurship Division of the SIO. In 1380 (2001/02) the SIO received two appropriations totalling IR1,810 bn for the "30,000 job creation project" and for the partial financing of new ventures or SME expansion projects. This amount represents a manifold increase in SME financing as compared with the traditional BIM loans.

2 The conservative approach of the banks to business financing has been repeatedly criticized. For an example of such a critique, see *Banks Still Ask for Collateral*, Abrar Economic Daily, 22 Azar 1380 (13 December 2001).

3 Information obtained from an interview with the manager for HRD and Entrepreneurship of SIO. For a sample of views of the business and industrial communities about the mission and role of a specialized bank for SMEs, see *Do Small Industries Need a Specialized Bank?*, Hamshahry Daily, 1 Aban 1380 (23 October 2001).

inadequate to operate effectively in a more liberalized economy, but it is not even responsive to the day to day needs of the government and business community. Government's dissatisfaction with the performance of banks has been echoed in the campaign launched by the Finance Minister an improvement in the productivity of the banks.[1] Hence, an overhaul of the banks' operation and management systems may soon become an urgent necessity. The minister has made this reform one of his top priorities, and has invited all bank managers to drafting their proposals for change.[2]

8.7 Representative Business Organizations

Associations of industrial firms, as organized bodies representing their concerns and interests, do exist in substantial numbers in Iran, where they are commonly known as "unions". Although some of these associations are very active, their structures, functions and behaviour often differ quite significantly from similar institutions in the mature market economies. It is therefore useful to review the characteristic structure and functions of these unions in Iran before presenting their numbers and groupings.

Unions of industrial firms in Iran can broadly be divided into conventional, newly founded and emerging forms of organization. The conventional forms have a more natural birth and growth process; they emerge organically rather than in a planned manner. By definition these unions are not financially dependent on, or supported by, the government. The conventional unions mainly engage themselves with classical lobbying functions. At present, some of these unions are very active and influential.[3]

The establishment of a new class of unions has recently been promoted by the Ministry of Industry and Mines. These are organized in a two-tier structure with the upper tier, known as "Industry Houses, composed of representatives of the lower bodies, known as "Associations of Homogenous Industries". A variety of new functions have been approved for these new unions,[4] since the Ministry of Industry and Mines is seeking to delegate a part of its industrial support service and capability development functions to them. This reflects the Ministry's desire

1 The Minister of Finance has repeatedly stated the need for a campaign to improve the effectiveness and productivity of the banking system. See, for example: *Budget-directed Facilities will be Decreased to 20% in the Next Year*, Abrar Daily, 19 Azar 1380 (10 December 2001). Some of the consulting and academic authorities have also dealt with the present inefficiencies of the banking system. Examples are: Ghareh Baghian, M. *The Costs of Banks' Inefficiencies Should Not be Paid by Others*, Nowrooz Daily, 15 Azar 1380 (6 December 2001), and President of the Association of Chartered Accountants, *The Costs of Overheads have Reduced the Competitive Capabilities of State-owned Banks*, Abrar Economic Daily, 13 Aban 1380 (4 November 2001).

2 Interview with the managing director of Bank Refah.

3 Two particularly influential unions are the Association of Managers of the Islamic republic of Iran and The Islamic Engineers Society of Iran. The former consists mainly of private entrepreneurs, while the membership of the latter includes engineers and engineer-managers of both public and private enterprises.

4 Ministery of Industry and Mines, *The Objective and Mission of the Associations of Homogenous Industries* and *The Provincial Industry House Charter*, Secretariat of the Commission for Industrial Representative Organizations.

to relieve itself of its day-to-day administrative burden and focus more on fundamental policy issues.

8.7.1 The conventional associations

A list provided by the Ministry of Industry and Mines divides these industrial unions between the jurisdictions of various deputy ministers. In addition to manufacturers, the list also includes support services unions. Of the total of 39 conventional unions in this group, 28 are known as cooperative associations.[1] The major features of these conventional industry associations may be summarized as follows:

- These associations are either industry-specific or comprise a group of professionals in certain fields. They are not, however, grouped by the size of their member firms. No union of industrial SMEs could therefore be identified, although there are some unions, such as those representing the food industry, in which SMEs outnumber other firms.
- Most of the existing associations are loosely knit organizations. Their existence is felt mainly in times of crisis, so that their level of activity tends to fluctuate according to the external pressures and risks they may be facing at any particular time. Thus, the association of automotive manufacturers was particularly active and visible when there was a possibility of the car import policies being liberalized.
- Few industry associations have the opportunity, financial resources, or skills to use the mass media effectively use, and hence to practice sophisticated lobbying. They rarely undertake or sponsor critical assessments and impartial analyses of public policies by known professionals and/or through seminars or workshops. The main exception to this general rule is the automotive industry association, which has shown itself to be capable of practicing advanced lobbying techniques with considerable effectively.

The available statistics on industry associations are not, in general, very reliable, and some of the associations listed in the formal rosters may have ceased to exist or become inactive. There seems to be no great interest in updating the lists. The statistical yearbook published by the Statistical Centre of Iran only records cooperative associations and ignores all others. The daily papers also carry very infrequent stories about these associations.

8.7.2 The newly founded associations

These associations are organized in a more orderly manner, and consist of 144 "homogenous industry associations" located in 22 provinces. The number of associations in each location varies, depending on the type of industries at that location. In addition to these associations,

1 Ibid.

there are 22 “industry houses”, with each province having one such industry house irrespective of the size of local industry.[1]

Table 8.12: Distribution of homogenous industry associations in various provinces

Province	Number	Province	Number	Province	Number
Tehran	20	Lorestan	9	Khuzestan	7
Khorasan	12	Isfahan	8	Zanjan	6
E. Azarbayjan	10	Fars	8	Semnan	6
Gilan	9	Ghazvin	8	Kermanshah	6
Sistan wa Baluchistan	5	Charmohal	5	Ilam	3
Golestan	5	Kerman	4	W. Azarbayjan	2
Mazandaran	5	Bushehr	3	Ardebil	2
Koh-kilooyeh	2				

Source: Ministery of Industry and Mines, *The Objective and Mission of the Associations of Homogenous Industries* and *The Provincial Industry House Charter*, Secretariat of the Commission for Industrial Representative Organizations.

8.8 Transparency and Accountability

8.8.1 General considerations

The issues of transparency and accountability are critical issues in the web of relationships between business, the government and the public. Transparency is basically a matter of quality in information dissemination. In a transparent public administration, government would make publicly visible and comprehensible the total flow of information within and between the public and the private sectors, as regards measures, directives, laws and regulations. Similarly, business enterprises would prepare, provide and disclose the information legally required by government agencies, consumers, and other lawful stakeholders in a sufficient and timely measure. Each individual citizen, in turn, fulfils her/his legal information dissemination duties by giving the right information at the right time, both to government and to business.

Issues of transparency relate to such matters as the fact that approximately 30 different kinds of taxes are levied in Iran, which makes tax collection highly un-transparent since noone fully understands the financial implications. Another example might be the discretion that officials can exercise in providing licences or rendering financial support (e.g. through loans ot the allocation of foreign exchange) to privileged classes in society. Similarly, the issue whether entrepreneurs fully understand the government’s decision making process with regard to policies affecting the business environment may be seen in this context. Do regulations

1 Ministry of Industry and Mines, op cit.

governing business change too often and/or are these disseminated and explained in such a way that entrepreneurs are informed in a clear and timely manner, etc.?

Accountability can be seen as an institutional or individual responsibility to carry out agreed functions, which may or may not be determined by law. Among the many different dimensions of accountability and transparency, this study will briefly examine the following aspects that may be regarded as the most important elements underlying the relationship between business, the government and the public. These dimensions are: 1) corporate financial statements, 2) product information and 3) universal access of individuals and enterprises to facilities provided by the government.[1]

8.8.2 Corporate financial statements

The financial transparency of business enterprises may be observed in the accuracy and accessibility of their external financial reports, submitted to their shareholders, creditors, the stock exchange, the public and government agencies. From among these reports, tax statements are particularly important since they represent a composite report of enterprise incomes, expenses, investments, profits and losses. Whilst there is a general suspicion that business enterprises in Iran might have a propensity to reduce their tax burden avoiding full transparency in their financial statements, this study could not identify any systematic documentation to confirm these intuitive suspicions. To fill this gap, an attempt was made to devise two transparency measures that together could shed some light on the issue. These measures are: a) the rate of tax declaration and b) the range of income statement deviation from the tax-base income, as defined by the tax assessors.

The first measure is self-explanatory. Simply stated, it is based in the fact that not all enterprises declare their incomes for tax purposes, as is required by law. The available data did not permit a determination of the tax avoidance/delay behaviour of industrial enterprises with respect to their size, but interviews with the tax authorities suggested that this behaviour is, in all probability, more common among small firms. The overall rate of tax avoidance for industrial firms was measured as a ratio of the total number of statements made by the industrial firms located within Tehran tax jurisdiction, to the total number of enterprises within this jurisdiction (TDI: tax declaration index). This exercise revealed an astonishingly low figure of 27.6%, implying that only about one in four industrial firms care to fill out an annual tax statement.

The second measure can be labelled as “income transparency index” (ITI). Income statements made by business enterprises for tax purpose are generally lower than the figures finally defined by tax authorities after their assessments of an accepted tax-base. The difference between these two incomes figures may be taken as a measure of financial transparency of enterprises. Using the available data, two indices were calculated for two sizable samples of

1 The choice of these measures has been guided by their crucial importance in Iran. Issues such as transparency or business norms are inherently culture-bound. What matters most in one culture may not be of pivotal importance in another. The three measures selected, as this study has found, matter most to the government, the public and business firms, respectively.

large and small industrial enterprises located within the Tehran tax jurisdiction. The dividing line between the two sample groups was set at an annual accepted income of Rials 400m., corresponding to US$ 50,000. The results of these calculations are as follows:

- For the larger Industrial firms this index amounts to 1.96, implying that the income stated for tax by the subject firms is approximately half the figure finally assessed and accepted.
- For smaller firms the index amounts to 4.62, suggesting that incomes stated by these firms are about four and half times less than the figures finally accepted.[1]

Taken together, the TDI and ITI are very revealing, in terms of both financial transparency and accountability. First, the figures suggest that the propensity of small firms for tax-avoidance is far greater and less controllable than in the case of larger firms. Secondly, they indicate that the tax accountability mechanisms currently in place do not seem to be very functional. Those firms that choose not to declare their incomes in due time are not heavily penalized, and it might take one to three years before their cases are processed and payments become due. During this period the public money will rest with these firms, while government will have to issue long-term bonds to finance its development projects. There thus seems to be a clear need to institutionalise rational tax behaviour.

8.8.3 Product information and liabilities

Another aspect of business transparency that is important for the relationship of business and customers is the amount and accuracy of product information, and the penalties that may be imposed in the case of false information being given.

Industrial SMEs produce a wide range of goods, each requiring the dissemination of certain types and amounts of information to the potential users. Product information is crucial where these products are used directly by the public. Goods traded between firms are usually subject to greater scrutiny by the buyers, who generally have access to proper information. Industrial goods fall into this category. By contrast, the typical public consumer does not have access to independent means of inspection and verification of product information.

Among the products directly used by the public, the food sector may be most relevant, as there are a large number of SMEs in food industry. An examination of product information for food items could thus reveal, at least partially, the degree of transparency in the relationship of some SMEs with the public. In this connection, a sample of 13 processed food items consisting of well-known brands were studied with respect to product information. Table 8.13 shows that in one important category of additives a large majority of firms did not provide any information, and in some other cases some information was kept out of the public's reach. Since the items selected were produced by medium-sized or large enterprises, it might be speculated that the situation would not be better for items produced by less well-known industrial SMEs.

1 The data used for the calculation of these indices were provided by the office of the Director of Tax Organization of the Ministry of Finance.

Table 8.13: Product information for 13 food items

Retail Price mentioned	Ingredients mentioned	Amounts of Ingredients mentioned	Additive Formulae mentioned	Production/ Expiry dates mentioned
2	12	7	2	10

Source: Direct Survey

An important dimension of product accountability is the liability of the producers, in case of false information. Although technically such liability does exist in Iran, actual product information litigation cases are rarely reported. In addition, the information provided by food manufacturers is not generally examined by any of the consumer protection agencies.[1]

8.8.4 Universal access of SMEs to government provided facilities

Business transparency has two sides. One important side is the provision of precise and adequate information by business to the government and the public. Another equally important transparency issue is the timely dissemination of information by the government to all relevant and interested parties. The effectiveness of government information dissemination is currently the subject of some concern, since the impression exists that many government agencies are unnecessarily conservative and restrictive in releasing information to the public or to business firms.[2] In the absence of an impartial and effective information dissemination system and practice, there is no guarantee for the universal access of SMEs to government provided support systems. This is an issue to which we shall revert in Chapter 10.

1 The only active centre in this area is the Beheshti University, which periodically annonces its findings about unhealthy food products in the market. The Ministry of Health is officially responsible for the safety of food and drugs, but does not have enough manpower and other facilities to perform this function adequately. Information about the Ministry of Health was collected through interviews with responsible officials.

2 This impression was reinforced by this study, as collecting some simple information from public agencies in some (not infrequent) cases proved to be a cumbersome job.

CHAPTER 9

BARRIERS TO SME DEVELOPMENT

9.1 Introduction

This section will discuss barriers to SME development. These barriers are grouped into the following five categories:

- Market barriers, referring to market restrictions such as contracts, price controls, etc.;
- Financial barriers, related to various financial obstacles faced by SMEs such as a lack of appropriate banking services;
- Barriers resulting from inappropriate government interventions;
- Barriers arising from a lack of information needed by SME managers; and
- Legal barriers to SME development.

9.2 Market Barriers

In determining the importance of SMEs for the Iranian economy, two particularly important sub-groups can be identified, which fulfil two distinct roles in the economy:

- *SMEs meeting general consumer needs*. These SMEs usually have a traditional structure and draw mainly on simple technologies, with their products being targeted at local markets. These enterprises are usually family firms, and are often owned and managed by a single person. The human resources employed by this class of firms often lack adequate training and management skills. Of course, not all SMEs have this type of structure, but this traditional setting is pervasive among most of them.
- *SMEs providing intermediary goods and materials to large industries*. This group of SMEs emerged in the post-revolutionary period when the idea of self-reliance became popular. A considerable number of small enterprises established their operations in Iran's industrial provinces and received authorization to sell their products to large industries belonging to the Ministry of Industry. Unlike the traditional SMEs mentioned above, this group uses more advanced technologies and employs more adequately trained staff. They often operate beyond the purely local markets and on a national scale, but usually lack international marketing capabilities.

These two groups of Iranian SMEs encounter the following specific obstacles and problems:

- *The existence of purchasing monopolies (monopsonies*). Since large firms command unrivalled control over markets, the smaller firms become highly dependent on these monopolized markets, which limits their room for manoeuvre. Their sales are affected by state-controlled markets and are subject to considerable fluctuations as a result. Changes in the policies of purchasing firms, or in their production structure, planning or sales processes will invariably affect the performance of this group of SMEs.
- *The stringent character of contracts that SMEs have to sign with large industries, as a result of their dependency upon large firms*. Due to their power, larger firms deal with smaller companies in a one-sided manner and since the latter do not have access to alternative markets, they have no option but to acquiesce. This is highlighted in the extract from a contract between a major motor manufacturer and a small business supplier reproduced in Box 9.1.

Box 9.1: Example of a contract between a large manufacturer and a small business supplier

Date of Contract: November 18, 2000

Amount of Contract: 423,000,000 Rials

Paragraph 3.4 of Contract: The supplier agrees to perform adequate research prior to quoting a price and signing the contract. The supplier will not change the offered price in the future and therefore no topic or subject can lead to a reconsideration of the quoted price by the supplier.

Paragraph 4.2 of Contract: In case of delay in delivery, the supplier will incur as penalty the equivalent of 5% of the amount of contract per day and a delay exceeding 30 days will result in the cancellation of the contract.

(In other words, the supplier will have to pay a fine of 21,150,000 rials for every day of delay in the delivery. Twenty days of delay will cost the supplier the total amount of the contract)

Paragraph 6.1 of Contract: In case the supplier refuses to comply with the terms of the contract or otherwise fails to carry out its commitment, the buyer (large firm) will be allowed to issue a written warning and then compensate itself for the damages incurred by withdrawing relevant sums from the supplier's deposits.

Paragraph 7 of Contract: To ensure that the terms of the contract are adequately complied with, the supplier (i.e. the contracted SME) will submit a cheque amounting to 150% of the total sum of the contract that will be receivable should the supplier not be able to carry out its commitments unconditionally.

Another paragraph delegates copyright ownership to the larger firm. In addition to the aforementioned points, none of the 12 articles of the contract address either explicitly or

implicitly the right of the SME. The contract is wholly drawn up with a view to the interests of the large firm. Other contracts reflect the same problem and abide by the same form and content. They are forced unilaterally on the small firm and unfortunately there are no organizations in Iran that could properly defend the rights of the smaller firms.

- *The existence of monopolized markets in various sectors as experienced by both types of SMEs*. The smaller firms are not able to compete effectively, and hence must incur substantial financial losses or be satisfied with a small profit margin. In a field study, 53 industrial managers were asked to rank the degree of the monopoly exerted by larger firms. On a scale of 1 to 7 (1 = high; 7 = low) Iran scored 4.17, which represented one of the highest scores in developing economies. In another question, the same managers were asked to rank antitrust and antimonopoly policies in Iran and the degree to which they have enhanced competition. That score came out at 2.29 (the lowest of 54 countries), reflecting that the perception of Iranian managers is that antitrust and antimonopoly policies are virtually nonexistent in their country.
- *Large fluctuations in supply or demand, especially in the food sector*. The supply and demand curves usually result from long production cycles. Thus, when prices rise in a certain period, most producers increase production levels in subsequent periods, leading to a glutted market and sharp price downturns. This problem is particularly acute in the country's food industry. Therefore, when prices decline (following a sharp increase in supply), smaller firms are placed under considerable pressure and cannot cover their losses financially.
- *Subsidized competition from state-owned firms.* In the commodity market, the majority of large firms are state-owned and subsidized by the government. Through their lobbying they draw on a vast network of relations and can easily solve any problem in the market. In addition, as they monopolize the markets, they exert considerable influence in their own favour. They can manipulate prices by controlling production or storage/stock levels, thus governing the rules-of-the-market game. Smaller firms do not wield comparable economic power, and are hence left at the mercy of the lager enterprises.
- *Lack of marketing mechanisms and access to national and international distribution channels.* The presence of advertising firms and distributors can play a considerable role in this area. In Iran, small firms often lack access to such support services and face obstacles when attempting to reach overseas markets. Nonetheless, existing facilities are made available to all industries, for instance the rental cost of 1 square metre of exhibition space is the same for both small and large industries.
- *SMEs purchase raw materials in a limited quantity and thus pay higher prices*. Therefore, the production cost they incur is much higher than larger firms, thus affecting their competitive standing in the market. The problem is amplified when the SMEs have to import raw materials. In a study of the import problems incurred by ten SMEs, the following points were raised:

- Foreign suppliers do not sell limited quantities of goods, and if they do, they charge higher prices;
- The import process is cumbersome and the import of limited quantities of goods causes major production planning problems, while the working capital of SMEs is forced to lie idle.
- Imports entail certain lump-sum expenses, so that per unit costs increase when smaller quantities are imported.

9.3 Financial Barriers

The financial problems faced by SMEs in Iran, as identified in selected interviews with owners of SMEs, may be summarized as follows:

- *Commercial and specialized banks that would lend money to SMEs are absent and loan criteria for firms of all sizes are similar.* Apart from providing loans to larger firms, The Bank of Industry and Mines is, in addition, the sole financial institution that allocates special funds to small industries, although the amount of funds is very limited. However, both small and large firms have equal access to loans, which is – in fact – to the disadvantage of the smaller firms. In a survey conducted by the World Economic Forum on the manner in which large and small firms are handled financially, Luxembourg, Hong Kong, Ireland, Holland, and Finland showed the most favourable results for SMEs while Argentina, Mexico, and Indonesia had the lowest rankings. A survey based on the same model was conducted on Iranian managers, who gave an average rating of 1.58 (out of 7). Were this average to be placed next to the score of other countries, it would put Iran at the bottom of the list in 54 place. The managers who were selected for this survey were involved in both large and small industries. The survey further demonstrated that Iranian banks apply the same conditions to large as well as small industries in a similar manner and do not provide a preferential policy towards SMEs.
- *Smaller firms have a more difficult time making loan mortgages*. The collateral policy of Iranian banks is geared predominantly towards fixed asset mortgages (in the form of land or buildings). Since smaller firms are not able to make fixed asset mortgages, they do not qualify for loans. Although a recent law prohibits banks from securing their loans with non-industrial assets, the banks still insist on this form of security. As a result of these difficulties, smaller firms have to turn to the far more expensive unofficial financial markets. The average interest rate in these markets is twice that of the official rate of 17%. Interest rates for short-term loans can be as high as 48%, and they vary according to the firm's credit background and the loan period.
- *The adoption of contractionary macro-economic policies by the government has resulted in a significant increase in liquidity pressures on SMEs.* In 1376-1379

(1997/98-2000/01), the financial pressure on smaller firms was very high. During this period, firms sold their products in instalments, which in turn reduced their liquidity. Firms that are dependent on large industries are also beset by problems of late-payment. In a study of two industries, it was revealed that payment delays in the auto industry reached six months, while payment delays in the paint industry amounted to at least five months.

- *Income from sales is not received in time, leading to an inability of the banks to secure loans, resulting to liquidity pressure on SMEs, driving them towards unofficial markets.* This factor not only increases the production costs, but also damages the industrial base of these firms while hampering the organization of production and manufacturing. All manufacturing considerations ultimately depend on the question of liquidity, and liquidity problems generate considerable uncertainty for manufacturing firms. Delays in delivery are the first outcome of liquidity problems. The inability to secure raw materials contributes to delivery delays, which in turn perpetuate the liquidity problems, thus trapping SMEs in a vicious circle leading to the ultimate bankruptcy of small firms.
- *The absence of joint ventures and lack of governmental facilities for promoting joint ventures poses further problems*. Small firms are not able to establish relations and ties with foreign investors, which necessitate familiarity with the international business culture and access to adequate infrastructure. Due to their lack of specialization and infrastructure, Iranian SMEs are not able to benefit from joint ventures and unfortunately there is no organization that could assist or support them in this area. In a survey, 55 industrial managers assigned a score of 2.5 (1 for minimum and 7 for maximum) in their appraisal of existing facilities in Iran for joint ventures. The score obviously is low compared to other countries with rankings similar to Iran.
- *The business environment for SMEs is considered to be very weak.* In a study undertaken at the IMI, the business environment coefficient was calculated for 7 different industrial areas in Iran. The results of this study, together with comparative indicators for a selection of other countries, are presented in Table 9.1. The coefficients are calculated for different countries on the basis of their deviation from the median. As the indices and statistics are standardized for each country, the countries with higher coefficients have a more favourable business environment. A coefficient of zero signifies a neutral operating environment, and a negative coefficient implies a discouraging environment. An increase in the negative direction of the coefficient indicates a deterioration in the business environment. Iran's coefficient was substantially negative, suggesting that the business environment imposed significant constraints on SME development and promotion.

Table 9.1: Business environment coefficients for selected countries

Coefficients	Financial market coefficient	Survey data coefficient	Hard data coefficient
Iran	-1.49	-1.49	-1.49
Ukraine	-1.59	-1.3	-1.69
Russia	-1.63	-0.86	-1.88
Zimbabwe	-0.61	-0.38	-0.69
Turkey	-0.36	-0.26	-0.39
Egypt	-0.29	-0.34	-0.27
Phillipine	-0.16	-0.31	-0.11
China	0.14	-0.96	0.5
Jordan	0.43	-0.41	0.71
Malaysia	0.54	-0.43	0.86
Singapore	0.88	0.59	0.97

Source: Imanirad, M., IMI, Tehran, 1379 (2001/02).

9.4 Barriers Resulting from Lack of Access to Information

The cost of information gathering and processing can be considerable, and since information is not always readily translated into revenues, SMEs do not place high priority on tapping it. This has often led to the emergence of specialized SME support institutions that gather, process and disseminate data to their clients. The lack of information leads to wrong decisions with regard to the quality and quantity of production, and to the pricing and marketing of the output. This leads to higher costs, and possibly even to unnecessary bankruptcies. The following areas of information were identified as being necessary for the growth of SMEs in Iran:

- *Marketing Information.* SMEs must be informed constantly about the organization of domestic and international exhibitions. This type of information is made available on the Websites of the Centre of Exports Promotion and Iran Trade Point. For instance the Web site of Iran Trade Point (http://www.irtp.com) posts information on all international exhibitions organized in Tehran, yet none of these events might be of interest to SMEs. Information on foreign exhibitions is not adequately disseminated in Iran; but Iranian managers can refer to the Internet to obtain information. The Iran Trade Point Website, for example, contains information on import and export regulations, free trade zone, insurance firms, and information on the export and import price index, all of which of greater interest to foreign investors and countries that are seeking to establish trade ties with Iran. As a result, this class of information is not used very extensively by Iranian firms. On the Iran Exports Promotion Website at http://www.iranexport.com, Iranian exports and exporting firms are introduced without classifying them into large and small enterprises. The Iran Trade Point Centre site at http://www.irantpcnet.com offers information to prospective investors and does not deal directly with the concerns of SMEs. Generally speaking none of the sites that deal with Iran's foreign trade

includes a section on SMEs. In any event, there is no Iranian centre that specifically tends to cater for the information needs of SMEs. Even the recently established SIO lacks a specialized site on the potential of small industries.

- *Investment information.* In order to increase transparency in markets and promote investment in small industries, prospective managers and investors need detailed information on existing firms and licences issued by the Ministry of Industry and Mines. This enables them to estimate the conditions of supply and demand in order to appraise new investment prospects. The Ministry of Industry can provide only limited information on business permissions, however, and as this information is not updated regularly it does not adequately reflect market conditions.
- *Technical and scientific information.* SMEs need access to such information so that they can adopt new and more cost effective technologies without incurring excessively high costs. Access to technical standards and specifications, and to new technological innovation and products can assist SMEs in developing their technology level and competitiveness. Relevant information in these areas is highly scattered and the information that does exist is not made readily available to SMEs. A number of universities have access to this information but do not place it at the disposal of SMEs. On-line access to such information, finally, requires high subscription fees.
- *Information on raw material suppliers and prospective buyers.* Unfortunately industry managers do not have access to this kind of information, the absence of which deprives them from entering competitive markets and prevents them from setting adequate prices. In recent years the annual publication Compass has carried information on raw material suppliers and inter-industry relations. A survey of 56 industrial managers found, however, that none of them was aware that such information even existed, and did not know how to access it.

In general all information needed by SMEs is shown in Table 9.2; it also shows the availability of the required information.

Table 9.2: Information requirements and availability

Type of information	Information availability
1. R&D databases and universities	1. Available but decentralized and not accessible for SMEs
2. International and domestic exhibitions and seminars	2. Available
3. List of national and international suppliers	3. Not available, but partly presented by Kompass.
4. Surveys of local, national and international Information markets for SMEs	4. Not available
5. Active demand in markets	5. Not available
6. Scientific and technical standards	6. Available but not easily accessible; the cost of this information is therefore very high at present.
7. Llicenses issued	7. Available but not updated.
8. List of the price and volume of imported and exported goods	8. Available but not accessible.
9. Capabilities of industrial SMEs in Iran	9. Not available
10. Database of technologies	10. Partly available but hard to access.
11. Sources and opportunities of domestic and international investments.	11. Not available.

9.5 Barriers Arising from Government Policy Towards SMEs

9.5.1 Government interventions in business practices.

When dealing with socio-economic phenomena, governments usually make two types of errors. One of these errors relates to the steps they need to take in order to improve the socio-economic environment, but don't. This type of error is known as "the error of omission". The second type of error concerns the steps that governments do take, but should refrain from taking because they concern matters that essentially fall beyond their jurisdiction and expertise. This type of error is known as "the error of commission". SMEs are faced with both errors. In order to protect small industries, the government should, in close consultation with the private sector, design and develop SME-promoting policies and policy instruments, paving the way for their growth. Lack of due attention to these factors will delay or even arrest the growth of SMEs. Secondly, government interventions in the business domain should not lead to unfavourable situations for SMEs. An example of "error of commission" is the government's intervention in industrial affairs of subsidizing the activities of state-owned firms. With this type of support, the subsidized and protected state-owned firms will command absolute control in the national economy, which discriminates against the competitiveness of SMEs. in is hampering to a great extent private sector development. According to statistics published in the IMI-100 project, a major portion of the Iranian economy is controlled by large and government-owned organizations. The results of this project show that the top five companies have revenues amounting to Rials 32,000 bn., whereas the total sales of companies ranking between 165 to 170 amounts to Rials 442 bn. Put differently, the 5 largest companies in Iran

are 72 times larger than the smallest five companies on the list. The companies included in the IMI-100 list number 170 and their total sales amount to Rials 130,000 bn. When this amount is compared with the national liquidity flow of IR 250,000bn, a GDP of IR 500,000 bn. and the government's public budget of Rials 163,000 bn., the economic contribution of large enterprises becomes more evident.

9.5.2 Law and bureaucracy.

SMEs face additional problems when it comes to government laws and bureaucracy. In order to deal with their problems the SMEs have to refer to various agencies and since they lack the necessary workforce or bureaucratic skills to negotiate with these organizations, they remain unable to solve their problems. In order to assess this situation a global standard questionnaire was used, with the objective of specifically measuring the degree to which these regulations obstruct the proper functioning of, and competition between, SMEs. Over 50 firms responded. The average score for Iranian firms was 2.00 nearing the absolute minimum of 1.00. The results show that existing government regulations are not favourable to the growth of small enterprises. A comparison between the scores of Iran and Taiwan (4.66), Malaysia (4.37), Jordan (3.87), Vietnam (3.42), and Indonesia (2.73) shows that the main bottlenecks faced by SMEs originate from government laws and bureaucracy.

Recently, the skilled workforce is migrating at a greater pace from the public to the private sector and the bureaucratic body is thus becoming weaker and more inefficient. A question on the efficiency of government and private executives was included in the questionnaire to a number of managers in both sectors. The public executives scored 1.33, whereas managers in private firms scored an efficiency point of 7 (with the scale from 1-low to 7-high). This shows to what extent managers perceive private firms to be far more efficient than the public sector.

There are other criteria for evaluating the government sector. On the same scale from 1 to 7, managers gave low rates to additional important issues, like:

- A score of 2.33 to the question: "are government's policies comprehensive and clear?"
- A score of 2.63 to the question: "are government's regulations clear?"
- A score of 1.71 to the question: "is the current taxation system stimulating competitiveness?"

Regarding the tax issue, the government of Brazil imposes the lowest tax (15%) on its firms, while Germany has the highest tax rate of 42%. Other countries fall anywhere in between these two extremes. The corporate tax rate for Iranian firms reaches 68%, which is way above that of Germany. Yet the point that deserves attention is that the average of tax paid by firms in Iran is not high. Whenever firms operate transparently, however, they become subject to higher taxation, increasing the tax rates comparable to those prevailing in Germany. The rate of tax collection in Iran is also not high. Consequently, the unequal collection of tax places the burden on firms that report their revenue status transparently. This then encourages large-scale tax evasion.

In addition to the question of tax, duties levied on the industrial sector are worthy of mention. These include:

- Municipality 1%
- Education 2%
- Islamic Republic of Iran Broadcasting (IRIB) 1% (for some firms)
- Environment 0.1 percent
- Ministry of Industry 0.2 per cent
- Sales of Dairy Products 1% (for some firms)
- Health 1%
- Provincial Duties 1%

On the one hand there are many different taxes and duties imposed on SMEs, and on the other hand, since SME are usually working in a competitive market, they cannot pass on these duties to their customers and therefore they have to pay them themselves. One of the main problems in this area is the way in which duties are factored into all stages of production and for all enterprises. The *raison d'être* of a number of duties on municipality and education are questionable.

In addition to the above, another problem is related to the administrative hurdles for the collection of duties. The account experts may not have complete command over the comprehensive range of tax issues and there are no institutions that could handle possible disputes arising from arbitrary decisions. The collection of the duties on a monthly basis is not commensurate with the collection of the firm's payable accounts that takes place every two months. These complexities, in addition to the lack of familiarity of the experts in charge of the issue, increases the costs associated with these tasks for all firms, but especially for SMEs. In addition, they have to assign different people for dealing with the various tax levying organizations, which has an increasing effect on cost of human resources in the company.

9.6 Legal Barriers

Laws institutionalize human behaviour and commercial laws institutionalize commercial and business relations. This latter factor, in turn, decreases business risks and transaction costs, which promotes a faster rate of economic growth. In order to grow and develop, SMEs need to rely on suitable and efficient laws. All in all, SMEs in Iran or in any other region need the following requisites:

- Existence of laws that promote the growth of the industrial sector

- Existence of laws for SMEs that would protect them against monopolies exerted by large firms

The main problems confronted by SMEs in these areas are as follows[1]:

- *Registration.* SMEs and all industries have to form and register a company in order to operate. In order for a company to secure loans or to participate in a tender, they must have been registered as a "corporation" in the Organization of Business Registration. This legal necessity to register is causing a myriad of problems for SMEs, as they are dragged into activities and relations that are far beyond their capacity to handle. They have to comply with more than 50 laws in the context of the trade law that will remain binding for both large and small firms. Therefore, as there is no proportionality between the scope of the law and size of the firm, the implementation of these laws poses serious problems for the smaller firms, whose managers must expend considerable time and effort to familiarize themselves with complicated trade laws. The process of registration (and dissolution) of firms can be extremely time consuming, especially for SMEs, and usually takes at least three months.
- *Board of Directors.* In Iran, corporations have to be managed by at least a three-person Board of Directors. The members of the board must be partners in the firm. Therefore, to start a company there must be at least three partners. Suppose two brothers decide to start a business. They would not be able to register their company, unless another person joins them.
- *Starters.* In Iran, a single person cannot start and register a company. At least two persons must register a company (in case of limited liability firms).
- *Changes in the Board.* According to the law, the Board of Directors of corporations must include at least three persons and one managing director for a period of two years. An inspector must be selected for the company for a maximum period of one year. Once the terms of managers and inspectors are over, new appointments have to be made and registered. The implementation of these changes and their registration with the authorities are extremely time consuming and difficult.
- *Other bureaucratic impediments.* The points raised above refer to only two stipulations made by the trade law; there are numerous considerations in the law that necessitate detailed discussion. All in all, the existing trade law bogs down Iranian SMEs in a web of legal considerations. And as these firms lack the requisite legal expertise or cannot afford a commercial lawyer, they become tied down in a complex legal web.
- *Trade disputes.* There are no specialized courts for various laws and, therefore, the degree of specialization of firms is rather limited. For instance, the legal provisions of the trade law are not addressed in a specialized court that tends similar matters. Public courts are responsible for trade disputes, a factor that renders the resolution of legal matters extremely lengthy.

- *Obsolete trade laws.* The trade law and other laws in Iran have not evolved with time. The outdated nature of these laws and their incompatibility with new economic considerations makes them inherently unfavourable for SMEs. For instance, nowhere in Iran's trade law is reference made to the Internet, fax, or new communication tools. The law does not refer to the use of computer and information technologies in the administration of firms, and regards only their traditional systems as being relevant.
- *Codification.* The absence of a coding mechanism in Iran's legal system creates additional complications and even contradictions. The contradiction between the trade and tax laws over the manner in which costs are handled is a case in point.
- *Shareholder managers*. The ongoing economic changes in today's world have resulted in the separation of management and ownership. In Iranian firms, managers must be selected from among shareholders. This limits the use of potential managerial talent that is available on the market.
- *Dispersion of laws:* In Iran, rules governing companies and their operations are scattered in various different laws, and have not been consolidated under a single Company Law. The lack of a Company Law has created a lot of problems for SMEs.
- *Tax laws.* Small firms have to comply with all legal stipulations and provisions concerning tax matters. The tax laws do not differentiate between large and small firms, and their provisions are to a large extent drafted with a view to taxing the operations of large companies. Therefore, compliance with these laws will be extremely costly for small firms that have to prepare legal documents and make tax payments accordingly. Their documents are usually rejected and the amount of tax is decided upon by tax officers and therefore lacks an accurate basis.
- *Labour laws*. One of the characteristics of SMEs is their flexibility and ability to adjust to market conditions. Unfortunately, the labour law in Iran not only does allow the SMEs to operate flexibly, but has also imposed stringent limitations on them. A case in point is the law on hiring employees. When a firm hires a worker, it has to be in accordance with the labour law, and the firm cannot fire him/her without the approval of the Labour Organization. The absence of laws on part-time employment forces industrial executives to hire full-time workers. Should a worker be hired in a small firm with a staff ranging between 10 to 49 persons, the employee will benefit from the following:
    - The employer cannot unilaterally fire the worker;
    - The salary defined by law must be paid on a monthly basis;
    - Workers remain eligible for pay during all official and unofficial holidays;
    - The worker is entitled to 30 days of vacation per year;
    - The worker is entitled to receive a bonus equivalent to 30 days of work;
    - A worker will be entitled to all legal benefit during 26 days of official holiday(s);

- The cost of firing will be equivalent to three months of salary that the employer will have to pay;
- The employer must account for 20% of employer's insurance;
- The employer must account for 3% of the workers' salaries to relevant organizations.

All of the above factors increase the human resource cost and introduce a considerable amount of rigidity in the commercial operations of small firms. In a research exercise undertaken at IMI, the direct and indirect labour costs in Iran were estimated at 5.5 times the amount of direct salary. If considering the hourly wage in Iran to be US$ 1, and supposing that the employer will have to incur $5.5 hourly labour cost, the cost of the workforce is comparatively much higher in Iran than in Mexico (US$ 1.50), the Czech Republic, Egypt, Indonesia, and China (amounting to US$ 1.91, US$ 1.40, US$ 0.41 and US$ 0.30 respectively).

CHAPTER 10

POLICY RECOMMENDATIONS

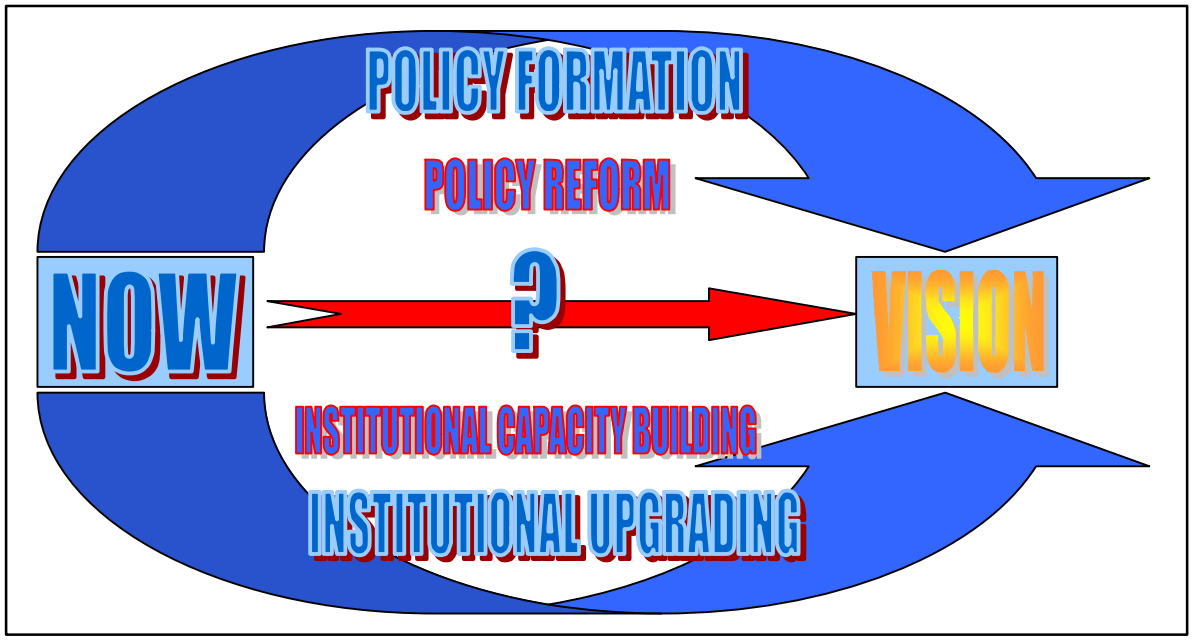
10.1 Introduction

Based on the foregoing analysis and findings, his chapter revisits government's "vision" (see Figure 10.1 below) of the potential economic and social contributions of SMEs and the gaps arising from the marginal role that these firms have hitherto been playing in the national economy. The main purpose of the study has been to search and/or design sound policy frameworks and institutional arrangements by which the present gap could be gradually bridged though short, medium and long-term measures. These measures will now be presented in a set of recommendations entailing policy reforms, institutional capacity building, institutional linkages and, finally, in a number of policy instruments from UNIDO's worldwide experiences with SME development projects.

10.2 Strategic Focus and Related Policy

Figure 10.1, also used in the preface to this study, shows the methodology applied to arrive at recommendations concerning the development and promotion of SMEs in Iran. As explained in the Preface, the "vision" of the government is known and laid down in the Third Socio-Economic and Cultural Development Plan, running from 2000 to 2004. That vision, and the discussions held with the SIO management and other responsible government authorities during the course of this study, have revealed that the views expressed are indeed in tune with the converging global trend on SME development. This has been taken as the point of departure and the framework within which the national SME policies and institutions should be developed.

Figure 10.1: Methodology applied for the present study

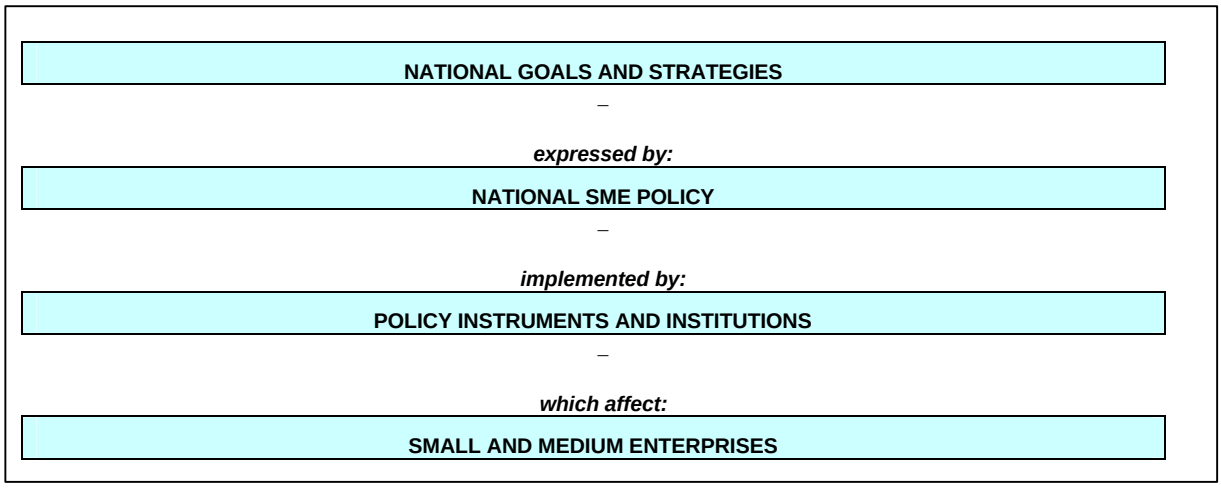


In undertaking an analysis of the policy and regulatory framework that SMEs face, it is useful to distinguish between the policies themselves and the instruments for their operationalization and execution. Policies are basically expressions of national goals and strategies to be achieved in the medium- or long-term future. The implementing measures, however, can be very specific, aimed at a particular sector of the economy, e.g. developing the export sector, innovation capacities, increased competitiveness, or employment generation, etc. These national policies and strategies may relate to the comparative advantage of a country, and/or may be related to economic emergencies, such as emphasizing import substitution. These policies are implemented through three types of instruments:

- *Legal instruments*, such as laws and legislative acts, e.g. investment incentive laws, labour laws, banking acts, training acts, etc.
- *Administrative mechanisms*, such as rules and regulations, e.g. registration requirements and procedures, export licensing, zoning regulations, etc.
- *Direct private sector interventions and assistance by the government in inputs and outputs markets*, such as the direct provision of credit, equipment, or raw materials; the purchase of goods produced by SMEs; venture capital investment; the provision of training and advisory services, etc.

Graphically the policy cycle can be presented as shown in Figure 10.2 below.

Figure 10.2: The policy cycle



The promotion of SMEs to achieve a national goal, such as the achievement of balanced industrial development, calls for a different policy framework, strategies and programmes, than does the promotion of SMEs aimed at the poverty alleviation for a particular target group. It follows that based on the identification of constraints and opportunities of SMEs and the subsequent recommendations, the government will first have to determine the focus of the SME policy based on the national goals and strategies. International best practices will be adapted to suit local goals and conditions, and the officials charged with implementing the improved policies and strategies will have to be provided with the appropriate training. The latter may require a variety of technical cooperation services such as, but not limited to:

- Support for the collection and processing of industrial statistics;
- The establishment of governance information networks;
- The preparation and mounting of technology foresight exercises; and
- More general training and capacity-building activities for policy makers.

Best practices show that there are two main avenues to proceed from the current "now" situation to the desired future "vision" situation. These are:

1. "Policy Reform", which includes policy formulation and the design of policy instruments required to create the macro- and micro-economic framework conditions that are a prerequisite for enhancing the competitiveness of SMEs, which will ultimately result in increased employment and exports. The government will have to be the main driver in this avenue, albeit with support from the private sector.
2. "Institutional Capacity Building", encompassing the institutional upgrading of existing, and the development and design of new, institutions required to provide practical assistance to the SME sector in Iran and enable them to become an important pillar of

the Iranian economy. The private sector, supported by the government, will have to be the main driver in this avenue.

In accordance with this view, recommendations will follow below, giving an answer to the question mark in Figure 1.10, the “how”. In other words the recommendations below will answer the question as to what kind of practical actions are needed to take Iran from the “now” to the “vision” situation.

10.3 Policy Refrom

In Chapter 3, this study discussed the issue of defining the SME sector, as differences in the size of enterprises might give rise to a variety of problems, the reslution of which would need different support measures. Obviously, the better the support measures are tuned to a certain target group of enterprises, the more efficient and effective the result will be. However, the various ministries in Iran do not have a unanimous view on a narrowly defined definition of SMEs. It is therefore recommended that a Council of (relevant) Ministers will decide on a definition on SMEs to be followed up by the Iran Statistical Centre and all other SME actors, in particular the ministry in charge and other agencies to develop the SME sector. It is recommended to have a close look at, and to consider adopting, the definition in use in the EU. The adoption of these criteria would facilitate comparisons between the operation of Iranian and EU SMEs, such as those in Spain, Italy, Greece, or other similar countries, on which plenty of information is available through the annual SME Observatory of EU SMEs. This might lead to the adoption of policies and policy instruments that have been used successfully in some of the member states of the EU with similar problems as those experienced by Iran.

10.3.1 The legal structure and environment

The reform of government policy should be focused principally on creating an enabling environment for SMEs that encourages business linkages and collaborative relationships among SMEs on the one hand, and between SMEs and LSEs/TNCs on the other. At the same time, this enabling environment should promote competition among SMEs, as it is only through living with competition that the long-term productivity and innovativeness of SMEs can be secured. In an enabling environment laws and regulations do not impose undue restrictions and obtrusive controls, hindering the process of entrepreneurship development. Finally, an enabling environment should provide the general countrywide physical and intellectual infrastructure required for starting and running a business. In the meantime, it should provide some individual ad hoc supports, particularly for smaller firms. The individual help packages, however, should enable SMEs to cope with the hardship of early years and /or the critical stages of the business life-cycle or expansion projects, without causing a rent seeking culture and/or a perpetual dependence on the government.

Laws that affect the general ability of people to start and engage in business

- The legal requirements and procedures for starting, expanding or closing down businesses need to be eased. At present it usually takes several months before it is possible to start a business. This waiting period should be brought down to a few weeks at the most.
- A "company law", which is still absent in the country, needs to be designed and developed. In this connection, the present law of commerce, which governs the establishment of companies, could possibly be amended to allow for incorporation of single person companies).

Legal and regulatory requirements related to starting a new business

- The establishment of a limited liability company can only be accomplished by a partnership of at least two people, who must jointly register the company. It is not permitted for a single person to do so. This inhibits the growth of the number of enterprises, and it is therefore recommended that this law be changed so that any single individual can start a new business.

Legal and regulatory requirements related to running a business

- SMEs wishing to bid for government contracts or to qualify for government loans must be registered as companies with at least three shareholders. It is recommended that these excessively severe registration requirements be eased.
- Executive managers are not allowed to run an enterprise unless they are also shareholders. This prevents high quality non-capital owning staff to move to the highest executive position in an enterprise. It is therefore recommended that the functions of executive management be separated from those of ownership in legal documents.
- Trade disputes are handled by public courts, which are not specialized in trade matters and therefore usually take a long time to settle these disputes. It is recommended that specialized courts be established to deal with trade disputes in order to speed up resolutions.
- Contractual arrangements between LSEs and SMEs, especially when working together in a forward or backward relationship, need to be regulated in order to prevent the exploitation of SMEs by the stronger LSEs.

10.3.2 Taxation and fiscal matters

- It is proposed that the tax law should be changed in such a way that a distinction is made between the LSEs and SMEs in taxation-related issues.

- Entrepreneurs in Iran are exposed to a large number of different tax and excise payments. It is recommended that the number of these levies be drastically reduced by the Tax Bureau Office of the Ministry of Finance.

10.3.3 Access to capital

Credit-line for SMEs

At present there are many potential entrepreneurs in Iran planning to start their SME operations, but are unable to do so because they lack access to required funds for a variety of reasons, including totally arbitrarily measures of banks to foreclose on agreed loans.[1] As the number of non-operational businesses continues to grow, this requires the following short term and urgent actions as recommended below:

- Establsihing an inventory of the financial requirements of all non-operating companies;
- Easing the requirements concerning the collateral for obtaining a loan;
- Subsidizing and/or decreasing the rates of interest, in particular for innovative businesses and those located in less developed areas; this can only be a temporary and very restricted solution, as the principal objective to remain within a broad market-oriented framework remains remains unchanged;
- Reducing custom duties for machinery and raw material to be imported;
- Facilitating access to information on all aspects of business including, but not limited to, markets, certification, taxation, raw material provision, clustering, innovation, technology, quality improvement and accounting services.

A longer-term recommendation is to generally improve access to credit at competitive market rates, particularly for businesses with less than 250 employees and in the 11 main industrial sectors which represent 88% of all businesses ranging from 10 to 99 employees. The expected outputs will be:

- Improved bankability of enterprises by assisting them in the fee-based preparation of Business Plans provided by non-financial service organisations (e.g. Business Advisory Services - BAS).
- Relatively low interest rates for borrowers to help reduce costs for the banks;
- Reduced scrutiny of bank loans at bank-level as a result of the formulation of loan criteria in close cooperation between the banks/financial intermediaries on the one hand, and the institutions/firms providing BAS on the other hand.
- A new and creative approach by the banks and financial intermediaries towards the notion of collateral, which is at short supply at borrowers' end.

1 According to information obtained from SIO, there were as many as 8,150 non-operational SMEs in April 2002. This represented a missed chance to employ approximately 100,000 workers.

- Reasonable profitability of such lending schemes for the financial intermediaries by selecting – in close consultation with the institutions/firms providing BAS – pockets of less risky borrowers within the designated category of businesses employing less than 250 employees.
- Improved commercial performance of businesses in the target categories and, as a consequence, an improvement in their ability to repay their borrowings.

Loan Guarantee Fund

A Loan Guarantee Fund (LGF), with an interest rate at least comparable to the level of current loans destined for less developed areas (13%), should be set up by the government. The LGF will guarantee the participating banks to take over a considerable part (e.g. 60% or 70%) of the risk of bad debts of borrowers. As the banks begin to run a reduced risk, they will be inclined to finance more risky projects as well. The expected output would be:

- Accelerated growth of existing SMEs who want to expand their businesses but would not be able to qualify for a loan due to insufficient collateral.
- Increase of small business start-ups by entrepreneurs who have a sound business plan but lack the financial means to start their business.
- Increased employment opportunities for skilled youth and women.
- Increased participation of service providers (consultants, researchers, etc.) in the economy, as they might assist the entrepreneurs in drafting their business plans and guiding them in their business activities.
- Improvements to the fiscal, legislative and regulatory framework (the enterprise environment).

Venture Capital

The existence of risk capital is a prerequisite for innovative business development in production, logistic services and new forms of distribution. A proposal should be worked out to establish a venture capital fund with government assistance, in which various banks will bring together funds to pay for the relatively high-risk and often innovative ventures to be financed. These banks will also be represented in the Board of Directors of the companies to be financed through the venture capital fund.

10.3.4 Employment

General

- Current labour laws cover all types of businesses. More differentiation is required, specifically as regards the "hire and fire" of staff members by SMEs; more flexibility in the labour law tends to lead to more employment generation.
- Consideration should be given to support (through financial arrangements, consulting services, etc.) the completion of the promising and viable projects among the reportedly 8,150 incomplete business ventures currently in existence in Iran.

Youth/Graduates

- Setting up incubation centres for emerging entrepreneurs under the guidance of the centre's management. This should be based on a business plan and for a relatively short period.
- Organising traineeships for youth in SMEs and LSEs in order to familiarize them with business practices and offer the management the option to to recruit the trainee after he/she has proven to be an asset to the company.
- Introducing apprenticeship programmes for youth working in entrepises, in order to allow them to obtain certificates and make them better workers.
- Establishing "ICT Twining Centres", with the idea to twin the bright ICT ideas of young researchers (university graduates) with high-risk investments, and to guide these ICT companies through the first difficult years of their existence, *inter alia* by linking them with incubation.

Women

Carrying out project activities as proposed by UNIDO within the framework of its integrated programme for Iran. These have been summarized in a UNIDO report on "Business Advisory Centres (BACs) for supporting women entrepreneurship in Iran" dated June 2001.

10.3.5 Education and HRD

Manpower skills upgrading, through vocational and on-the-job training, is presently conducted mainly by government institutions. It is recommended that this training should be tuned more specifically to the needs of the SME market, and therefore to transfer these training facilities to the private sector, which would be in a better position to provide market-oriented training. The government's role will be to provide the required funds (financing, topping up and subsidizing), as the trainees will not be in the position to meet all expenditures themselves. In addition, the government could also provide the required physical facilities.

10.3.6 Technology application

Technology support, such as R&D facilities (e.g. through universities), innovation centres, high-tech testing facilities, etc., should be designed and developed. These should be aimed primarily at such priority industries as textiles, glass and ceramics, food processing and electronics.

10.4 Institutional Capacity Building

Our recommendations for institutional capacity building are addressed at two distinct levels: the government level and the private sector level.[1] The significance of this separation is to indicate whether the public or the private sector should have the primary responsibility for the development of the specific institutional structures mentioned below. However, it should be understood that irrespective of who will be ultimately responsible*, institutional capacity building is a joint effort of both the public and the private sector,* which may also need the contribution of multinational agencies. This means, *inter alia*, that government financial support for private sector business support institutions may be indispensable for their survival. For the government this should not be considered as a "cost" but rather as an "investment", as business support organisations will have a positive effect on the financial business results of the SMEs, and will hence stimulate an increase in government income from tax revenues.

10.4.1 At the government level

A. An institutional framework for sustainable SME development

Key elements

This recommendation covers the establishment of an institutional structure for sustainable SME development. It should be emphasized that the establishment of such an institutional model to improve the operating environment for SMEs can only be achieved through the adoption of a coherent and comprehensive programme of coordinated activities implemented by both central and local government authorities, with international support where necessary and appropriate. The institutional framework, and the programme to establish and operate it, should have the following characteristics:

- *Clear and transparent structure*, with an unambiguous delineation of the responsibilities and tasks of the various actors involved in the SME development process.
- *Open cooperation and exchange of information* between the various public- and private-sector organizations active in promoting SME development.

1 The private sector in this context is include the whole range of essentially autonomous institutions that can have an impact on SME development, such as chambers of commerce, industry associations, academic institutions, certification firms, consultancy firms, entrepreneurs, etc., even if they may be partially) funded by the government.

- *Clear understanding of the policy cycle,* involving policy design, policy implementation through the application of appropriate legal and regulatory instruments, and feedback of results to permit policy any policy revisions that may be found to be necessary.
- *Ownership by the SME sector,* giving entrepreneurs a strong share of the responsibility for the development of their businesses.
- *Separating policy design from policy execution*, of which the former is the prerogative of the government while the latter is mainly the responsibility of the non-government sector.
- *Stimulating the establishment of business support organisations* (BSO) and related non-government organisations (NGOs) to provide direct support to the SME-sector.

The concept boils down to creating an enabling environment for small and medium-sized businesses, so that favourable policy interventions from above and the responses triggered by them from below will have a maximum chance to be effective.

A possible policy implementation tool: the "SME Development Agency"

As noted above, the principal focus of the government with regard to an SME policy should be on *policy design* rather on *policy implementation*, which should be left primarily to the private sector and semi-autonomous public-sector business support organisations with a definite role in implementing policy, such as Export Promotion Boards, Chambers of Commerce, etc. To enhance the operational effectiveness of such a structure, this study proposes the creation of a specific *SME Development Agency* at the national and/or provincial level to serve as a hinge between the policy-making organs of the government on the one hand, and the policy-executing bodies (such as the private and semi-autonomous public-sector BSOs) and enterprises on the other. The recently established SIO could be adapted to serve as such an SME Development Agency, with appropriate outreach facilities being developed to the provincial level.

Such an SME Development Agency would be expected to undertake or promote four major functions, as discussed below and presented graphically in Figure 10.3:

1. *Accelerating business development* by establishing or strengthening BSOs for medium, small and micro enterprises throughout the area of jurisdiction and, in addition, identifying the specific support services or interventions that need to be provided to the SME-sector. More specificall, this function entails:
    - *Supporting, strengthening and stimulating the establishment of relevant BSOs*, such as business advisory services and incubation centres (especially for youth enterprises), training institutions, business associations, innovation centres, employers' associations, etc., and supporting efforts to promote foreign direct investment, in order to assist the further development of the SME sector.

- Select *training institutions* inside and outside the Agency's jusrisdiction and develop curricula for specific courses needed by the local SME community, which these institutions could be sub-contracted to teach.
- Stimulate the development and training of a *local consulting capacity*.

2. *Providing information* to the SME sector about new government policies and policy instruments, such as incentive schemes, and monitoring the results of these policies and policy instruments. The specific activities covered by this function include:
   - *Collecting business information* (research data) from the enterprise level, analysing these data and disseminating them to the business sector and governments. Reliable empirical data are required to inform the government about the effectiveness of its SME policies, and to provide private sector business associations and relevant BSOs with analyses of the results in order to enable them to take corrective actions.
   - *Connecting with business databanks* in other parts of the country, region or world (to promote the domestic and foreign marketing of SME products).
   - *Issuing publications* to disseminate information about the importance of SME development and the results achieved.

3. *Coordinating the support activities of BSOs* and the programmes of the government and/or international donors so as to increase effectiveness of the support services provided to the SME sector. This would also entail the following:
   - *Building up contacts with international donors* to help to link and tune their assistance so that it contributes towards a coherent development of the SME sector.
   - *Becoming a natural entry point* for SME support programmes operated by the government, donors, external NGOs, or other private sector agents.
   - *Developing and maintaining good contacts with SME-related institutions*, such as banks, universities, industrial estate planners, etc.

4. *Lobbying* – when the SME Development Agency is well-established and legitimized as an independent entity, it can support lobbying efforts on behalf of SMEs, or take an advocacy position as a lobby organisation itself, either on its own or jointly with a business association or a relevant BSO. The Agency can represent SME business associations and/or individual enterprises to government authorities, to discuss social, legal, economic, trade, industrial and other matters important to SMEs. In this, it will function as a professional body, without any political objective.[1]

1 Lobbying includes discussions with government officials on: (a) improving the legal framework (e.g. licensing procedures), (b) adapting fiscal regulations (e.g. equal tax treatment of private and co-operative entrepreneurship), (c)

The institutional set-up

The SME Development Agency, as a not-for-profit organisation, should ideally have a Board of Directors, composed of high level representatives of the national and provincial governments, the business community (selected sectoral business associations and entrepreneurs), banks, social welfare NGOs, trade unions and universities. The representation of female entrepreneurs should specifically be ensured. The Board will decide on the strategic matters related to the Agency, approve its annual budget, and be charged with the appointment and/or dismissal of the Agency's management.

The Agency should be a strong operational unit. Management and staff should be familiar with problems at the entrepreneurial level, show decisiveness, and be practical and flexible in their assistance to the enterprises, government bodies and non-government institutions alike (for job descriptions of the staff of such an agency, see Annex 5). In addition, the entity should be able to work at a professional policy level as well, in order to be able to advocate effectively the specific and/or general needs of the SME sector at all levels of local, regional and national government. Most importantly, the management and staff should have the confidence of the business community, which must be convinced that the organization is truly advocating their demands and not simply those of the government. If the Agency is unable to gain the confidence of the entrepreneurs, will fail miserably in its mission.

The SME Development Agency should not perform all activities by itself, but *sub-contract* as many as possible to specialized institutions. These could be both government organisations and non-government organisations or private companies, with whom the Agency would combine to form a multi-agency network. Such a multi-agency network should be an independent public/private body, ultimately financed partly by fees or a percentage of the contract sum for contracts offered to the BSOs, such as business associations, employers' associations, business advisory centres, training institutions, research institutions, business incubation centres, etc.

While seeking to recover some of its costs through the provision of market-oriented services, the SME Development Agency will nedd to be partially financed by the government. It should be understood that any such agency – in whatever economy – would never be able to cover all of the costs incurred in the execution of all the tasks it will be mandated to perform. Even in developed market economies there is continued government involvement in both the type of agencies described here and in relevant NGOs, so as to optimally stimulate business development.[1]

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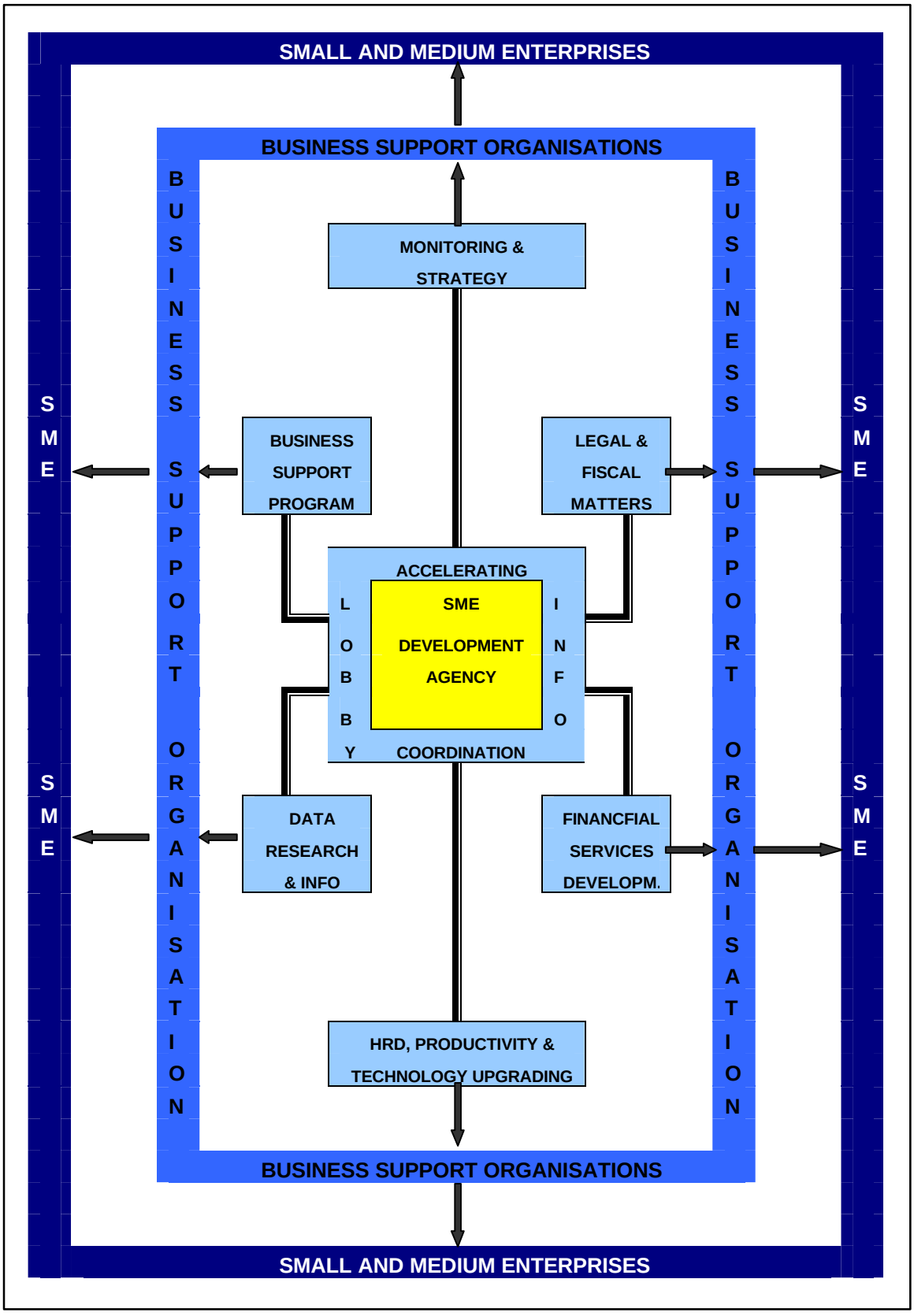
financial conditions (e.g. availability of credit at reasonable conditions) and/or, (d) public works (providing and maintaining infrastructure for the SME sector).

1 In The Netherlands for instance, the government annually ploughs back approximately US$ 500 million into SME development agencies from the roughly US$5 billion of taxes levied on that sector. This 10% seems to be a worthwhile "investment" for the government, since taxes levied from SMEs are increasing each year, ultimately resulting in an increase in tax income that exceeds the value of the "investment".

Figure 10.3: The SME agency as the basis of a multi-agency BSO network



Monitoring and adjustment of policies and instruments

The SME Development Agency should also take on the responsibility of monitoring and assessing the results of the steps taken towards sustainable SME development. There needs to be regular feed-back on the validity of the policies developed and the instruments applied in practice. To that end, two specific sets of actions will need to be provided for:

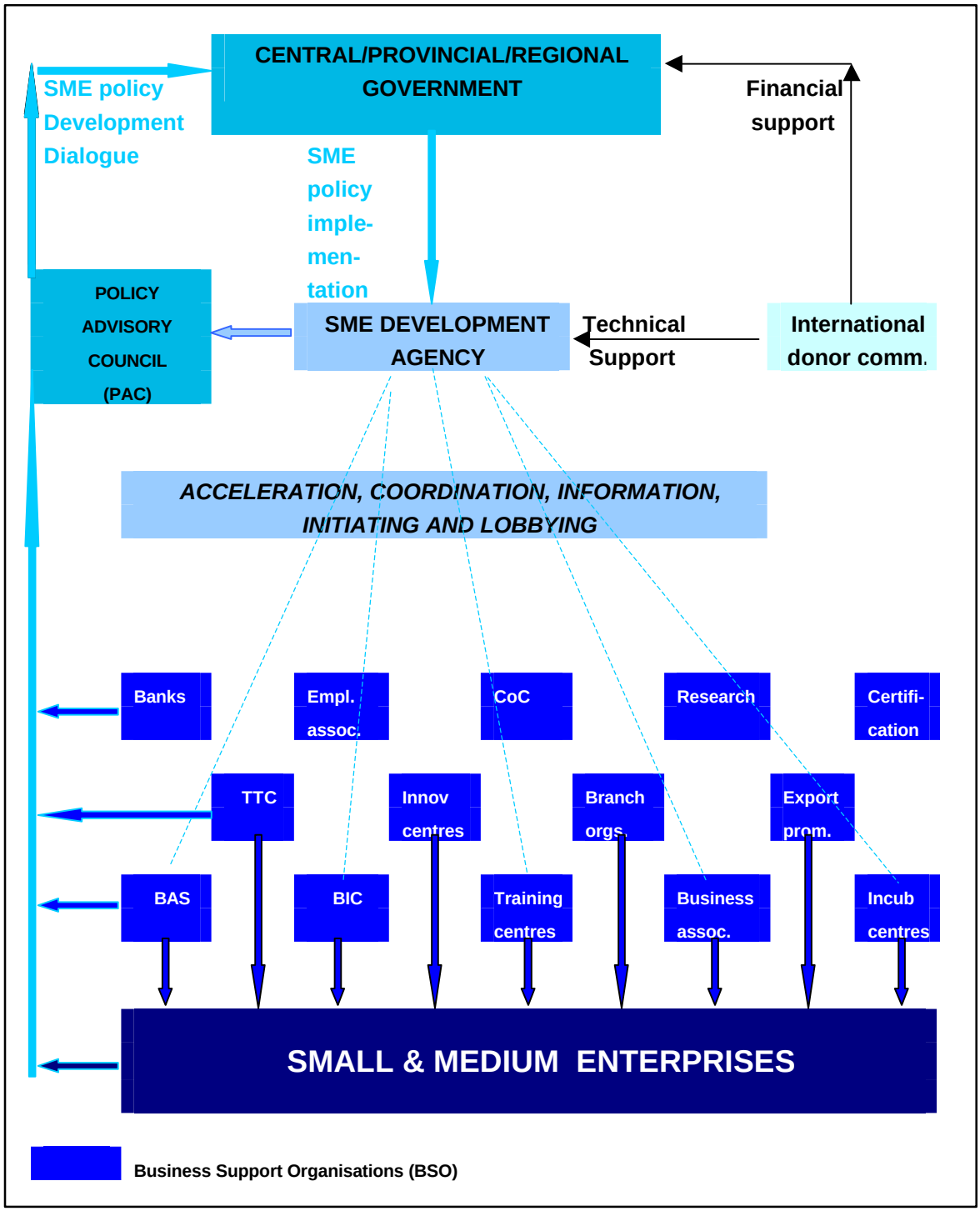
- A feedback of the results of the policies/instruments implemented at the entrepreneurial level to the SME Development Agency. The Agency will have to undertake the required research on the data coming from all BSOs and from the businesses themselves. These data will be analysed, interpreted and submitted to both the government and the intermediate BSOs. The feedback will include recommendations on fine-tuning, changing or developing new policies.
- The establishment of an SME Policy Advisory Council, consisting of members of the business community (including female entrepreneurs), BSOs, banks, NGOs, local government, employers' organisations and trade unions. This Council will be the sparring partner of the government in designing new and/or adapted policies, although the government will, of course, continue to bear the ultimate responsibility for designing such policy.
- This model could be extended to permit an additional direct channel of communication for SMEs and BSOs with the government to permit a degree of decentralization of the system.

A Possible Institutional Framework

The model presented above is depited graphically in Figure 10.4, in which the following major levels of activity can be distinguished:

- *The government*, which will be responsible for policy design and review, in close consultation with the Policy Advisory Council and the SME Development Agency;
- *The SME Development Agency*, which will serve as the hinge between the government and the public- and private-sector BSOs, and will be responsible for implementing the SME policies through various policy instruments.
- *The Small and Medium Enterprises*, constituting the recipients of the business services provided by the SME Development Agency and BSOs.

Figure 10.4: Institutional structure of policy framework for SME development



Notes:
BAS = Business Advisory Services;
Business assoc = Business Association;
Empl. assoc = Employers Association;
Innov. centres = Innovation centres;
BIC = Business Innovation Centres
Incub. ctrs = Incubation Centres;
CoC = Chamber of Commerce
Branch orgs = Branch organizations
TTC = Technology Transfer Centre
Export prom. = Export promotion

B. Establishment of a Ministrial Council for SME development

Another important recommendation within the framework of institutional capacity building for SME development calls for the establishment of a Ministrial Council for SME Development and Promotion within the government, in which all relevant ministries will be represented. This body will be charged with the task of coordinating and tuning the various government policies and policy instruments directed towards the development and/or promotion of SMEs. The Council should be chaired by ministry principally responsible for SME Development. Alternatively, it may be attached to the Office of the President, and be presided over by the same.

This Ministerial Council will work in close consultation with the SME Development Agency, being the implementer of government policies, as well as with the Policy Advisory Council in designing SME-related policies for the country.

C. Metrology, standards, testing and quality

It is recommended that the existing infrastructure for metrology, standards, testing and quality (MSTQ) be carefully reviewed and improved or strengthened as necessary. Such an infrastructure, which includes the setting of official standards with regard to the safety of manufactured products, is of critical importance as an instrument for consumer protection. In addition, the setting of improved quality standards will help to enhance the international competitiveness manufacturers and stimulate increased exports.

D. Export promotion packages

Export promotion in Iran is primarily geared towards LSEs. In order to stimulate the export capacity of SMEs, specialized export promotion packages may be developed by an Export Trade Promotion Organisation. Such a package might include assistance for export-oriented product development (identifying and exploiting comparative and competitive advantages), organizing and co-financing the participation of Iranian SMEs in foreign exhibitions and fairs, supporting the adoption of improved packaging methods and transport logistics and, finally, helping SMEs to obtain working capital to finance their letters of credit.

10.4.2 At the private-sector level

Many of the policy instruments recommended below as a means for effectively promoting SME Development have – in one way or another – already been applied in Iran, either as an experiment or as a-stand alone support service for SMEs. The impression has nevertheless been gained during the preparation of this study that the performance of these support services could be significantly improved, and that their application could be extended and better coordinated.

A. SME cluster and network development

The development of SME clusters and networks offers an effective instrument for raising the competitiveness of Iranian SMEs, as it provides them with opportunities to benefit from collective efficiencies arising from joint actions in obtaining raw material, meeting import requirments, and improving logistical systems and production technologies to derive both an increased quantity and improved quality of their output, to enable them to serve larger markets and develop forward and backward linkages with LSEs. In addition, the SMEs retain their flexibility, which is an important asset required to react instantaneously to market changes. Finally, because of the regionally distinct nature of SME clusters, their existence will facilitate the emergence of various support institutions in such areas as R&D, training, export promotion, and financial service, who will be able to provide more targeted services at a lower cost.

B. Consulting services for SMEs

In many cases sonsulting services work exclusively for LSEs, as SMEs are not always in a position to properly assess the benefits of such services, or have funds to pay for them. It is therefore recommended that:

- Specialized consulting services for SME-related problems in entrepreneurship, management and business development should be established and promoted to provide SMEs with advice on such issues as:
    - Financing (business plans, feasibility studies);
    - Marketing for domestic and export markets;
    - Production technology, innovation, certification;
    - Joint ventures with domestic and foreign businesses; and
    - Developing forward and backward linkages with LSEs.
- Government facilities should be introduced to help SMEs cover a portion their consulting expenditure, e.g. by providing vouchers to entrepreneurs, which can be used to buy consulting services.

C. Science & Technology Parks

The establishment of science and technology parks like the Ghadir park in Isfahan should be given more attention. Given the need for Iranian SMEs to become more competitive, and thereby to generate more employment opportunities and exports, more innovative production methods using more sophisticated technologies need to be developed.

D. Business & Innovation Centres (BICs) and R&D Technology Transfer Centres

Attention needs to be given to the development of business centres working in close cooperation with the various technical universities in Iran. Such centres would help to identify and disseminate newly researched technologies and the empirical findings of enterprises

applying these technologies, in order to help SMEs develop innovative new products and/or production methods, and so to be more competitive in export markets and against imports in the domestic market. Such Business and Innovation Centres (BICs) could be located in vacated old, but refurbished, buildings and could provide low-cost accommodation to 20-30 enterprises, who would also receive a variety of consulting and operational business services (accounting, communication, power/energy, security, etc) from the centres. The establishment and operation of these BICs would require:

- A private or public development agency in charge of establishing and managing the BICs, and providing consulting and operational business services to the enterprises in the centres at fees which will cover the cost of the BICs' operations.
- The establishment of contacts between the enterprises in the BIC and appropriate faculties of Iran's technical universities in order to give these enterprises the opportunity to access the results of technical research and give the universities and opportunity to obtain feed-back on the application of the new technology in practice, thereby enriching the technical research. This linkage might lead to researchers being included in technical projects, which again will have a positive impact on the development and applyication of new technologies.

E. Business Incubation Centres

The establishment of business incubation centres may be considered. Such incubators assist emerging entrepreneurs launch their businesses by helping them to draw up a business plan and providing them with an initial location for their business. These incubators house, at a very low rent, various production and service businesses for a relatively short period of time, during which they will be given assistance by the management of the centres in such fields as production, marketing, pricing, book keeping, etc., in order to enable them to conduct their business in a profitable manner. Other central services may include secretarial support, fax and telephone connections, and computer and E-mail facilities. After an initial period, in which the firms have to prove their ability to stand on their own feet, they are made to move out and acquire their own facilities, thereby making room available for other emerging entrepreneurs.

F. One-stop-shopping

The introduction of the "one-stop-shopping" concept for entrepreneurs, whereby many business and information services for entrepreneurs are brought together under one roof, would also assist the development of entrepreneurship. It would enhance the quality of support given to entrepreneurs, and make it more efficient and effective.

G. Access to information

A major complaint of entrepreneurs is the lack of information about opportunities in both domestic and export markets, prices, technologies, ICT possibilities (E-commerce), sector specific issues, taxation, general business rules and regulations, etc. It is recommended that as

part of the institutional framework to be strengthened and/or developed, specific attention should be paid to the development of means for the dissemination of such information to SMEs, using all possible media, such as radio, TV, magazines, and the internet.

Prior to the launching of such an information collection and dissemination programme, it will, of course, be necessary to identify the precise nature of the information required by both the SMEs themselves and all relevant private and public support institutions. The collection of such data and information, which will have to be coordinated with the Statistical Centre of Iran, will also be useful for the purpose of monitoring the results of policies and implementation instruments adopted by the government and business support organisations.

H. Entrepreneurship development

The success of an economy is to a greater or lesser extent dependent on the endowment of raw materials in the country, the geographical location, climatic circumstances and some other factors. To a very large extent, however, the economic performance of a country is dependent on the quality of its human resources. In this context, the development of entrepreneurship is an imperative if the country wants to enhance both its international competitiveness and stimulate the creation of more jobs. It is therefore recommended to:

- Encourage the creation of an entrepreneurial culture in the country, specifically among the youth. They should be brought into contact with successful independent business leaders, who should serve as role models. Temporary work programmes should be promoted for young people during vacations and holidays. In particular, they should be familiarized with the process of independent business management.
- Promote the establishment of private management and/or entrepreneurship training institutions at various levels, i.e. for starting micro-businesses as well as small and medium-sized businesses;
- Offer national prizes to entrepreneurs for specific business achievements in the area of innovation, exports, job creation, and the like. The annual prizegiving ceremonies should be broadcast in TV and covered by the other media as well.
- Establishing “ICT Twinning Centres” with the idea of twinning bright ICT ideas of young researchers with high-risk investments, and to guide these ICT companies through the first difficult years of their existence. These ICT Twinning Centres could also function as a focal point for SMEs to introduce E-commerce and E-business successfully into their operations.

10.5 Implemention of Recommendations

In implementing the recommendations as set out in this chapter, one should not only look at the barriers inhibiting SME growth and development that have been identified in this study and described in some detail in Chapter 9. One should also look at what has already been

accomplished in the area of SME development. The following points may be mentioned in this connection:

- The Small Industry Organisation (SIO) has been established in 2001 with the purpose of concentrating the support services for the SME sector and assisting SMEs to achieve higher growth;
- Financial and fiscal policies are presently under scrutiny and proposed changes may have a positive effect on the SME sector. In addition, there is a relatively wide network of banks throughout the country, through which entrepreneurs can be reached;
- There is an impressive educational infrastructure in the country in terms of the TVTO and other institutions up to university level, which could all serve as a basis for improving professional and/or entrepreneurial skills and expertise;
- In its human resources development policy, the Iranian government is not only keen to getting more women involved in the SME sector, but their share in the labour force is also increasing;
- There are a number of ongoing experiments in the field of business support organisations, such as Business and Innovation Centres (BIC), Special Economic Zones, Science Research & Technology Parks, Business Incubation Centres and Clusters. Although many of these programmes are in their infant stage, the positive and negative experiences with them could be useful when reviewing the systems with a view to overhauling and/or expanding them;
- Backward linkages have already begun to be developed in a significant way in the automobile industry, and given the projected expansion of this industry, these linkages are expected to expand as well. This development may serve as an example for other industrial sectors;
- Although intended predominantly to serve the LSEs, a network of consultants (NIMEC) has recently been established, which could form the basis forthe establishment of consulting services to serve SMEs only;
- Although the compilation and dissemination of relevant information about the SME sector needs to be improved, the Statistical Centre of Iran already constitutes an important part of the infrastructure required to improve the flow of adequate and relevant information;
- Iran already has an environmental policy, which provides a good basis for further improvements.

In other words, both the existing weaknesses and strengths should be taken into consideration when developing a road map for implementing the recommendations. This means that current developments, organizations, structures and the like should be taken as a starting point for a further strengthening and improvement of the SME support system through project activities.

Chapters 2 to 9 of this study have presented a thorough identification of these strengths and weaknesses.

The best practices and experiences of other countries in upgrading their policy frameworks and institutional structures to achieve their governments' visions of an improved SME sector in terms of both increased exports and job creation have taught policy implementers to follow a certain sequence as outlined below:

1. Conducting discussions on the results of this study with all of the main actors in the field of SME development with the purpose of making an inventory of the required actions to be undertaken, based on the recommendations as made in this chapter.
2. Prioritizing these actions to undertaken on the basis of these discussions and the recommendations to emerge from them. In this regard experience teaches us to concentrate first on:
    - Agreeing on an "integrated strategy framework for SME development" encompassing needed projects, in order to get from the current situation to the vision;
    - Agreeing at government level about the establishment of a Council of Ministers giving concerted and coordinated directions for SME development under the chairmanship of the responsible minister in charge of SME development;
    - Agreeing to initiate the establishment of an independent SME Development Agency, and enabling it to function as a counterpart for dealing with and coordinating the interventions of the government and/or international development agencies resulting from this SME strategy document. In a simultaneous effort this SME Development Agency will be subject to a project to train its staff members and to professionalize the agency;
    - Agreeing on the prioritization of the actions to be taken with regard to SME development within the framework of the integrated programme for Iran, which will have to be closely tuned to the available financial support this may require.
3. Selecting and inviting international development agencies to submit technical proposals to the Minister-in-charge of SME development for project activites as agreed to according to the prioritization. In this regard, UNIDO has provided information on project proposals in the next chapter, Chapter 11, which it has successfully carried out in other developing economies all over the world.

CHAPTER 11

PROJECT PROPOSALS FOR IMPLEMENTATION WITH THE TECHNICAL COOPERATION OF UNIDO

11.1 Introduction

This chapter will focus on possible inputs of UNIDO in the field of policy formation and policy instruments for SME development, in which the Organisation has a worldwide track record. In this respect, this study must also be seen as another important document in addition and complementary to the ones already made by UNIDO in assisting the government of Iran, such as the recently completed project on the delivery of a draft for a new FDI law in Iran (2002), needs assessment for women entrepreneurship (2002), the "Industrial Sector Survey on the Potential for Non-Oil Manufactured Exports" (1999), and the "Industrial Development Review" (1995). Finally, in the field of international labelling and environmental regulation – two issues again of great importance for this present SME study – UNIDO has been assisting the government of Iran with 53 ongoing projects to the tune of more than US$ 19m. within the framework of the Montreal Protocol. Obviously, UNIDO possesses the necessary background expertise of the country as well as the required national and regional information to optimize the results of projects undertaken by their consultants.

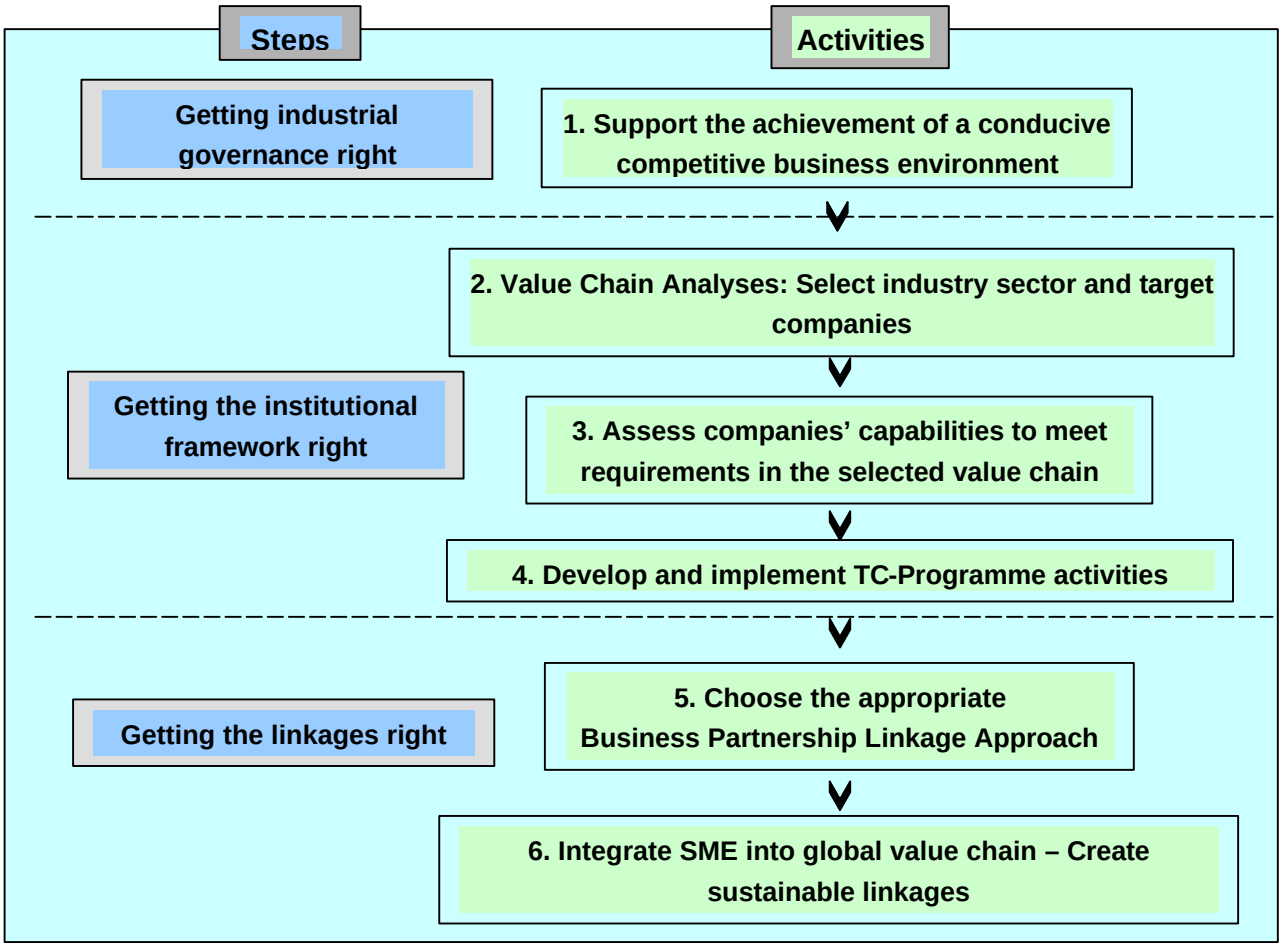
As regards this present study on the potential for SME development in Iran, there are two important issues related to the "vision" ultimately being propagated by the government, i.e. to create a sustained capability to generate jobs for new entrants into the work-force and to create a similar sustained capability to enhance the country's export capacities by diversifying beyond its present dependence on the export of oil and oil products. As has been discussed, these two issues are strongly related to enhancing the competitiveness of the SME sector, which will enable enterprises to compete successfully in the international market and to become players and partners in the globalized world. The latter requires, inter alia, FDI and the linking of local SMEs with national LSEs and/or foreign TNCs. This, in turn, requires the adoption of appropriate government measures to create an enabling environment for this to happen.

In the Preface and in Chapter 10, two separate but related approaches to achieving these objectives were suggested, i.e. policy reform and institutional capacity building. Taking the growing trend towards internationalization and globalization into account, a third approach may be added at this juncture, i.e. promoting sustainable SME-TNC linkages. These three approaches can be conceptualized in a series of steps as illustrated in Figure 11.1. This diagrammatic representation provides a logical sequence of activities to facilitate the

development of SMEs in Iran in accordance with the recommendations in Chapter 10, and the subsequent insertion of Iranian SMEs into the global value chains. This framework is based on a combination of extensive research and experience, and its various components have been successfully applied by UNIDO for many years and in a large number of countries. To assist the public- and private-sector counterparts in Iran to achieve these goals, UNIDO can offer technical cooperation and support through three different types of projects as follows:

- Technical cooperation to create a suitable business environment – "Getting industrial governance right"
- Technical cooperation to prepare local SMEs for partnerships – "Getting the institutional framework right"
- Technical cooperation to facilitate matchmaking – "Getting the linkages right"

Figure 11.1: The three steps to sustainable SME development in a globalized environment



Source: UNIDO, *Supporting SME Development through Sustainable Business Linkages*, February 2002, p. 7.

Against this background, the remainder of this chapter will outline the range and scope of actions required under each of the three steps listed above, and the specific project activities proposed by UNIDO to be undertaken in response.

11.2 Getting Industrial Governance Right

While the causes for inter-country variations in the performance of SMEs span a wide range, an important subset of these causes is often related to the policy and regulatory framework prevailing in a particular country, and the resulting differences in the business environment. The difference in performance is, in addition, often exacerbated by the persistence of more fundamental differences in economic and industrial governance, which may have both benign (e.g. inadequate inter-agency information flows and coordination) and malign (e.g. corruption) origins.

Recognising that an improvement of the broader governance framework often constitutes a critical precondition for SME development and promotion, UNIDO proposes a number of support services to assist Iran. These proposals are based on the recommendations in chapter 10 as well as UNIDO's experience in Iran[1] and other developing economies, and range from macro-level policy advice to specific tools intended to support policy-makers in obtaining, processing and sharing policy-relevant inputs for appropriate and effective policy formulation and implementation. The former include support for the drafting of broad industrial policies and strategies, as well as specialized advice for the formulation of more focused investment or SME promotion strategies.

In the case of Iran, particular emphasis may be given to sector-oriented development approaches targeted at specific industries. For example, the country's leading industrial branches include food products and beverages (1,987 firms), textiles (1,540 firms) wearing apparel (395 firms), leatherwear and products (366 firms), chemicals (572 firms), rubber and plastics (582 firms), non-metallic minerals (3,324 firms), fabricated metals (933 firms), machinery and equipment (969 firms), electrical machinery and apparatus (295 firms) and furniture (356 firms).[2] These eleven sectors constitute 88% of all businesses with 10-99 employees. Many of these industries may have a distinct geographical focus. Each of these industrial growth poles contain own account workers; micro-, small- and medium-sized businesses; and large enterprises. In addition, each of these sectors often depends on a number of supporting sub-sectors. One might therefore consider the formulation of specific strategies for each of these sectors. Since the SMEs in many of these sectors may also be concentrated in certain regions, such a sectoral approach may include a regional development approach as well.

1 See the various policy studies listed at the beginning of this chapter that UNIDO has carried out in assisting the Iranian government in policy formation concerning the industrial sector, export of non-oil products, FDI law, and participation of women in industrial development.

2 Iran Statistical Yearbook 1378(1999/00), chapter 7; the numbers of companies (cies.) between brackets behind the indsutrial products, constitute enterprises from 10 to 99 employees only

It follows that based on the identification of constraints and opportunities of SMEs and the subsequent recommendations, the government will first have to determine the focus of its SME policy depending upon the national goals and strategies. International best practices will be adapted to suit local goals and conditions, and the officials charged with implementing the revised policies and strategies will be provided with appropriate training. The latter provides opportunities for a variety of technical cooperation services such as, but not limited to:

- Support for the collection and processing of industrial statistics;
- The establishment of governance information networks;
- The preparation and mounting of technology foresight exercises; and
- More general training and capacity-building activities for policy makers.

These are all areas in which UNIDO could provide support services to policy-making and executing bodies in Iran, if required.

11.3 Getting the Institutional Framework Right

The policy-related support measures discussed above can make a major contribution towards strengthening the competitiveness of Iranian SMEs and helping to attract the interest of potential foreign partners for them. They nevertheless represent merely a necessary and not a sufficient condition for the successful development and promotion of the Iranian SME sector and its ability to penetrate wider markets, either directly or through their integration into broader national, regional or global value chains. This study has revealed that the SME sector is indeed confronted with serious challenges that still need to be addressed, such as:

- *Shortage of skills.* While the capacity of SMEs to absorb labour with low skill levels may be one of their principal advantages in Iran, the lack of entrepreneurial, managerial and technical skills also inhibits their capacity to grow and enhance their competitiveness. This is a particularly serious disadvantage in the current age of globalization, where the increasing liberalization of trade is making SMEs vulnerable to external competition in both foreign and domestic markets.
- *Inability to meet international standards.* Due to the small scale of their production and their frequent dependence on low skill and technology levels, SMEs in Iran are often unable to meet the increasingly strict technical, environmental and social standards being applied in many countries. This hampers their ability to tap international markets, and even to compete against imports.
- *Inadequacy of support services.* One of the principal weaknesses of SMEs anywhere in the world arises from the fact that they are unable to internalize a variety of necessary support services, such as design, testing or marketing. These services consequently need to be bought in, which in turn presupposes the existence of an independent SME Development Agency and a network of BSOs, both in the public and

increasingly in the private sector. As has been observed in the study, these BSOs are often not available in sufficient numbers or at the appropriate quality. This further hampers the growth and upgrading of SMEs to a level at which they can compete effectively in the liberalized international trading environment of today.

- *Lack of internal economies of scale.* Almost by definition, SMEs are unable to benefit from internal economies of scale. Their comparatively small size prevents them from placing or accepting large orders, investing in "lumpy" plant and equipment, adopting and adapting new technologies, undertaking training and other HRD activities, etc.

To help overcome these and related constraints, UNIDO is able to provide a variety of associated institutional capacity-building measures. It is recommended that this should be done in close consultation with a specialized SME Development Agency, whose establishment was proposed in the previous chapter and which would function as an important counterpart for UNIDO. In addition, the Organization could help to promote the establishment and/or strengthening of SME associations and organizations, on the understanding that the policy support measures can only be effective where appropriate mechanisms exist for dialogue between policy-makers and those who are affected by the policies. As in other developing economies, SMEs in Iran generally lack the political and economic influence of their larger counterparts (LSEs), and are therefore seldom able to ensure that the policy and regulatory framework within which they operate fully meets their needs. While the resulting biases against them may not necessarily be deliberate, as for example in the case of excessive reporting requirements, they may nevertheless impose a significant burden on the SMEs. It is therefore important that SMEs are given the necessary political representation to enable them to present their needs to policy makers. This initiative will directly and indirectly strengthen the functioning and performance of the SME Development Agency and its subsidiaries throughout the country in its gestation period.

Based on the weaknesses identified in this study on the one hand and UNIDO's experiences and expertise on the other, various specific interventions may be offered by UNIDO to support the efforts of the Iranian counterparts to promote the development of the country's industrial SMEs. These measures are summarized below.

Business Information Networks (BIN)

The BINs are intended to serve as one-stop shops offering easy access for SMEs to all the necessary forms of local, regional and international business information and knowledge that might require, including market intelligence and information on technology sources, investment partners, environmental regulations, etc. The system is internet-based, but also accessible to non-internet users through the establishment of physical business information centres in strategic locations. Based on a model successfully applied by UNIDO in Sri Lanka, the BINs are themselves established as SMEs, with shareholders from both the public and private sectors. They are thus designed and set up to operate on a commercial basis from the outset, with all services being fee-based. To ensure financial sustainability during the difficult first

years, additional services are offered that later may be outsourced, e.g. internet service provision tailored to the needs of SMEs, e-commerce solutions and IT training.

SME cluster and network development

The SME cluster and network development programme is one of UNIDO's most well-established support programmes for SMEs, and is aimed at helping such firms overcome the constraints arising from their small size and resulting inability to realize economies of scale by joining together to achieve external economies and collective efficiencies. The programme comprises a combination of country-level technical cooperation projects, the most advanced of which are currently being implemented in India and Central America, and the development of related methodologies and tools such as a cluster development methodology, a Manual on network promotion, training courses for cluster/network development practitioners, and joint learning workshops. The next stage of the development of the programme will involve the design and implementation of a regular global training course drawing on UNIDO's own and outside expertise. This training course, which is currently still under development, will be intended to benefit practitioners from private sector institutions, NGOs, donors, governments, banks, etc., and is expected to be held once a year in Europe in cooperation with a relevant research institution. Preliminary discussions have already been held with the SIO for the initiation of a project to develop a number of selected SME clusters in Iran, and it is hoped that the project will be initiated in the near future once the funding modalities have been clarified.

Metrology, Standards, Testing and Quality (MSTQ)

The MSTQ programme offered by UNIDO could represent a helpful response to the increasing need for SMEs in Iran to demonstrate compliance with a growing range of international standards and technical regulations if they wish to participate fully in the liberalized international markets. A properly configured institutional infrastructure related to MSTQ is thus a prerequisite for the development of SMEs, and for their ability to establish linkages with large buyers, industrial partners and potential investors, who are often particularly stringent in their demands for evidence of compliance with such standards. In order to enable developing countries to meet these requirements and overcome the technical barriers to trade that they represent, UNIDO has developed a comprehensive programme providing all the necessary technical assistance to developing countries to strengthen their MSTQ facilities and gain international accreditation. This programme thus serves an important function of trade facilitation and export promotion.

Business Advisory Services (BAS)

UNIDO has considerable experience and expertise in assisting developing countries to establish and/or strengthen local providers of Business Advisory Services (BAS). The UNIDO programmes have the dual objective of assisting the providers of the services in developing cost-effective, efficient and well-managed service packages in such fields as marketing, production management, quality standards, productivity improvement, etc., for their client

SMEs, and at the same time of assisting these SMEs in developing an awareness of the need and benefits of obtaining such services, which should ultimately lead to a better commercial performance of the businesses in general. The outputs of such a programme might include:

- The strengthening of existing public and/or private institutions or firm with sufficient spread throughout the country, in order to enhance their capability to provide specific identified business services to the target group of micro and small businesses in the main industrial sectors and related sub-sectors;
- Assistance with the establishment of such institutions and/or firms if they do not already exist;
- Training for professional BAS staff in providing selected business services.
- A chain of centres throughout the country to provide BAS at the "enterprises' doorsteps", i.e. on-the-spot delivery of services tuned to the needs of the enterprises.
- Provision of affordable and sustainable fee-based services, albeit possibly with some government support by use of a voucher system.

Business Training

UNIDO can support existing Iranian institutions to develop their training programmes in such areas as entrepreneurship development, production techniques, export marketing, and other business skills as required. This will enable the institutions to provide up-to-date, practical and hands-on training geared to the needs of SME entrepreneurs in the selected sectors. The outputs of such a programme could include:

- Support for a number of selected training institutes, with wide coverage over the country, providing non-traditional hands-on short training courses at times and places convenient for the target group.
- Assistance with the development of curricula for training courses covering not only the technical contents but pedagogical matters as well. The courses will cater for both entrepreneurial skills (management, book-keeping, marketing, etc) and production skills, which includes product development, product innovation, and design, particularly in the main sectors of the Iranian economy and related sub-sectors.
- Training of staff within the selected institutions to enhance their capabilities in effectively transferring skills and developing curricula for newly emerging needs of industrial SMEs.

Women entrepreneurship

At the invitation of the Iranian government, an assessment was carried out by UNIDO in the course of 2001 on possible modalities for the stimulation of women entrepreneurship. This resulted in a proposal to carry out a "Women Entrepreneurship Development Programme". General activities to be undertaken in this regard included: a) addressing social constraints through appropriate training, in order to enhance the role of women in development and

increase their prestige; b) increasing awareness of world economic and social trends and improving women's skills, both in the technical and business fields, by means of specific training; c) encouraging the creation of social and professional associations aimed at promoting productive activities initiated by women, and finally d) increasing the visibility of women by raising their level of participation in decision-making positions. In addition, a number of very specific measures were proposed in the assessment, in which UNIDO could be instrumental in assisting the government in promoting women entrepreneurship optimally. These are:

- Introducing short courses designed to promote entrepreneurship for women and young entrepreneurs in their final year at university.
- Creating the equivalent of business incubators at universities and vocational schools, in order to promote the creation of new business under the short-term protection and guidance of the institution.
- Creating national and/or provincial schemes to support women entrepreneurs through the BAS programme. These schemes should act in a very proactive way to encourage entrepreneurship among women and youth, and should include a Women's Business Counsellor to identify business opportunities and help in the preparation of business plans - with special emphasis being placed on product and marketing issues.
- Helping women and youth entrepreneurs in the presentation of business proposals to the financial institutions for evaluation.
- The Government – possibly through the Ministry of Industry and Mines – should reach an agreement with the financial institutions in order to lengthen substantially the payback period of loans dedicated to investment, and subsidize the very high interest rates given to projects presented by SMEs in general. As a means of encouraging women and young entrepreneurs, the amount of the subsidy to interest rates and the payback period should be increased by up to 25%. As a further measure, and in order to ease the load for women and young entrepreneurs, the repayments should only include interests charges and not amortization of capital during the first two years of activity of the new enterprise.
- The SME Development Agency recommended in Chapter 10 should also pay attention to the specific needs of women entrepreneurs by providing advice and assistance to their companies in the form of consultancy services.

11.4 Getting the Linkages Right

Finally, once a favourable policy and regulatory environment has been created and the local SMEs have been upgraded to a point where they have become viable partners for TNCs, external support may still be necessary to promote the desired TNC-SME linkages and create sustainable partnerships. Foreign-based TNCs may not automatically become aware of the opportunities offered by Iranian SMEs, and the Iranian authorities or SMEs may not be aware

of how best to attract foreign investors with whom to establish the desired linkages. The task of bringing together the potential partners, and helping them to understand each other's capabilities and needs, thus remains formidable even where the policy and institutional conditions have been met.

Business Partnership Programme

UNIDO's SME Branch has developed this programme to serve as a model for economically viable and sustainable technical assistance that focuses on the quality, efficiency and international competitiveness of SMEs. Within the targeted industry, the approach seeks to achieve:

- Technological and managerial learning effects;
- Improved domestic resource use in production; and
- Increased productive employment and incomes.

A project under the programme will address problems of SMEs in specific industries in an integrated way, emphasizing the more advanced SMEs. In value chains, the focus will be on second and third tier suppliers: fourth tier suppliers are likely to need a different type of support, such as a small business credit scheme or advisory services – and first tier suppliers will be strong enough not to need external assistance. Wherever economically and technically feasible, SMEs should avoid being locked into a captive relationship with a single TNC. In UNIDO's partnership projects, SMEs with more than one large partner are normally chosen. The type of support or expertise that UNIDO can provide in the context of a public-private partnership can be divided in four categories:

- Match making and coalition building;
- Improving the business environment in which development know-how is transferred;
- Building support capacities for strengthening the technical, managerial and organizational performance of the SMEs, where this is not covered by the business to business relationship;
- Evaluating the process and the results, and suggesting corrective measures or new areas for cooperation.

These types of expertise may be used individually or in various combinations, depending on the character of the partnership. The typical contribution made by the other partners is:

- *Business experts*: Design, implementation and guidance of training in SMEs and of local engineers;
- *Host Government:* Political endorsement, financial support, national "ownership";
- *Research institutes/universities:* Expose SMEs to best practices, technical training, enterprise diagnoses;

- *Business Associations:* Information of target sector, help create sustainable national support services;
- *NGOs:* Ensuring that issues like social and environmental sustainability are properly addressed in international investments.

When executing such a programme, UNIDO will be in the position to apply “best practices” in that it will make available experiences of similar programmes, e.g. with FIAT S.p.A in India for the automotive component industry.

Subcontracting and Partnership Exchange (SPX)

In collaboration with local organizations, UNIDO has developed a Subcontracting and Partnership Exchange (SPX) programme. This provides for the establishment of an information and promotion centre for industrial subcontracting and partnership between main-contractors and sub-contractors aiming at helping the member industries to optimize the utilization of their manufacturing capacities. The exchanges are a meeting point between industrial vendors/suppliers and buyers, and instrument to help balance the supply and demand of industrial subcontracting orders.

In case such a programme would be executed in Iran, the SPX established in Iran would become a part of the UNIDO SPX club, which has some 45 SPXs from more than 30 countries as members. The SPX will therefore provide Iranian SMEs with a unique opportunity to be part of the global sourcing network. For many other developing economies the SPX has proved to be a powerful instrument to establish international linkages and become part of a global network.

Investment Promotion

With regard to Iran’s investment promotion objective, UNIDO has already provided upstream assistance to the Government in the formulation of appropriate investment policies. In addition, the Organization can offer assistance in the establishment and strengthening of a national investment promotion agency. In assisting developing countries to attract inflows of FDI, UNIDO can draw on such tools as the Computer Model for Feasibility Analysis and Reporting (COMFAR) developed in-house, as well as its worldwide network of investment and technology promotion offices (ITPOs).

In encouraging the establishment of linkages between national SMEs and international corporations, UNIDO can rely on both its traditional and a number of innovative new approaches. The traditional approaches include the establishment of subcontracting and partnership exchanges and investment and technology promotion meetings (INTECHMARTs). The former serve as technical information, promotion, and matchmaking centres between main contractors, suppliers and subcontractors. The latter comprise matchmaking events at which joint ventures, licensing agreements, and other forms of inter-firm partnerships are established.

ANNEXES

Annex 1

New Developments in EU SME Policies

The importance of SMEs in terms of production and job creation is so high in the economies of the member states of the EU and other western European countries that many policies favouring SME growth entail substantial changes in the general architecture of the existing system of economic governance. As such, they are aimed at bringing about a comprehensive structural reform of public administration, national labour markets, and the education, training and research systems.

This Annex presents three tables indicating SME policies related to:

- The business environment;
- The financial environment and the internationalization and information services; and
- R&D, labour & training, and fostering entrepreneurship and enterprise culture.

These include policy aims and the tools which will be applied in order to achieve these aims for the countries under review.

The following abbreviations have been used for the countries covered in these tables:

A	Austria	I	Italy
B	Belgium	IRL	Ireland
CH	Switzerland	IS	Iceland
D	Germany	L	Luxembourg
DK	Denmark	NL	Netherlands
E	Spain	NO	Norway
F	France	P	Portugal
FIN	Finland	S	Sweden
G	Greece	UK	United Kingdom

Table A1.1: Main aims of new developments in SME policies and major tools applied in the field of business environment, Western Europe

Aims	Tools	Countries
Simplification and reduction of administrative overheads borne by businesses, especially with regard to requirements for new installations and statements	Electronic declarations and unified forms and documents	A, CH, E, F, FIN, I, IS, P
	Simplification of statistical requirements or administrative declarations for firms	A, CH, D, DK, E, F, FIN, I, IRL, IS, L, NL, NO, P, S, UK
	One-stop Shops for handling administrative matters, especially for new enterprises	E, F, I, L, P
Providing businesses with information, especially on administrative requirements	Informative One-stop Shops, even on Internet sites	A, CH, D, DK, E, F, FIN, IRL, L, NO, P, UK
Carrying out studies on administrative burdens in order to suggest simplification improvements to policy makers	Public research about the impact on SMEs of regulations and proposals for improvements of the regulatory systems	B, CH, D, DK, E, FIN, IRL, L, NL, NO, P, S
Reduction and relief for taxes and social security on behalf of SMEs	Legislative reform simplifying tax and social security systems	E, F, FIN, I, IS, IRL, L, P, S
	Legislative reform relieving tax and social security burdens, especially for new firms	A, B, CH, D, E, FIN, I, P, UK
Simplification of the administrative structure	Reorganization and amalgamation of ministries, public bodies and agencies	CH, F, FIN, I, IRL, NO, UK
Reducing the occupational impact of business failures	Reforms on failure legislation in order to allow the failed entrepreneur to create a new firm or to avoid failure	A, B, D, NL, P
Facilitating enterprise transfer	Legislative reforms, tax-relief or incentives for enterprise transfer	A, B, F, I

Source: ENSR, 1999.

Table A1.2: Main aims of new developments in SME policies and major tools applied with regard to the financial environment, and internationalization and information services

Aims	Tools	Countries
Financial environment		
Development of innovative funding mechanisms for SME start-up and growth, especially in terms of innovation and capitalisation	Legislative adjustments; establishment of, and incentives for, venture capital, seed capital funds or business angels	A, CH, D, DK, E, EL, F, FIN, IRL, IS, P, NO, S, UK
	Establishment of, and incentives for, mezzanine financing, participatory loans, participative credit	A, D, DK, E, F, FIN, I, L, NL, NO
Facilitation of SME access to credit and improvement of their financial structure	Schemes to guarantee debt contracted by SMEs, as well as debt rescheduling and reduction programmes	A, B, CH, D, E, F, FIN, I, NL, UK
	Measures for delayed payments	EL, I, IRL, UK
National programmes of direct aid to SMEs	Financial incentives for SME investments	A, B, D, E, EL, I, IRL, P, UK
Institutional reforms	Creation of stock markets for non-quoted SMEs	A, B, DK
Internationalization and Information Services		
Promotion of SME penetration of foreign markets	Incentive programmes for market research and participation in sector fairs	A, CH, D, DK, E, EL, I, IRL, L, NL, NO, UK
	Creation of national, private or public agencies to promote foreign trade	CH, EL, IRL, IS, NL, UK
Support of collaborative international efforts and the creation of wider networks for national SMEs	Financial incentives and technical support, often on the part of promotion agencies, in pursuit of foreign partners and establishment of agreements, joint ventures	A, CH, D, DK, EL, F, I, IRL, L, NL, NO, P, UK
	Financial incentives for direct investments abroad	A, D, DK, E, F, FIN, I, IS, NL
Dissemination of information of specific interest to SMEs (managerial, trade, financial, etc.)	Creation of specific information outlets and websites	A, B, CH, D, E, F, FIN, S, IRL, L, NO, P, UK
Upgrading the firm's organization capacity to penetrate foreign markets	Training programmes for managers or employees or entrepreneurs	A, B, D, DK, E, I, IRL, L, NL, NO, P

Source: ENSR, 1999.

Table A1.3: Main aims of new developments in SME policies and major tools applied in the fields of R&D, labour and training, and fostering entrepreneurship and enterprise culture

Aims	Tools	Countries
Improved access to R&D; Labour and Training		
Creation of highly innovative new SMEs	Establishment of incubators	CH, DK, F, FIN, I, IS, NL, UK
	Financial tools for creating hi-tech and high-productivity industries (seed capital, venture capital)	CH, D, DK, F, FIN, IS, L, NL, S
Helping existing SMEs to conduct R&D or absorb innovation from outside	Collaborative programmes between SMEs and public research centres or amongst SMEs	A, CH, D, DK, E, EL, F, FIN, IS, L, NL, NO, P, S, UK
	Financial and tax incentives for innovative investments or implementation of quality certification systems	A, D, DK, E, EL, F, I, IRL, L, UK,
	Public sector innovation programmes in particular areas (IT and Internet, electronic trade, biotechnology)	A, CH, F, I, NO, P
Improvement of the national research system in order to disseminate technological innovation to SMEs, among others	Incentive programmes for commercial application of public sector research	A, D, F, UK
	Creation of new research and technology transfer structures or fostering the competence of existing ones	A, E, FIN, I, IRL, IS, L
	Promotion of activities and training or consultancy programmes for the diffusion of new technologies	A, CH, D, DK, FIN, I, IRL. IS, L, NL, P, UK
Improvement of the ratio between quality and human capital cost in SMEs	Vocational training programmes to meet company needs	B, CH, D, E, EL, F, FIN, I, IRL, IS, L, NO, UK
	Cost relief for hiring trainee personnel and new graduates	A, CH, D, E, F, I, NL, P, UK
	Cost relief for hiring scientific professionals or qualified managers	B, D, DK, I
Favouring access of the jobless to the labour market, especially in SMEs	Modification of plans for national labour markets towards greater flexibility	A, B, E, EL, F, FIN, I, ISL, L, P, S
	Incentives for hiring unemployed	B, D, E, F, FIN, L, P, S

Fostering Entrepreneurship and Enterprise Culture		
Developing the trend to self-employment, especially among the young and areas of society most at risk of exclusion from the labour market	Incentives to creation of new businesses by the young, women, and the jobless	B, D, DK, E, F, I, IS, L, NL
	Courses in self-employment	A, CH, D, E, EL, FIN, I, P, S, UK
Increasing knowledge of business methods and labour, partly for future hiring in companies	Courses in company subjects, internships and business game programmes for students	B, CH, DK, FIN, I

Source: ENSR, 1999.

The solutions to comparable problems are often similar, albeit with specific national features, and include such measures as the provision and increased use of information tools, streamlining the relationship between businesses and public administration, enhancing the technological and innovative capacity of smaller enterprises (sometimes in collaboration with public research institutes), training and upgrading of human resources, and innovative financial tools for SME development.

Annex 2

Appendices to Chapter 3

SME Statistics for Iran

Table A2.1: Establishments engaged in wholesale trade, retail trade and repair of motor vehicles and personal and household goods, by urban/rural areas and Ostans: 1373 (1994/95)

Province	Retail sales and repair services of personal and household goods			Wholesale trade and commission trade		
	Rural	Urban	Total	Rural	Urban	Total
Total Iran	**194,541**	**723,702**	**918,243**	**5,377**	**56,072**	**61,449**
East Azerbeijan	11,327	51,738	63,065	224	4,347	4,571
West Azerbeijan	8,602	31,908	40,810	173	2,151	2,324
Ardebil	5,026	13,614	18,640	54	1,057	1,111
Esfahan	11,751	56,960	68,711	647	3,265	3,912
Ilam	1,688	5,393	7,081	5	244	249
Bushehr	2,318	6,861	9,179	33	224	257
Tehran	24,777	178,110	202,887	864	20,259	21,125
Charmahal & Bakhtiyari	2,347	7,356	11,703	53	238	291
Khorasan	21,622	73,654	44,676	282	3,538	3,820
Khuzestan	7,317	35,013	42,330	149	1,942	2,091
Zanjan	4,135	10558	14,693	23	284	307
Semnan	1,605	6,846	8,451	13	304	317
Sistan & Baluchestan	4,402	12,768	17,170	39	508	547
Fars	11,217	36,362	47,579	191	1,970	2,161
Kordestan	4,618	15,682	20,302	42	520	562
Kerman	5,643	19,036	24,679	319	1,953	2,272
Kermanshah	4,257	23,527	27,784	47	1,218	1,265
Kohgiloyeh & Boyerahmad	1,761	3,871	5,632	11	53	64
Gilan	14,125	23,905	38,030	1,045	3,879	4,924
Lorestan	3,348	16,921	20,269	37	922	959
Mazandaran	21,837	44,540	66,383	666	2,743	3,409
Markazi	-	-	-	-	726	726
Hormozgan	3,867	6,421	10,288	116	419	535
Hamedan	7,353	18,750	26,103	205	2,001	2,206
Yazd	1,929	9,523	11,452	103	1,307	1,410

Table A2.2: Establishments engaged in wholesale trade, retail trade, and repair of motor vehicles and personal and household goods, by industry and class of worker: 1373 (1994/95)

Non Industry Productions	3-5 Workers	2 Workers	1 Worker	Total
Total	**63,494**	**199,048**	**878,774**	**1,150,857**
Sale, maintenance and repair of motor vehicles and motorcycles, retail sale of automotive fuel	18,955	48,556	101,013	171,165
Sale of motor vehicles	1,655	2,291	3,054	7,177
Maintenance and repair of motor vehicles	1,821	6,468	20,865	24,370
Sale, maintenance and repair of motorcycles and related parts and accessories, retail sales of automotive fuel	298	317	1,595	2,718
Wholesale and commission trade, except of motor vehicles and motorcycles	9,443	16,203	3,368	61,449
Wholesale trade of agricultural raw materials, live animals, food, beverages and tobacco	1,948	4,604	8,505	15,446
Wholesale trade of non-agricultural intermediate products, waste and scrap	1,981	4,107	9,835	16,335
Wholesale trade of machinery, equipment and supplies	667	569	1,070	2,520
Retail trade, except of motor vehicles and motor cycles, repair of personal and household goods	35,096	134,239	744,073	918,243
Non-specialized retail trade in stores	6,173	27,174	27,402	30,752
Retail sale of food, beverages and tobacco in specialized stores	20,377	74,846	298,216	395,566
Retail sale of second-hand goods in stores	413	1,493	7,711	9,632
Retail trade not in stores	4	133	1,355	1,560
Repair of personal and household goods	2,083	9,068	58,967	70,382

Table A2.3: Establishments engaged in wholesale trade, retail trade, and repair of motor vehicles and personal and household goods, by industry and class of worker, 1373 (1994/95)

Non Industry Production	100+ Workers	50-99 Workers	10-49 Workers	6-9 Workers
Total	**150**	**231**	**3,478**	**5,631**
Sale, maintenance and repair of motor vehicles and motorcycles, retail sale of automotive fuel	150	231	3,478	5,631
Sale of motor vehicles	2	3	55	117
Maintenance and repair of motor vehicles	5	6	74	128
Sale of motor vehicle parts and accessories	0	1	15	36
Sale, maintenance and repair of motorcycles and related parts and accessories, retail sales of automotive fuel	4	2	264	238
Wholesale and commission trade, except of motor vehicles and motorcycles	35	73	766	1,241
Wholesale trade on a fee or contract basis	0	1	5	59
Wholesale trade of agricultural raw materials, live animals, food, beverages and tobacco	6	13	181	189
Wholesale trade of household goods	6	15	134	257
Wholesale trade of non-agricuflural intermediate products, waste and scrap	7	5	99	126
Wholesale trade of machinery, equipment and supplies	3	10	72	129
Retail trade, except of motor vehicles and motorcycles, repair of personal and household gootls	65	48	1,705	2,876
Non-specialized retail trade in stores	20	37	748	955
Retail sale of food, beverages and tobacco in specialized stores	3	5	159	401
Other retail trade of new goods in specialized stores	36	50	703	1,320
Retail sale of second-hand goods in stores	0	0	0	15
Retail trade not in stores	0	0	2	29
Repair of personal and household goods	6	6	93	156

Table A2.4: Number of workers of establishments engaged in wholesale trade, retail trade and repair of motor vehicles and personal and household goods by industry, 1373 (1994/95)

Non Industry production	Workers
Total	**1,589,935**
Sale, maintenance and repair of motor vehicles and sale automotive fuel	288,863
Sale of motor vehicles	14,146
Maintenance and repair of motor vehicles	147,647
Sale of motor vehicles parts and accessories	41,513
Sale, maintenance and repair of motorcycles, related parts and accessories	26,263
Retail sales of automotive fuel	9,595
Wholesale and commission trade	127,481
Wholesale trade on a fee or contract basis	2,774
Wholesale trade of agricultural raw materials, live animals, food, beverages and tobacco	44,268
Wholesale tradeof household goods	28,940
Wholesale trade of non-agricultural intermediate products, waste and scrap	29,819
Wholesale trade of machinery, equipment and supplies	14,193
Other Wholesale trade	7,487
Retail trade, except of motor vehicles, repair of personal and household goods	1,173,592
Non-specialized retail trade in stores	357,653
Retail sale of food, beverages and tobacco in specialized stores	162,991
Other retail trade of new goods in specialized stores	558,729
Retail sale of second-hand goods in stores	10,875
Retail trade not in stores	1,853
Repair of personal and household goods	81,491

Annex 3

Appendices to Chapter 5

A. Results of Automotive Focus Group Study

Tables A3.1-A3.7 below present the results of the focus group study related to the integration of industrial SMEs into the global business norms and portrait of the bests:

Table A3.1 indicates that the majority of firms studied are involved with the production of metal and body products, needing relatively simple technologies.

Table A3.1: Frequency distribution of focus group firms by product

Products /Numbers	Metal	Electrical Electronic	Polymer Products	Body and Modules	2-3 Products	No Answer
Small	13	2	1	2	0	0
Medium	7	2	7	12	14	0
Large	0	1	1	2	3	2

Source: Focus group study

Table A3.2 shows that firms in the focus groups were generally in the A and B categories, which are considered the highest ranks in OEM scales.

Table A3.2: Grading of the selected focus groups by two major car manufacturers (OEMs)

Grades and Numbers	A	B	C	Two Grades	No Grades	No Answer
Small	0	10	3	3	2	0
Medium	13	18	3	3	6	0
Large	5	2	0	0	0	2

Source: Ibid

Table A3.3 shows that about 10% of firms studied have export of a commercial value, either directly or through trading companies. An equal number are in the process of learning to enter the world market through symbolic export. These figures are much higher than the total number

of Iranian industrial SMEs engaged in export activities, which does not exceed 2% according to the best available estimates.

Table A3.3: Grouping of focus group member firms by export activities

Categories and Numbers	Symbolic Exports (< 10%)	Export Through Trading Companies	Direct Exports	No Exports	No Answer
Small	3	2	2	11	0
Medium	9	5	0	28	0
Large	2	1	1	3	2

Source: Ibid

Table A3.4 shows that the firms studied generally fall into two categories of either having ISO 9000-2 or no standards certification. Many therefore lack some of the important quality certificates required for doing business in a global market.

Table A3.4: Grouping of focus group member firms by quality certificates (including applications in process)

Categories and Numbers	ISO 9000-02	ISO 14000	QS/TS	National Standard	Other	No Standard
Small	7	0	0	0	0	11
Medium	16	0	0	1	2	19
Large	6	0	0	3	0	0

Source: Ibid

Table A3.5 shows that at least 50% of the firms in the focus groups have more than 60% of the market share in the goods they produce.

Table A3.5: Grouping of focus group member firms by domestic market share

Categories and Numbers	<40%	41-60%	61-80%	81-100%	No Answer
Small	5	5	3	4	1
Medium	6	9	11	12	0
Large	1	3	1	4	0

Source: Ibid

Table A3.6 indicates the relative absence of foreign competitors in the domestic market. Together, these tables show that competition is not intense in the industries represented by the focus group member firms.

Table A3.6: Foreign competition experienced by focus group members firms in the domestic market

Categories and Numbers	0%	<5%	5-20%	>20%	No Answer
Small	2	2	6	5	3
Medium	9	9	9	7	2
Large	2	2	2	3	0

Source: Ibid

Table A3.7 indicates a relative wide degree of access by employees of the focus group firms to the Internet in their places of work. The much lower rate of home access suggests that the use of this communication facility has not yet become routine. Furthermore it was found through group discussions that Internet use is limited to the exchange of information, and no cases of E-commerce were reported.

Table A3.7: Grouping of focus group member firms by use of the Internet

Categories and Numbers	Company Website	E-mail	Office Internet Access	Home Internet Access
Small	6	12	6	1
Medium	20	34	32	11
Large	7	7	8	1

Source: Ibid

B. Academic Research on SME Development

Table A3.8: Extent of academic interest in SME/entrepreneurship development

Description	Share of Added Value	Share of Industrial jobs	Share of SME/Entrepreneurship-specific Articles	Share of SME/Entrepreneurship-specific Thesis
Small Enterprises (<50 Employees)	34%	61%	1%	<1%

Source: Direct Survey

Table A3.9: Academic interest in management topics expressed in number of published articles

Title	No. of Tadbir Articles	Per cent of Tadbir Articles	No. of Other Articles	Per cent of Other Articles	No. of Total	Per cent of Total
SME/Entrepreneurship	20	1%	13	1%	33	1%
International Business Culture	18	1%	29	2%	47	1.5%
International Business	166	8.7%	45	3%	211	6.5%
Quality & Productivity	118	6.2%	213	16%	331	10.3%
Other Topics	1,585	83%	1,015	78%	2,600	80.7%
Total	1,907	100%	1,350	100%	3,222	100%

Source: Direct Survey

Table A3.10: Academic interest in management topics expressed in number of BA/MA theses

Description	No. Of BA Thesis	Per Cent BA Thesis	No. Of MA Thesis	Per Cent MA Thesis	Total BA/MA	Total Per cent BA?MA
SME/Entrepreneurship	1	.5%	5	negligible	6	negligible
Internat. Business Culture	0	0%	17	2%	17	1.6%
International Business	5	2.3%	50	5.9%	55	5%
Quality& Productivity	26	12.1%	101	11.85%	127	11.9%
Other	183	85.1%	679	79.7%	862	80.8%
Total	215	100%	852	100%	1,067	100%

Source: Direct Survey

Annex 4

Appendices to Chapter 8

A. Distribution of Industrial Estates In Iran

Figure A8.1: Distribution of industrial estates in Iran

B. Islamic Financial Contracts as Applied in Iran[1]

1 Qard-al-hasana (interest free loan/deposit)

Qard-al-hasana is an interest free loan that can be collateralized. Qard-al-hasana is used by banks as a basis for current and saving accounts (see below) and to lend. Borrowers repay only the principal to the bank plus a management fee (set by the Central Bank). Qard-al-hasana loans are granted to institutions, individuals, and bank employees based on the assessment of the needs and directives from the relevant authorities. These loans can be collateralized.

2 Musharaka madania (civil participation)

Under this contract the bank and the client negotiate the ratio at which the profits from the financed activity will be distributed between them based on a feasibility study of the expected profitability of the project being financed. This contract is used for financing manufacturing, housing, trade and services. Two versions were presented as to how the contract is executed:

In the first version, the banks and the client determine the profit distribution ratio according to their respective contributions to the project's capital. However, the contract would also specify that the bank will only get a share in the profit equivalent to the rate specified by the Central Bank and would forego to the client all the profits in excess of this rate. Similarly, the client would compensate the bank if actual profits would result in a return to the bank less than the Central Bank rate. Banks also require collateral from the client against potential losses.

In the second version, the bank calculates the Musharaka ratio that would make the return to the bank equivalent to the lending profit rates as mandated by the Central Bank. The client is expected to pay a share equivalent to the agreed profit irrespective of the actual rate of profit and is also required to provide insurance cover for the financed items (i.e. the actual Musharaka ratio will differ from the one specified in the contract).

Banks get collateral on the Musharaka contract indirectly in two ways. When a Musharaka contract is concluded the bank could extend a notional Qard-al-hasana loan (e.g. IR 1,000) against which the bank requires the client to present a collateral with value equivalent to that of the Musharaka contract. If the client does not deliver the profit rate that the bank expects on the maturity date, the bank will convert the outstanding balance into a loan and ask the client to pay it in addition to the small Qard-al-hasana loan or risk losing the collateral. The bank also could require the client to present collateral against misconduct, which is permissible under the law.

1 Taken from International Monetary Fund (IMF), *Islamic Republic of Iran, Financial System Stability Assessment*, July 2000

3 Musharaka hoquoqi (equity participation)

Under this activity banks acquire shares of existing companies or in newly established companies. The banksnormally finance such participation from their own resources; however, it is permissible to have the investment deposit funds also engaged in such activities. There are some restrictions as to the percentage of the bank's participation in the share capital and this requires the approval of the Central Bank prior to final participation. The bank's income is derived from the dividends declared by the respective companies.

4 Direct investments

Direct investment means the provision of capital by banks for the implementation of profit-making productive and development projects. The banks are not permitted to invest in the production of luxury or non-essential products under this activity. Banks undertake such activities after evaluating and assessing the viability of such projects in terms of economic, financial and technical terms. The banks normally utilize their own resources in committing to such investment projects, however, it is permissible to have the depositors funds also utilized subject to the return being in line with the minimum rate of return determined by the authorities.

5 Muzaraba

Muzaraba is a contract whereby one party (the bank) undertakes to provide capital (cash) on proviso that the other party (the client) employs such capital in trade (buying and selling the financed goods), and both parties share the profit (the distribution of profits and all other issues are handled similar to the Musharaka contract). The Muzaraba is usually of the restricted type where the entrepreneur must use the funds in the transaction that is specified in the contract. However, in practice, the bank has little control on how the funds are used. The client is also required to provide insurance cover on the financed items.

6 Other investments

The banks invest in Government bonds, public utility bonds, shares and other forms of investments. Such investments are undertaken to utilize surplus funds or because of directives received from the authorites. Banks also continue to receive interest on their pre-1983 banking facilities.

7 Salaf (forward delivery contract)

This is a contract whereby the bank provides funds for the purchase of agricultural goods at a fixed price for a future delivery date. Banks use the Salaf contract mainly to finance agriculture. At the time of entering into the contract, a Wakala (power of attorney) is given to the farmer to sell the goods (on behalf of the bank) as and when they are ready for sale. The farmer is paid a commission for his services. The farmer is obliged to arrange an insurance cover against any destruction or failure to produce the goods. The farmer is also required to consult the bank in case the price is below the contracted price. In practice, the farmer keeps the price difference if the sale price was higher than the forward price that was specified in the contract; in effect selling the goods to himself at the contract price and reselling them

afterwards at a higher price. The bank gets only the profits arising from the premium on the forward price. If the sale price is less than the forward price the bank is expected to carry the loss, although in practice the bank rarely does so.

8 Murabaha (combined with instalment sale)

Under this arrangement, the customer pays the price of the subject matter plus the bank's mark-up in instalments over the financing period. The mark-up rate is determined annually by the Central Bank based on the type of industry or services the financing is provided to. The terms of the contract range from one year (e.g. for raw materials) up to 20 years (e.g. for housing). Banks use this contract to provide short, medium and long term financing for manufacturing (the purchase of raw materials, machinery, equipment and installations), housing, and construction. The bank would normally insist on having the financed items insured by the customer for the duration of the contract. The maintenance and other improvements as and when required are paid by the customer. The contracts can be collateralized by the assets that were acquired from the financing provided by the contract.

In case of late payments, a penalty equivalent to an annual 6% applies on the principal, and is calculated on a daily basis by dividing the 6% by 365 days times the duration of the delay. In case of default, the client will be liable for the principal, the mark-up that will be accrued during the remainder of the term, and the 6% annual penalty. If the clients continue to be in default after the expiration of the contract term, a new mark-up rate plus the penalty rate will apply on an annual basis. The bank can choose to foreclose on the client by retaining the collateral.

9 Hire purchase under Ijara (lease) contract

Hire-purchase is a leasing contract where the lease holder, at the end of the period of the lease and upon fulfilling the conditions specified in the contract, receives the title to the leased property. This contract is usually used in the purchase of property. The bank enters into a contract whereby it acquires the property for the customer, and then enters into an Ijara (lease) contract with the customer who pays rentals (profit plus principal) for the duration of the contract. At the end of the contract (i.e. when the customer has paid the full value of the asset, as agreed in the beginning of the contract) the title is transferred to the customer. The customer (the leaser) is responsible for the maintenance and insurance of the property. The profit rates are based on the margin rates published by the Central Bank. Although, the title of the asset is in the name of the bank, in practice to get possession of the asset in case of default a court order is required.

10 Jo'aalah (service financing contract)

When banks provide the Jo'aalah facility, they act as a broker for the user of the funds in financing services (with applications mostly in housing but also in trade and manufacturing) and take their profits in the form of a service fee. When used for housing maintenance, the owner of the house would request the bank to arrange maintenance of the property, and the amount is

repaid by the customer in instalments. For small amounts third party guarantees are taken while for larger amounts the property is taken as collateral.

11 Mobilization of funds

Banks are allowed to mobilize funds by offering different deposit facilities as described below. As per the banking regulations and law all deposits may be guaranteed by the bank.

11.1 Demand deposits: These are current accounts that are used primarily for payment services. These deposits are considered as Qard-al-hasana from depositors to the banks and hence can not earn any return. Current account deposits are guaranteed by banks and can be withdrawn on demand.

11.2 Savings deposits: These deposits, like demand deposits, are based on Qard-al-hasana. However, if a specific minimum average balance is maintained for at least three months, depositors will be eligible for a raffle bonus equivalent to 2% (on an annual basis).

11.3 Investment deposits: These are income-earning deposits with a maturity of 3 months, 1, 2, 3 and 5 years. In principle, these deposits are based on a Wakala contract, where banks are entrusted by the depositors to manage these funds for a fee, with the depositors bearing the risks. The banks' practice, however, differs significantly. The Central Bank announces at the beginning of the year the expected profit rates for various deposits (in 1999/2000 they were 8%, 14%, 15%, 16%, and 18.5% respectively for deposits of 3 months, 1, 2, 3, and 5 years). These rates represent the expected profitability of the banking system as a whole. Depositors are compensated according to the pre-announced rates regardless of whether the particular bank they placed their deposits in was profitable or not. If the banks' profits turn out to be higher than the announced rates, they are supposed (at the instruction of the Central Bank) to make additional payments to the depositors, although this has not occurred frequently. In the reverse case where profitability rate is less than expected, depositors will still get returns equivalent to the announced rates.

11.4 Special investment deposits: These are deposits of certain organizations (e.g. the pension fund) that are allowed with special government permission. The bank acts as a true manager of these funds (under a Wakala contract), placing them in projects and investments specified by the depositors and transfering all profits to them for a negotiated fee. These funds are permitted to be lent out at rates higher then those announced by the Central Bank, and hence earn higher rates of returns for the depositors. The depositors also carry the risk of loss, although it is highly unlikely.

11.5 Special trust deposits: The funds in these deposits are placed (by individuals and organizations) in the bank to be given as Qard-al-hasana (for charity purposes) as per the instruction of the depositors. The bank charges a fee for its services.

11.6 Foreign currency deposits: Foreign currency can be placed in demand, savings, or investment deposits for 3 months. Demand deposits do not earn income. Deposits of 3 months earn LIBOR plus 1% (as a maximum). The foreign currency is then placed by the bank in the Central Bank at a rate equal to LIBOR plus 2%.

11.7 Inter-bank Market: Banks place surplus funds in other banks. However, aside from lending from commercial banks to specialized banks, this practice is not very common and is usually done at the instruction of, and at terms (rates and maturity) determined by the Central Bank.

Annex 5

Appendices to Chapter 10

Job descriptions of staff members of an SME Development Agency

1 DIRECTOR OF THE AGENCY

- Managing the Agency by planning, organising, communicating, directing, monitoring and coordinating its main functions and by so doing, assisting the staff of the various units in carrying out their tasks efficiently and effectively.
- Managing the secretariat.
- Coordinating all national and international donor inputs.
- Carrying out awareness-creation and lobbying functions.
- Preparing management and/or board meetings.
- Producing the annual budget and annual workplan.

2. HEAD OF FINANCIAL UNIT

- Assisting the Government in making proposals regarding financial policy issues in support of micro-, small and medium-sized enterprises.
- Developing strategies for the implementation of the financial policy.
- Developing financial instruments within the scope of the financial policy.
- Maintaining contacts with the main financial institutions in the country responsible for rendering financial services to the SME sector.
- Coordinating and monitoring the implementation, by participating banks, of financial schemes for SMEs, initiated either by the government or by any national or international institution.
- Evaluating the results of the implementation of the various financial instruments and a.) discussing with the end-users or the intermediate support organizations the scope for changes and/or improvements to the policy instruments and procedures, and b.) making appropriate recommendations to the government to adjust the policy.

- Studying new or different financial policy matters and instruments developed in other countries and assessing their applicability to the SME sector in Iran.

3. HEAD OF UNIT FOR BUSINESS SUPPORT PROGRAMMES

- Assisting the government in making proposals with regard to policy issues related to business support programmes offering non-financial services to SMEs, such as business advisory services, incubation centres, innovation centres, training centres, business associations, business clubs, and the like.
- Developing strategies for the implementation of the policy related to business support programmes.
- Developing instruments for the business support programme within the scope of the approved policy.
- Maintaining contacts (including information collection and dissemination) with the BSOs in the country responsible for rendering direct services to the SME sector.
- Coordinating and monitoring the implementation of the business support programmes carried out BSOs for SMEs, which may have been initiated by the government or by other national or international institutions.
- Evaluating the results of the implementation of the various instruments related to the business support programme and a.) discussing with the intermediate support organisations the scope for changes and/or improvements to the policy instruments or related procedures, and b.) making recommendations to the government to adjust the policy accordingly.
- Studying new or different policies and instruments related to business support programmes as developed in other countries and assessing their applicability to the SME sector in Iran.

4. HEAD OF UNIT FOR LEGISLATIVE AND FISCAL MATTERS

- Studying and filing (ideally on an electronic database) all legislation and fiscal policies related to the SME sector.
- Identifying – through own analysis – inconsistencies, loopholes and overlaps in the prevailing legislation and fiscal regulations, and preparing proposals for improvements to be channelled to the respective government ministries.
- Based on information and feedback received from the SME sector (entrepreneurs and BSOs), preparing new or adapted proposals on legislation and fiscal policies, in order to create a more conducive business climate for the SME sector.

- Evaluating the effectiveness and results of existing legislation and fiscal policy vis-à-vis the policy objectives of the government.
- Studying the legislative measures and fiscal policies adopted by other countries.

5. HEAD OF UNIT FOR INFORMATION, PUBLICATIONS AND PUBLIC RELATIONS

- Making regular assessments of the information needs of the various categories of SMEs (own-account workers, micro-enterprises, and small and medium-sized enterprises) and BSOs.
- Making existing information available, developing new information and providing information on how to use that information.
- Identifying various means of communication (TV, radio, the Internet, newspapers, brochure, seminars, etc) and determine their effectiveness vis-à-vis specific types of information to be communicated to the various categories of enterprises.
- Issuing publications, in coordination with all other departments, on topics of interest to the SME sector, as well as for the public at large in promoting the sector.
- Maintaining relationships with international SME-promotion organizations, such as WASME, ICSC, etc.

6. HEAD OF UNIT OF MONITORING AND STRATEGY

- Collecting relevant statistical and research data from the Statistical Centre of Iran, enterprises, and intermediate support organizations on the achievements of the SME sector, by sector, branch, industry, size, etc., in order to assess the results and effectiveness of the implementation of the various policy instruments.
- Making comparisons with the SME economy in other countries and identifying areas for improvement.
- Initiating own research at enterprise-level, in order to complete the data for final analysis.
- Conducting analyses of all relevant data, reporting the data, it and issuing readable publications on the assessment of all actors in the SME sector, including the Government; the analysis will include suggestions and recommendations on policies and strategies for the improved performance of the sector or parts of it.
- Developing annual data ratios for selected categories of the SME sector, and thereby monitoring the economic performance of the sector or parts of it.

7. HEAD OF UNIT FOR HRD, TRAINING, PRODUCTIVITY AND TECHNOLOGY UPGRADING

- Identifying training needs, especially in relation to entrepreneurial performance, productivity improvement and technology upgrading.
- Developing curricula (or outlines thereof) for SME-related training programmes.
- Developing – in close consultation with the government or appropriate private-sector bodies – co-financing schemes for the entrepreneurs to be trained.
- Identifying and supporting training institutions with a capacity to train entrepreneurs and/or representatives of BSOs in appropriate subjects.
- Maintaining contacts with centres of excellence in the field of HRD and training, both domestically (e.g. universities, business schools, etc.) and abroad (e.g. international SME organizations), in order to remain updated on the modalities of training and the content-matter of training programmes.
- Maintaining contacts with reputed international organizations in the field of technology upgrading and productivity improvement.